NOTICE OF PROPOSED CHANGE
TRAFFIC ANALYSIS

Southern Grove DRI
Port St. Lucie, FL

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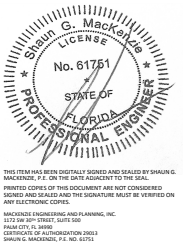

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INTRODUCTION

The Southern Grove Development of Regional Impact (DRI) (the "Project") is generally located west of I-95 and south of Tradition Parkway in the City of Port Saint Lucie, Florida (see Figure 1). The DRI is one of four DRIs that fall within an area known as the Southwest Annexation Area, which is generally bounded by I-95 to the east, Range Line Road to the west, Tradition Parkway/Gatlin Boulevard to the north, and the St. Lucie County/Martin County Line to the south.

Southern Grove was acquired by Mattamy Homes and the Governmental Finance Corporation (GFC) prior to 2020. The new owners are proposing modifications to the entitlements and transportation conditions based on the proposed entitlements.

PURPOSE

This analysis has been performed to analyze:

- The effect of removing the Paar Drive Overpass
- Modifying the phasing of the Southern Grove internal roadway improvements
- Relocation of uses within the Southern Grove DRI
- Modification of Southern Grove's uses and intensities

PROPOSED USE CHANGES

The development intensities and uses are modified based on the new owners' desired land use plan. The proposed changes result in the following general changes:

- A small reduction in residential homes
- Decrease in commercial use (office, retail and research & development)
- Increase in industrial use
- Elimination of a University
- Addition of independent and assisted living facility

The detailed changes are shown in Table 1.

Table 1. Proposed DRI Use Changes

Use	Unit	ITE Use Code	2005 ADA	2009 Substantial Deviation	2021 NOPC	Change Compared to 2009 SD
Single Family	DUs	210	5,833	3,314	2,396	-918
Multi Family	DUs	221	1,555	4,074	3,484	-590
Single Family Age-Restricted	DUs	251			1,379	1,379
Hotel	Rooms	310	500	791	1,051	260
Industrial	SF	130	1,999,404	4,583,336	8,745,000	4,161,664
Commercial (Retail)	SF	820	2,164,061	3,675,075	1,831,465	-1,843,610
Service & Office	SF	710	2,073,238	2,430,728	1,409,903	-1,020,825
Research & Development	SF	760		2,498,601	1,201,557	-1,297,044
Hospital	Beds	610		300	300	0
Civic	SF	-	41,927	41,927	41,927	0
Institutional Use	SF	-	276,369	276,350	276,350	0
K-8 School	Students	522	2,220	3,200	3,200	0
University	Students	-	6,000	6,000	0	-6,000
Park	Acres	411	80	80	80	0
Independent Living Facility	Beds	253			415	415
Assisted Living	Beds	254			150	150

BUILDOUT AND PHASING

The buildout of the project, April 25, 2041, will include of 2,396 single family dwelling units, 3,484 multi family dwelling units, 1,379 single family age-restricted dwelling units, 1,051 hotel rooms, 8,745,000 square feet of industrial, 1,831,465 square feet of commercial retail, 1,409,903 square feet of service & office, 1,201,557 square feet of research & development, hospital (300 beds), 41,927 square feet of civic use, 276,350 square feet of institutional use, 80 acres of park, two K-8 schools (3,200 students), an independent living facility (415 dwelling units), and an assisted living facility (150 beds).

The proposed development will be divided into four phases with phase buildout dates of 2026, 2031, 2036, and 2041. The proposed development program and phasing for the Southern Grove DRI are summarized in Tables 2 and 3.

Table 2. Proposed Development Program and Phasing

Land Use	Unit	Phase 1 2026	Phase 2 2031	Phase 3 2036	Phase 4 2041	Total
Single Family	DUs	862	1,534	0	0	2,396
Multi Family	DUs	1,438	2,046	0	0	3,484
Single Family Age-Restricted	DUs	700	679	0	0	1,379
Hotel	Rooms	250	310	80	411	1,051
Industrial Park	SF	450,000	3,250,000	1,380,116	3,664,884	8,745,000
Commercial Retail	SF	180,000	796,480	258,500	596,485	1,831,465
Service & Office	SF	400,000	250,000	50,000	709,903	1,409,903
Research & Development	SF	300,000	200,000	50,000	651,557	1,201,557
Hospital	Beds	180	120	0	0	300
Civic Use	SF	0	13,975	0	27,952	41,927
Institutional Use	SF	0	62,064	122,092	92,194	276,350
Park	Acres	80	0	0	0	80
K-8 School	Students	0	1,600	1,600	0	3,200
Independent Living Facility	Beds	415	0	0	0	415
Assisted Living	Beds	150	0	0	0	150

Table 3. Proposed Cumulative Development Program and Phasing

Land Use	Unit	Phase 1 2026	Phase 2 2031	Phase 3 2036	Phase 4 2041
Single Family	DUs	862	2,396	2,396	2,396
Multi Family	DUs	1,438	3,484	3,484	3,484
Single Family Age-Restricted	DUs	700	1,379	1,379	1,379
Hotel	Rooms	250	560	640	1,051
Industrial Park	SF	450,000	3,700,000	5,080,116	8,745,000
Commercial Retail	SF	180,000	976,480	1,234,980	1,831,465
Service & Office	SF	400,000	650,000	700,000	1,409,903
Research & Development	SF	300,000	500,000	550,000	1,201,557
Hospital	Beds	180	300	300	300
Civic Use	SF	0	13,975	13,975	41,927
Institutional Use	SF	0	62,064	184,156	276,350
Park	Acres	80	80	80	80
K-8 School	Students	0	1,600	3,200	3,200
Independent Living Facility	Beds	415	415	415	415
Assisted Living	Beds	150	150	150	150

HISTORY

The Original Plan

The original Southern Grove study is encapsulated in the Western Annexation Traffic Study (WATS). The plan of all of the projects in the area was the creation of an employment center of over 5,000,000 square feet on 250 acres adjacent to Becker Road located jointly within the Wilson Groves and Riverland/Kennedy boundaries. The Riverland/Kennedy and Wilson Groves projects retain the entitlements to build an employment center, but both projects altered their land use plans to eliminate the employment center. The traffic analysis includes the trip generation and impact related to this 5,000,000 SF employment center, but it is unlikely to occur based on the current development plans of both properties. Southern Grove planned for a regional mall at the northwest quadrant of the I-95 and Becker Road interchange. A new overpass and interchange was planned for at Marshall Parkway (Open View Road/ East/West Road #3) and a back entrance to the mall was planned via an I-95 overpass connecting Paar Drive from west of I-95 to east of I-95.

The Southern Grove Substantial Deviation (2009 – 2012)(WATS 2.0)

The developers of Southern Grove intensified the non-residential uses on the property through a substantial deviation. The changes added almost 7,000,000 square feet of residential use to the property to create an employment center within Southern Grove. The result of the changes created more employment in the Western Annexation Area but reduced travel demand by creating more employment opportunities closer to residential development. The result greatly improved the jobs housing balance in the area and reduced trips leaving the western annexation area. The study showed the area roads could operate acceptably without the Marshall Parkway overpass or interchange. However, the condition remained in the DRI, but was delayed until the end of Phase 3. The WATS 2.0 study maintained the Paar Drive overpass over I-95 as a rear entrance to the future regional mall.

Western Grove NOPC (2015)

The developers of Western Grove modified their development program and reduced their intensity by 955 homes. The lost development intensity equates to 8,290 daily trips off the roadway network based on ITE's report, *Trip Generation (10th Edition)*. Western Grove Trip Generation contained in Appendices G utilized, *Trip Generation (9th Edition)* consistent with the development order for that project.

Riverland/Kennedy (Riverland) Development to Date

The Riverland development has thus far approved two age restricted single family development projects. Age restricted housing was never contemplated in any previous traffic study. The change of two 1,250 home neighborhoods to age restricted results in an estimated reduction of 11,970 daily external trips from the property. Riverland/Kennedy Trip Generation contained in Appendices G utilized, *Trip Generation (8th Edition)* consistent with the development order for that project.

Southern Grove Notice of Proposed Change 2020/2021

Prior to 2020, the property changed ownership and is now owned by Mattamy Homes (Master Developer) and Governmental Finance Corporation (GFC). The properties' remaining entitlements are split between the two owners with Mattamy Homes owning most of the residential entitlements and GFC owning most of the non-residential entitlements. Both developers propose moving their entitlements and reshaping the land use plan for Southern Grove. The changes include the elimination of the regional mall concept and the elimination of a 6,000 student university campus. The proposed changes to Southern Grove generally keep non-residential use quantities the same, but accelerate the residential development consistent with the market demand, and alter the residential use mix to capture the 55 and older consumer by adding age restricted, independent living and assisted living options. The non-residential uses change from higher trip generating commercial use to lower trip generating industrial use.

Wilson Groves

Wilson Groves Trip Generation contained in Appendices G utilized, *Trip Generation (8th Edition)* consistent with the development order for that project.

DATA

The information contained below was used to develop the foregoing traffic analysis.

- Western Annexation Traffic Study (WATS)
- Southern Grove DRI Application for Development Approval
- FDOT's Q/LOS Manual
- *Trip Generation, 8th Edition* (ITE report)
- *Trip Generation, 9th Edition* (ITE report)
- *Trip Generation, 10th Edition* (ITE report)

STUDY AREA

The project is not increasing intensity and is only moving uses around within approved DRI. Therefore, the project study area was limited to roadway network generally west of I-95 and south of Crosstown Parkway in Port St. Lucie.

The roadway network east of I-95 is not expected to change, therefore the study area is generally described by the following boundaries:

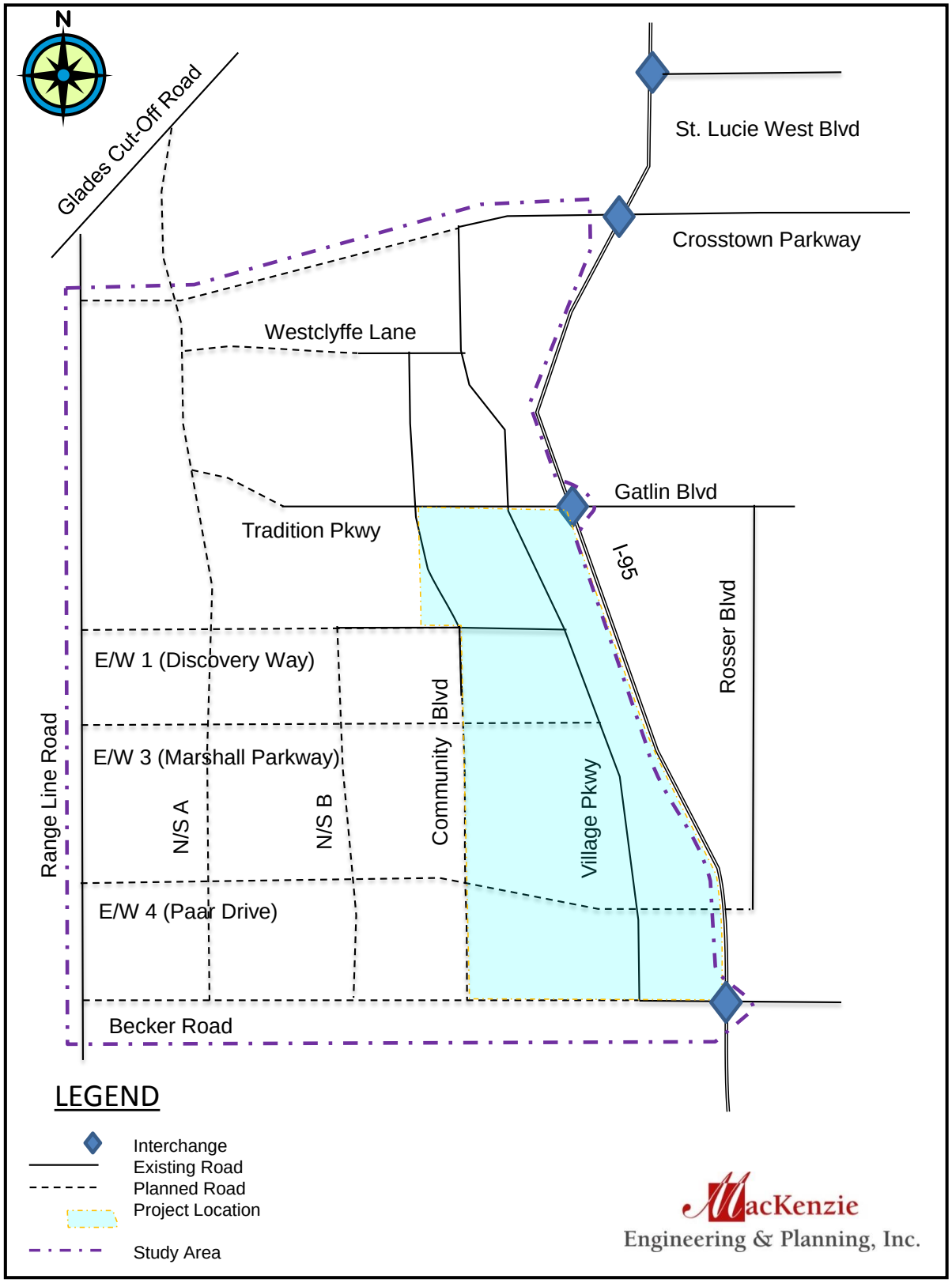
North: Crosstown Parkway

South: Becker Road

East: I-95

West: Range Line Road

Figure 1. Site Location & Study Area Map



PROGRAMMED IMPROVEMENTS

The Capital Improvements Programs for the City of Port St. Lucie and the Work Program for District IV of the Florida Department of Transportation (FDOT) were reviewed to identify the roadway improvements in the study area that are programmed for construction within the next three years. Applicable improvements are summarized in Table 4. Specific programmed improvement details are located in Appendix C.

Table 4. Programmed Improvements

Roadway	Limits	Improvement	Funding Agency	Year	Appendix Reference
Midway Road & I-95		SB – Add 2 NBL & 2 SBL	FDOT	2023	C7
Gatlin Blvd & I-95		NB – Add 3 NBL, 3 SBL & 2 NBR	FDOT	2023	C6
Port St. Lucie Blvd	Darwin Blvd to Alcantarra Blvd	4-Laning	FDOT	2022	C2
Port St. Lucie Blvd	Alcantarra Blvd to Paar Drive	4-Laning	FDOT	2024	C1
Port St. Lucie Blvd	Paar Drive to Becker Road	Design & ROW	FDOT	2021-2023	C8
St. Lucie West Blvd	Commerce Center Dr to E. of I-95	4/5 Laning & Ramp Improvements	FDOT	2022	C3
SR 714	Citrus Blvd to Martin Downs Blvd	4-Laning	FDOT	2022	C4
I-95	High Meadow Avenue to SR 70	Widening Study (PD&E)	FDOT	2024	C5
West Midway Road	Glades Cut-Off Road to Jenkins Road	Widening (Construction Not Funded)	FDOT	2021-2024	C9

PLANNED IMPROVEMENTS

The Capital Improvements Programs for the City of Port St. Lucie and St. Lucie TPO identify several long range improvements (2025-2040) that are incorporated into the transportation model. Applicable improvements are summarized in Table 5. Specific programmed improvement details are located in Appendix D.

Table 5. Planned Improvements

Roadway	Limits	Improvement	Funding Agency	Year
Port St. Lucie Blvd	Becker Road to Paar Drive	4-Laning	FDOT	2031-2040

ROADWAY SERVICE CAPACITY

Existing facilities within the study area were identified and data regarding those facilities were gathered in order to apply FDOT's generalized service volumes to those roadways. The roads were analyzed using service volumes based on FDOT's Q/LOS Handbook, the City's adopted level of services standard for Collectors (LOS D) and Arterials (LOS E), and the City's roadway designations from the Comprehensive Plan. The analysis focuses on the analysis of PM peak hour conditions because the study is limited to project volumes and the PM peak hour of the project generates more traffic than the AM peak hour.

PROPOSED CHANGES

Buildout Extension

An extension is not being requested. The current DRI buildout date is 2041 pursuant to Resolution 21-R34, which extended the DRI based on statutory extension permitted by law.

Network Changes

Upon reviewing the platted and dedicated right-of-way network and the needed laneage within and surrounding the project, the applicant is proposing to delete the Paar Drive overpass. Timing of internal roadway construction is also proposed as a part of the DRI changes.

Land Use Changes

Land use changes are discussed in the Proposed Use Change section of the report.

TRIP GENERATION

Trip generation for the DRI development order is based on Institute of Transportation Engineering's (ITE) manual, *Trip Generation Manual (8th Edition)*. This study updates the trip generation for the project to the 10th Edition of ITE's *Trip Generation Manual*. Civic use and Institutional Use are not included in ITE's *Trip Generation Manual (10th Edition)*. Therefore, trip generation rates and equations for the 2005 WATS were utilized. The rates and formulas from the 2005 WATS are located in Appendix N.

Internal Capture (Within Zones)

Internal capture within each zone is estimated using the same internal capture methodology applied within the WATS study as well as the Southern Grove 2012 Substantial Deviation Traffic Study. Several use combinations were not contemplated in the prior studies; therefore, additional internal capture rates are proposed as follows:

Table 6. New Internal Capture Rates

From Category	Internal Capture Rate	To Category	Internal Capture Rate
From R&D to Residential	2%	To Residential from R&D	3%
From Residential to R&D	1%	To R&D from Residential	1%
From Industrial to R&D	2%	To R&D from Industrial	2%
From R&D to Industrial	2%	To Industrial from R&D	2%
From Industrial to Hotel	1%	To Hotel from Industrial	1%
From Hotel to Industrial	1%	To Industrial from Hotel	1%
From Residential to Hotel	1%	To Hotel from Residential	1%
From Hotel to Residential	1%	To Residential from Hotel	1%

R&D and industrial use are employment uses similar to office. Therefore the internal capture rates were set similar those of office use contained in ITE's *Trip Generation Handbook (3rd Edition).*

Age restricted residential internal capture with schools was set to zero. Trip generation and internal capture by zone is detailed in Appendix B. Internalization also occurs in-between traffic zones.

Internal Capture (Between Zones)

The Southern Grove internal capture percentage between traffic analysis zones (TAZs) utilized the internal capture rates published in Exhibit E, Table 2 of the Southern Grove Development Order (Resolution 15-R95).

Table 7. Internal Capture Rates

Phase	Internal Capture Rates between TAZs
1	8.5%
2	14.7%
3	20.6%
4	24.4%

Pass-by Capture

The proposed pass-by capture rate of 34 percent is used for commercial uses and is in accordance with the ITE pass-by rates for the land use Commercial Retail (Land Use 820), as shown in Appendix J. The Daily and PM peak hour trip generation is summarized in Tables 8-15 and detailed in Appendix B.

General Information

The proposed project includes a mix of residential, school, commercial retail, office, industrial, research and development, and civic/institutional uses. All of the land uses are internally connected using roadways within the Southwest Annexation Area. Vehicles, pedestrians, bicyclists, etc. can travel among the land uses without accessing the external roadway network. The site design for Southern Grove will encourage interaction among all of the land uses.

Method

The internal/external split for generated trips was developed as follows:

1. The DRI was divided into eight different traffic analysis zones (TAZs) of development. Each zone is expected to internalize an amount of traffic (TAZ internal capture) based on the mix of land uses and agreed upon internal capture rates.
2. Pass-by capture was applied to each zone based on the presence and quantity of retail development within the zone (for further detail see explanation on the following pages).
3. The net external trips out of each zone (net external TAZ trips) were calculated by obtaining the projected gross trips generated by the zone and subtracting the TAZ internal capture and pass-by capture trips.
4. The socio-economic data associated with each zone was placed into the model.
5. The model trips associated with each zone were calibrated to match the net external trips out of each zone.

Internal trips were subtracted from the driveway volumes to determine the total external trips. Tables 8 through 15 summarize the calculation of internal and external trips.

Table 8. Daily Trip Generation (Phase 1 Land Use)

Gross Daily Trip Generation	TAZ Internal Capture Trips	External TAZ Trips	Pass-by Trips	External Daily Trip Generation	DRI Internal Capture Trips	External DRI Trips
49,781	4,556	45,225	3,085	42,140	3,582	38,558

Table 9. PM Peak Hour Trip Generation (Phase 1 Land Use)

Gross PM Peak Hour Trip Generation			TAZ Internal Capture Trips		Pass-by Trips		Net External TAZ Trips			Internal Capture % among DRI*	Internal Capture Trips among DRI		Net External DRI Trips		
Total	in	out	in	out	in	out	Total	in	out		in	out	Total	in	out
4,092	1,918	2,174	180	180	133	133	3,466	1,605	1,861	8.5%	147	147	3,172	1,458	1,714

Table 10. Daily Trip Generation (Phase 2 Land Use)

Gross Daily Trip Generation	TAZ Internal Capture Trips	External TAZ Trips	Pass-by Trips	External Daily Trip Generation	DRI Internal Capture Trips	External DRI Trips
132,087	15,846	116,241	9,496	106,745	14.7%	91,053

Table 11. PM Peak Hour Trip Generation (Phase 2 Land Use)

Gross PM Peak Hour Trip Generation			TAZ Internal Capture Trips		Pass-by Trips		Net External TAZ Trips			Internal Capture % among DRI*	Internal Capture Trips among DRI		Net External DRI Trips		
Total	in	out	in	out	in	out	Total	in	out		in	out	Total	in	out
11,954	5,500	6,454	613	613	463	463	9,802	4,422	5,380	14.7%	720	721	8,361	3,702	4,659

* These internal capture percentages were obtained from the previously accepted WATS study. Based on direction from the Regional Planning Council, these internal capture percentages were used for application on external roadways (roadways outside of the Western Annexation Area).

Table 12. Daily Trip Generation (Phase 3 Land Use)

Gross Daily Trip Generation	TAZ Internal Capture Trips	External TAZ Trips	Pass-by Trips	External Daily Trip Generation	DRI Internal Capture Trips	External DRI Trips
160,933	20,872	140,061	12,659	127,402	26,245	101,157

Table 13. PM Peak Hour Trip Generation (Phase 3 Land Use)

Gross PM Peak Hour Trip Generation			TAZ Internal Capture Trips		Pass-by Trips		Net External TAZ Trips			Internal Capture % among DRI*	Internal Capture Trips among DRI		Net External DRI Trips		
Total	in	out	in	out	in	out	Total	in	out		in	out	Total	in	out
14,678	6,612	8,066	840	840	608	608	11,783	5,165	6,619	20.6%	1,214	1,214	9,356	3,952	5,404

Table 14. Daily Trip Generation (Phase 4 Land-Use)

Gross Daily Trip Generation	TAZ Internal Capture Trips	External TAZ Trips	Pass-by Trips	External Daily Trip Generation	DRI Internal Capture Trips	External DRI Trips
216,090	30,278	185,812	17,168	168,644	41,149	127,495

Table 15. PM Peak Hour Trip Generation (Phase 4 Land Use)

Gross PM Peak Hour Trip Generation			TAZ Internal Capture Trips		Pass-by Trips		Net External TAZ Trips			Internal Capture % among DRI*	Internal Capture Trips among DRI		Net External DRI Trips		
Total	in	out	in	out	in	out	Total	in	out		in	out	Total	in	out
20,002	8,419	11,583	1,212	1,212	841	841	15,896	6,366	9,530	24.4%	1,939	1,939	12,018	4,427	7,591

* These internal capture percentages were obtained from the previously accepted WATS study. Based on direction from the Regional Planning Council, these internal capture percentages were used for application on external roadways (roadways outside of the Western Annexation Area).

Southern Grove Comparison to prior Approvals

The following sections compare the proposed approvals to prior approvals to show the effects of the change in use, change in use location, change in pass-by capture, and change in ITE Trip Generation methodology.

Phase 1

The Phase 1 changes result in an increase of 1,772 external daily trips compared to the 2009 ADA approval. The increased trip generation is a result of an increase in residential and office use and reductions in commercial (retail), hotel and R&D uses. Table 16 displays the Phase 1 proposed uses included in the DRI traffic analysis.

Table 16. Phase 1 Land Use and Trip Generation Comparison

Use	2005 ADA	2009 NOPC	2021 NOPC (ITE 8th)	2021 NOPC (ITE 10th)	Change from 2009 Approval
SF	944	300	862	862	562
MF	56	600	1,438	1,438	838
SF Age Restricted			700	700	700
Indeptendent Living			415	415	415
Assisted Living			150	150	150
Hotel		371	250	250	-121
Industrial		450,000	450,000	450,000	0
Commercial	78,408	465,000	180,000	180,000	-285,000
Service	36,590	350,000	400,000	400,000	50,000
R&D		915,000	300,000	300,000	-615,000
Hospital		300	180	180	-120
Civic		0	0	0	0
Institutional		0	0	0	0
School			0	0	0
University			0	0	0
Park	10	10	80	80	70
Gross Daily Trips	15,497	47,930	50,115	49,781	1,851
Internal Trips	1,429	5,874	5,022	4,556	-1,318
Pass-by Trips	574	1,688	3,578	3,085	1,397
External Daily Trips	13,494	40,368	41,515	42,140	1,772

Phase 2

The Phase 2 changes result in a decrease of 5,029 external daily trips compared to the 2009 ADA approval. The decreased trip generation is a result of increased internal and pass-by capture. Phase 2 proposed significant acceleration of the residential uses consistent with anticipated market demand, increases in industrial and large decreases in commercial, service, and R&D. Table 17 displays the Phase 2 proposed uses included in the DRI traffic analysis.

Table 17. Phase 2 Land Use and Trip Generation Comparison

Use	2005 ADA	2009 NOPC	2021 NOPC (ITE 8th)	2021 NOPC (ITE 10th)	Change from 2009 Approval
SF	3,630	1,300	2,396	2,396	1,096
MF	320	1,600	3,484	3,484	1,884
SF Age Restricted			1,379	1,379	1,379
Independent Living			415	415	415
Assisted Living			150	150	150
Hotel	100	621	560	560	-61
Industrial	525,334	1,861,112	3,700,000	3,700,000	1,838,888
Commercial	523,591	1,675,075	976,480	976,480	-698,595
Service	539,926	1,043,576	650,000	650,000	-393,576
R&D		1,442,867	500,000	500,000	-942,867
Hospital		300	300	300	0
Civic	8,385	8,385	0	0	-8,385
Institutional	41,456	41,456	54,424	54,424	12,968
School	2,220	1,600	1,600	1,600	0
University	1,000	1,000	0	0	-1,000
Park	45	35	80	80	45
Gross Daily Trips	86,014	127,301	142,996	132,087	4,786
Internal Trips	8,230	11,402	16,550	15,846	4,444
Pass-by Trips	3,591	4,125	10,554	9,496	5,371
External Daily Trips	74,193	111,774	115,892	106,745	-5,029

Phase 3

The Phase 3 changes result in a decrease of 59,509 external daily trips compared to the 2009 ADA approval. The decreased trip generation is a result of large decreases in commercial, office, University and R&D uses. Residential building is complete in Phase 3 and industrial uses increase. Table 18 displays the Phase 3 proposed uses included in the DRI traffic analysis.

Table 18. Phase 3 Land Use and Trip Generation Comparison

Use	2005 ADA	2009 NOPC	2021 NOPC (ITE 8th)	2021 NOPC (ITE 10th)	Change from 2009 Approval
SF	5,217	2,300	2,396	2,396	96
MF	1,190	2,618	3,484	3,484	866
SF Age Restricted			1,379	1,379	1,379
Independent Living			415	415	415
Assisted Living			150	150	150
Hotel	400	791	640	640	-151
Industrial	1,129,076	3,222,224	5,080,116	5,080,116	1,857,892
Commercial	1,276,308	2,675,075	1,234,980	1,234,980	-1,440,095
Service	1,203,780	1,737,152	700,000	700,000	-1,037,152
R&D		1,970,734	550,000	550,000	-1,420,734
Hospital		300	300	300	0
Civic	25,157	25,157	13,975	13,975	-11,182
Institutional	163,519	163,519	184,156	184,156	20,637
School	2,220	3,200	3,200	3,200	0
University	6,000	6,000	0	0	-6,000
Park	80	70	80	80	10
Gross Daily Trips	164,908	221,971	176,922	160,933	-61,038
Internal Trips	19,280	26,948	22,780	20,872	-6,076
Pass-by Trips	6,990	8,112	14,382	12,659	4,547
External Daily Trips	138,638	186,911	139,760	127,402	-59,509

Phase 4

The Phase 4 changes result in a decrease of 67,753 external daily trips compared to the 2009 ADA approval and is also fewer trips than the 2005 approval. The decreased trip generation is a result of large decreases in commercial, office, University and R&D uses. Industrial uses increase along with hotel use. Table 19 displays the Phase 4 proposed uses included in the DRI traffic analysis.

Table 19. Phase 4 Land Use and Trip Generation Comparison

Use	2005 ADA	2009 NOPC	2009 Uses Relocated	2021 NOPC (ITE 8th)	2021 NOPC (ITE 10th)	Change from 2009 Approval
SF	5,833	3,314	3,314	2,396	2,396	-918
MF	1,555	4,074	4,074	3,484	3,484	-590
SF Age Restricted				1,379	1,379	1,379
Independent Living				415	415	415
Assisted Living				150	150	150
Hotel	500	791	791	1,051	1,051	260
Industrial	1,999,404	4,583,336	4,583,336	8,745,000	8,745,000	4,161,664
Commercial	2,164,061	3,675,075	3,675,075	1,831,465	1,831,465	-1,843,610
Service	2,073,238	2,430,728	2,430,728	1,409,903	1,409,903	-1,020,825
R&D		2,498,601	2,498,601	1,201,557	1,201,557	-1,297,044
Hospital		300	300	300	300	0
Civic	41,927	41,927	41,927	41,927	41,927	0
Institutional	276,369	276,350	276,350	276,350	276,350	0
School	2,220	3,200	3,200	3,200	3,200	0
University	6,000	6,000	6,000	0	0	-6,000
Park	80	80	80	80	80	0
Gross Daily Trips	214,401	289,240	291,829	243,690	216,090	-75,739
Internal TAZ Trips	25,619	37,964	45,400	31,158	30,278	-15,122
Pass-by Trips	7,537	9,710	10,032	18,969	17,168	7,136
External Daily Trips	181,245	241,566	236,397	193,563	168,644	-67,753

Current Trends

Residential

Trip generation from residential neighborhoods west of I-95 has generally been lower than estimated by ITE's report, Trip Generation. Many of the buyers are retirees or older purchasers without children, which results in fewer vehicular trips leaving neighborhoods. The study continues to project all new development at ITE trip generation rates, which makes the study conservative.

Non-residential

Several of the large land purchasers of GFC property are warehousing and distribution use. These uses have lower employment density per square foot relative to office and commercial uses. This will result in lower trip generation from these industrial uses on the roadway network. The study continues to project all new development at ITE trip generation rates, which makes the study conservative.

MODELING

MacKenzie Engineering and Planning, Inc. (MEP) performed modeling of the Western Annexation Area (WAA) of Port St. Lucie using the 2040 **Treasure Coast Regional Planning Model (TCRPM) Version 4.0.** The WAA is generally bounded by Crosstown Parkway to the north, I-95 to the east, Range Line Road to the west, and Becker Road to the south. The model was reviewed for both land use and network.

TAZ data in Western Grove, Wilson Groves, Riverland/Kennedy and Southern Grove were modified to reflect the approved buildout of each DRI.

TAZ data was interpolated to the years 2030 to correspond to the Phase 2, 2035 to correspond to Phase 3, and 2040 to correspond to Phase 4/buildout. The one-year difference between the projected phase dates and model years corresponding to the final three phases of the project is not expected to result in a significant difference in results. Within the study area, the network was modified to reflect existing plus committed laneage. Upon review of the data, TAZs and respective socio-economic data were revised within the model for the Southern Grove, Western Grove, Wilson Groves, and Riverland DRIs. After that, the model roadway network surrounding the project was reviewed for reasonableness and modified to reflect the existing plus committed network. All roadway modifications made in the Phase 2 model were carried forward to the Phase 3 and Phase 4 models. Tables 16 through 18 outline the model roadway adjustments for Phases 2, 3 and 4, respectively.

Roadways identified as over capacity within the Southwest Annexation Area (SWAA) were widened or parallel facilities were improved in the model to alleviate congestion in and around the SWAA to allow for an uncongested assignment of traffic. The proposed phase years presented in this submittal (2026, 2031, 2036, and 2041) correspond to the phases one (1) through four (4) of the project, respectively.

Model Adjustments

Southern Grove, Western Grove, Riverland, and Wilson Groves DRIs are represented in the model by the following TAZs:

- Western Grove DRI-TAZs – 668, 670, 673, 862
- Riverland DRI-TAZs – 645, 649, 655-658, 855-860
- Southern Grove DRI-TAZs – 646, 651, 659-664
- Wilson Groves DRI-TAZs – 647, 648, 652-654, 861

Land use was converted to SE data and input for Southern Grove, Western Grove, Riverland, and Wilson Groves DRIs. The SE data loaded into the model for the Southern Grove, Western Grove, Riverland, and Wilson Groves match their DRI approvals. Each phase of the model matches the amount of use associated with each DRI's approved phasing, respectively.

Model Calibration

Each TAZ within the Southern Grove DRI (TAZs 646, 651, 659-664) was calibrated using shadow trips, employee trips, workers, and auto trips so that the combined model trips from each Southern Grove model TAZ match the projected new external ITE trips from DRI. Southern Grove DRI is represented by multiple TAZs and the location, TAZ connectors and land use in the TAZs are consistent with the proposed use and connectivity. The calibrated trips are shown in Tables 20 through 22.

The Phase 2, 3 and 4 model trips are calibrated within one, five, and zero percent of the projected ITE phase trips, respectively.

Table 20. ITE Trip Generation Compared To Model Calibrated Trips - Phase 2

Zone	ITE Trips	Model Trips	**% Difference**
Total	106,745	105,698	**-1%**
664	16,932	14,245	-16%
659	13,495	15,525	15%
662	15,298	14,084	-8%
661	21,567	15,201	-30%
646	7,555	10,794	43%
651	4,042	6,377	58%
660	12,774	13,409	5%
663	15,082	16,063	7%

Table 21. ITE Trip Generation Compared To Model Calibrated Trips - Phase 3

Zone	ITE Trips	Model Trips	**% Difference**
Total	127,402	133,691	**5%**
664	17,818	20,292	14%
659	13,596	16,336	20%
662	23,351	20,606	-12%
661	23,867	24,752	4%
646	10,389	10,878	5%
651	8,116	8,908	10%
660	13,926	14,704	6%
663	16,339	17,215	5%

Table 22. ITE Trip Generation Compared To Model Calibrated Trips - Phase 4

Zone	ITE Trips	Model Trips	**% Difference**
Total	168,644	169,252	**0%**
664	27,628	28,602	4%
659	14,221	15,364	8%
662	26,860	27,626	3%
661	29,789	27,113	-9%
646	18,127	13,441	-26%
651	10,309	14,181	38%
660	24,621	23,698	-4%
663	17,089	19,227	13%

Table 23. 2030 Model Roadway Adjustments

Roadway	From	To	Existing	Modification
Becker Road	Rangeline Rd	N/S A	-	2-lane
	N/S A	N/S B	-	4-lanes
	N/S B	Community Blvd	-	4-lanes
	Community Blvd	Village Pkwy	-	4-lanes
	Village Pkwy	I-95 Interchange	6-lanes	-
N/S A	Becker Rd	Paar Drive	-	2-lane
	Paar Drive	Marshall Pkwy	-	2-lane
	Marshall Pkwy	Discovery Way	-	2-lane
	Discovery Way	Gatlin Blvd	-	2-lane
	Gatlin Blvd	Westcliffe Ln	-	2-lane
	Westcliffe Ln	Crosstown Pkwy	-	-
N/S B	Becker Rd	Paar Drive	-	-
	Paar Drive	Marshall Pkwy	-	-
	Marshall Pkwy	Discovery Way	-	2-lane
Community Blvd	Becker Rd	Paar Drive	-	2-lane
	Paar Drive	Marshall Pkwy	-	2-lane
	Marshall Pkwy	Discovery Way	-	4-lanes
	Discovery Way	Gatlin Blvd	2-lane	-
	Gatlin Blvd	Westcliffe Ln	4-lanes	-
Village Pkwy	Becker Rd	Paar Drive	4-lanes	-
	Paar Drive	Marshall Pkwy	4-lanes	-
	Marshall Pkwy	Discovery Way	4-lanes	-
	Discovery Way	Gatlin Blvd	6-lanes	-
	Gatlin Blvd	Westcliffe Ln	4-lanes	-
	Westcliffe Ln	Crosstown Pkwy	4-lanes	-
E/W 4 (Paar Drive)	Rangeline	N/S A	-	-
	N/S A	N/S B	-	-
	N/S B	Community Blvd	-	-
	Community Blvd	Village Pkwy	-	-
	Village Pkwy	Rosser Blvd	-	-
E/W 3 (Marshall Pkwy)	Rangeline	N/S A	-	2-lane
	N/S A	N/S B	-	2-lane
	N/S B	Community Blvd	-	4-lanes
	Community Blvd	Village Pkwy	-	-
E/W 1 (Discovery Way)	Rangeline	N/S A	-	2-lane
	N/S A	N/S B	-	2-lane
	N/S B	Community Blvd	-	2-lane
	Community Blvd	Village Pkwy	2-Lanes	4-lanes
Tradition Pkwy/ Gatlin Blvd	Rangeline	N/S A	-	-
	N/S A	Community Blvd	-	2-lane
	Community Blvd	Village Pkwy	4-lanes	4-lanes
	Village Pkwy	I-95 Interchange	6-lanes	6-lanes
Westcliffe Lane	N/S A	Community Blvd	-	2-lane
	Community Blvd	Village Pkwy	4-lanes	4-lanes
Crosstown Pkwy	Rangeline	N/S A	-	2-lane
	N/S A	Village Pkwy	-	2-lane
	Village Pkwy	Commerce Ctr Pkwy	4-Lanes	6-lanes
	Commerce Ctr Pkwy	I-95 Interchange	6-lanes	6-lanes

Figure 2. 2030 Southwest Annexation Area Roadway Network And Laneage

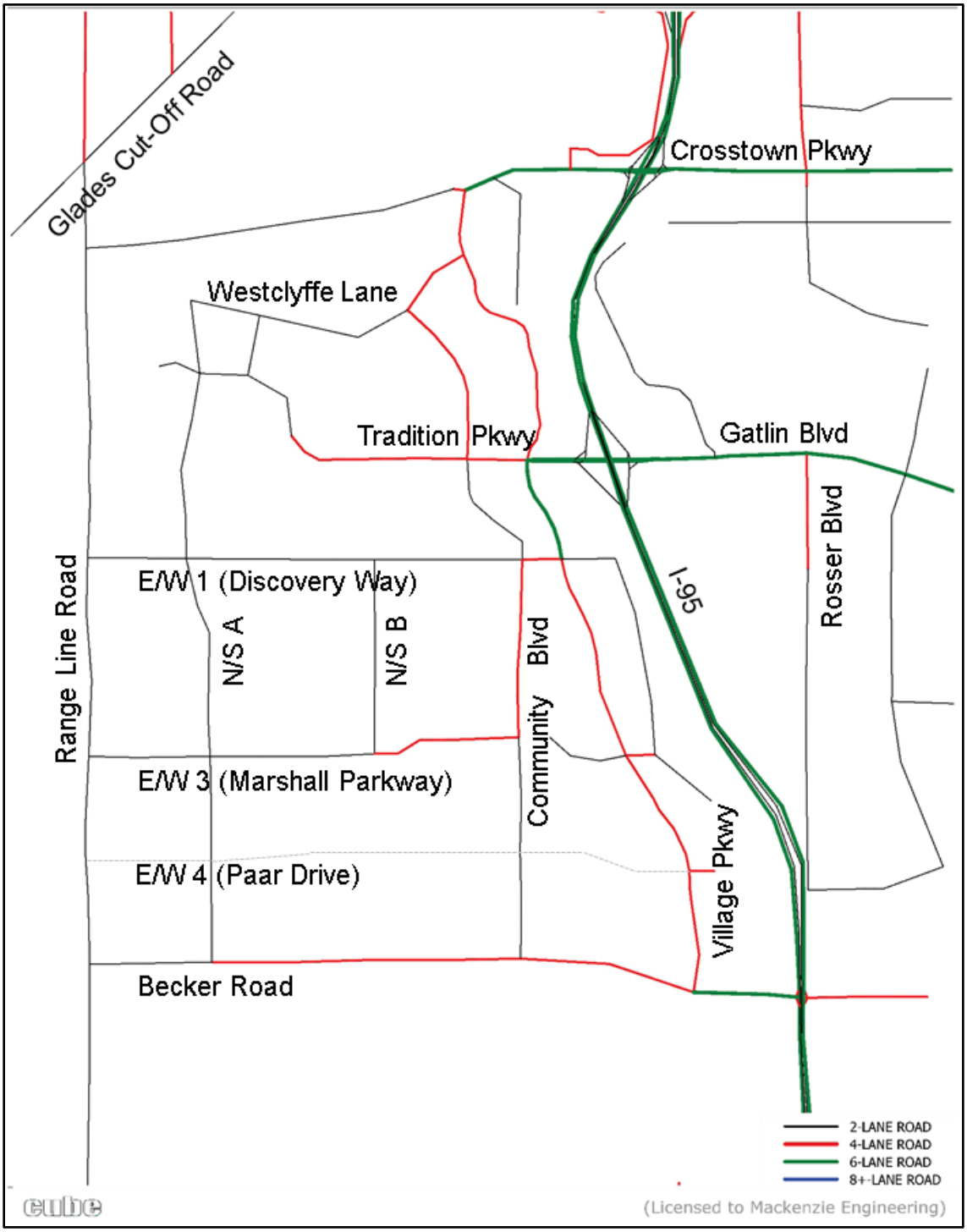


Table 24. 2035 Model Roadway Adjustments

Roadway	From	To	Modification
Becker Road	Rangeline Rd	N/S A	-
	N/S A	N/S B	-
	N/S B	Community Blvd	-
	Community Blvd	Village Pkwy	-
	Village Pkwy	I-95 Interchange	-
N/S A	Becker Rd	Paar Drive	-
	Paar Drive	Marshall Pkwy	-
	Marshall Pkwy	Discovery Way	-
	Discovery Way	Gatlin Blvd	-
	Gatlin Blvd	Westcliffe Ln	-
	Westcliffe Ln	Crosstown Pkwy	New 2-lane
N/S B	Becker Rd	Paar Drive	New 2-lane
	Paar Drive	Marshall Pkwy	New 2-lane
	Marshall Pkwy	Discovery Way	-
Community Blvd	Becker Rd	Paar Drive	-
	Paar Drive	Marshall Pkwy	-
	Marshall Pkwy	Discovery Way	-
	Discovery Way	Gatlin Blvd	Widen to 4-lanes
	Gatlin Blvd	Westcliffe Ln	-
Village Pkwy	Becker Rd	Paar Drive	-
	Paar Drive	Marshall Pkwy	-
	Marshall Pkwy	Discovery Way	-
	Discovery Way	Gatlin Blvd	-
	Gatlin Blvd	Westcliffe Ln	-
	Westcliffe Ln	Crosstown Pkwy	-
E/W 4 (Paar Drive)	Rangeline	N/S A	New 2-lane
	N/S A	N/S B	New 2-lane
	N/S B	Community Blvd	New 2-lane
	Community Blvd	Village Pkwy	New 2-lane
	Village Pkwy	Rosser Blvd	No Build
E/W 3 (Marshall Pkwy)	Rangeline	N/S A	-
	N/S A	N/S B	-
	N/S B	Community Blvd	-
	Community Blvd	Village Pkwy	New 2-lane
E/W 1 (Discovery Way)	Rangeline	N/S A	-
	N/S A	N/S B	-
	N/S B	Community Blvd	-
	Community Blvd	Village Pkwy	-
Tradition Pkwy/ Gatlin Blvd	Rangeline	N/S A	New 2-lane
	N/S A	Community Blvd	-
	Community Blvd	Village Pkwy	-
	Village Pkwy	I-95 Interchange	-
Westcliffe Lane	N/S A	Community Blvd	-
	Community Blvd	Village Pkwy	-
Crosstown Pkwy	Rangeline	N/S A	-
	N/S A	Village Pkwy	-
	Village Pkwy	Commerce Ctr Pkwy	-
	Commerce Ctr Pkwy	I-95 Interchange	-

Figure 3. 2035 Southwest Annexation Area Roadway Network And Laneage

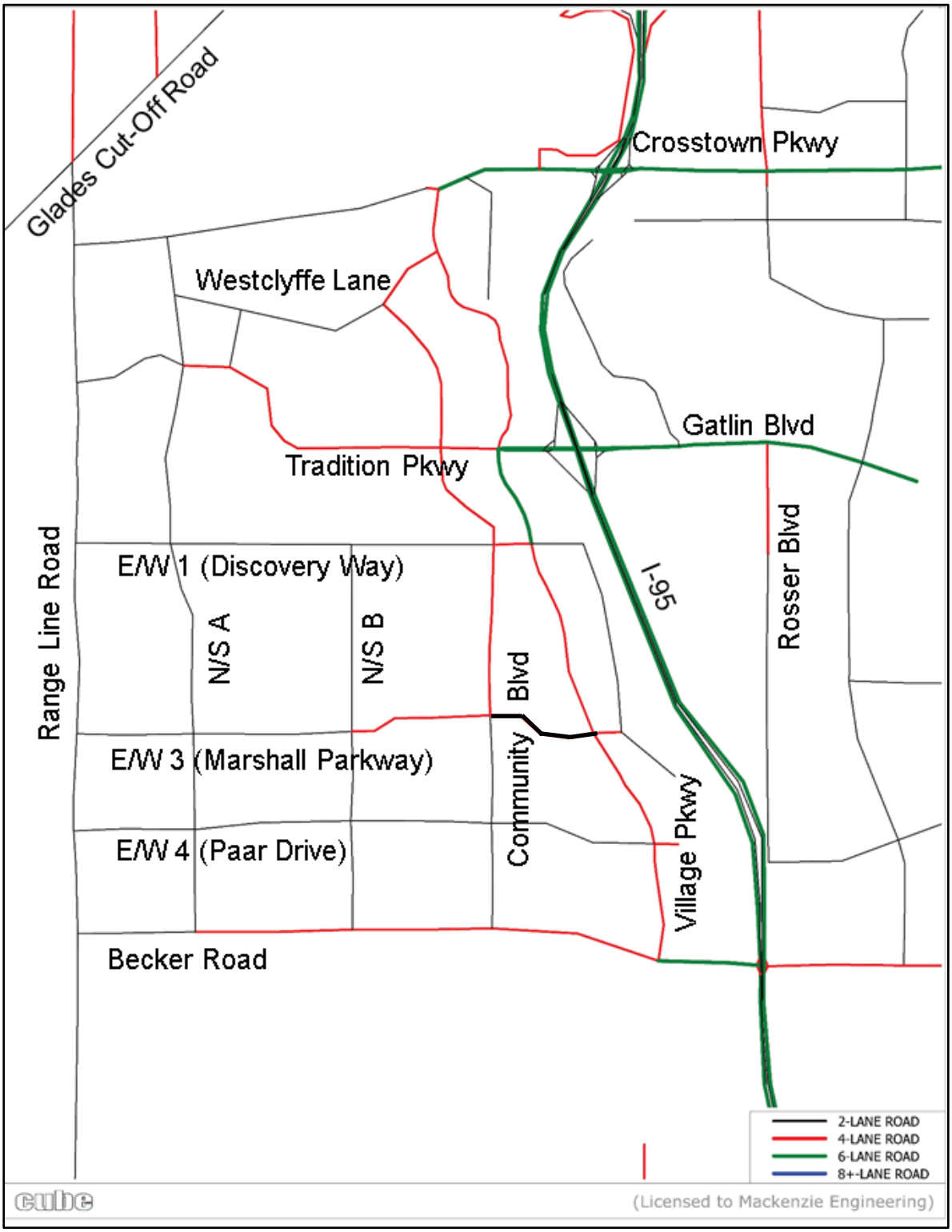
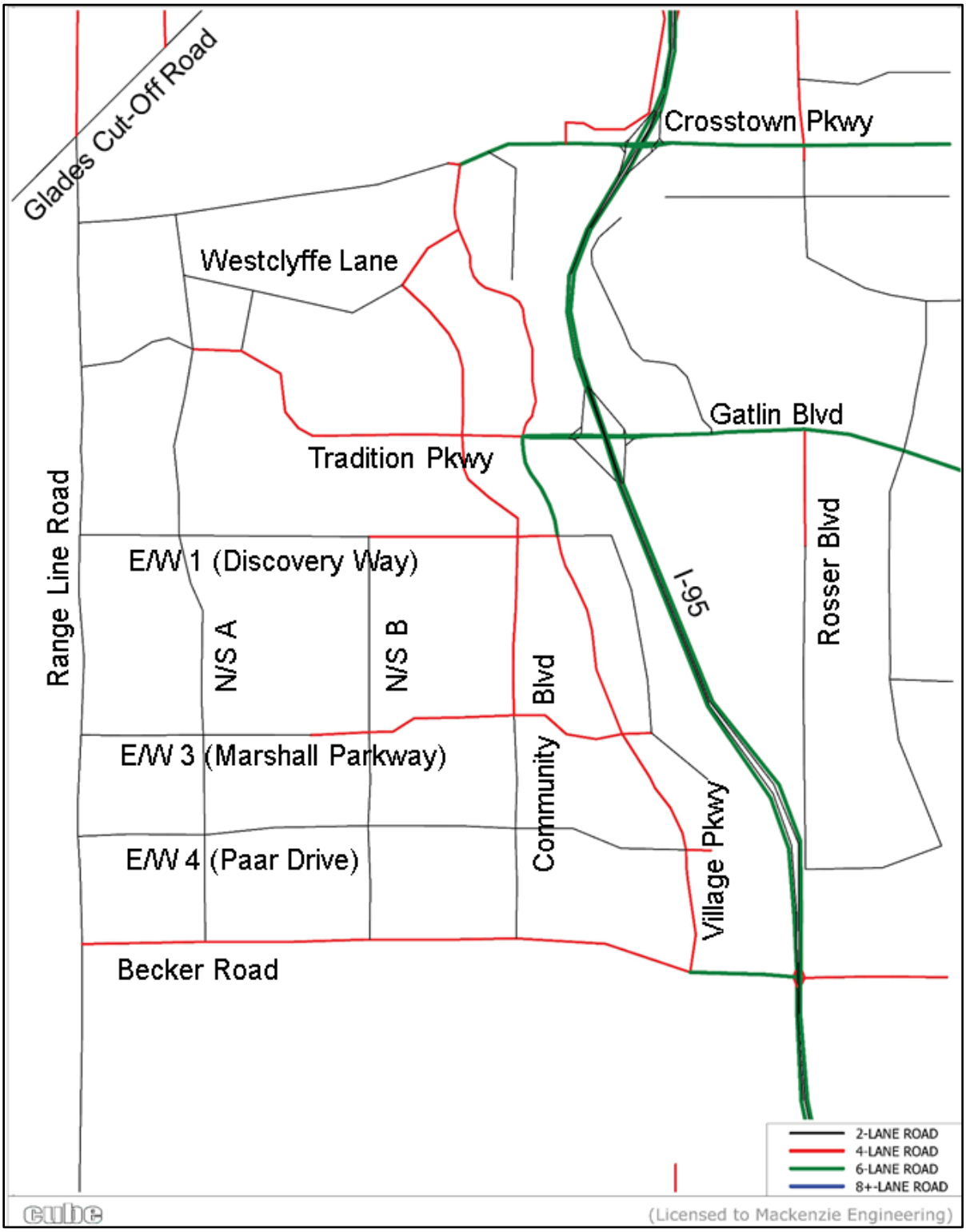


Table 25. 2040 Model Roadway Adjustments

Roadway	From	From	Modification
Becker Road	Rangeline Rd	N/S A	Widen to 4-lanes
	N/S A	N/S B	-
	N/S B	Community Blvd	-
	Community Blvd	Village Pkwy	-
	Village Pkwy	I-95 Interchange	-
N/S A	Becker Rd	Paar Drive	-
	Paar Drive	Marshall Pkwy	-
	Marshall Pkwy	Discovery Way	-
	Discovery Way	Gatlin Blvd	-
	Gatlin Blvd	Westcliffe Ln	-
	Westcliffe Ln	Crosstown Pkwy	-
N/S B	Becker Rd	Paar Drive	-
	Paar Drive	Marshall Pkwy	-
	Marshall Pkwy	Discovery Way	-
Community Blvd	Becker Rd	Paar Drive	-
	Paar Drive	Marshall Pkwy	-
	Marshall Pkwy	Discovery Way	-
	Discovery Way	Gatlin Blvd	-
	Gatlin Blvd	Westcliffe Ln	-
Village Pkwy	Becker Rd	Paar Drive	-
	Paar Drive	Marshall Pkwy	-
	Marshall Pkwy	Discovery Way	-
	Discovery Way	Gatlin Blvd	-
	Gatlin Blvd	Westcliffe Ln	-
	Westcliffe Ln	Crosstown Pkwy	-
E/W 4 (Paar Drive)	Rangeline	N/S A	-
	N/S A	N/S B	-
	N/S B	Community Blvd	-
	Community Blvd	Village Pkwy	-
	Village Pkwy	Hegener Drive	New 2-lane
E/W 3 (Marshall Pkwy)	Rangeline	N/S A	-
	N/S A	N/S B	-
	N/S B	Community Blvd	-
	Community Blvd	Village Pkwy	Widen to 4-lanes
E/W 1 (Discovery Way)	Rangeline	N/S A	-
	N/S A	N/S B	-
	N/S B	Community Blvd	Widen to 4-lanes
	Community Blvd	Village Pkwy	-
Tradition Pkwy/ Gatlin Blvd	Rangeline	N/S A	-
	N/S A	Community Blvd	Widen to 4-lanes
	Community Blvd	Village Pkwy	-
	Village Pkwy	I-95 Interchange	-
Westcliffe Lane	N/S A	Community Blvd	-
	Community Blvd	Village Pkwy	-
Crosstown Pkwy	Rangeline	N/S A	-
	N/S A	Village Pkwy	-
	Village Pkwy	Commerce Ctr Pkwy	-
	Commerce Ctr Pkwy	I-95 Interchange	-

Figure 4. 2040 Southwest Annexation Area Roadway Network And Laneage



ROADWAY ANALYSIS

Total Future Traffic

Future traffic volumes were developed for Phase 2, 3 and 4 of the project. Phase 1 traffic was not developed on the adjacent roadway network because the project nearing completion of Phase 1 and those impacts are understood. Future traffic includes the sum of existing traffic, ambient growth in traffic, committed/approved development traffic, and project traffic. Committed/approved development traffic includes traffic from the following three Southwest Annexation Area DRIs as well as all projects and projections of growth through 2040 contained in the Treasure Coast Regional Planning Model 4.0:

- Western Grove DRI
- Wilson Groves DRI
- Riverland DRI

The land uses and phasing information for each of the above three DRIs are shown in Tables 26-28.

Table 26. Phase 2 Land Use Summary

DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	Independent Living Facility (Units)	ALF (Beds)
Western Grove	4,000	0	0	0	0	200,000	50,000	0	0	0	54,450	25	1,600	0	0
Riverland	8,424	3,276	0	0	1,361,250	892,668	1,473,250	0	0	213,781	439,327	172	1,600	0	0
Southern Grove	3,775	3,484	1,379	560	3,700,000	976,480	650,000	500,000	300	13,975	62,064	80	1,600	415	150
Wilson Groves	5,775	1,925	0	0	1,361,250	590,000	1,503,250	0	0	40,347	185,727	135	1,600	0	0

Table 27. Phase 3 Land Use Summary

DRI	Single Family (DU)	Multi Family (DU)	SF Age-Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	High School (Students	Indepndnt Living Facility (Units)	ALF (Beds)
Western Grove	4,000	0	0	0	0	200,000	50,000	0	0	0	54,450	25	1,600	0	0	0
Riverland	8,424	3,276	0	0	952,875	892,668	952,785	0	0	101,781	327,327	172	1,600	2,500	0	0
Southern Grove	2,396	3,484	1,379	730	4,753,590	1,280,980	650,000	550,000	300	25,157	163,519	80	3,200	0	415	150
Wilson Groves	5,775	1,925	0	0	952,875	590,000	1,094,875	0	0	40,347	185,727	93	1,600	0	0	0

Table 28. Phase 4 (2041 / Buildout) Land Use Summary

DRI	Single Family (DU)	Multi Family (DU)	SF Age-Restricte (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	Independent Living (Units)	ALF (Beds)
Western Grove	4,000	0	0	0	0	200,000	50,000	0	0	0	54,450	25	1,600	0	0
Riverland	8,424	3,276	0	0	1,361,250	892,668	1,473,250	0	0	213,781	439,327	172	1,600	0	0
Southern Grove	2,396	3,484	1,379	1,051	8,745,000	1,831,465	1,409,903	1,201,557	300	41,927	276,350	80	3,200	415	150
Wilson Groves	5,775	1,925	0	0	1,361,250	590,000	1,503,250	0	0	40,347	185,727	135	1,600	0	0

Interchange Analysis

The Tradition Parkway/Gatlin Boulevard and Becker Road interchanges with I-95 were evaluated in 2031, 2036 and 2041 because of the removal of the Paar Drive Overpass. Year 2031, 2036 and 2041 traffic volumes were obtained from model traffic volumes and estimated using FDOT's TURNS5 Turning Movement Analysis Tool – V2014.

The projected 2031, 2036 and 2041 intersection turning movement volumes were evaluated at both interchanges. To determine needed improvements at the interchanges, the intersections were analyzed and the signal timing was optimized. After the signal timing was optimized, improvements to the laneage were examined. Improvements were added to each intersection until all movements were at a volume to capacity ratio of 1.0 or less in Synchro 10.

The Tradition Parkway interchange is projected to operate acceptably with the FDOT programmed improvements. Based on the analysis, the Becker Road interchange will need improvements. The Becker Road interchange is projected to need a second southbound right-turn lane in 2031 and a second northbound left turn lane in 2036. The Becker Road interchange is projected to operate acceptably with the needed improvements. The interchange analysis results are shown in Table 29.

Table 29. Interchange Analysis Results

	Tradition Parkway		Becker Road	
	I-95 SB Ramp	**I-95 NB Ramp**	**I-95 SB Ramp**	**I-95 NB Ramp**
2031	C	D	C	D
Needed Improvement	-	-	Add 2nd SBR	-
2036	C	D	D	D
Needed Improvement	-	-	-	Add 2nd NBL
2041	C	D	D	C
Needed Improvement	-	-	-	-

The improvements identified are projected to make the interchange ramp intersections operate acceptably. The project AADT at the Tradition Parkway northbound on-ramp and

southbound off-ramp are 25,000 to 27,000. It is expected that further improvements will be necessary at merge and diverge locations with I-95. These locations were not analyzed for acceptability because the DRI is not increasing in intensity and therefore does not have additional impact on the state's Strategic Intermodal System (SIS). The interchange analyses detail pages are located in Appendix I.

Figure 5. Tradition Parkway Interchange Lane Geometry

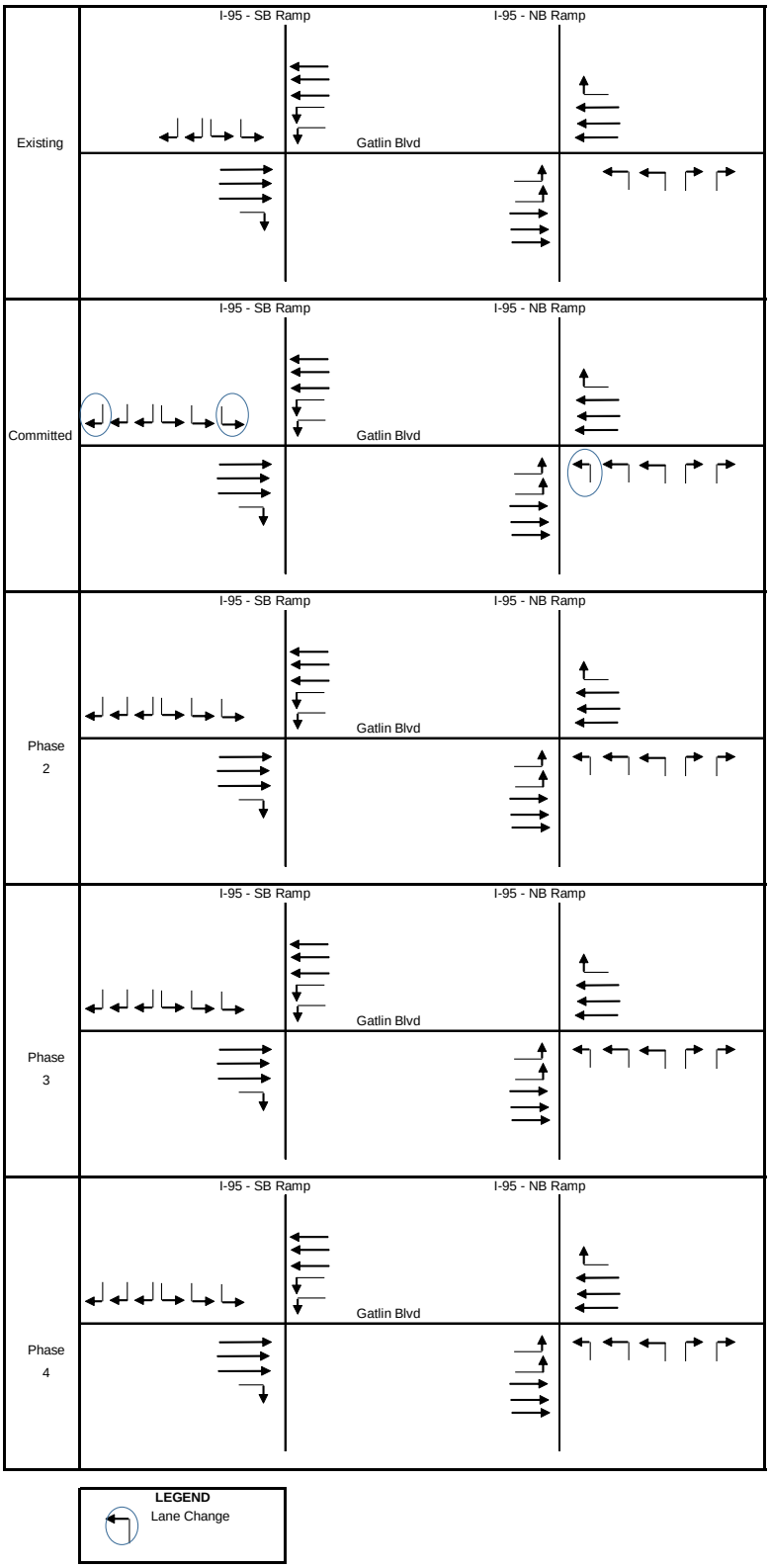
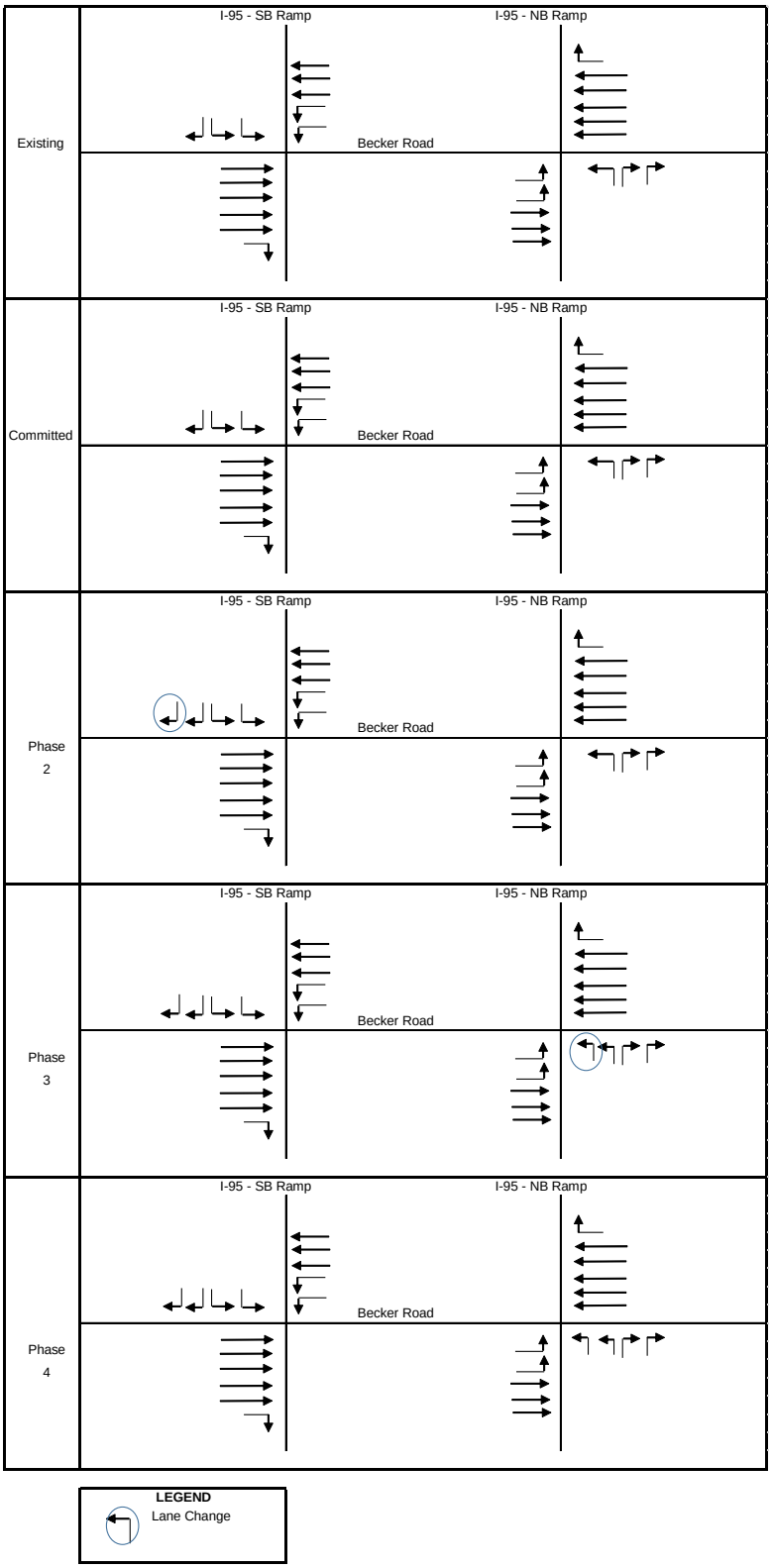


Figure 6. Becker Road Interchange Lane Geometry



Roadway Capacity Analysis

Future PM peak hour directional traffic volumes were compared to their established service volume thresholds for all roadways in the study area.

Roadway Analysis

Proposed Condition

A traffic analysis was performed on all roadways in the WAA as well as all future roadways in the WAA. The model output is projected in peak season weekday average daily traffic (PSWADT). A peak-to-daily ratio (K) of 0.9 was applied and a direction distribution factor (D) of 0.55 was applied to daily volumes within the study area. The generalized service volumes are compared to total future traffic by phase in Tables 30 through 36. The study then compares the projected peak hour peak direction traffic volumes to the roadway service volumes to determine if improvements are needed. If an improvement is needed, the necessary improvement is identified. A summary of the roadway improvements needed within the study area is shown in Tables 37 and 38.

SIS Analysis

The applicant is decreasing intensity. Therefore, further analysis of SIS facilities is not needed or required.

Table 30. Projected Phase 2 Roadway Volumes and Laneage Needs

Roadway	From	To	Model Traffic	AADT	Peak Hour	NB/EB	SB/WB	Planned Service Capacity and Laneage		Vol/MSV Ratio	Needed Imprvmnt
Becker Road	Rangeline	N/S A	11,283	11,283	1,015	456	559	924	2-Lanes	0.60	
	N/S A	N/S B	21,143	21,143	1,903	856	1,047	2,100	4-Lanes	0.50	
	N/S B	Community Blvd	32,798	32,798	2,952	1,328	1,624	2,100	4-Lanes	0.77	
	Community Blvd	Village Parkway	36,872	36,872	3,318	1,825	1,493	2,100	4-Lanes	0.87	
	Village Parkway	I-95 Interchange	46,952	46,952	4,226	2,324	1,902	3,171	6-Lanes	0.73	
N/S A	Becker Rd	Paar Drive	14,237	14,237	1,281	576	705	924	2-Lanes	0.76	
	Paar Drive	Open View	14,469	14,469	1,302	716	586	924	2-Lanes	0.77	
	Open View	E/W 1	8,663	8,663	780	429	351	924	2-Lanes	0.46	
	E/W 1	Gatlin Blvd	12,670	12,670	1,140	627	513	924	2-Lanes	0.68	
	Gatlin Blvd	Westcliffe Ln	6,474	6,474	583	320	263	924	2-Lanes	0.35	
N/S B	Open View	E/W 1	7,711	7,711	694	382	312	924	2-Lanes	0.41	
Community Blvd	Becker Rd	Paar Drive	17,438	17,438	1,569	706	863	924	2-Lanes	0.93	
	Paar Drive	Open View	17,778	17,778	1,600	720	880	924	2-Lanes	0.95	
	Open View	E/W 1	26,078	26,078	2,347	1,056	1,291	2,100	4-Lanes	0.61	
	E/W 1	Gatlin Blvd	13,807	13,807	1,243	560	683	924	2-Lanes	0.74	
	Gatlin Blvd	Westcliffe Ln	8,381	8,381	754	415	339	2,000	4-Lanes	0.21	
Village Parkway	Becker Rd	Paar Drive	20,123	20,123	1,811	815	996	2,100	4-Lanes	0.47	
	Paar Drive	Open View	18,679	18,679	1,681	756	925	2,100	4-Lanes	0.44	
	Open View	E/W 1	26,703	26,703	2,403	1,322	1,081	2,100	4-Lanes	0.63	
	E/W 1	Gatlin Blvd	49,117	49,117	4,421	2,431	1,990	3,171	6-Lanes	0.77	
	Gatlin Blvd	Westcliffe Ln	9,124	9,124	821	452	369	2,100	4-Lanes	0.22	
	Westcliffe Ln	Crosstown Pkwy	22,346	22,346	2,011	1,106	905	2,100	4-Lanes	0.53	

Table 31. Projected Phase 2 Roadway Volumes and Laneage Needs (Continued)

Roadway	From	To	Model Traffic	AADT	Peak Hour	NB/EB	SB/WB	Required Service Capacity and Laneage		Vol/MSV Ratio	Needed Imprvmnt
E/W 3	Rangeline	N/S A	5,491	5,491	494	222	272	924	2-Lanes	0.29	
(Marshall	N/S A	N/S B	13,709	13,709	1,234	555	679	924	2-Lanes	0.73	
Parkway)	N/S B	Community Blvd	22,122	22,122	1,991	896	1,095	2,100	4-Lanes	0.52	
E/W 1	Rangeline	N/S A	9,846	9,846	886	399	487	924	2-Lanes	0.53	
(Discovery	N/S A	N/S B	12,132	12,132	1,092	491	601	924	2-Lanes	0.65	
Way)	N/S B	Community Blvd	17,057	17,057	1,535	691	844	924	2-Lanes	0.91	
	Community Blvd	Village Parkway	37,911	37,911	3,412	1,535	1,877	2,100	4-Lanes	0.89	
Tradition	N/S A	Community Blvd	15,028	15,028	1,353	609	744	924	2-Lanes	0.81	
Parkway/	Community Blvd	Village Parkway	19,629	19,629	1,767	795	972	2,100	4-Lanes	0.46	
Gatlin Blvd	Village Parkway	I-95 Interchange	69,961	69,961	6,296	3,463	2,833	3,171	6-Lanes	**1.09**	**8-Lanes**
Westcliffe	N/S A	Community Blvd	9,121	9,121	821	451	370	792	2-Lanes	0.57	
Lane	Community Blvd	Village Parkway	16,863	16,863	1,518	835	683	1,800	4-Lanes	0.46	
	Rangeline	N/S A	9,610	9,610	865	476	389	924	2-Lanes	0.52	
Crosstown	N/S A	Village Parkway	14,242	14,242	1,282	705	577	924	2-Lanes	0.76	
Parkway	Village Parkway	Commerce Ctr Pkwy	32,788	32,788	2,951	1,623	1,328	3,171	6-Lanes	0.51	
	Commerce Ctr Pkwy	I-95 Interchange	35,775	35,775	3,220	1,771	1,449	3,171	6-Lanes	0.56	

Table 32. Projected Phase 3 Roadway Volumes and Laneage Needs

Roadway	From	To	Model Traffic	AADT	Peak Hour	NB/EB	SB/WB	Planned Service Capacity and Laneage		Vol/MSV Ratio	Needed Imprvmnt
Becker Road	Rangeline	N/S A	11,800	11,800	1,062	478	584	924	2-Lanes	0.63	
	N/S A	N/S B	17,905	17,905	1,611	725	886	2,100	4-Lanes	0.42	
	N/S B	Community Blvd	27,231	27,231	2,451	1,103	1,348	2,100	4-Lanes	0.64	
	Community Blvd	Village Parkway	29,841	29,841	2,686	1,477	1,209	2,100	4-Lanes	0.70	
	Village Parkway	I-95 Interchange	52,679	52,679	4,741	2,608	2,133	3,171	6-Lanes	0.82	
N/S A	Becker Rd	Paar Drive	8,229	8,229	741	334	407	924	2-Lanes	0.44	
	Paar Drive	Open View	8,020	8,020	722	397	325	924	2-Lanes	0.43	
	Open View	E/W 1	10,221	10,221	920	506	414	924	2-Lanes	0.55	
	E/W 1	Gatlin Blvd	11,903	11,903	1,071	589	482	924	2-Lanes	0.64	
	Gatlin Blvd	Westcliffe Ln	10,918	10,918	983	540	443	924	2-Lanes	0.58	
	Westcliffe Ln	Crosstown Pkwy	11,192	11,192	1,007	554	453	924	2-Lanes	0.60	
N/S B	Becker Rd	Paar Drive	5,106	5,106	460	253	207	924	2-Lanes	0.27	
	Paar Drive	Open View	13,730	13,730	1,236	556	680	924	2-Lanes	0.74	
	Open View	E/W 1	10,066	10,066	906	498	408	924	2-Lanes	0.54	
Community Blvd	Becker Rd	Paar Drive	6,365	6,365	573	258	315	924	2-Lanes	0.34	
	Paar Drive	Open View	11,022	11,022	992	446	546	924	2-Lanes	0.59	
	Open View	E/W 1	26,597	26,597	2,394	1,077	1,317	2,100	4-Lanes	0.63	
	E/W 1	Gatlin Blvd	19,338	19,338	1,740	783	957	2,100	4-Lanes	0.46	
	Gatlin Blvd	Westcliffe Ln	11,679	11,679	1,051	578	473	2,000	4-Lanes	0.29	
Village Parkway	Becker Rd	Paar Drive	21,385	21,385	1,925	866	1,059	2,100	4-Lanes	0.50	
	Paar Drive	Open View	20,093	20,093	1,808	813	995	2,100	4-Lanes	0.47	
	Open View	E/W 1	22,157	22,157	1,994	1,097	897	2,100	4-Lanes	0.52	
	E/W 1	Gatlin Blvd	47,982	47,982	4,318	2,375	1,943	3,171	6-Lanes	0.75	
	Gatlin Blvd	Westcliffe Ln	8,954	8,954	806	443	363	2,100	4-Lanes	0.21	
	Westcliffe Ln	Crosstown Pkwy	20,105	20,105	1,809	995	814	2,100	4-Lanes	0.47	

Table 33. Projected Phase 3 Roadway Volumes and Laneage Needs (Continued)

Roadway	From	To	Model Traffic	AADT	Peak Hour	NB/EB	SB/WB	Required Service Capacity and Laneage		Vol/MSV Ratio	Needed Imprvmnt
E/W 4 (Paar Drive)	Rangeline	N/S A	2,388	2,388	215	97	118	924	2-Lanes	0.13	
	N/S A	N/S B	11,585	11,585	1,043	470	573	924	2-Lanes	0.62	
	N/S B	Community Blvd	12,500	12,500	1,125	506	619	924	2-Lanes	0.67	
	Community Blvd	Village Parkway	9,545	9,545	859	387	472	924	2-Lanes	0.51	
E/W 3 (Marshall Parkway)	Rangeline	N/S A	5,613	5,613	505	227	278	924	2-Lanes	0.30	
	N/S A	N/S B	14,675	14,675	1,321	595	726	924	2-Lanes	0.79	
	N/S B	Community Blvd	26,163	26,163	2,355	1,060	1,295	2,100	4-Lanes	0.62	
	Community Blvd	Village Parkway	13,298	13,298	1,197	539	658	924	2-Lanes	0.71	
E/W 1	Rangeline	N/S A	6,653	6,653	599	270	329	924	2-Lanes	0.36	
	N/S A	N/S B	11,464	11,464	1,032	465	567	924	2-Lanes	0.61	
	N/S B	Community Blvd	16,536	16,536	1,488	669	819	924	2-Lanes	0.89	
	Community Blvd	Village Parkway	35,034	35,034	3,153	1,419	1,734	2,100	4-Lanes	0.83	
Tradition Parkway/ Gatlin Blvd	Rangeline	N/S A	3,435	3,435	309	170	139	924	2-Lanes	0.18	
	N/S A	Community Blvd	14,946	14,946	1,345	605	740	924	2-Lanes	0.80	
	Community Blvd	Village Parkway	16,401	16,401	1,476	664	812	2,100	4-Lanes	0.39	
	Village Parkway	I-95 Interchange	71,334	71,334	6,420	3,531	2,889	4,242	8-Lanes	0.83	
Westcliffe Lane	N/S A	Community Blvd	6,658	6,658	599	330	269	792	2-Lanes	0.42	
	Community Blvd	Village Parkway	15,129	15,129	1,362	749	613	1,800	4-Lanes	0.42	
Crosstown Parkway	Rangeline	N/S A	8,933	8,933	804	442	362	924	2-Lanes	0.48	
	N/S A	Village Parkway	17,200	17,200	1,548	851	697	924	2-Lanes	0.92	
	Village Parkway	Commerce Ctr Pkwy	35,657	35,657	3,209	1,765	1,444	3,171	6-Lanes	0.56	
	Commerce Ctr Pkwy	I-95 Interchange	38,192	38,192	3,437	1,891	1,546	3,171	6-Lanes	0.60	

Table 34. Projected Phase 4 Roadway Volumes and Laneage Needs

Roadway	From	To	Model Traffic	AADT	Peak Hour	NB/EB	SB/WB	Planned Service Capacity and Laneage		Vol/MSV Ratio	Needed Imprvmnt
Becker Road	Rangeline	N/S A	14,865	14,865	1,338	602	736	2,100	4-Lanes	0.35	
	N/S A	N/S B	22,832	22,832	2,055	925	1,130	2,100	4-Lanes	0.54	
	N/S B	Community Blvd	32,009	32,009	2,881	1,297	1,584	2,100	4-Lanes	0.75	
	Community Blvd	Village Parkway	33,358	33,358	3,002	1,651	1,351	2,100	4-Lanes	0.79	
	Village Parkway	I-95 Interchange	59,999	59,999	5,400	2,970	2,430	3,171	6-Lanes	0.94	
N/S A	Becker Rd	Paar Drive	9,297	9,297	837	377	460	2,100	4-Lanes	0.22	
	Paar Drive	Open View	7,557	7,557	680	374	306	2,100	4-Lanes	0.18	
	Open View	E/W 1	9,485	9,485	854	470	384	2,100	4-Lanes	0.22	
	E/W 1	Gatlin Blvd	11,557	11,557	1,040	572	468	924	2-Lanes	0.62	
	Gatlin Blvd	Westcliffe Ln	10,155	10,155	914	503	411	924	2-Lanes	0.54	
	Westcliffe Ln	Crosstown Pkwy	11,838	11,838	1,065	586	479	924	2-Lanes	0.63	
N/S B	Becker Rd	Paar Drive	7,142	7,142	643	354	289	2,100	4-Lanes	0.17	
	Paar Drive	Open View	15,237	15,237	1,371	617	754	2,100	4-Lanes	0.36	
	Open View	E/W 1	10,662	10,662	960	528	432	2,100	4-Lanes	0.25	
Community Blvd	Becker Rd	Paar Drive	6,777	6,777	610	275	335	2,100	4-Lanes	0.16	
	Paar Drive	Open View	14,240	14,240	1,282	577	705	2,100	4-Lanes	0.34	
	Open View	E/W 1	32,078	32,078	2,887	1,299	1,588	2,100	4-Lanes	0.76	
	E/W 1	Gatlin Blvd	30,009	30,009	2,701	1,216	1,485	2,100	4-Lanes	0.71	
	Gatlin Blvd	Westcliffe Ln	18,735	18,735	1,686	927	759	2,000	4-Lanes	0.46	
Village Parkway	Becker Rd	Paar Drive	26,660	26,660	2,399	1,079	1,320	2,100	4-Lanes	0.63	
	Paar Drive	Open View	25,790	25,790	2,321	1,044	1,277	2,100	4-Lanes	0.61	
	Open View	E/W 1	28,572	28,572	2,571	1,414	1,157	2,100	4-Lanes	0.67	
	E/W 1	Gatlin Blvd	57,984	57,984	5,219	2,870	2,349	3,171	6-Lanes	0.91	
	Gatlin Blvd	Westcliffe Ln	7,791	7,791	701	386	315	2,100	4-Lanes	0.18	
	Westcliffe Ln	Crosstown Pkwy	25,621	25,621	2,306	1,268	1,038	2,100	4-Lanes	0.60	

Table 35. Projected Phase 4 Roadway Volumes and Laneage Needs (Continued)

Roadway	From	To	Model Traffic	AADT	Peak Hour	NB/EB	SB/WB	Required Service Capacity and Laneage		Vol/MSV Ratio	Needed Imprvmnt
E/W 4 (Paar Drive)	Rangeline	N/S A	2,569	2,569	231	104	127	924	2-Lanes	0.14	
	N/S A	N/S B	12,744	12,744	1,147	516	631	2,100	4-Lanes	0.30	
	N/S B	Community Blvd	15,430	15,430	1,389	625	764	2,100	4-Lanes	0.36	
	Community Blvd	Village Parkway	13,338	13,338	1,200	540	660	924	2-Lanes	0.71	
E/W 3 (Marshall Parkway)	Rangeline	N/S A	5,548	5,548	499	224	275	924	2-Lanes	0.30	
	N/S A	N/S B	14,306	14,306	1,288	580	708	924	2-Lanes	0.77	
	N/S B	Community Blvd	26,841	26,841	2,416	1,087	1,329	2,100	4-Lanes	0.63	
	Community Blvd	Village Parkway	18,131	18,131	1,632	735	897	924	2-Lanes	0.97	
	Village Parkway	E. of Village Pkwy	8,489	8,489	764	420	344	840	2-Lanes	0.50	
E/W 1 (Discovery Way)	Rangeline	N/S A	6,593	6,593	593	267	326	924	2-Lanes	*0.35*	
	N/S A	N/S B	11,394	11,394	1,025	461	564	924	2-Lanes	*0.61*	
	N/S B	Community Blvd	18,045	18,045	1,624	731	893	2,100	4-Lanes	*0.43*	
	Community Blvd	Village Parkway	46,076	46,076	4,147	1,866	2,281	2,100	4-Lanes	*1.09*	4-Lane E/W 3
Tradition Parkway/ Gatlin Blvd	Rangeline	N/S A	3,560	3,560	320	176	144	924	2-Lanes	*0.19*	
	N/S A	Community Blvd	16,742	16,742	1,507	678	829	2,100	4-Lanes	*0.39*	
	Community Blvd	Village Parkway	18,120	18,120	1,631	734	897	2,100	4-Lanes	*0.43*	
	Village Parkway	I-95 Interchange	79,998	79,998	7,200	3,960	3,240	4,242	8-Lanes	*0.93*	
Westcliffe Lane	N/S A	Community Blvd	7,046	7,046	634	349	285	792	2-Lanes	*0.44*	
	Community Blvd	Village Parkway	22,225	22,225	2,000	1,100	900	1,800	4-Lanes	*0.61*	
Crosstown Parkway	Rangeline	N/S A	9,319	9,319	839	461	378	924	2-Lanes	*0.50*	
	N/S A	Village Parkway	18,051	18,051	1,625	894	731	924	2-Lanes	0.97	
	Village Parkway	Commerce Ctr Pkwy	41,262	41,262	3,714	2,042	1,672	3,171	6-Lanes	0.64	
	Commerce Ctr Pkwy	I-95 Interchange	44,348	44,348	3,991	2,195	1,796	3,171	6-Lanes	0.69	

Table 36. Summary of Projected and Needed Roadway Laneage

Roadway	From	To	Phase 2	Phase 3	Phase 4
Becker Road	Rangeline	N/S A	2-lane	-	Widen to 4LD
	N/S A	N/S B	4-lanes	-	-
	N/S B	Community Blvd	4-lanes	-	-
	Community Blvd	Village Parkway	4-lanes	-	-
	Village Parkway	I-95 Interchange	6-lanes & Interchange Improvements	Interchange Improvements	-
N/S A	Becker Rd	Paar Drive	2-lane	-	Widen to 4LD
	Paar Drive	Marshall Parkway	2-lane	-	Widen to 4LD
	Marshall Parkway	Discovery Way	2-lane	-	Widen to 4LD
	Discovery Way	Gatlin Blvd	2-lane	-	-
	Gatlin Blvd	Westcliffe Ln	2-lane	-	-
	Westcliffe Ln	Crosstown Pkwy	No Build	New 2-lane	-
N/S B	Becker Rd	Paar Drive	No Build	New 2-lane	Widen to 4LD
	Paar Drive	Marshall Parkway	No Build	New 2-lane	Widen to 4LD
	Marshall Parkway	Discovery Way	2-lane	-	Widen to 4LD
Community Blvd	Becker Rd	Paar Drive	2-lane	-	Widen to 4LD
	Paar Drive	Marshall Parkway	2-lane	-	Widen to 4LD
	Marshall Parkway	Discovery Way	4-lanes	-	-
	Discovery Way	Gatlin Blvd	2-lane	Widen to 4LD	-
	Gatlin Blvd	Westcliffe Ln	4-lanes	-	-
Village Parkway	Becker Rd	Paar Drive	4-lanes	-	-
	Paar Drive	Marshall Parkway	4-lanes	-	-
	Marshall Parkway	Discovery Way	4-lanes	-	-
	Discovery Way	Gatlin Blvd	6-lanes	-	-
	Gatlin Blvd	Westcliffe Ln	4-lanes	-	-
	Westcliffe Ln	Crosstown Pkwy	4-lanes	-	-

Table 37. Summary of Projected and Needed Roadway Laneage (Continued)

Roadway	From	To	Phase 2	Phase 3	Phase 4
E/W 4 (Paar Drive)	Rangeline	N/S A	No Build	New 2-lane	-
	N/S A	N/S B	No Build	New 2-lane	Widen to 4LD
	N/S B	Community Blvd	No Build	New 2-lane	Widen to 4LD
	Community Blvd	Village Parkway	No Build	New 2-lane	Widen to 4LD
E/W 3 (Marshall Parkway)	Rangeline	N/S A	2-lane	-	-
	N/S A	N/S B	2-lane	-	-
	N/S B	Community Blvd	4-lanes	-	-
	Community Blvd	Village Parkway	No Build	New 2-lane	Widen to 4LD
E/W 1 (Discovery Way)	Rangeline	N/S A	2-lane	-	-
	N/S A	N/S B	2-lane	-	-
	N/S B	Community Blvd	2-lane	-	Widen to 4LD
	Community Blvd	Village Parkway	4-lanes	-	Widen E/W 3 to 4LD
Tradition Parkway/ Gatlin Blvd	Rangeline	N/S A	No Build	New 2-lane	-
	N/S A	Community Blvd	2-lane	-	Widen to 4LD
	Community Blvd	Village Parkway	4-lanes	-	-
	Village Parkway	I-95 Interchange	6-lanes	Widen to 8LD	-
Westcliffe Lane	N/S A	Community Blvd	2-lane	-	-
	Community Blvd	Village Parkway	4-lanes	-	-
Crosstown Parkway	Rangeline	N/S A	2-lane	-	-
	N/S A	Village Parkway	2-lane	-	-
	Village Parkway	Commerce Ctr Pkwy	6-lanes	-	-
	Commerce Ctr Pkwy	I-95 Interchange	6-lanes	-	-

Based on the results shown in Tables 26 through 33, the results essentially match those from the WATS study with a few exceptions.

The following roads showed a need for fewer lanes based on the updated traffic study:

- Paar Drive
    - Only 2-lanes needed at buildout from Range Line Road to Village Parkway
    - An overpass over I-95 is not needed
- Tradition Parkway – The Southern Grove Substantial Deviation study showed a need for 8-lanes on Tradition Parkway from Village Parkway to I-95 and this study does as well. Most of the segment is 8-lanes and FDOT is constructing interchange improvements. Therefore, no actions or development order modifications are recommended for this segment.
- Becker Road showed a need for improvements at the interchange. Implementation of the interchange improvements is anticipated to result in acceptable levels of service at the interchange.
- North/South Road A operates acceptably as a 2-lane road from Becker Road to Crosstown Parkway.

Martin County Impacts

Citrus Boulevard

Citrus Boulevard is located in Port St. Lucie and Martin County. The study roadway segment is located between Becker Road and Martin Highway (SR 714). A revised analysis of the roadway segment, which is a development order condition, was examined based on the revised analysis.

A new significance analysis is performed for the DRI. Based on the analysis, the project is not significant on Citrus Boulevard in Phase 2. Next a roadway analysis will be performed to determine if the roadway needs to be widened.

Table 38. Phase 2 Significance Analysis

Roadway	From	To	Traf Assnmnt	NB/EB	SB/WB	Significance		Signif (Y/N)	
						NB/EB	SB/WB	NB/EB	SB/WB
Rangeline Road	Martin Hwy	Becker Rd	0.8%	20	14	2.7%	1.9%	no	no
Citrus Boulevard	Martin Hwy	Becker Rd	0.6%	15	10	1.3%	0.8%	no	no

A roadway analysis of Citrus Boulevard is performed using daily traffic volume from the Phase 2 model. The estimated model traffic on Citrus Boulevard is 14,851 daily trips (Appendix L). A combined K-factor and D-Factor is estimated based on Martin County's level of service tables as shown in Appendix K. Peak hour peak direction volume was projected by multiplying Martin County's effective K & D-factors times the projected daily traffic. The resulting analysis shows the projected peak hour peak direction volume is 1,292. The projected volume shows that the roadway fails and needs to be widened as a result of background traffic as shown in Table 39. Because this roadway failure is a result of background traffic, Southern Grove is no longer responsible for this improvement in accordance with State Law and the improvement will be removed from the DRI Development Order.

Table 39. Phase 2 Roadway Analysis

Roadway	From	To	Existing Lanes	Service Volume	Total Daily Volume	K & D	Peak Hour Volume	Volume to Capacity Ratio	Improve Required (Y/N)	Needed Improve
Rangeline Road	Martin Hwy	Becker Rd	2	740	10,515	0.0493	518	0.70	no	
Citrus Boulevard	Martin Hwy	Becker Rd	2	1,200	14,851	0.087	1,292	1.08	YES	4-Lanes

CR 609/Range Line Road

Range Line Road extend from Indiantown north to Glades Cut-Off Road in Port St. Lucie and Martin County. The study roadway segment is located between Becker Road and Martin Highway (SR 714). A revised analysis of the roadway segment, which is a development order condition was examined based on the revised analysis.

A roadway analysis of Citrus Boulevard is performed using daily traffic volume from the Phase 3 and 4 models. The estimated Phase 3 and Phase 4 model traffic on Citrus Boulevard is 10,858 and 14,556 daily trips (Appendix L), respectively. A combined K-factor and D-Factor is estimated based on Martin County's level of service tables as shown in Appendix K. Peak hour peak direction volume was projected by multiplying Martin County's effective K & D-factors times the projected daily traffic. The resulting analysis shows the projected Phase 3 and 4 peak hour peak direction volume is 535 and 718, respectively. The projected volume shows that the roadway is anticipated to operate acceptably at buildout. Because this roadway is projected to operate acceptably at buildout, Southern Grove is no longer responsible for this improvement and the improvement will be removed from the DRI Development Order.

Table 40. Phase 3 and 4 Roadway Analysis

Roadway	From	To	Existing Lanes	Service Volume	Total Daily Volume	K & D	Peak Hour Volume	Volume to Capacity Ratio	Improve Required (Y/N)	Needed Improve
PHASE 3 ANALYSIS										
Rangeline Road	Martin Hwy	Becker Rd	2	740	10,858	0.0493	535	0.72	no	
PHASE 4 ANALYSIS										
Rangeline Road	Martin Hwy	Becker Rd	2	740	14,556	0.0493	718	0.97	no	

RECOMMENDATION

Southern Grove Combined Changes

The combined result of the cumulative changes is a net reduction of 67,753 daily trips. In addition, the northwest corner of I-95 and Becker Road is proposed for industrial, not a regional mall. Based on the land use change and the DRI wide reduction of more than 67,000 daily trips, the Paar Drive overpass is not needed and no longer serves the original intent as a secondary entrance to a regional mall.

Other Area Changes

In addition, two other changes occurred in the area that are not captured in the model. The first is Western Grove's reduction in residential entitlements between Western and Tradition. The resulting change is an estimated decrease of 8,290 daily trips. The second change is that Riverland/Kennedy constructed their first two pods of development (approximately 1,800 dwelling units) as age restricted. The estimated impact is a reduction of 11,970 daily trips. These two changes are not captured in the model.

Table 41. Summary of Area Trip Reduction

DRI	Trip Reductions
Southern Grove	-67,753
Western Grove	-8,290
Riverland/Kennedy	-11,970
Total	-88,013

Lane Change Recommendations

The proposed changes for the Southern Grove DRI result in a decrease in overall lane needs in the WAA network, and specifically for the following road segments:

- Paar Drive
  - 2-lanes only from Community Drive to Village Parkway
  - No Overpasses Needed
- Becker Road & I-95 – Interchange Improvements (Turn Lanes)

DEVELOPMENT ORDER CHANGES

The development order (D.O.) proposes numerous changes associated with the Notice of Proposed Change (NOPC) application. The following is a brief discussion of the changes to each condition in the development order.

Conditions 20-22 Changes

Conditions 20-22 reflect the analysis of the Southern Grove roadway network. Construction of the initial 2-lanes of roads will occur based on trip thresholds. A trip threshold is provided for road widening, but monitoring of roadway conditions will provide the most effective tool for determining the timing of roadway widening in Southern Grove because so much of the widening is a function of growth related trips passing through the roadway network.

Table 42. Condition 20-21 Changes

Roadway	Existing Lanes	Required Improvement	Trip (1) Threshold	Status	Reason
~~Phase 1 (2012) – 2,000 Trips (1)~~					
Tradition Parkway					
Interstate I-95	-	Ramps	2,000	Satisfied	-
Village Pkwy to I-95	4LD	Widen to 6LD	2,000	Satisfied	-
Becker Road					
Interstate I-95	-	New Interchange	2,000	Satisfied	-
Village Pkwy to I-95	0	Construct 4LD	2,000	Satisfied	-
Village Parkway					
Tradition Parkway to Discovery Way	0	Construct 4LD	2,000	Satisfied	-
Discovery Way to Marshall Pkwy	0	Construct 4LD	2,000	Satisfied	-
Marshall Pkwy to E/W 4	0	Construct 4LD	2,000	Satisfied	-
E/W 4 to Becker Rd	0	Construct 4LD	2,000	Satisfied	-
~~Phase II (2018) – 3,979 Trips (1)~~					
Becker Road					
Village Pkwy to I-95	4LD	Widen to 6LD	3,979	Satisfied	-
Community Blvd to Village Pkwy (2)	2LD	Widen to 4LD	3,979		-
Village Parkway					
Tradition Parkway to Discovery Way	4LD	Widen to 6LD	3,979	Satisfied	Satisfied
~~Phase III (2023) – 9,948 Trips (1)~~					
Becker Road					
Community Blvd to Village Pkwy (2)	4LD	Widen to 6LD	14,718		Not needed in new analysis
~~Phase IV (2028) – 14,718 Trips (1)~~					
Village Parkway					
Discovery Way to Marshall Pkwy	4LD	Widen to 6LD	14,718		Not needed
Marshall Pkwy to E/W 4	4LD	Widen to 6LD	14,718		Not needed
E/W 4 to Becker Rd	4LD	Widen to 6LD	14,718		Not needed

L= Lane; D=Divided; E/W 1 = Discovery Way; E/W 4 = Paar Dr; E/W 3 = Marshall Pkwy

(1) Southern Grove Net External p.m. Peak Hour Trips

(2) If the Annexation Agreement is amended to provide that the construction of the initial two lanes of Becker Road from Community Boulevard to Village Parkway is required no earlier than 2018, or later if agreed to by the parties of the Annexation Agreement, then the construction of the initial 2LD shall become a Phase II responsibility of Southern Grove in place of the requirement that Southern Grove widen the roadway from 2LD to 4LD.

Table 43. Condition 22 Changes

Roadway	Existing Lanes	Required Improvement	Trip (1) Threshold	Status	Reason
~~***Phase 1 (2012) – 2,000 Trips (1)***~~					
Community Blvd			-		
Tradition Pkwy to Discovery Way	0	Construct 2LD	**2,000**	Satisfied	-
Tradition Pkwy to Discovery	2LD	Widen to 4LD	**8,361**		Needed early in Phase 3
Becker Road to E/W 4 (2)	2LD	Widen to 4LD	**16,450**		
Discovery Way			-		
Community Blvd to Village Pkwy	0	Construct 2LD	**2,000**	Satisfied	-
Community Blvd to Village Pkwy	2LD	Widen to 4LD	**5,670**		Needed earlier based on Model
~~***Phase II (2018) – 3,979 Trips (1)***~~					
E/W 4 (Paar Dr)			-		
Community Blvd to Village Pkwy	0	Construct 2L ~~4LD~~	**9,326**		Needed after buildout of Phase 2, accelerate E/W 3, decelerate E/W 4
Community Blvd to Village Pkwy	2LD	Widen to 4LD	**14,718**	-	Not Needed
Village Pkwy to Hegener Dr ~~West of I-95~~	0	Construct 2L ~~4LD~~	**11,606**		Paar Overpass not needed, construct as needed
~~Rosser Road to Port St. Lucie Blvd~~ Village Pkwy to Hegener Dr	2LD	Widen to 4LD	**14,718**		This road will be built as needed.

Table 44. Condition 22 Changes

Roadway	Existing Lanes	Required Improvement	Trip (1) Threshold	Status	Reason
~~***Phase III (2023) – 9,948 Trips (1)***~~					
Marshall Pkwy (E/W 3)			-		
Community Blvd to Village Pkwy	2	Widen to 4LD	**16,450**		May be needed in Phase 4
Village Pkwy to ~~West of I-95~~ Hegener Dr	~~0~~	Construct 2LD	**11,606**		
Village Pkwy to Hegener Drive ~~West of I-95~~	2	Widen to 4LD	**16,450**		
Roadway	**Existing Lanes**	**Required Improvement**	**DU (3) Threshold**	**Status**	**Reason**
Marshall Pkwy (E/W 3)					
Community Blvd to Village Pkwy	0	Construct 2LD	**6,700**		Provide more clarity on timing of completion and accelerate
~~***Phase IV (2028) – 14,718 Trips (1)***~~					

L= Lane; D=Divided; E/W 1 = Discovery Way; E/W 4 = Paar Dr; E/W 3 = Marshall Pkwy

(1) Southern Grove Net External p.m. Peak Hour Trips

(2) The construction of the initial 2-lane divided roadway is the responsibility of others. The developer is responsible for widening the roadway from 2LD to 4LD.

(3) Residential Building Permit Threshold Includes single family and multi-family DUs, age and non-age restricted (Excludes adult living facility beds/dwelling units)

Condition 23 Changes

Condition 23 is recommended for deletion because Condition 31 requires monitoring of the interchanges and I-95. Modifications at the interchange(s) will result in acceptable levels of service.

~~23. No building permits shall be issued upon Becker Road reaching the level of service "E" pm peak hour threshold for a 6 lane divided roadway from Village Parkway to I-95, until: 1) contracts have been let to build Paar Drive from west of I-95 to Rosser Road as a 4 Lane divided bridge overpass; 2) a local government development agreement consistent with sections 163.3220 through 163.3243, F.S. has been executed to provide for the improvement; 3) the monitoring program included in Conditions 16 and 17 if applicable, does not require the improvement; or 4) the road is in the first three years of the City's adopted Capital Improvement Program or FDOT's adopted work program. As part of its annual traffic count program, the City shall notify the developer upon Becker Road reaching the level of service "D" pm peak hour threshold for a 6 lane divided roadway from Village Parkway to I-95.~~

Condition 24 – External Road Improvements West of I-95

Condition 24 is satisfied because the applicant is constructing its fair share of the improvements necessary to support the development and mitigate its impacts.

Condition 25 – External Road Improvements East of I-95

Condition 25 is satisfied because the applicant is constructing its fair share of the improvements necessary to support the development and mitigate its impacts.

Condition 26

Condition 26 is satisfied.

Condition 27 – Improvements Outside the City

Condition 27 is updated to reflect the status of improvements outside the City.

Table 45 - Road Improvements Outside the City of Port St. Lucie

Road	*(1)Trip Threshold*	*Year Of Failure*	*Required Lanes*	*Status*
~~***Citrus Highway***~~ ~~St. Lucie County Line to SR 714 (2)~~	~~3,636~~	~~2014~~	~~Widen to 4LD~~	
Martin Highway (SR 714) Citrus Highway to Florida's Turnpike	8,332	2017	Widen to 4LD	***Satisfied- 3 yr. CIP(FDOT)***
Martin Highway (CR 714) Florida's Turnpike to High Meadows	5,139	2013	Widen to 4LD	***Satisfied***
Martin Highway (CR 714) High Meadows Avenue to Berry Avenue	5,995	2014	Widen to 4LD	***Satisfied***
Midway Road Torino Parkway to Selvitz Road	9,412	2014	Widen to 4LD	(2)
Midway Road Selvitz Road to 25th Street	10,814	2019	Widen to 4LD	*Satisfied- 3 yr. CIP(County)*
Midway Road 25th Street to Oleander	NA	2023	Widen to 4LD	*Satisfied- 3 yr. CIP(County)*
~~***Range Line Road***~~ ~~SR 714 to Becker Road~~	~~NA~~	~~2025~~	~~Widen to 4LD~~	

(1) Total Southern Grove DRI Net External PM Peak Hour Trips

~~(2) Provided sufficient right of way exists for the improvement~~

(2) Satisfied based on Agreement with St. Lucie County

Condition 28 – E/W 3 and I-95 IJR

Condition 28 is proposed to remain, but the following text is proposed for deletion: "The IJR shall be funded by the developer at a cost not to exceed two million dollars. The methodology for this traffic study shall be agreed upon by the Developer, City of Port St. Lucie, and Florida Department of Transportation. In the event that a methodology cannot be agreed upon among all parties, the City of Port St. Lucie shall be the final arbiter."

The condition will read as follows:
"Upon development that generates more than 14,718 total net external p.m. peak hour two way trips or by January 1, 2028, whichever comes last, an interchange justification traffic report ("IJR") shall be prepared to evaluate the need for an interchange along I-95 with E/W 3."

Condition 29 – E/W 3 and I-95 Interchange Construction

Condition 29 is proposed to remain unchanged.

Condition 30 – Lane Geometry

The condition is proposed for modification as follows:
"Prior to construction of an intersection of two arterial roads, two collector roads or an arterial and collector road, the Develop shall submit to the City for approval, an intersection analysis to designate the lane geometry for each intersection as it is to be constructed and at buildout."

Condition 31 – I-95 Interchange Monitoring

The condition is deleted and replaced with the following:
"No building permits shall be issued for development that generates more than 6,000 total net external p.m. peak hour trip threshold on or after December 31 2031, whichever comes last, until: 1) contracts have been let to construct a second southbound right-turn lane and a second northbound left-turn lane at the I-95 and Becker Road interchange; or 2) a local

government development agreement consistent with sections 163.3220 through 163.3243, F.S. has been executed; 3) the monitoring program included in Conditions 16 and 17, if applicable, does not require these improvements; or 4) the improvement is scheduled in the first three years of the City's adopted Capital Improvements Program or FDOT's adopted work program."

Condition 32 – Roads Open to Public

No change is proposed.

Condition 33 – Monitoring

No change is proposed.

Condition 34 – Road Funding Sources

No change is proposed.

Condition 35 Mitigation of Environmental Impact in Road ROW

No change is proposed.

ROAD PHASING

The proposed Southern Grove Road Phasing is shown in Figures 1 through 4.

Figure 7. Phase 1 Road Laneage

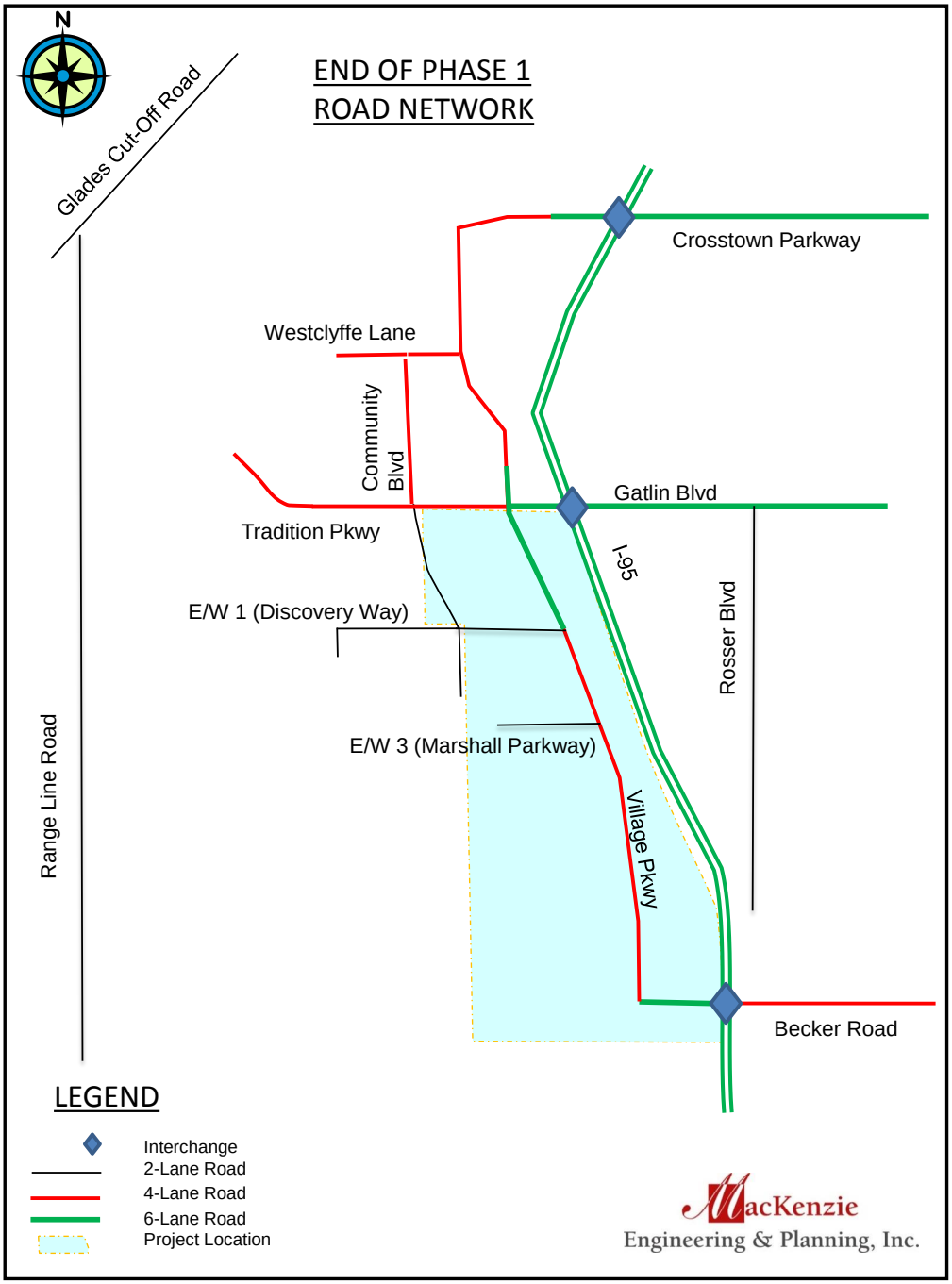


Figure 8. Phase 2 Road Laneage

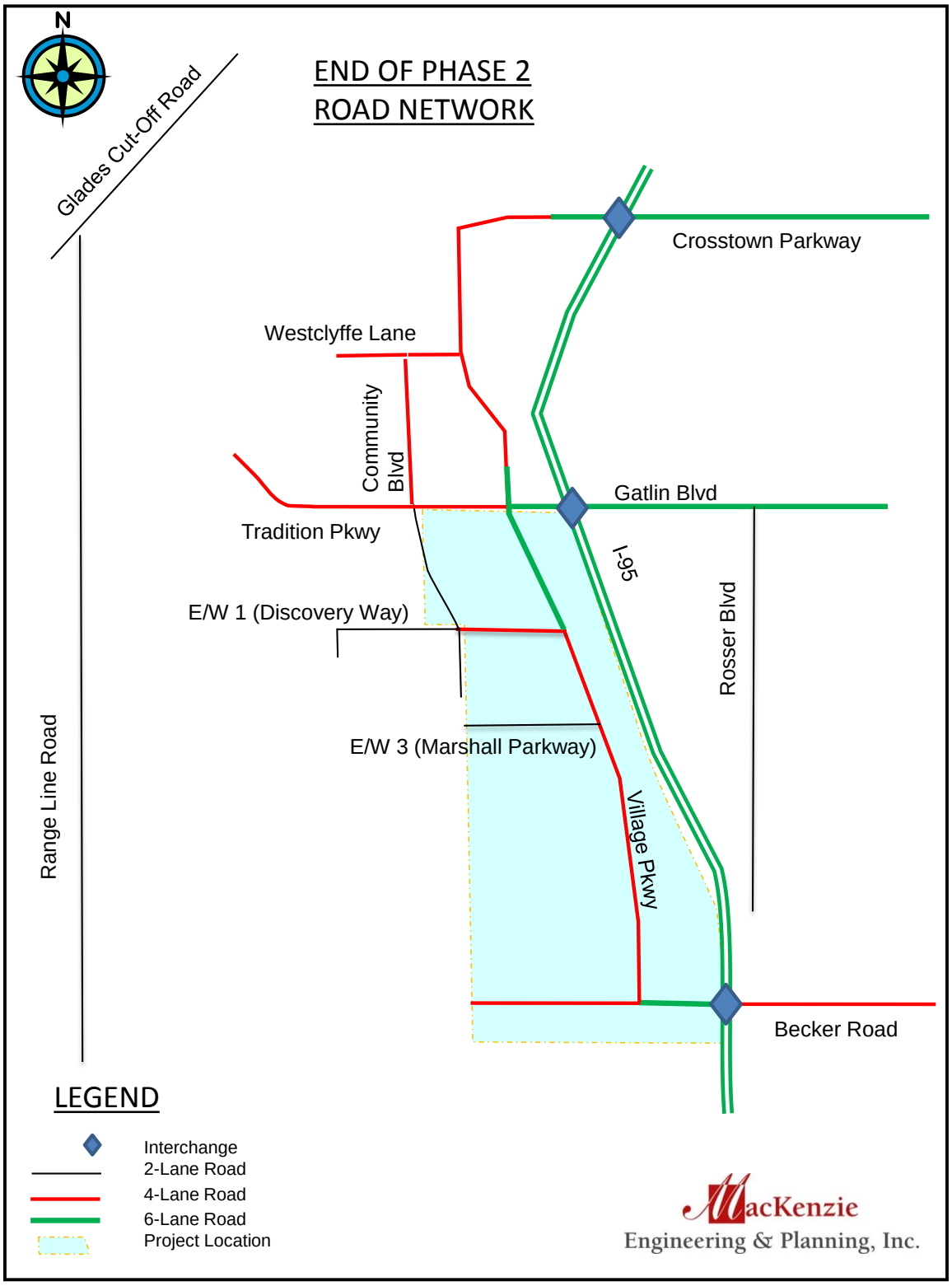


Figure 9. Phase 3 Road Laneage

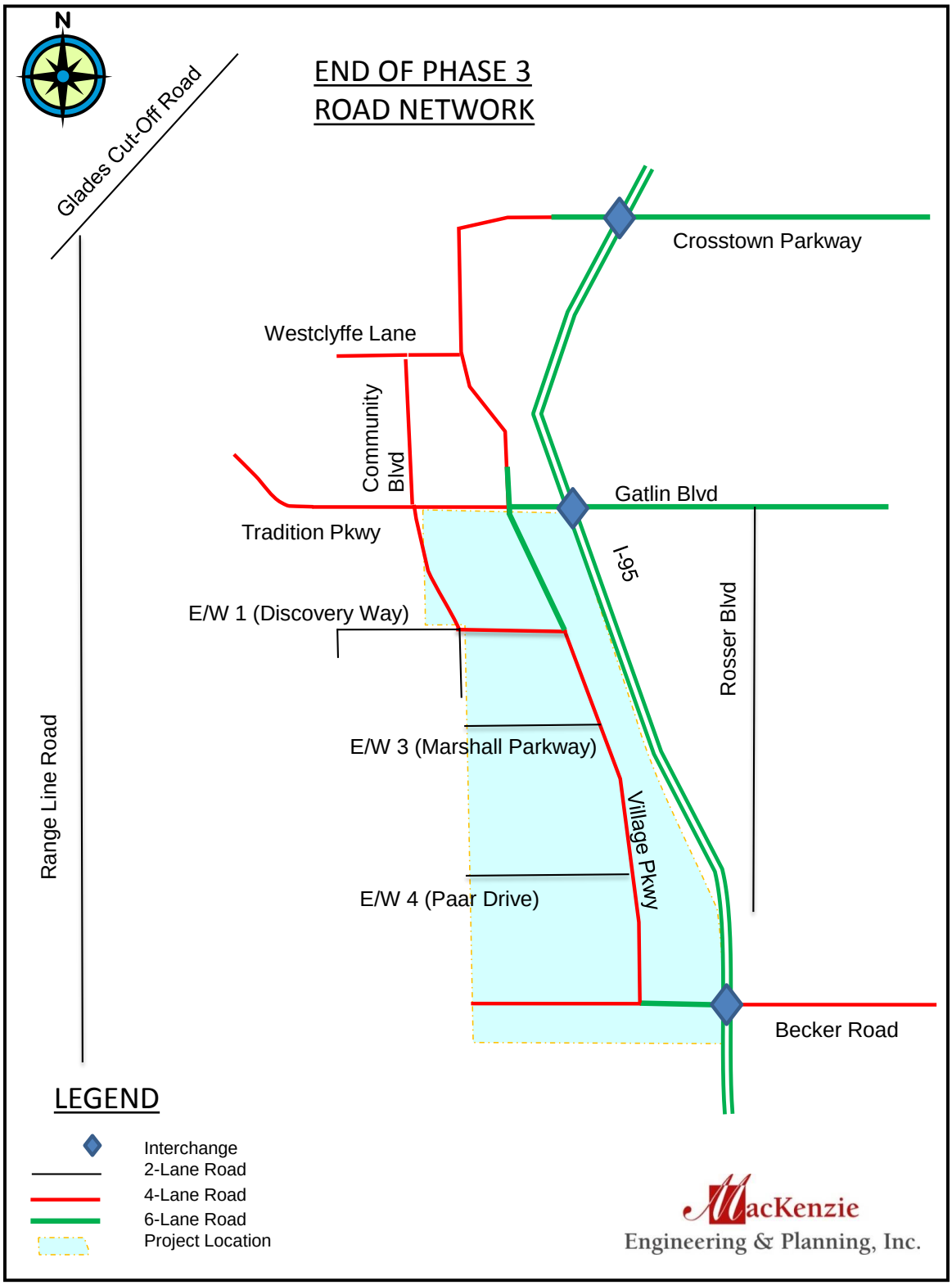


Figure 10. Phase 4 Road Laneage

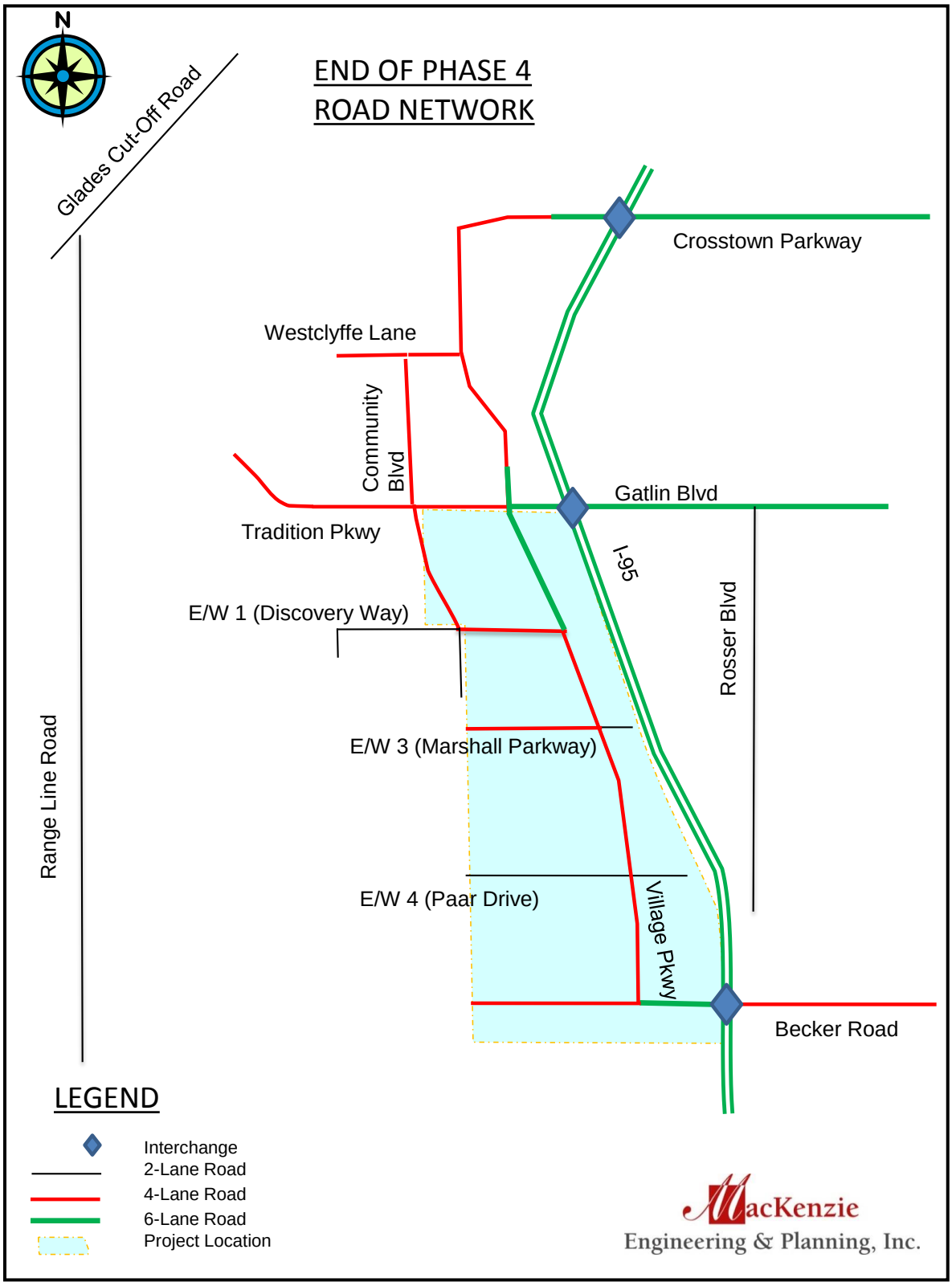
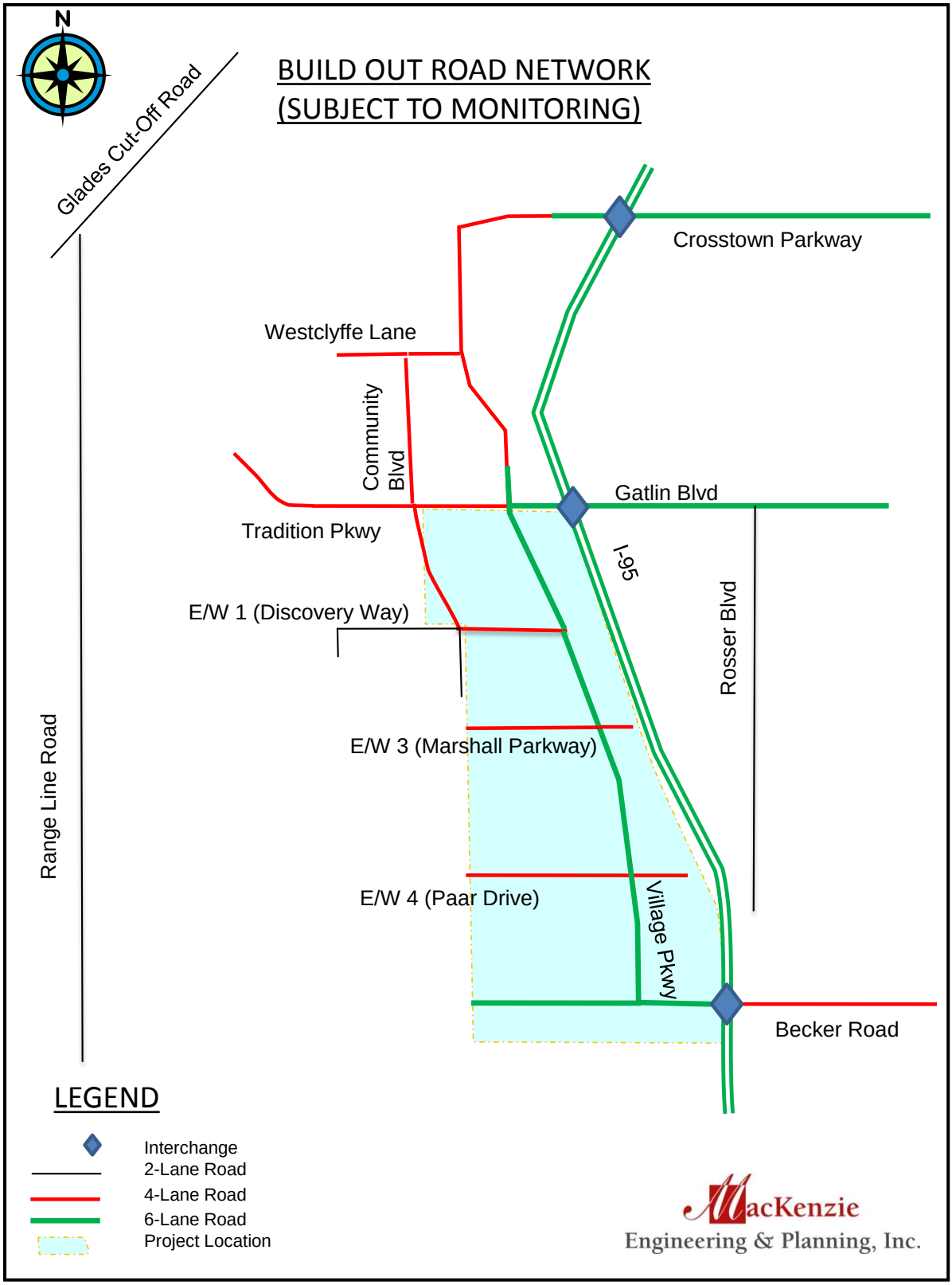


Figure 11. Potential Buildout Road Laneage (Subject to Monitoring)



CONCLUSION

The changes proposed to the Southern Grove DRI do not result in significant or substantial changes. The combined result of the cumulative changes is a net reduction of 67,753 daily trips. In addition, the northwest corner of I-95 and Becker Road is proposed for an industrial employment center, not a regional mall. Based on the land use changes and the DRI wide reduction of more than 67,000 daily trips, the Paar Drive overpass is not needed and no longer serves the original intent as a secondary entrance to a regional mall.

The proposed changes for the Southern Grove DRI result in a decrease in overall lane needs to Southern Grove and specifically for the following road segments:

- Paar Drive
    - Two-lanes are needed from Community Drive to Village Parkway.
    - An I-95 overpass is not needed.
- Another interchange is not needed to support the reduced Southern Grove development program.
- Becker Road & I-95 – Interchange
    - Additional turn-lanes are needed at the Becker Road interchange to support the project, but additional through lanes are not needed.
- The project no longer significantly impacts Citrus Boulevard and the failure of Citrus Boulevard in the future is a result of background traffic.

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APPENDICES

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Appendix A

Southern Grove Land Use

Southern Grove DRI

PHASE 4 (USE ALLOCATION ESTIMATE - 4/23/2021)

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	Independent Living Facility (Units)	ALF (Beds)
381	664	Southern Grove	-	-	0	393	-	43,725	920,443	826,557	300	0	36,000	0		0	0
382	659		173	1,484	0	0	-	96,000	39,060	-		0	46,046	0		0	0
383	662		1,859	-	0	0	-	330,800	-	-		0	46,046	40	1,600	0	0
384	661		-	800	0	458	2,625,000	642,000	150,000	150,000		0	0	0		415	150
385	646		-	300	0	0	3,325,000	81,500	75,000	75,000		27,952	12,000	0		0	0
386	651		-	-	940	0	-	192,720	-	-		0	46,065	25		0	0
387	660		-	900	0	200	2,795,000	194,000	225,400	150,000		0	10,064	0		0	0
388	663		364	-	439	0	-	250,720	-	-		13,975	80,129	15	1,600	0	0

DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	Independent Living Facility (Units)	ALF (Beds)
Southern Grove	2,396	3,484	1,379	1,051	8,745,000	1,831,465	1,409,903	1,201,557	300	41,927	276,350	80	3,200	415	150

CHANGES IN LAND USE BY ZONE

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	Elementary School (Students)	K-8 School (Students)	High School (Students)	Living Facility (Units)	ALF (Beds)
381	664	Southern Grove	-	-	0	0	-	2,130	307,116	196,557	0	0	0	0	0	0	0	0	0
382	659		-	46	0	0	-	(24,000)	35,000	-	0	0	0	0	0	0	0	0	0
383	662		691	(300)	0	0	-	4,800	(50,000)	-	0	0	0	0	0	0	0	0	0
384	661		(156)	676	0	300	753,951	(623,697)	(449,978)	(612,817)	0	0	0	0	0	0	0	-5	0
385	646		-	(653)	0	0	2,041,577	(603,385)	(336,547)	(448,245)	0	0	0	0	0	0	0	0	0
386	651		-	-	10	0	-	(25,680)	-	-	0	0	0	0	0	0	0	0	0
387	660		-	249	0	200	1,366,136	(568,498)	(526,416)	(432,540)	0	0	0	0	0	0	0	0	0
388	663		(46)	(225)	-1	-240	-	(5,280)	-	-	0	0	0	0	0	0	0	0	0

DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	Elementary School (Students)	K-8 School (Students)	High School (Students)	Living Facility (Units)	ALF (Beds)
Southern Grove	489	-207	9	260	4,161,664	-1,843,610	-1,020,825	-1,297,045	0	0	0	0	0	0	0	-5	0

Southern Grove DRI - PHASE 4

EXISTING GFC USE (GFC ALLOCATION ESTIMATE CIRCA 2019)

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)
381	664	Southern Grove	-	-	82	-	-	311,494	428,443
384	661		-	82	158	1,126,049	1,265,697	599,978	762,817
385	646		-	953		1,283,423	684,885	411,547	523,245
387	660			651		1,428,864	632,269	676,416	582,540
	Southern Grove		0	1,686	240	3,838,336	2,582,851	1,999,435	2,297,045

PROPOSED GFC USE (GFC ALLOCATION ESTIMATE 11/2/2020)

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)
381	664	Southern Grove	-		82	-	10,500	625,000	625,000
384	661		-	600	218	2,625,000	214,000	150,000	150,000
385	646		-	300		3,325,000	81,500	75,000	75,000
387	660			900	200	2,050,000	194,000	150,000	150,000
	Southern Grove		0	1,800	500	8,000,000	500,000	1,000,000	1,000,000

CHANGE IN GFC USE

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)
381	664	Southern Grove	-	-	0	-	10,500	313,506	196,557
384	661		-	518	60	1,498,951	(1,051,697)	(449,978)	(612,817)
385	646		-	(653)	0	2,041,577	(603,385)	(336,547)	(448,245)
387	660		-	249	200	621,136	(438,269)	(526,416)	(432,540)
	Southern Grove		0	114	260	4,161,664	-2,082,851	-999,435	-1,297,045

Southern Grove DRI - PHASE 4

EXISTING 3rd PARTY USE (ALLOCATION ESTIMATE CIRCA 2019)

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)
381	664	Southern Grove				311		33,225	295,443	201,557
382	659			1,004				96,000	4,060	
383	662									
384	661									
385	646									
386	651				940					
387	660						745,000		75,400	
388	663		364							

DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)
Southern Grove	364	1,004	940	311	745,000	129,225	374,903	201,557

Southern Grove DRI - PHASE 4

MATTAMY USE (USE ALLOCATION ESTIMATE CIRCA 2019)

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Commercial Retail (SF)	Service & Office (SF)	Living Facility (Units)	ALF (Beds)
381	664	Southern Grove	-	-	0	0	8,370	6,390		
382	659		173	434	0	0	24,000	-		
383	662		1,168	300	0	0	326,000	50,000		
384	661		156	42	0	0	-	-	420	150
385	646		-	-	0	0	-	-		
386	651		-	-	-10	0	218,400	-		
387	660		-	-	0	0	130,229	-		
388	663		46	225	440	240	256,000	-		

DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Commercial Retail (SF)	Service & Office (SF)	Living Facility (Units)	ALF (Beds)
Southern Grove	1,543	1,001	430	240	962,999	56,390	420	150

MATTAMY USE ALLOCATION ESTIMATE 1/20/2021)

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Commercial Retail (SF)	Service & Office (SF)	Living Facility (Units)	ALF (Beds)
381	664	Southern Grove	-	-	0	0	-	-		
382	659		173	480	0	0	-	35,000		
383	662		1,859	-	0	0	330,800	-		
384	661		-	200	0	240	428,000	-	415	150
385	646		-	-	0	0	-	-		
386	651		-	-	0	0	192,720	-		
387	660		-	-	0	0	-	-		
388	663		-	-	439	0	250,720	-		

DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Commercial Retail (SF)	Service & Office (SF)	Living Facility (Units)	ALF (Beds)
Southern Grove	2,032	680	439	240	1,202,240	35,000	415	150

CHANGE IN MATTAMY USE

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Commercial Retail (SF)	Service & Office (SF)	Living Facility (Units)	ALF (Beds)
381	664	Southern Grove					(8,370)	(6,390)		
382	659		-	46	0	0	(24,000)	35,000	0	0
383	662		691	(300)	0	0	4,800	(50,000)	0	0
384	661		(156)	158	0	240	428,000	-	-5	0
385	646		-	-	0	0	-	-	0	0
386	651		-	-	10	0	(25,680)	-	0	0
387	660		-	-	0	0	(130,229)	-	0	0
388	663		(46)	(225)	-1	-240	(5,280)	-	0	0

DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Commercial Retail (SF)	Service & Office (SF)	Living Facility (Units)	ALF (Beds)
Southern Grove	489	-321	9	0	239,241	-21,390	-5	0

Existing DRI Use and Allocation

Currently Approved							
Total	DUs	Hotel	Industrial	Commercial Retail	Service & Office	R&D	Hospital
DRI Total	**5,598**	**791**	**4,583,336**	**3,675,075**	**2,430,728**	**2,498,602**	**300**
GFC	1,686	240	3,838,336	2,582,851	1,999,435	2,297,045	0
Mattamy	2,544	240	0	962,999	56,390	0	0
3rd Party	1,368	311	745,000	129,225	374,903	201,557	300

Proposed							
Total	DUs	Hotel	Industrial	Commercial Retail	Service & Office	R&D	Hospital
DRI Total	**5,880**	**1,051**	**8,745,000**	**1,831,465**	**1,409,903**	**1,201,557**	**300**
GFC	1,800	500	8,000,000	500,000	1,000,000	1,000,000	0
Mattamy	2,712	240	0	1,202,240	35,000	0	0
3rd Party	1,368	311	745,000	129,225	374,903	201,557	300

Proposed Change by Land Owner							
Total	DUs	Hotel	Industrial	Commercial Retail	Service & Office	R&D	Hospital
DRI Total	**282**	**260**	**4,161,664**	**-1,843,610**	**-1,020,825**	**-1,297,045**	**0**
GFC	114	260	4,161,664	-2,082,851	-999,435	-1,297,045	0
Mattamy	168	0	0	239,241	-21,390	0	0
3rd Party	0	0	0	0	0	0	0

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Appendix B

Southern Grove Trip Generation and Internal Capture

EXHIBIT 1-1
Southern Grove DRI (SG 10th Edition ITE)
Proposed Daily Trip Generation - Phase 1

TAZ	TRCPM TAZ	Gross Daily Trip Generation	Gross Trips (Trip Generation)	TAZ Internal Trips	TAZ Internal Trips	External Trips (Internal Capture)	Pass-by Trips	Pass-by Trips	External Daily Trip Generation	Net External Trips (Pass-by)	% Internal Among Proj. TAZ	Total Net External Trips (Internal Among TAZs)
481	664	14,823		2,222			678		11,923			
482	659	15,462		1,192			1,340		12,930			
483	662	3,106		32			0		3,074			
484	661	2,484	49,781	252	4,556	45,225	288	3,085	1,944	42,140	8.5%	38,558
485	646	0		0			0		0			
486	651	2,339		20			0		2,319			
487	660	4,960		392			287		4,281			
488	663	6,607		446			492		5,669			

EXHIBIT 1-2
Southern Groves DRI
Proposed PM Peak Hour Trip Generation - Phase 1

Area	TAZ	Gross Trip Generation			TAZ Internal Capture			Pass-by Capture	Net External TAZ Trips			Gross Trip	External Trip	Net External DRI Trips			% Internal among	Internal trips among	Net External DRI Trips		
		Total	In	Out	Total	In	Out	Total	Total	In	Out	Generation	Generation	Total	In	Out	Project TAZs	Project TAZs	Total	In	Out
664	481	1,129	357	772	160	80	80	60	909	247	662										
659	482	1,279	712	567	108	54	54	121	1,050	598	453										
662	483	317	199	118	4	2	2	0	313	197	116										
661	484	151	80	71	20	10	10	23	108	59	50	4,092	3,732	3,466	1,606	1,862	8.5%	295	3,171	1,459	1,712
646	485	0	0	0	0	0	0	0	0	0	0										
651	486	171	104	67	4	2	2	0	167	102	65										
660	487	434	110	324	26	13	13	22	386	86	300										
663	488	611	356	255	38	19	19	40	533	317	216										

WATS TAZ	TCRPM TAZ
381	664

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	250	rooms	[310]	T = 8.36*(X)	2,090
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	42,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	3,333
Service & Office	300,000	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	3,080
Research & Development(1)	205,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	2,302
Hospital	180	beds	[610]	T = 22.32*(X)	4,018
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[411]	T = 0.78*(X)	
Elementary School	0	students	[520]	T = 1.89*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
High School	0	students	[530]	T = 2.03*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	14,823
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	14,823
				Internal Capture % among TAZ =	14.99%
				Internal Capture trips among TAZ =	2,222

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	42,000	s.f.
0.75 * Intensity =	31,500	s.f.
External Trips from Matrix =	2,659	trips
0.75 * External Trips from Matrix =	1,994	trips
Pass-By Percent =	34%	
Pass-By Reduction =	678	trips

NET NEW EXTERNAL DAILY TRIPS =	11,923

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	250	rooms	[310]	T = 0.60*(X); (51% in)	150	77	73
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	42,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	286	137	149
Service & Office(2)	300,000	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	323	52	271
Research & Development(1)	205,000	s.f.	[760]	T = 0.49*(X); (15% in)	100	15	85
Hospital	180	beds	[610]	T = 2.08*(X) - 104.00; (28% in)	270	76	194
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.17*(X); (48% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
High School	0	students	[530]	T = 0.14*(X); (48% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,129	357	772
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	1,129	357	772
				Internal Capture % among TAZ =	14.17%	-	-
				Internal Capture trips among TAZ =	160	80	80

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	42,000	s.f.
0.75 * Intensity =	31,500	s.f.
External Trips from Matrix =	234	trips
0.75 * External Trips from Matrix =	176	trips
Pass-By Percent =	34%	
Pass-By Reduction =	60	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	909	247	662

WATS TAZ	TCRPM TAZ
382	659

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	173	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	1,722
Multi-Family Residential	1,438	d.u.	[221]	T = 5.45*(X)-1.75	7,835
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	96,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	5,847
Service & Office	5,000	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	58
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[411]	T = 0.78*(X)	
Elementary School	0	students	[520]	T = 1.89*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
High School	0	students	[530]	T = 2.03*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	15,462
				Total Gross Residential Trips =	9,557
				Total Gross Non-Residential Trips =	5,905
				Internal Capture % among TAZ =	7.71%
				Internal Capture trips among TAZ =	1,192

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	96,000	s.f.
0.75 * Intensity =	72,000	s.f.
External Trips from Matrix =	5,253	trips
0.75 * External Trips from Matrix =	3,940	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,340	trips

NET NEW EXTERNAL DAILY TRIPS =	**12,930**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	173	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	172	108	64
Multi-Family Residential	1,438	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	573	350	223
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	96,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	527	253	274
Service & Office[2]	5,000	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	7	1	6
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.17*(X); (48% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
High School	0	students	[530]	T = 0.14*(X); (48% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,279	712	567
				Total Gross Residential Trips =	745	458	287
				Total Gross Non-Residential Trips =	534	254	280
				Internal Capture % among TAZ =	8.44%	-	-
				Internal Capture trips among TAZ =	108	54	54

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	96,000	s.f.
0.75 * Intensity =	72,000	s.f.
External Trips from Matrix =	473	trips
0.75 * External Trips from Matrix =	355	trips
Pass-By Percent =	34%	
Pass-By Reduction =	121	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,050**	**598**	**452**

WATS TAZ	TCRPM TAZ
383	662

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	325	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	3,075
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	40	acres	[411]	T = 0.78*(X)	31
Elementary School	0	students	[520]	T = 1.89*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
High School	0	students	[530]	T = 2.03*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	3,106
				Total Gross Residential Trips =	3,075
				Total Gross Non-Residential Trips =	31
				Internal Capture % among TAZ =	1.03%
				Internal Capture trips among TAZ =	32

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
0.75 * Intensity =	0	s.f.
External Trips from Matrix =	0	trips
0.75 * External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**3,074**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	325	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	315	198	117
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)			
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	40	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.17*(X); (48% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
High School	0	students	[530]	T = 0.14*(X); (48% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	317	199	118
				Total Gross Residential Trips =	315	198	117
				Total Gross Non-Residential Trips =	2	1	1
				Internal Capture % among TAZ =	1.26%	-	-
				Internal Capture trips among TAZ =	4	2	2

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
0.75 * Intensity =	0	s.f.
External Trips from Matrix =	0	trips
0.75 * External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**313**	**197**	**116**

WATS TAZ	TCRPM TAZ
384	661

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	10,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	1,256
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[411]	T = 0.78*(X)	
Elementary School	0	students	[520]	T = 1.89*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
High School	0	students	[530]	T = 2.03*(X)	
Congregate Care Facility	415	d.u.	[253]	T = 2.02*(X)	838
Assisted Living Facility	150	beds	[254]	T = 2.60*(X)	390
				Total Gross Trips =	2,484
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	2,484
				Internal Capture % among TAZ =	10.14%
				Internal Capture trips among TAZ =	252

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	10,000	s.f.
0.75 * Intensity =	7,500	s.f.
External Trips from Matrix =	1,130	trips
0.75 * External Trips from Matrix =	848	trips
Pass-By Percent =	34%	
Pass-By Reduction =	288	trips

NET NEW EXTERNAL DAILY TRIPS =	**1,944**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	10,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	99	48	51
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.17*(X); (48% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
High School	0	students	[530]	T = 0.14*(X); (48% in)			
Congregate Care Facility	415	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)	23	14	9
Assisted Living Facility	150	beds	[254]	T = 0.19*(X); (63% in)	29	18	11
				Total Gross Trips =	151	80	71
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	151	80	71
				Internal Capture % among TAZ =	13.25%	-	-
				Internal Capture trips among TAZ =	20	10	10

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	10,000	s.f.
0.75 * Intensity =	7,500	s.f.
External Trips from Matrix =	89	trips
0.75 * External Trips from Matrix =	67	trips
Pass-By Percent =	34%	
Pass-By Reduction =	23	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**108**	**59**	**49**

WATS TAZ	TCRPM TAZ
385	646

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[411]	T = 0.78*(X)	
Elementary School	0	students	[520]	T = 1.89*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
High School	0	students	[530]	T = 2.03*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	0
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	#DIV/0!
				Internal Capture trips among TAZ =	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
0.75 * Intensity =	0	s.f.
External Trips from Matrix =	0	trips
0.75 * External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**0**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)			
Service & Office(2)	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development(1)	0	s.f.	[760]	T = 0.49*(X); (15% in)	0	0	0
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.17*(X); (48% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
High School	0	students	[530]	T = 0.14*(X); (48% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	0	0	0
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
0.75 * Intensity =	0	s.f.
External Trips from Matrix =	0	trips
0.75 * External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**0**	**0**	**0**

WATS TAZ	TCRPM TAZ
386	651

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	500	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	2,319
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	25	acres	[411]	T = 0.78*(X)	20
Elementary School	0	students	[520]	T = 1.89*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
High School	0	students	[530]	T = 2.03*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	2,339
				Total Gross Residential Trips =	2,319
				Total Gross Non-Residential Trips =	20
				Internal Capture % among TAZ =	0.85%
				Internal Capture trips among TAZ =	20

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
0.75 * Intensity =	0	s.f.
External Trips from Matrix =	0	trips
0.75 * External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**2,319**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	500	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)	169	103	66
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)			
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	25	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.17*(X); (48% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
High School	0	students	[530]	T = 0.14*(X); (48% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	171	104	67
				Total Gross Residential Trips =	169	103	66
				Total Gross Non-Residential Trips =	2	1	1
				Internal Capture % among TAZ =	2.34%	-	-
				Internal Capture trips among TAZ =	4	2	2

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
0.75 * Intensity =	0	s.f.
External Trips from Matrix =	0	trips
0.75 * External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**167**	**102**	**65**

WATS TAZ	TCRPM TAZ
387	660

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	450,000	s.f.	[130]	T = 3.37*(X/1000)	1,517
Commercial Retail	10,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	1,256
Service & Office	95,000	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	1,010
Research & Development(1)	95,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	1,177
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[411]	T = 0.78*(X)	
Elementary School	0	students	[520]	T = 1.89*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
High School	0	students	[530]	T = 2.03*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	4,960
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	4,960
				Internal Capture % among TAZ =	7.90%
				Internal Capture trips among TAZ =	392

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	10,000	s.f.
0.75 * Intensity =	7,500	s.f.
External Trips from Matrix =	1,124	trips
0.75 * External Trips from Matrix =	843	trips
Pass-By Percent =	34%	
Pass-By Reduction =	287	trips

NET NEW EXTERNAL DAILY TRIPS =	**4,281**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	450,000	s.f.	[130]	T = 0.40*(X/1000); (21% in)	180	38	142
Commercial Retail	10,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	99	48	51
Service & Office[2]	95,000	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	108	17	91
Research & Development[1]	95,000	s.f.	[760]	T = 0.49*(X); (15% in)	47	7	40
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.17*(X); (48% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
High School	0	students	[530]	T = 0.14*(X); (48% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	434	110	324
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	434	110	324
				Internal Capture % among TAZ =	5.99%	-	-
				Internal Capture trips among TAZ =	26	13	13

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	10,000	s.f.
0.75 * Intensity =	7,500	s.f.
External Trips from Matrix =	88	trips
0.75 * External Trips from Matrix =	66	trips
Pass-By Percent =	34%	
Pass-By Reduction =	22	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**386**	**86**	**300**

WATS TAZ	TCRPM TAZ
388	663

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	364	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	3,413
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	200	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	1,035
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	22,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	2,147
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	15	acres	[411]	T = 0.78*(X)	12
Elementary School	0	students	[520]	T = 1.89*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
High School	0	students	[530]	T = 2.03*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	6,607
				Total Gross Residential Trips =	4,448
				Total Gross Non-Residential Trips =	2,159
				Internal Capture % among TAZ =	6.75%
				Internal Capture trips among TAZ =	446

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	22,000	s.f.
0.75 * Intensity =	16,500	s.f.
External Trips from Matrix =	1,931	trips
0.75 * External Trips from Matrix =	1,448	trips
Pass-By Percent =	34%	
Pass-By Reduction =	492	trips

NET NEW EXTERNAL DAILY TRIPS =	5,669

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	364	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	351	221	130
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	200	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)	82	50	32
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	22,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	177	85	92
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	15	acres	[412]	T = 0.06*(X); (41% in)	1	0	1
Elementary School	0	students	[520]	T = 0.17*(X); (48% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
High School	0	students	[530]	T = 0.14*(X); (48% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	611	356	255
				Total Gross Residential Trips =	433	271	162
				Total Gross Non-Residential Trips =	178	85	93
				Internal Capture % among TAZ =	6.22%	-	-
				Internal Capture trips among TAZ =	38	19	19

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	22,000	s.f.
0.75 * Intensity =	16,500	s.f.
External Trips from Matrix =	159	trips
0.75 * External Trips from Matrix =	119	trips
Pass-By Percent =	34%	
Pass-By Reduction =	40	trips

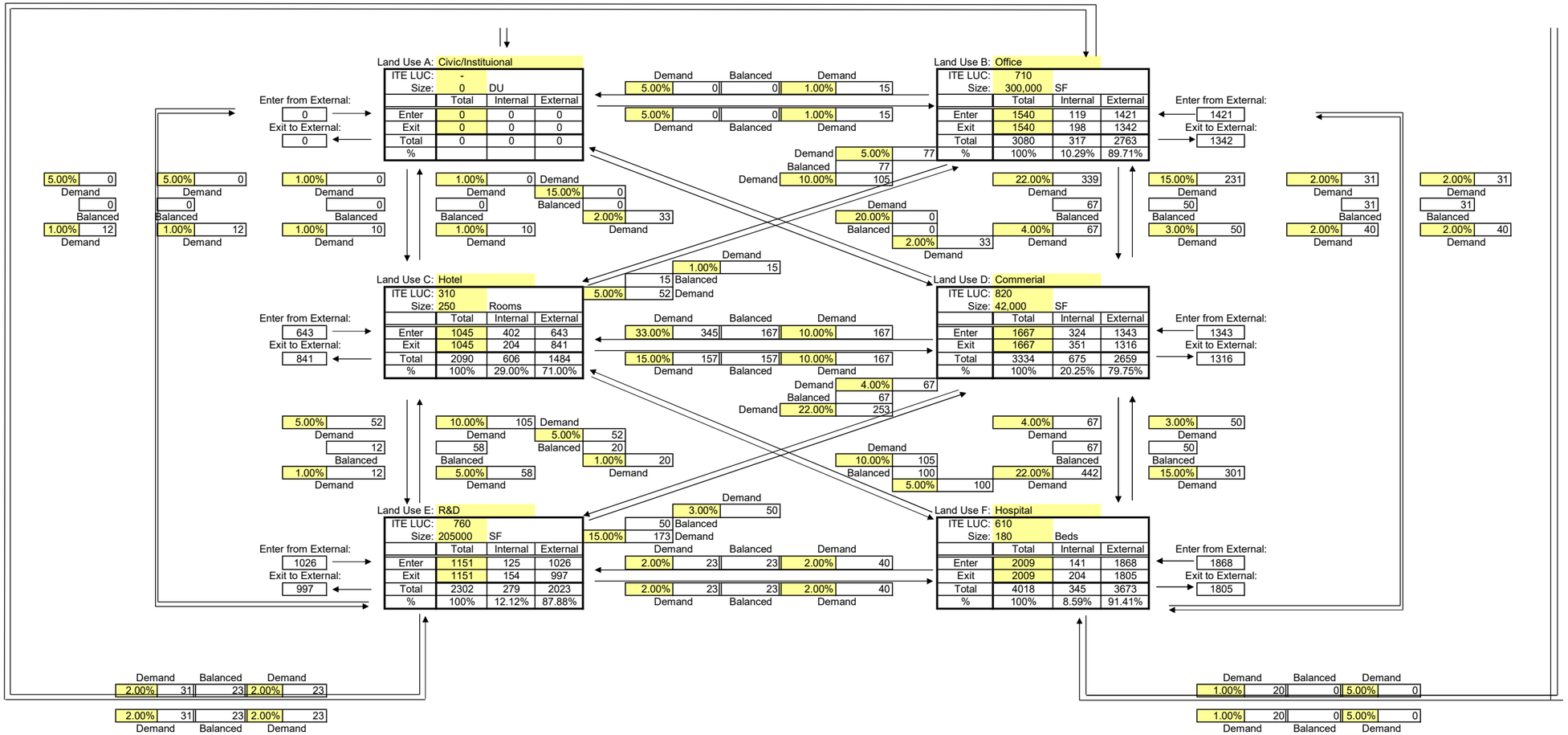
	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**533**	**317**	**216**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: ########

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 664



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Civic/Instituid	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	0	1421	643	1343	1026	1868	6301
Exit	0	1342	841	1316	997	1805	6301
Total	0	2763	1484	2659	2023	3673	**12602**
Single Use Trip Gen Estimate	0	3080	2090	3334	2302	4018	**14824**
	0.00%	10.29%	29.00%	20.25%	12.12%	8.59%	

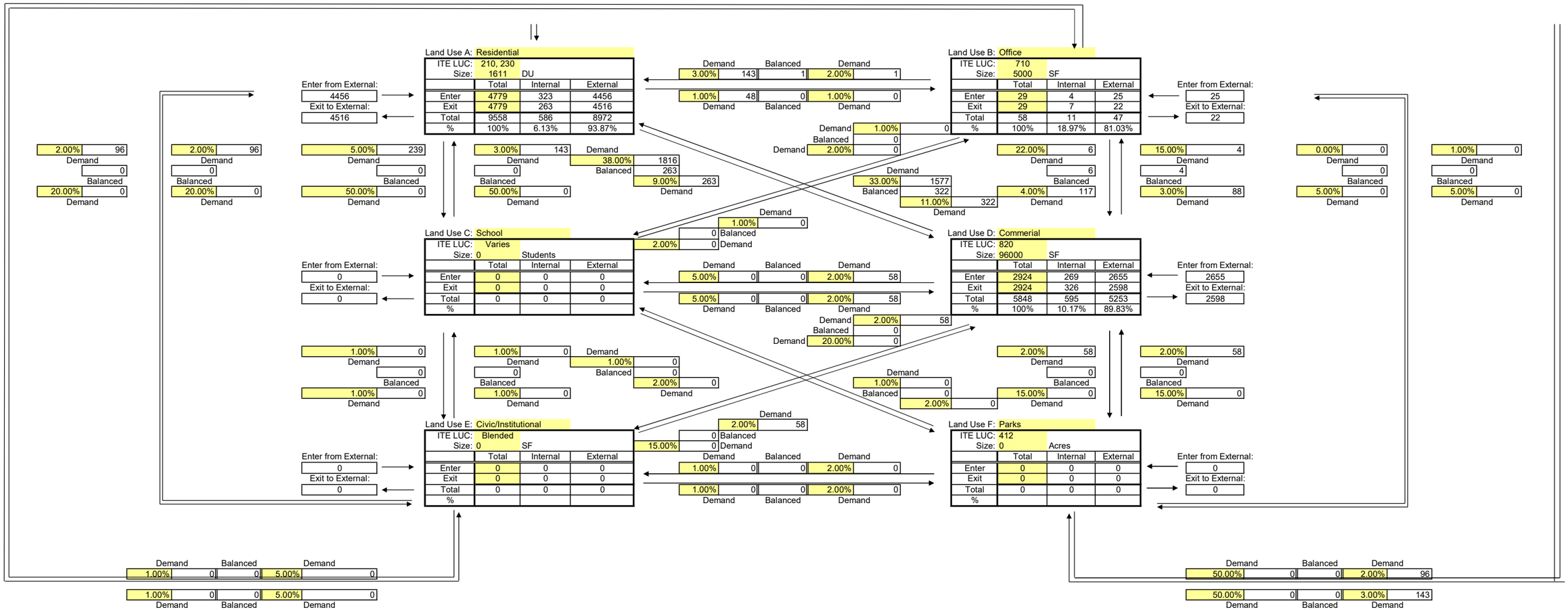
Internal Capture = 14.99%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 659



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	4456	25	0	2655	0	0	7136
Exit	4516	22	0	2598	0	0	7136
Total	8972	47	0	5253	0	0	**14272**
Single Use Trip Gen Estimate	9558	58	0	5848	0	0	**15464**
	6.13%	18.97%	0.00%	10.17%	0.00%	0.00%	

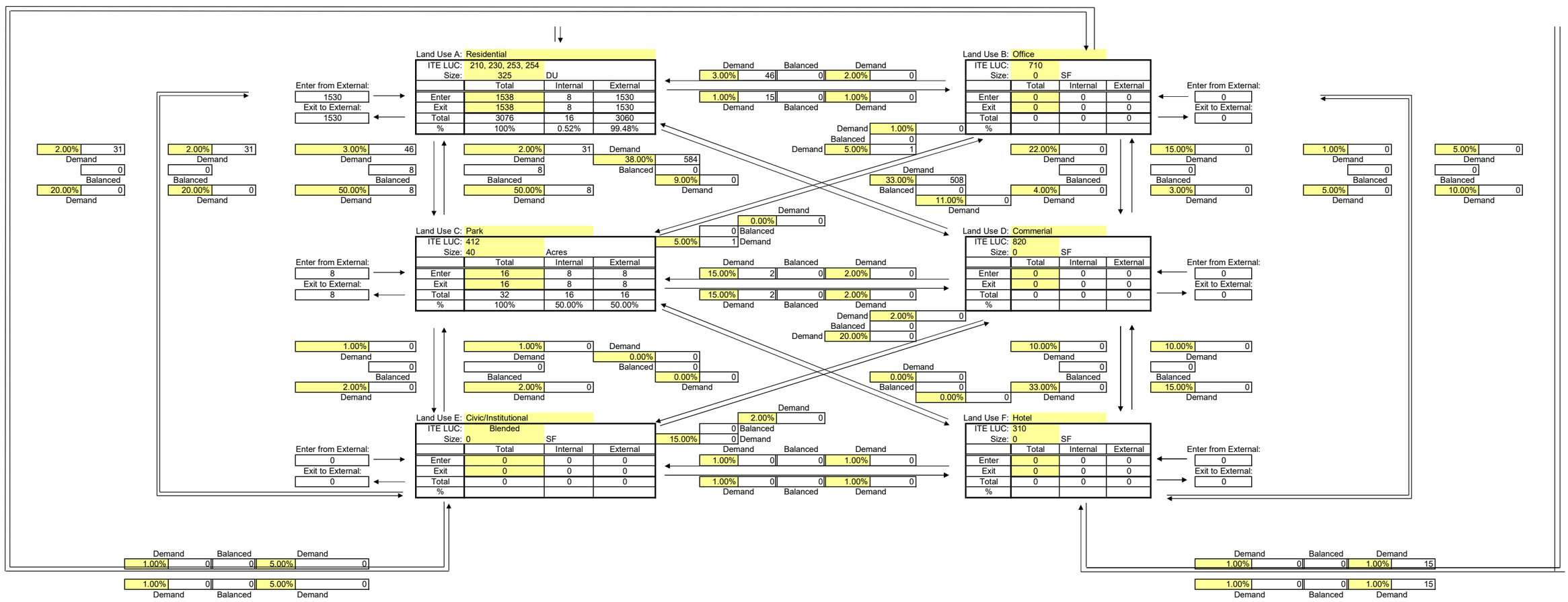
Internal Capture = 7.71%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 662



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	1530	0	8	0	0	0	1538
Exit	1530	0	8	0	0	0	1538
Total	3060	0	16	0	0	0	**3076**
Single Use Trip Gen Estimate	3076	0	32	0	0	0	**3108**
	0.52%	0.00%	50.00%	0.00%	0.00%	0.00%	

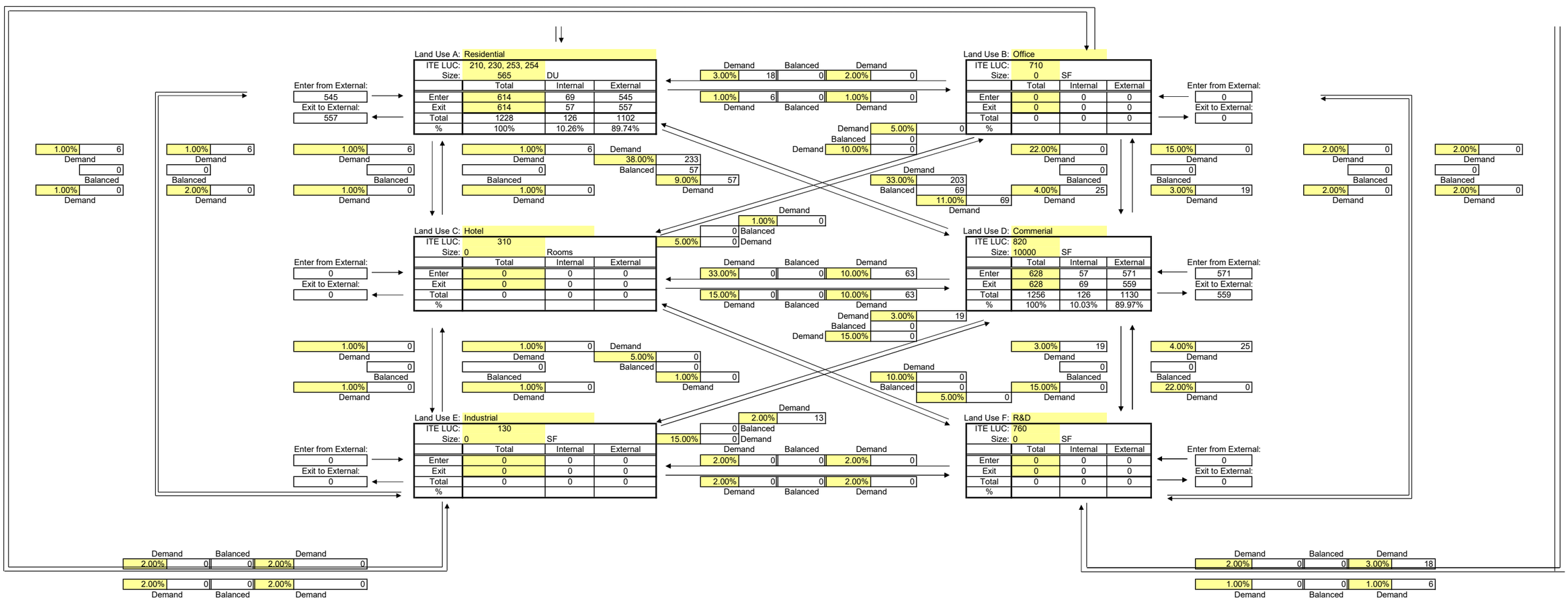
Internal Capture = 1.03%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 661



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C Hotel	D Commerial	E Industrial	F R&D	Total
Enter	545	0	0	571	0	0	1116
Exit	557	0	0	559	0	0	1116
Total	1102	0	0	1130	0	0	**2232**
Single Use Trip Gen Estimate	1228	0	0	1256	0	0	**2484**
	10.26%	0.00%	0.00%	10.03%	0.00%	0.00%	

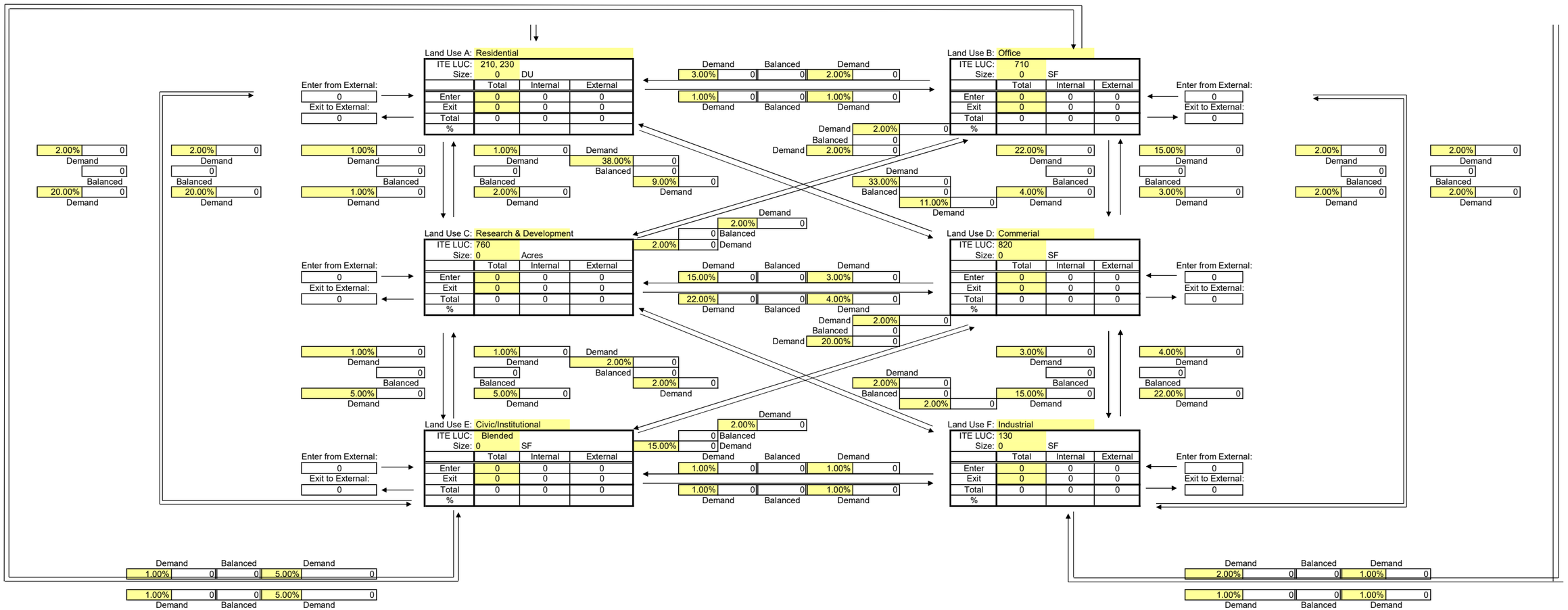
Internal Capture = 10.14%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 646



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial	Total
Enter	0	0	0	0	0	0	0
Exit	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	**0**
Single Use Trip Gen Estimate	0	0	0	0	0	0	**0**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

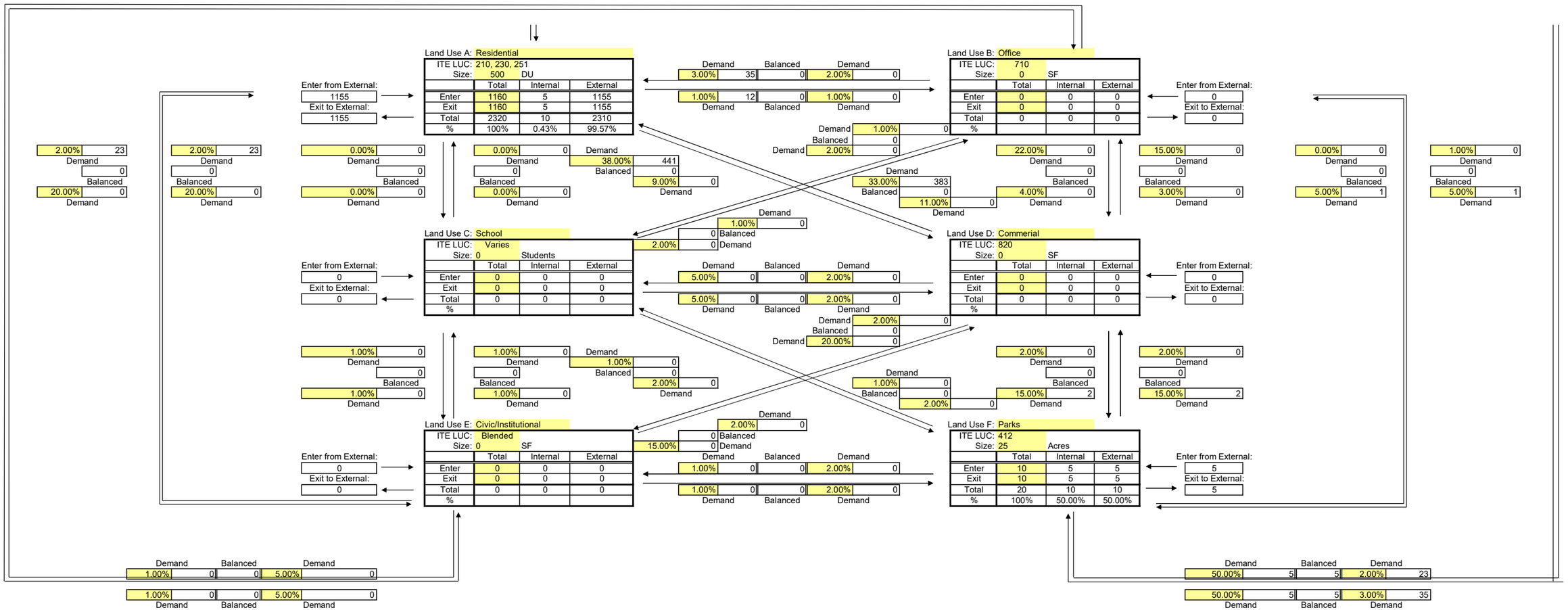
Internal Capture = #DIV/0!

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 651



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1155	0	0	0	0	5	1160
Exit	1155	0	0	0	0	5	1160
Total	2310	0	0	0	0	10	**2320**
Single Use Trip Gen Estimate	2320	0	0	0	0	20	**2340**
	0.43%	0.00%	0.00%	0.00%	0.00%	50.00%	

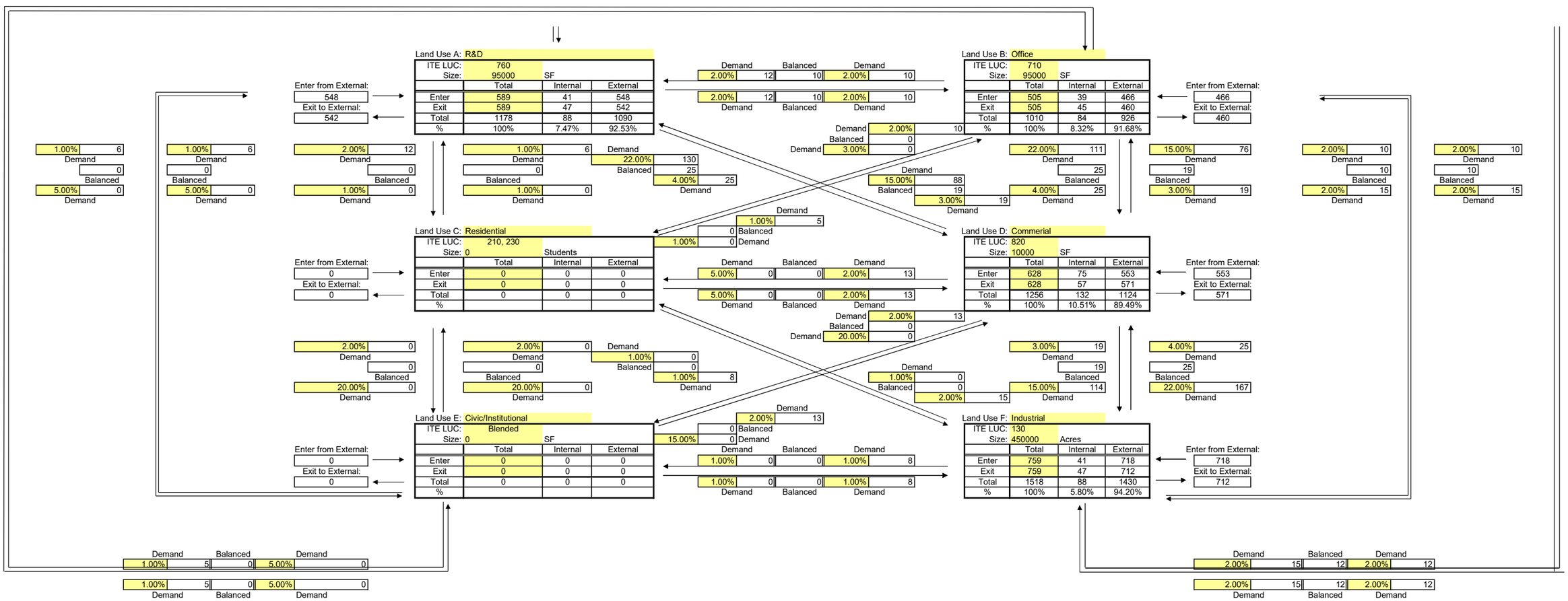
Internal Capture = 0.85%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 660



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institut	F Industrial	Total
Enter	548	466	0	553	0	718	2285
Exit	542	460	0	571	0	712	2285
Total	1090	926	0	1124	0	1430	**4570**
Single Use Trip Gen Estimate	1178	1010	0	1256	0	1518	**4962**
	7.47%	8.32%	0.00%	10.51%	0.00%	5.80%	

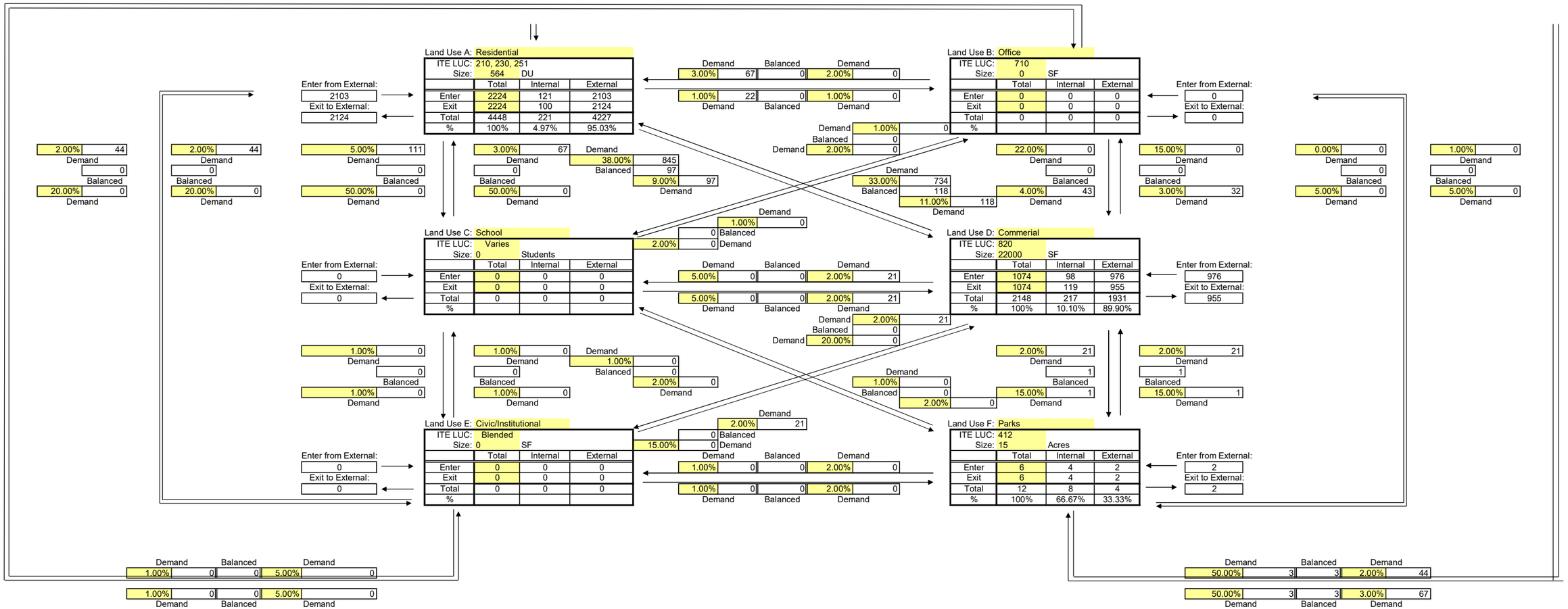
Internal Capture = 7.90%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 663



Land Use	Total	Internal	External
A: Residential			
Enter	2224	121	2103
Exit	2224	100	2124
Total	4448	221	4227
%	100%	4.97%	95.03%
B: Office			
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			
C: School			
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			
D: Commerial			
Enter	1074	98	976
Exit	1074	119	955
Total	2148	217	1931
%	100%	10.10%	89.90%
E: Civic/Institutional			
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			
F: Parks			
Enter	6	4	2
Exit	6	4	2
Total	12	8	4
%	100%	66.67%	33.33%

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2103	0	0	976	0	2	3081
Exit	2124	0	0	955	0	2	3081
Total	4227	0	0	1931	0	4	**6162**
Single Use Trip Gen Estimate	4448	0	0	2148	0	12	**6608**
	4.97%	0.00%	0.00%	10.10%	0.00%	66.67%	

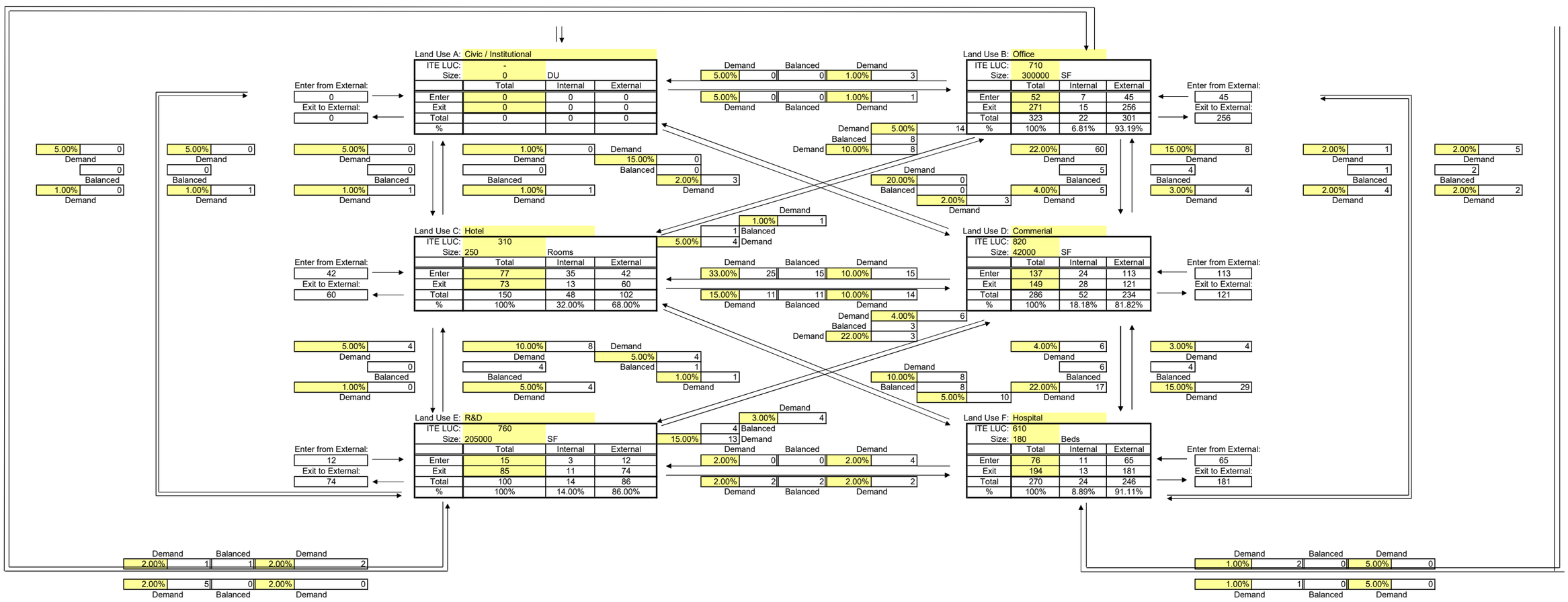
Internal Capture = 6.75%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 664



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A: Civic / Institutional	B: Office	C: Hotel	D: Commerial	E: R&D	F: Hospital	Total
Enter	0	45	42	113	12	65	277
Exit	0	256	60	121	74	181	692
Total	0	301	102	234	86	246	**969**
Single Use Trip Gen Estimate	0	323	150	286	100	270	**1129**
	0.00%	6.81%	32.00%	18.18%	14.00%	8.89%	

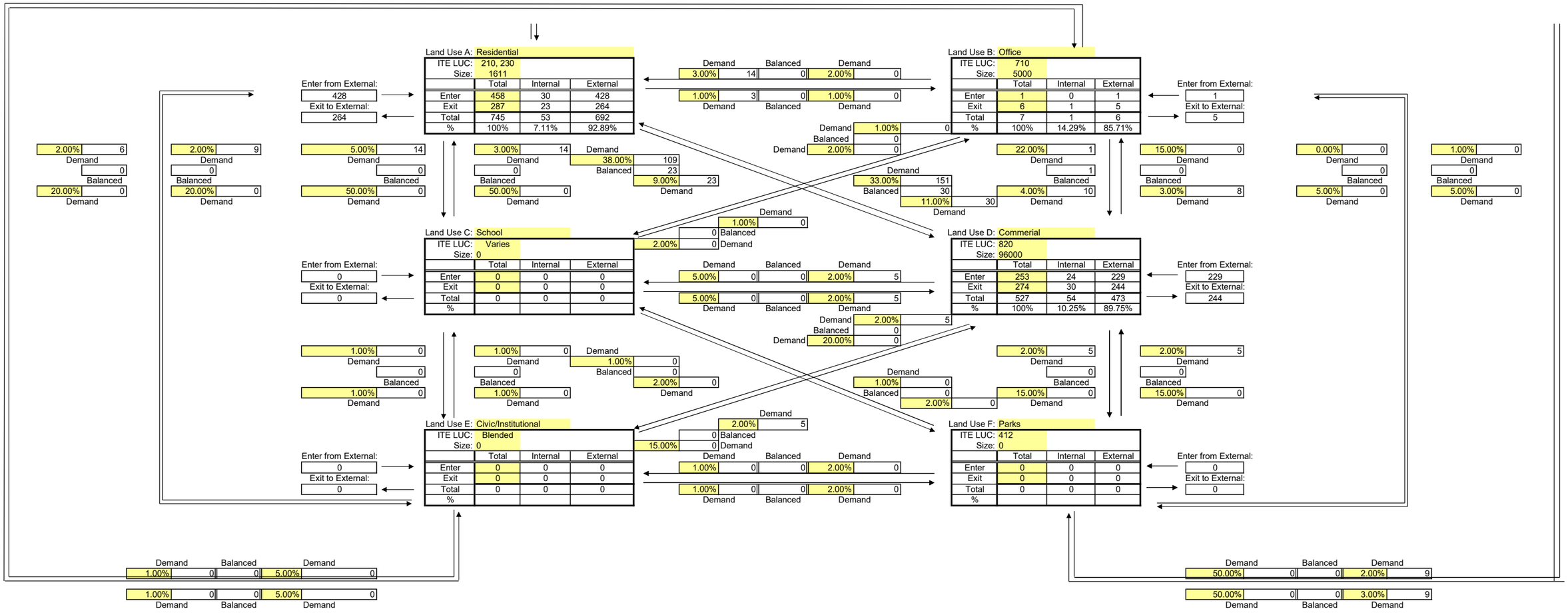
Internal Capture = 14.17%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 659



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	428	1	0	229	0	0	658
Exit	264	5	0	244	0	0	513
Total	692	6	0	473	0	0	**1171**
Single Use Trip Gen Estimate	745	7	0	527	0	0	**1279**
	7.11%	14.29%	0.00%	10.25%	0.00%	0.00%	

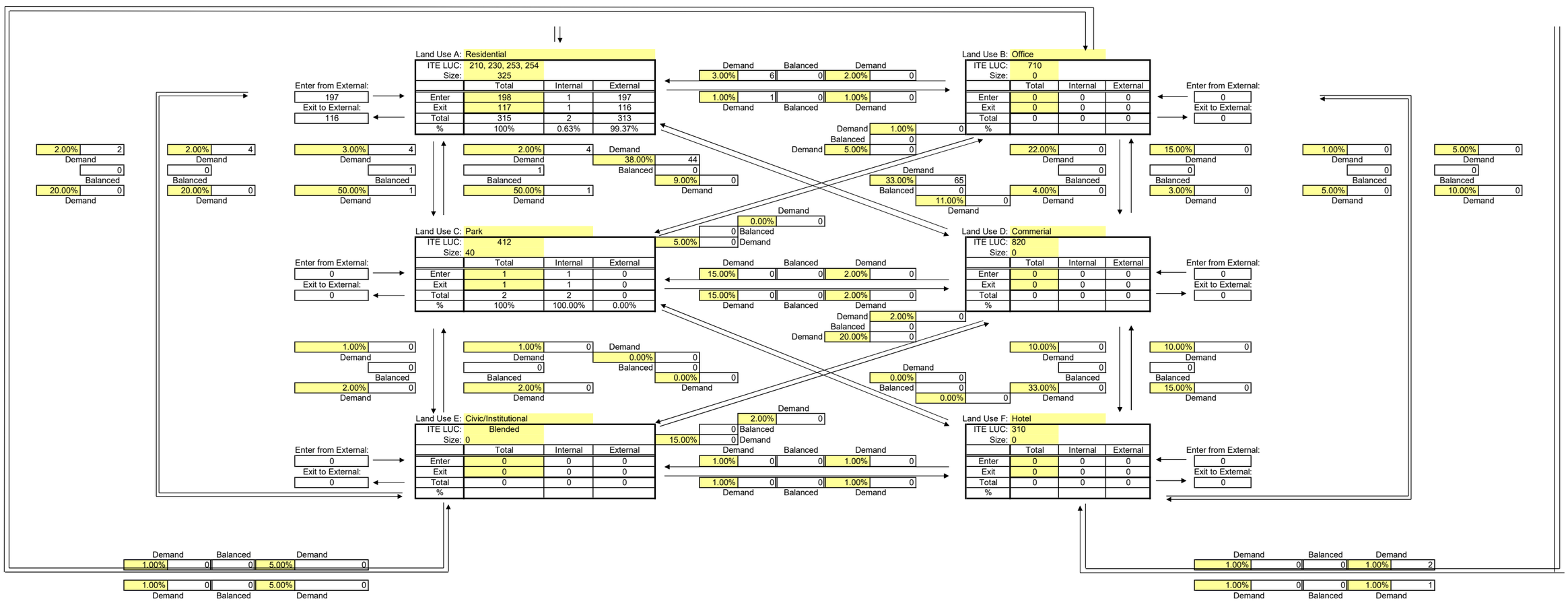
Internal Capture = 8.44%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 662



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residentia	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	197	0	0	0	0	0	197
Exit	116	0	0	0	0	0	116
Total	313	0	0	0	0	0	**313**
Single Use Trip Gen Estimate	315	0	2	0	0	0	**317**
	0.63%	0.00%	0.00%	0.00%	0.00%	0.00%	

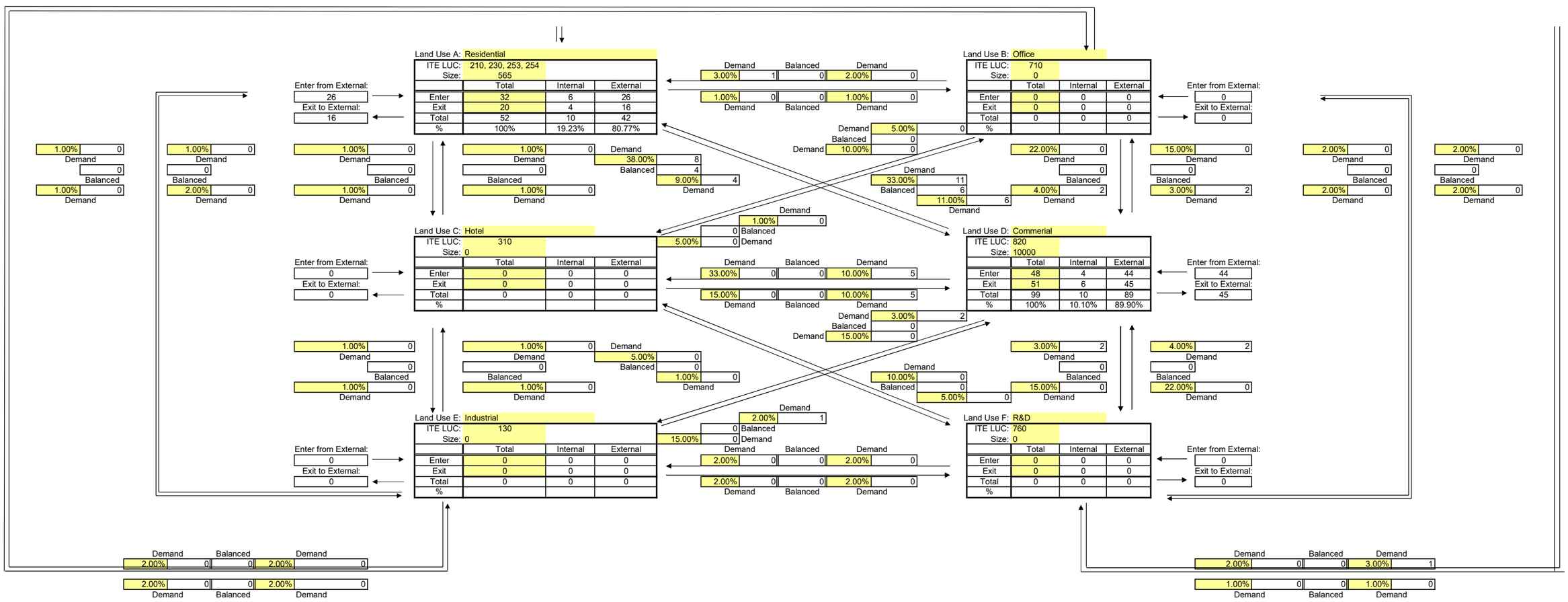
Internal Capture = 1.26%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 661



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C Hotel	D Commerial	E Industrial	F R&D	Total
Enter	26	0	0	44	0	0	70
Exit	16	0	0	45	0	0	61
Total	42	0	0	89	0	0	**131**
Single Use Trip Gen Estimate	52	0	0	99	0	0	**151**
	19.23%	0.00%	0.00%	10.10%	0.00%	0.00%	

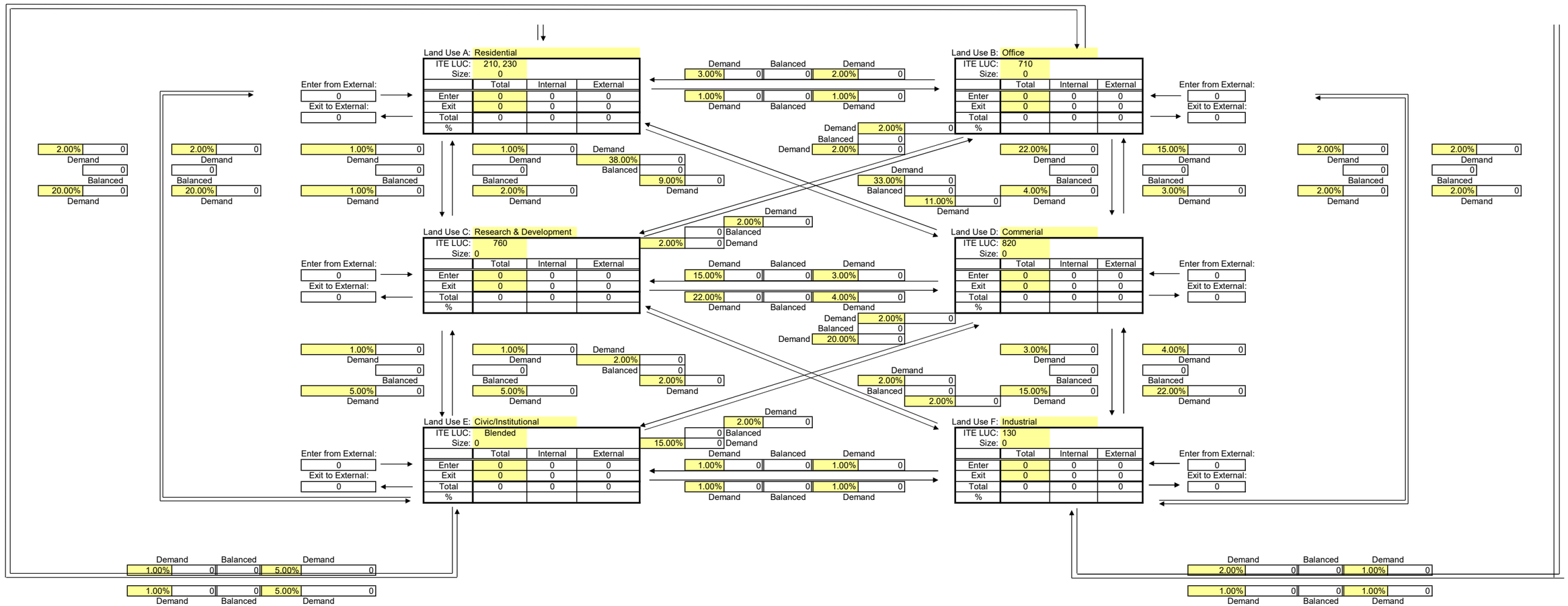
Internal Capture = 13.25%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 646



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial	Total
Enter	0	0	0	0	0	0	0
Exit	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	**0**
Single Use Trip Gen Estimate	0	0	0	0	0	0	**0**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

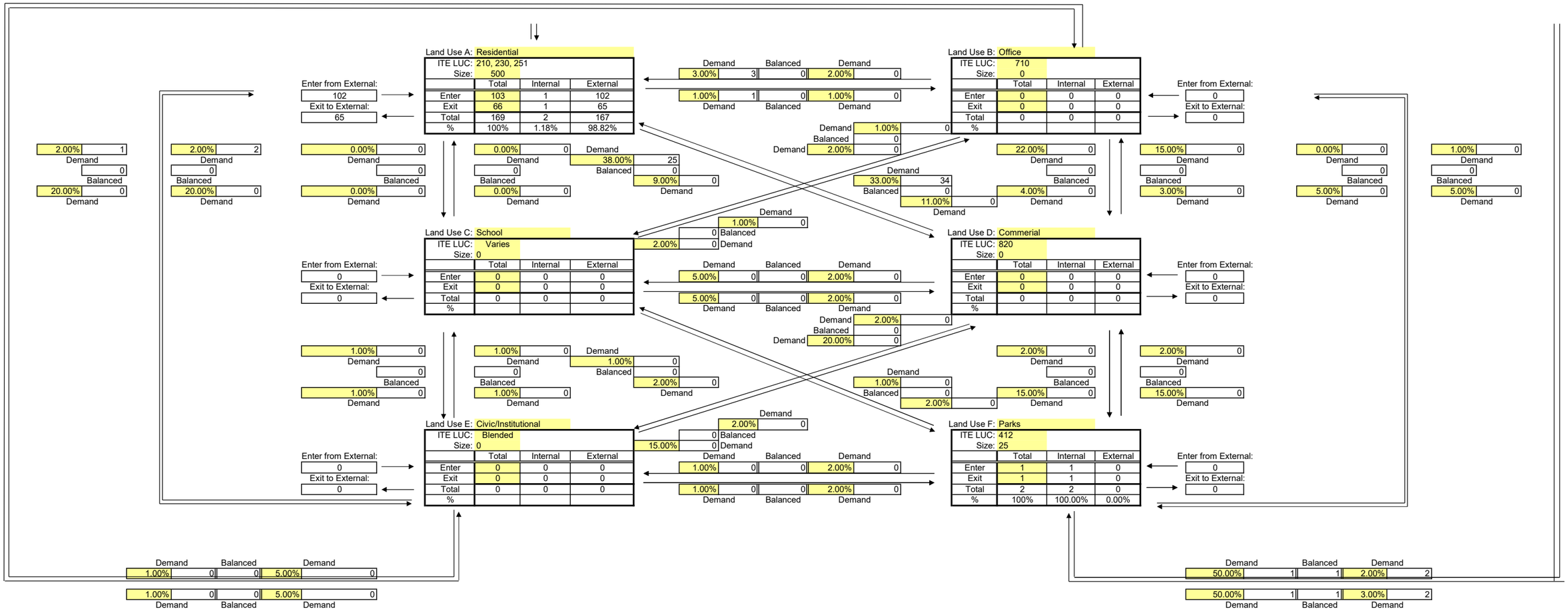
Internal Capture = #DIV/0!

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 651



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A	B	C	D	E	F	Total
	Residentia	Office	School	Commerial	Civic/Institu	Parks	
Enter	102	0	0	0	0	0	102
Exit	65	0	0	0	0	0	65
Total	167	0	0	0	0	0	**167**
Single Use Trip Gen Estimate	169	0	0	0	0	2	**171**
	1.18%	0.00%	0.00%	0.00%	0.00%	0.00%	

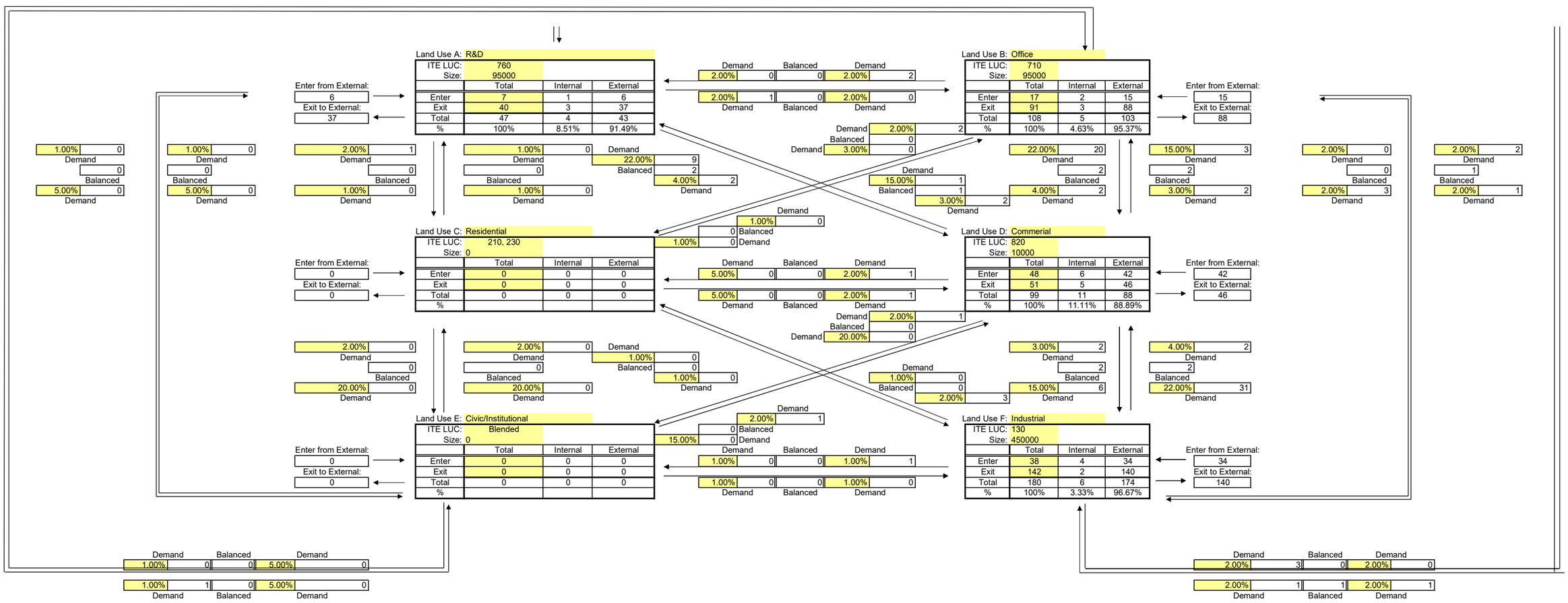
Internal Capture = 2.34%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook*, October 1998)

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 660



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

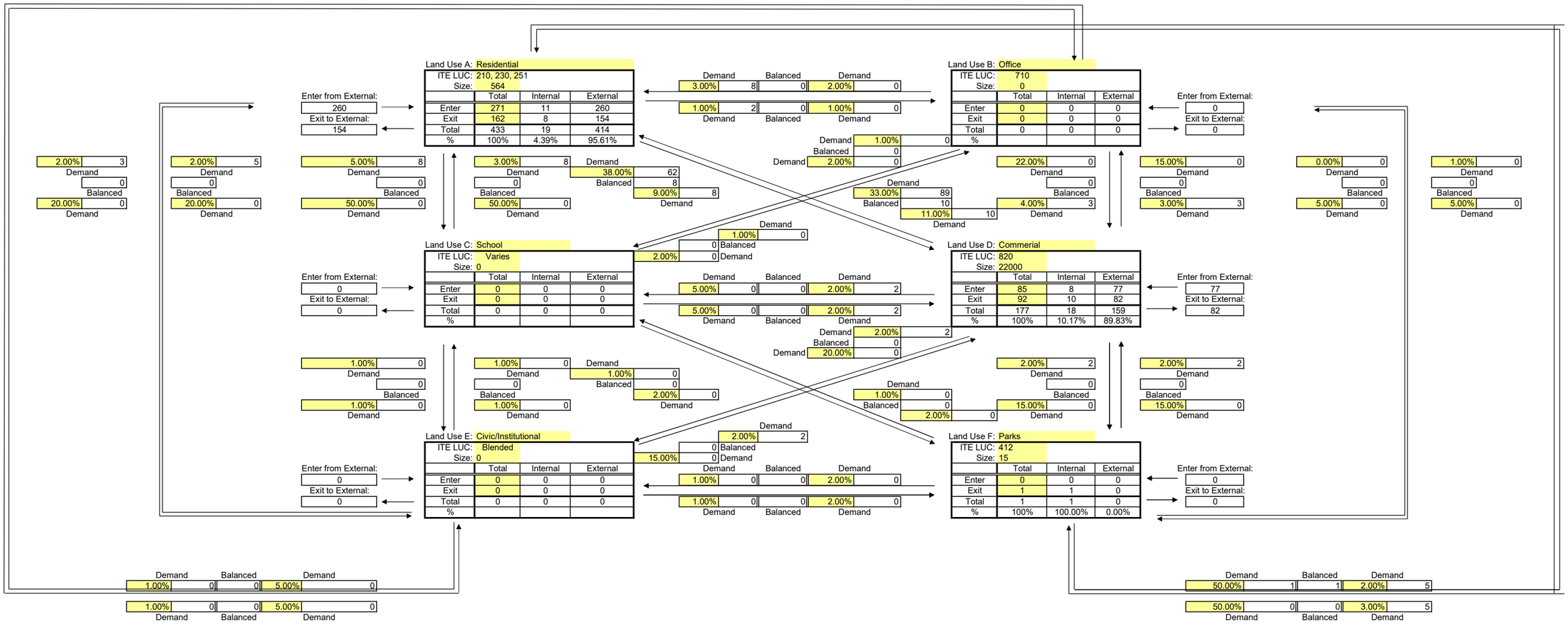
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institut	F Industrial	Total
Enter	6	15	0	42	0	34	97
Exit	37	88	0	46	0	140	311
Total	43	103	0	88	0	174	**408**
Single Use Trip Gen Estimate	47	108	0	99	0	180	**434**
	8.51%	4.63%	0.00%	11.11%	0.00%	3.33%	

Internal Capture = 5.99%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 663



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	260	0	0	77	0	0	337
Exit	154	0	0	82	0	0	236
Total	414	0	0	159	0	0	**573**
Single Use Trip Gen Estimate	433	0	0	177	0	1	**611**
	4.39%	0.00%	0.00%	10.17%	0.00%	0.00%	

Internal Capture = 6.22%

EXHIBIT 2-1
Southern Groves DRI
Proposed Daily Trip Generation - PHASE 2

TRCPM TAZ	DRI	Gross Daily Trip Generation	Gross Trips (Trip Generation)	TAZ Internal Trips	TAZ Internal Trips	External Trips (Internal Capture)	Pass-by Trips	Pass-by Trips	External Daily Trip Generation	Net External Trips (Pass-by)	% Internal Among Proj. TAZ	Total Net External Trips (Internal Among TAZs)
664	Southern Grove	20,368	132,087	2,754	15,846	116,241	682	9,496	16,932	106,745	14.7%	91,053
659		16,362		1,558			1,309		13,495			
662		15,330		32			0		15,298			
661		31,714		6,024			4,123		21,567			
646		9,239		1,114			570		7,555			
651		4,062		20			0		4,042			
660		13,781		680			327		12,774			
663		21,231		3,664			2,485		15,082			

EXHIBIT 2-2

Southern Groves DRI

Proposed PM Peak Hour Trip Generation - **PHASE 2**

TAZ	DRI	Gross Trip Generation			TAZ Internal Capture			Pass-by Capture	Net External TAZ Trips			Gross Trip	External Trip	Net External DRI Trips			% Internal among	Internal trips among	Net External DRI Trips		
		Total	In	Out	Total	In	Out	Total	Total	In	Out	Generation	Generation	Total	In	Out	Project TAZs	Project TAZs	Total	In	Out
481	Southern Grove	1,625	506	1,119	214	107	107	59	1,352	369	983										
482	Southern Grove	1,364	740	624	148	74	74	117	1,099	607	492										
483	Southern Grove	1,682	1,059	623	4	2	2	0	1,678	1,057	621										
484	Southern Grove	2,961	1,290	1,671	390	195	195	436	2,135	877	1,258	11,954	10,728	9,802	4,422	5,380	14.7%	1,441	8,361	3,702	4,659
485	Southern Grove	891	298	593	84	42	42	49	758	231	527										
486	Southern Grove	278	169	109	4	2	2	0	274	167	107										
487	Southern Grove	1,210	440	770	44	22	22	27	1,139	404	735										
488	Southern Grove	1,943	998	945	338	169	169	238	1,367	710	657										

WATS TAZ	TCRPM TAZ
381	664

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	393	rooms	[310]	T = 8.36*(X)	3,285
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	43,725	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	3,425
Service & Office	410,540	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	4,175
Research & Development(1)	225,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	2,506
Hospital	300	beds	[610]	T = 22.32*(X)	6,696
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	9,212	s.f.	-	T = 30.49*(X/1000)	281
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	20,368
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	20,368
				Internal Capture % among TAZ =	13.52%
				Internal Capture trips among TAZ =	2,754

Commercial Retail Pass-By Calculation:		
Intensity =	43,725	s.f.
0.75 * Intensity =	32,794	s.f.
External Trips from Matrix =	2,675	trips
0.75 * External Trips from Matrix =	2,006	trips
Pass-By Percent =	34%	
Pass-By Reduction =	682	trips

NET NEW EXTERNAL DAILY TRIPS =	**16,932**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	393	rooms	[310]	T = 0.60*(X); (51% in)	236	120	116
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	43,725	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	295	142	153
Service & Office[2]	410,540	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	436	70	366
Research & Development[1]	225,000	s.f.	[760]	T = 0.49*(X); (15% in)	110	17	93
Hospital	300	beds	[610]	T = 2.08*(X) - 104.00; (28% in)	520	146	374
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	9212	s.f.	-	T = 3.05*(X/1000); (40% in)	28	11	17
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,625	506	1,119
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	1,625	506	1,119
				Internal Capture % among TAZ =	13.17%	-	-
				Internal Capture trips among TAZ =	214	107	107

Commercial Retail Pass-By Calculation:		
Intensity =	43,725	s.f.
0.75 * Intensity =	32,794	s.f.
External Trips from Matrix =	232	trips
0.75 * External Trips from Matrix =	174	trips
Pass-By Percent =	34%	
Pass-By Reduction =	59	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,352**	**370**	**982**

WATS TAZ	TCRPM TAZ
382	659

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	173	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	1,722
Multi-Family Residential	1,484	d.u.	[221]	T = 5.45*(X)-1.75	8,086
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	96,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	5,847
Service & Office	39,060	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	426
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	9,212	s.f.	-	T = 30.49*(X/1000)	281
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	16,362
				Total Gross Residential Trips =	9,808
				Total Gross Non-Residential Trips =	6,554
				Internal Capture % among TAZ =	9.52%
				Internal Capture trips among TAZ =	1,558

Commercial Retail Pass-By Calculation:		
Intensity =	96,000	s.f.
0.75 * Intensity =	72,000	s.f.
External Trips from Matrix =	5,135	trips
0.75 * External Trips from Matrix =	3,851	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,309	trips

NET NEW EXTERNAL DAILY TRIPS =	**13,495**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	173	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	172	108	64
Multi-Family Residential	1,484	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	590	360	230
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	96,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	527	253	274
Service & Office[2]	39,060	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	47	8	39
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	9212	s.f.	-	T = 3.05*(X/1000); (40% in)	28	11	17
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,364	740	624
				Total Gross Residential Trips =	762	468	294
				Total Gross Non-Residential Trips =	602	272	330
				Internal Capture % among TAZ =	10.85%	-	-
				Internal Capture trips among TAZ =	148	74	74

Commercial Retail Pass-By Calculation:		
Intensity =	96,000	s.f.
0.75 * Intensity =	72,000	s.f.
External Trips from Matrix =	459	trips
0.75 * External Trips from Matrix =	344	trips
Pass-By Percent =	34%	
Pass-By Reduction =	117	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,099**	**608**	**491**

WATS TAZ	TCRPM TAZ
383	662

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	1,859	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	15,299
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	40	acres	[411]	T = 0.78*(X)	31
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	15,330
				Total Gross Residential Trips =	15,299
				Total Gross Non-Residential Trips =	31
				Internal Capture % among TAZ =	0.21%
				Internal Capture trips among TAZ =	32

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
0.75 * Intensity =	0	s.f.
External Trips from Matrix =	0	trips
0.75 * External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,298**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,859	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	1,680	1,058	622
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)			
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	40	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,682	1,059	623
				Total Gross Residential Trips =	1,680	1,058	622
				Total Gross Non-Residential Trips =	2	1	1
				Internal Capture % among TAZ =	0.24%	-	-
				Internal Capture trips among TAZ =	4	2	2

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
0.75 * Intensity =	0	s.f.
External Trips from Matrix =	0	trips
0.75 * External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,678**	**1,057**	**621**

WATS TAZ	TCRPM TAZ
384	661

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	800	d.u.	[221]	T = 5.45*(X)-1.75	4,358
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	67	rooms	[310]	T = 8.36*(X)	560
Industrial	1,280,000	s.f.	[130]	T = 3.37*(X/1000)	4,314
Commercial Retail	542,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	18,973
Service & Office	50,000	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	542
Research & Development(1)	150,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	1,739
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	415	d.u.	[253]	T = 2.02*(X)	838
Assisted Living Facility	150	beds	[254]	T = 2.60*(X)	390
				Total Gross Trips =	31,714
				Total Gross Residential Trips =	4,358
				Total Gross Non-Residential Trips =	27,356
				Internal Capture % among TAZ =	18.99%
				Internal Capture trips among TAZ =	6,024

Commercial Retail Pass-By Calculation:		
Intensity =	542,000	s.f.
0.75 * Intensity =	406,500	s.f.
External Trips from Matrix =	16,166	trips
0.75 * External Trips from Matrix =	12,125	trips
Pass-By Percent =	34%	
Pass-By Reduction =	4,123	trips

NET NEW EXTERNAL DAILY TRIPS =	**21,567**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	800	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	326	199	127
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	67	rooms	[310]	T = 0.60*(X); (51% in)	40	20	20
Industrial	1,280,000	s.f.	[130]	T = 0.40*(X/1000); (21% in)	512	108	404
Commercial Retail	542,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	1,898	911	987
Service & Office[2]	50,000	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	59	9	50
Research & Development[1]	150,000	s.f.	[760]	T = 0.49*(X); (15% in)	74	11	63
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	415	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)	23	14	9
Assisted Living Facility	150	beds	[254]	T = 0.19*(X); (63% in)	29	18	11
				Total Gross Trips =	2,961	1,290	1,671
				Total Gross Residential Trips =	326	199	127
				Total Gross Non-Residential Trips =	2,635	1,091	1,544
				Internal Capture % among TAZ =	13.17%	-	-
				Internal Capture trips among TAZ =	390	195	195

Commercial Retail Pass-By Calculation:		
Intensity =	542,000	s.f.
0.75 * Intensity =	406,500	s.f.
External Trips from Matrix =	1,710	trips
0.75 * External Trips from Matrix =	1,283	trips
Pass-By Percent =	34%	
Pass-By Reduction =	436	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,135**	**877**	**1,258**

WATS TAZ	TCRPM TAZ
385	646

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	300	d.u.	[221]	T = 5.45*(X)-1.75	1,633
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	1,225,000	s.f.	[130]	T = 3.37*(X/1000)	4,128
Commercial Retail	31,500	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	2,741
Service & Office	25,000	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	277
Research & Development(1)	25,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	460
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	9,239
				Total Gross Residential Trips =	1,633
				Total Gross Non-Residential Trips =	7,606
				Internal Capture % among TAZ =	12.05%
				Internal Capture trips among TAZ =	1,114

Commercial Retail Pass-By Calculation:		
Intensity =	31,500	s.f.
0.75 * Intensity =	23,625	s.f.
External Trips from Matrix =	2,234	trips
0.75 * External Trips from Matrix =	1,676	trips
Pass-By Percent =	34%	
Pass-By Reduction =	570	trips

NET NEW EXTERNAL DAILY TRIPS =	**7,555**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	300	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	127	77	50
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	1,225,000	s.f.	[130]	T = 0.40*(X/1000); (21% in)	490	103	387
Commercial Retail	31,500	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	231	111	120
Service & Office[2]	25,000	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	31	5	26
Research & Development[1]	25,000	s.f.	[760]	T = 0.49*(X); (15% in)	12	2	10
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	891	298	593
				Total Gross Residential Trips =	127	77	50
				Total Gross Non-Residential Trips =	764	221	543
				Internal Capture % among TAZ =	9.43%	-	-
				Internal Capture trips among TAZ =	84	42	42

Commercial Retail Pass-By Calculation:		
Intensity =	31,500	s.f.
0.75 * Intensity =	23,625	s.f.
External Trips from Matrix =	193	trips
0.75 * External Trips from Matrix =	145	trips
Pass-By Percent =	34%	
Pass-By Reduction =	49	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**758**	**232**	**526**

WATS TAZ	TCRPM TAZ
386	651

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	940	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	4,042
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	25	acres	[411]	T = 0.78*(X)	20
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	4,062
				Total Gross Residential Trips =	4,042
				Total Gross Non-Residential Trips =	20
				Internal Capture % among TAZ =	0.49%
				Internal Capture trips among TAZ =	20

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
0.75 * Intensity =	0	s.f.
External Trips from Matrix =	0	trips
0.75 * External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**4,042**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	940	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)	276	168	108
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)			
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	25	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	278	169	109
				Total Gross Residential Trips =	276	168	108
				Total Gross Non-Residential Trips =	2	1	1
				Internal Capture % among TAZ =	1.44%	-	-
				Internal Capture trips among TAZ =	4	2	2

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
0.75 * Intensity =	0	s.f.
External Trips from Matrix =	0	trips
0.75 * External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**274**	**167**	**107**

WATS TAZ	TCRPM TAZ
387	660

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	900	d.u.	[221]	T = 5.45*(X)-1.75	4,903
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	100	rooms	[310]	T = 8.36*(X)	836
Industrial	1,195,000	s.f.	[130]	T = 3.37*(X/1000)	4,027
Commercial Retail	12,535	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	1,465
Service & Office	125,400	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	1,322
Research & Development(1)	100,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	1,228
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	13,781
				Total Gross Residential Trips =	4,903
				Total Gross Non-Residential Trips =	8,878
				Internal Capture % among TAZ =	5.25%
				Internal Capture trips among TAZ =	680

Commercial Retail Pass-By Calculation:		
Intensity =	12,535	s.f.
0.75 * Intensity =	9,401	s.f.
External Trips from Matrix =	1,283	trips
0.75 * External Trips from Matrix =	962	trips
Pass-By Percent =	34%	
Pass-By Reduction =	327	trips

NET NEW EXTERNAL DAILY TRIPS =	**12,774**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	900	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	365	223	142
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	100	rooms	[310]	T = 0.60*(X); (51% in)	60	31	29
Industrial	1,195,000	s.f.	[130]	T = 0.40*(X/1000); (21% in)	478	100	378
Commercial Retail	12,535	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	117	56	61
Service & Office[2]	125,400	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	141	23	118
Research & Development[1]	100,000	s.f.	[760]	T = 0.49*(X); (15% in)	49	7	42
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,210	440	770
				Total Gross Residential Trips =	365	223	142
				Total Gross Non-Residential Trips =	845	217	628
				Internal Capture % among TAZ =	3.64%	-	-
				Internal Capture trips among TAZ =	44	22	22

Commercial Retail Pass-By Calculation:		
Intensity =	12,535	s.f.
0.75 * Intensity =	9,401	s.f.
External Trips from Matrix =	104	trips
0.75 * External Trips from Matrix =	78	trips
Pass-By Percent =	34%	
Pass-By Reduction =	27	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,139**	**405**	**734**

WATS TAZ	TCRPM TAZ
388	663

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	364	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	3,413
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	439	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	2,068
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	250,720	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	11,232
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	36,000	s.f.	-	T = 30.49*(X/1000)	1,098
Park	15	acres	[411]	T = 0.78*(X)	12
K-8 School	1,600	students	[522]	T = 2.13*(X)	3,408
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	21,231
				Total Gross Residential Trips =	5,481
				Total Gross Non-Residential Trips =	15,750
				Internal Capture % among TAZ =	17.26%
				Internal Capture trips among TAZ =	3,664

Commercial Retail Pass-By Calculation:		
Intensity =	250,720	s.f.
0.75 * Intensity =	188,040	s.f.
External Trips from Matrix =	9,745	trips
0.75 * External Trips from Matrix =	7,309	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,485	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,082**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	364	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	351	221	130
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	439	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)	152	93	59
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	250,720	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	1,073	515	558
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	36000	s.f.	-	T = 3.05*(X/1000); (40% in)	110	44	66
Park	15	acres	[412]	T = 0.06*(X); (41% in)	1	0	1
K-8 School	1600	students	[522]	T = 0.17*(X); (49% in)	256	125	131
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,943	998	945
				Total Gross Residential Trips =	503	314	189
				Total Gross Non-Residential Trips =	1,440	684	756
				Internal Capture % among TAZ =	17.40%	-	-
				Internal Capture trips among TAZ =	338	169	169

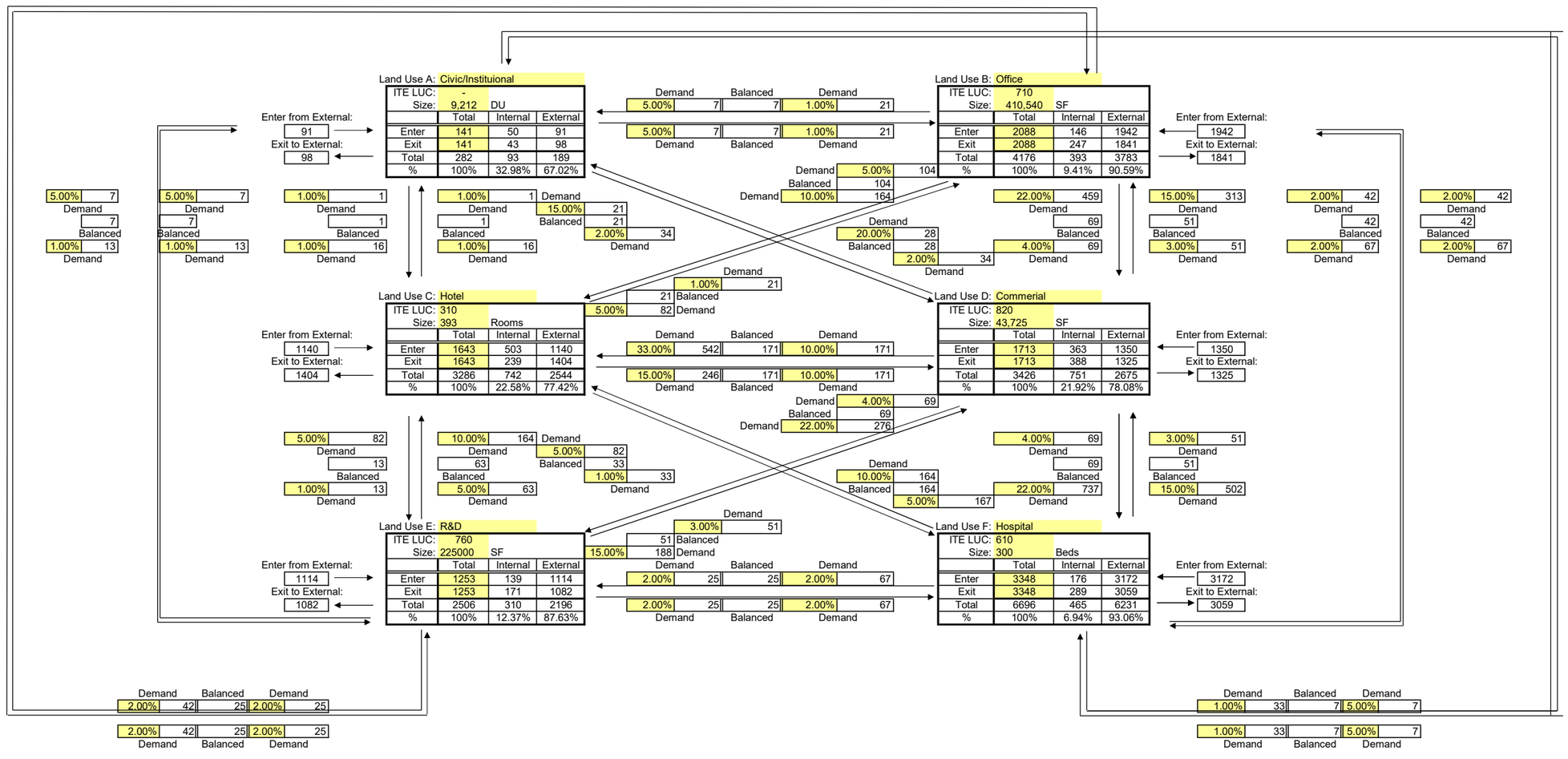
Commercial Retail Pass-By Calculation:		
Intensity =	250,720	s.f.
0.75 * Intensity =	188,040	s.f.
External Trips from Matrix =	934	trips
0.75 * External Trips from Matrix =	701	trips
Pass-By Percent =	34%	
Pass-By Reduction =	238	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,367**	**710**	**657**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: ########

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 664



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

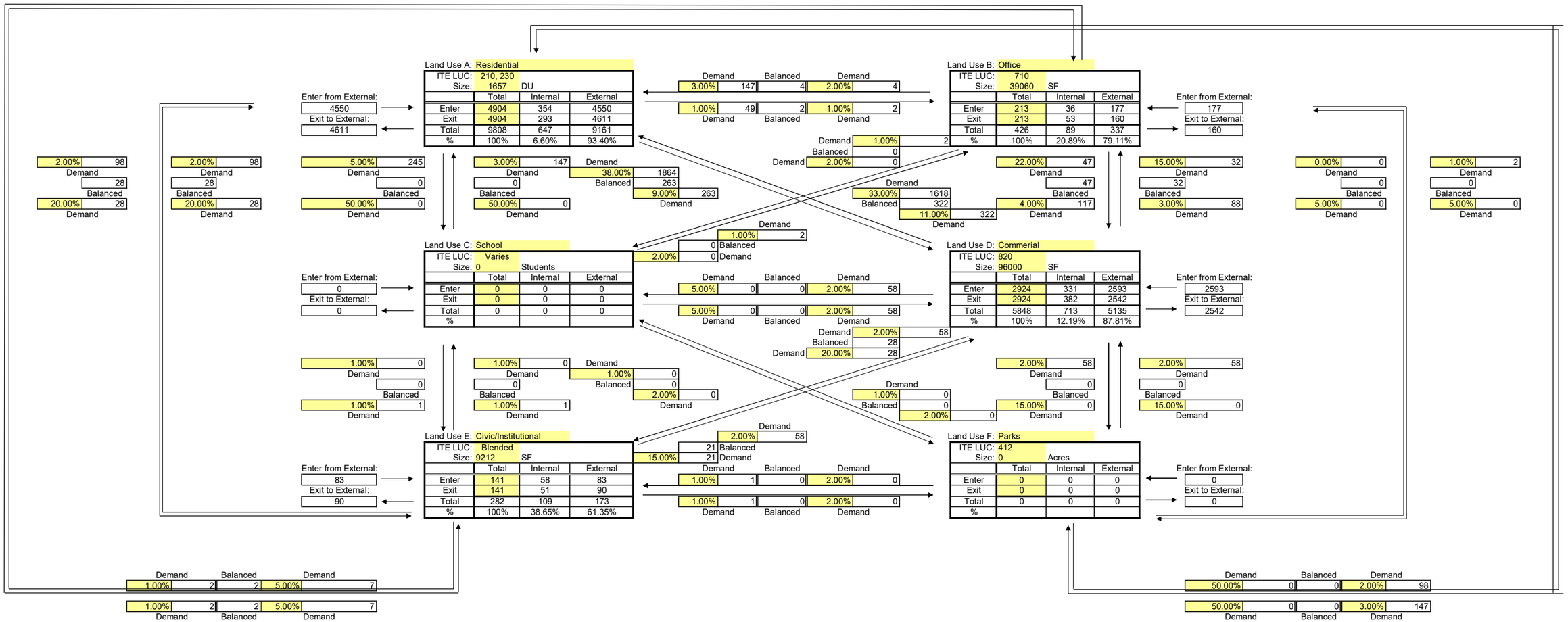
Category	Land Use A Civic/Instituio	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	91	1942	1140	1350	1114	3172	8809
Exit	98	1841	1404	1325	1082	3059	8809
Total	189	3783	2544	2675	2196	6231	**17618**
Single Use Trip Gen Estimate	282	4176	3286	3426	2506	6696	**20372**
	32.98%	9.41%	22.58%	21.92%	12.37%	6.94%	

Internal Capture = 13.52%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 659



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

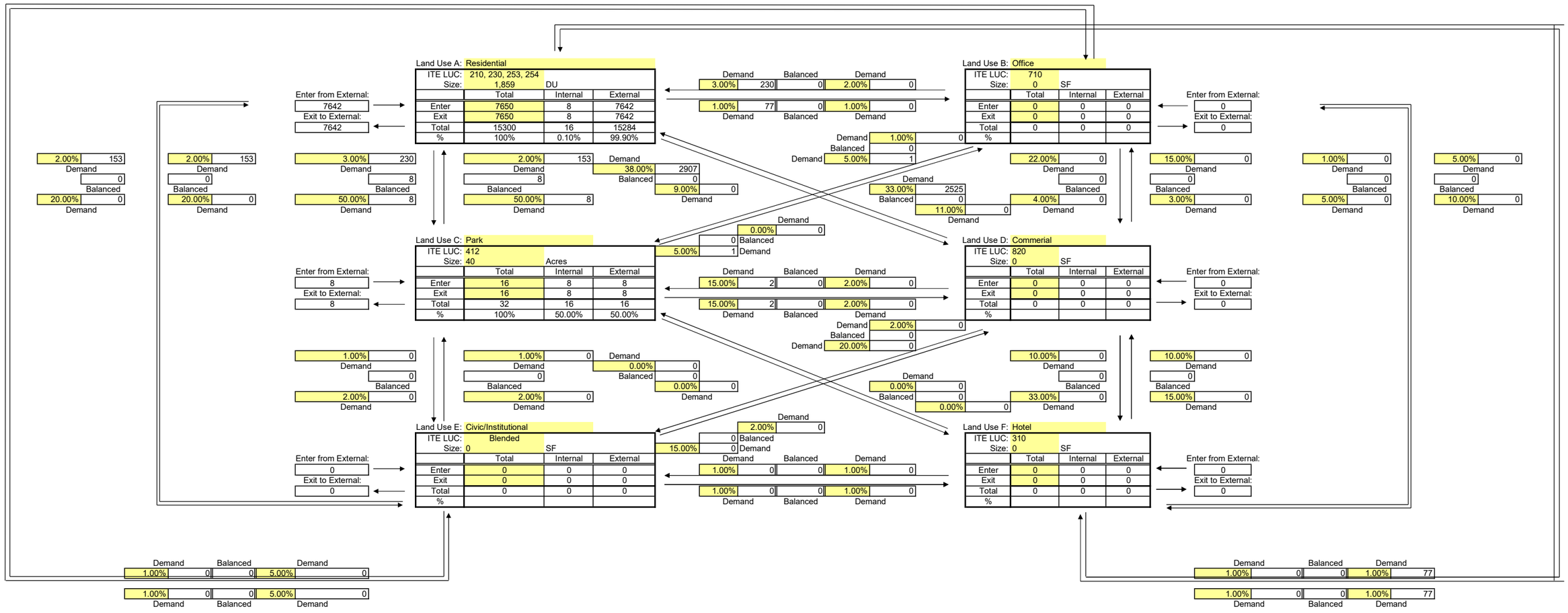
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	4550	177	0	2593	83	0	7403
Exit	4611	160	0	2542	90	0	7403
Total	9161	337	0	5135	173	0	**14806**
Single Use Trip Gen Estimate	9808	426	0	5848	282	0	**16364**
	6.60%	20.89%	0.00%	12.19%	38.65%	0.00%	

Internal Capture = 9.52%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 662



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

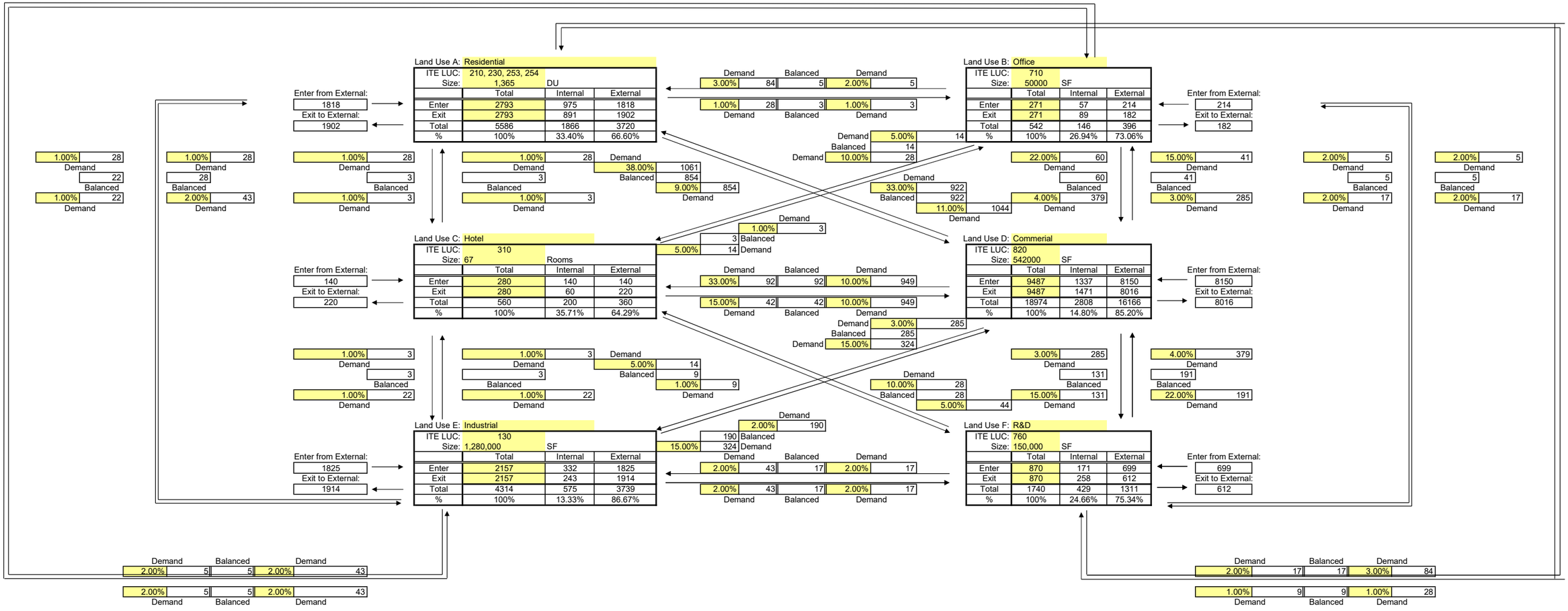
Category	Land Use A Residentia	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	7642	0	8	0	0	0	7650
Exit	7642	0	8	0	0	0	7650
Total	15284	0	16	0	0	0	**15300**
Single Use Trip Gen Estimate	15300	0	32	0	0	0	**15332**
	0.10%	0.00%	50.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.21%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 661



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

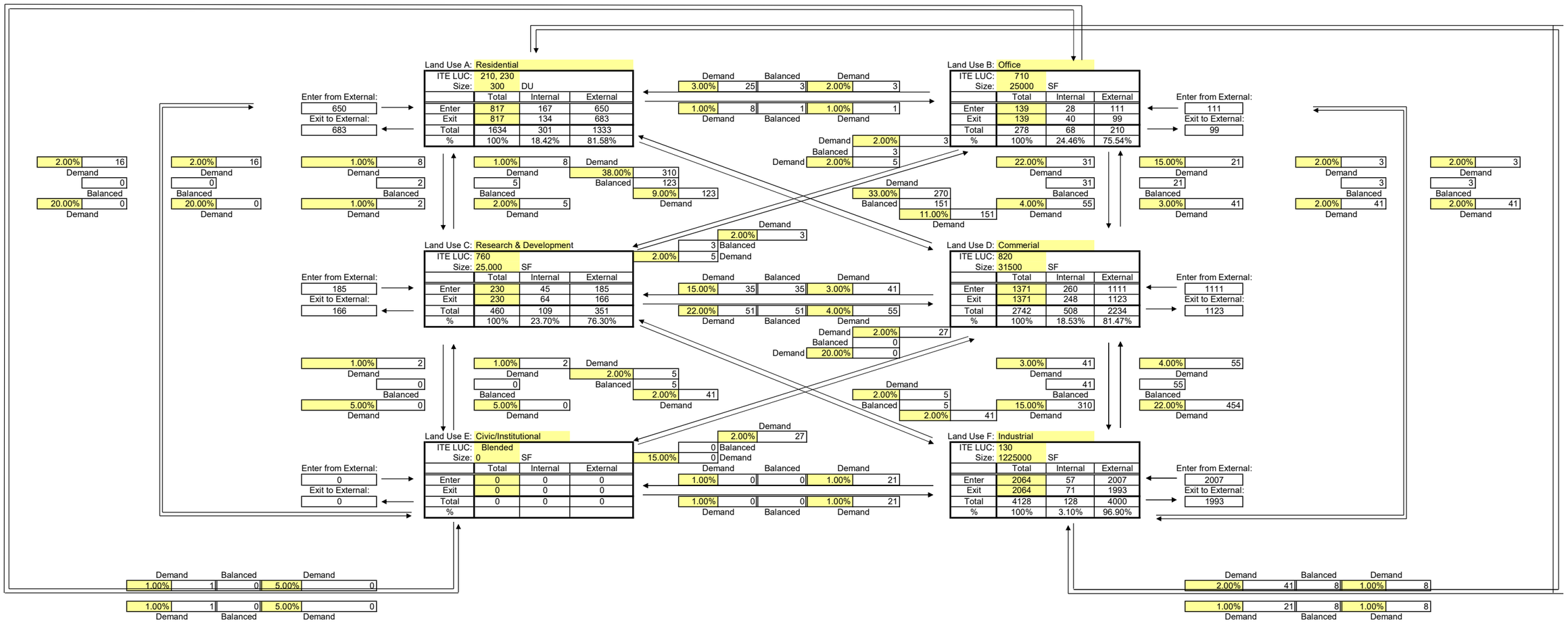
Category	Land Use						
	A	B	C	D	E	F	Total
	Residentia	Office	Hotel	Commerial	Industrial	R&D	
Enter	1818	214	140	8150	1825	699	12846
Exit	1902	182	220	8016	1914	612	12846
Total	3720	396	360	16166	3739	1311	**25692**
Single Use Trip Gen Estimate	5586	542	560	18974	4314	1740	**31716**
	33.40%	26.94%	35.71%	14.80%	13.33%	24.66%	

Internal Capture = 18.99%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 646



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

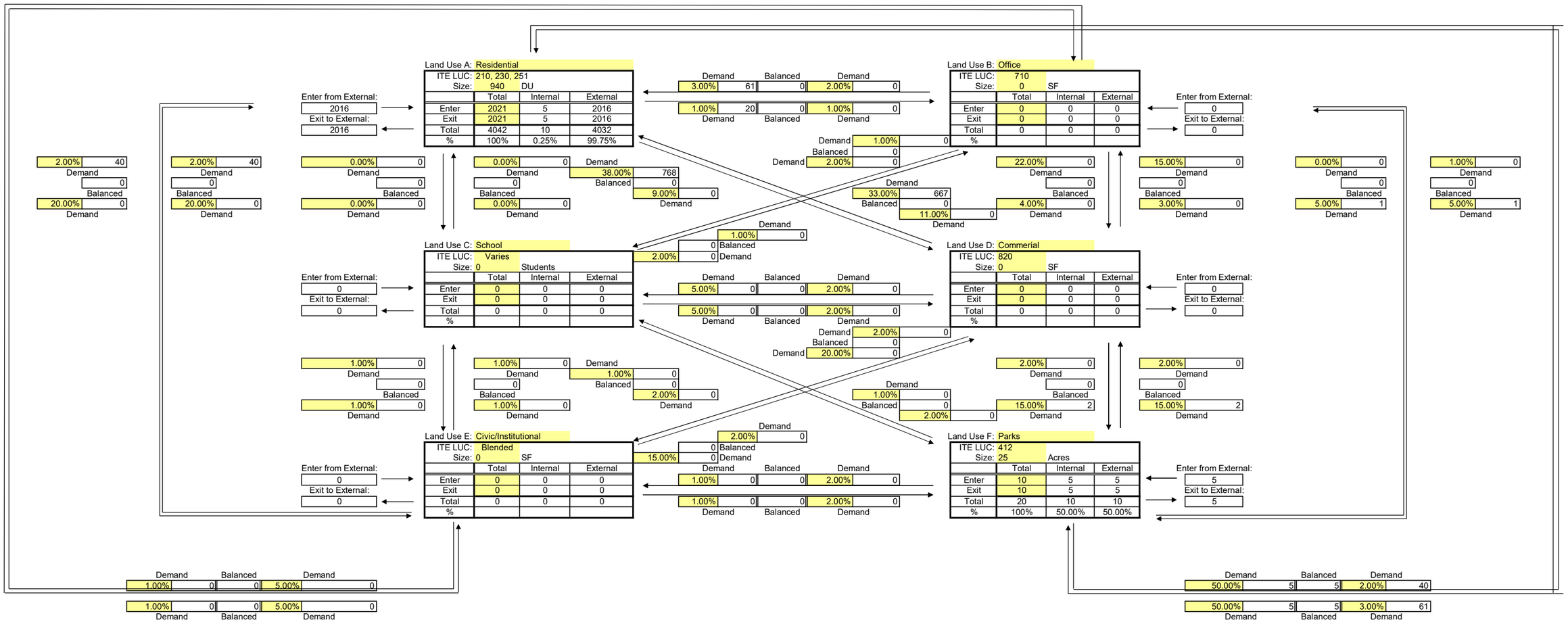
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial	Total
Enter	650	111	185	1111	0	2007	4064
Exit	683	99	166	1123	0	1993	4064
Total	1333	210	351	2234	0	4000	**8128**
Single Use Trip Gen Estimate	1634	278	460	2742	0	4128	**9242**
	18.42%	24.46%	23.70%	18.53%	0.00%	3.10%	

Internal Capture = 12.05%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 651



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

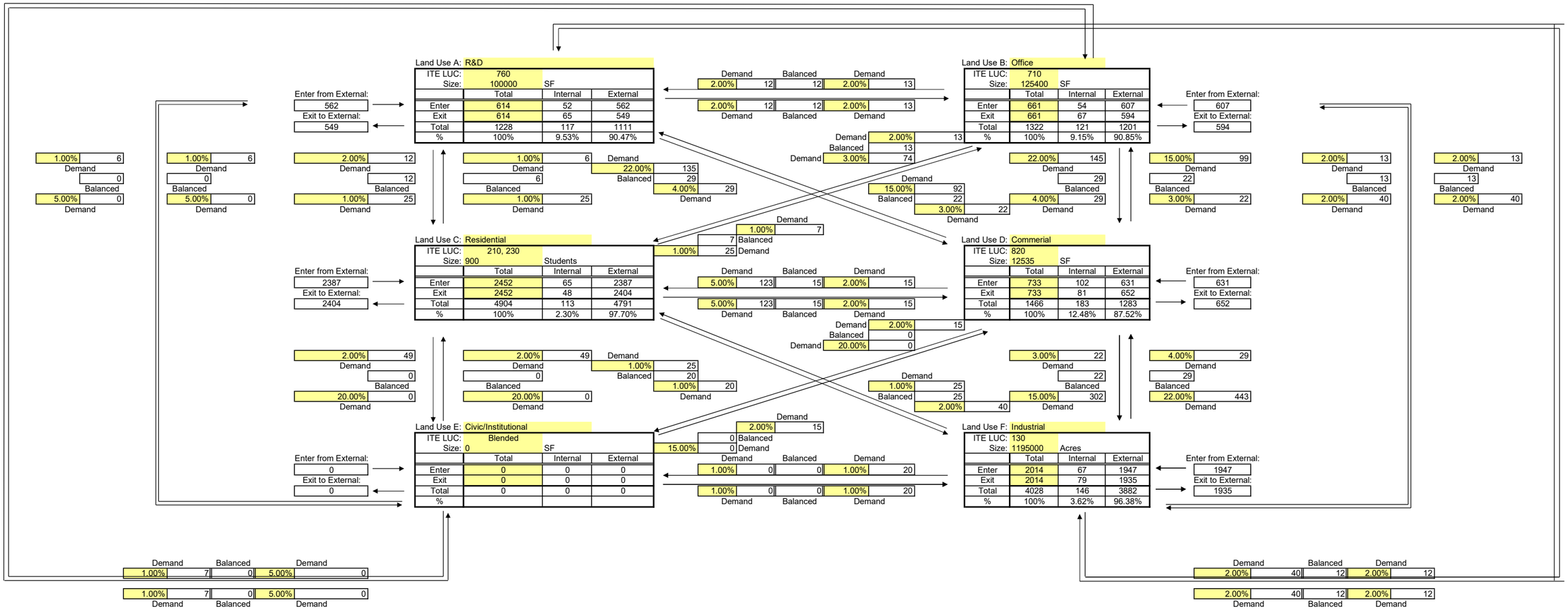
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2016	0	0	0	0	5	2021
Exit	2016	0	0	0	0	5	2021
Total	4032	0	0	0	0	10	**4042**
Single Use Trip Gen Estimate	4042	0	0	0	0	20	**4062**
	0.25%	0.00%	0.00%	0.00%	0.00%	50.00%	

Internal Capture = 0.49%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 660



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

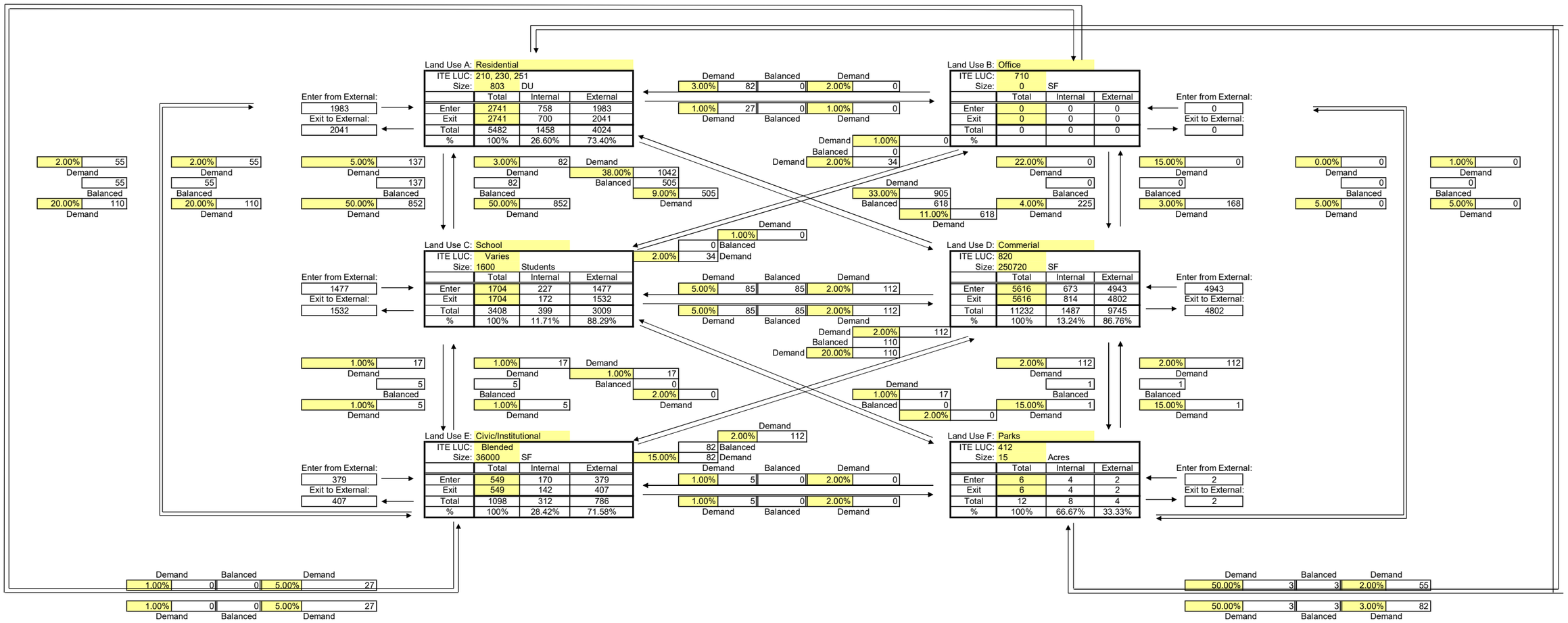
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institu	F Industrial	Total
Enter	562	607	2387	631	0	1947	6134
Exit	549	594	2404	652	0	1935	6134
Total	1111	1201	4791	1283	0	3882	**12268**
Single Use Trip Gen Estimate	1228	1322	4904	1466	0	4028	**12948**
	9.53%	9.15%	2.30%	12.48%	0.00%	3.62%	

Internal Capture = 5.25%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 663



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

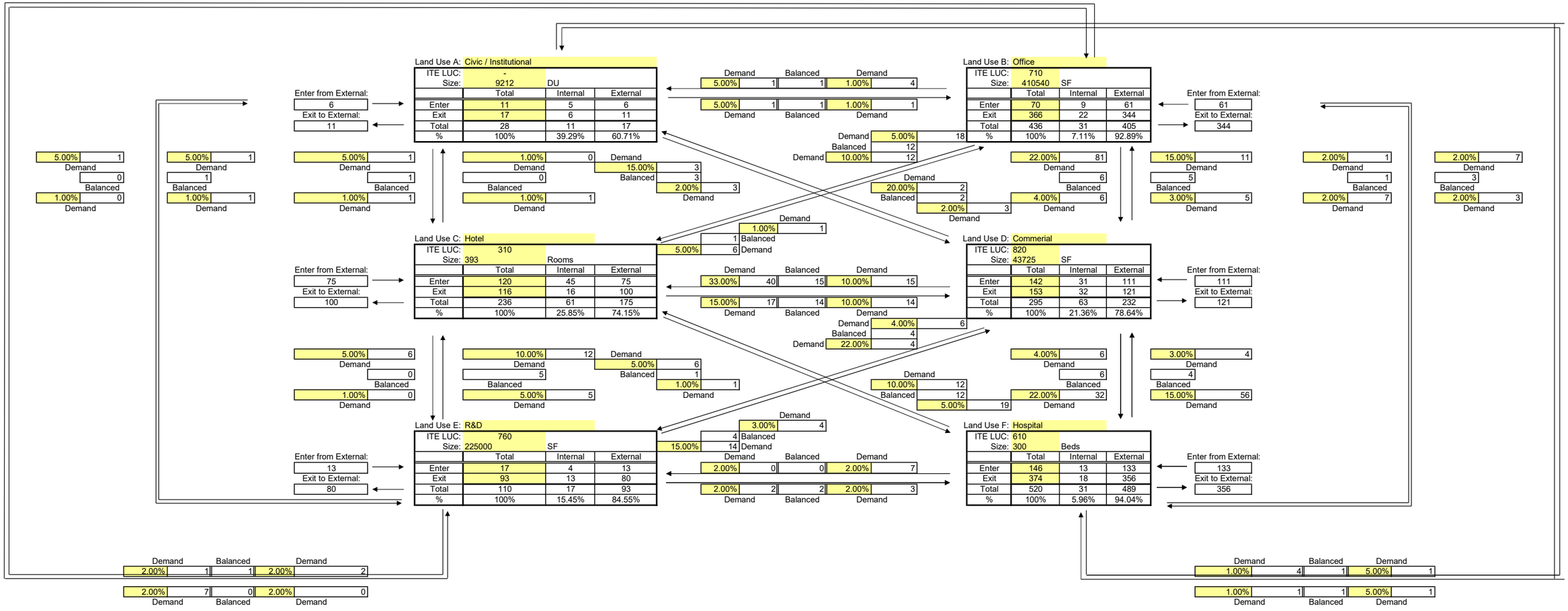
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1983	0	1477	4943	379	2	8784
Exit	2041	0	1532	4802	407	2	8784
Total	4024	0	3009	9745	786	4	**17568**
Single Use Trip Gen Estimate	5482	0	3408	11232	1098	12	**21232**
	26.60%	0.00%	11.71%	13.24%	28.42%	66.67%	

Internal Capture = 17.26%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 664



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

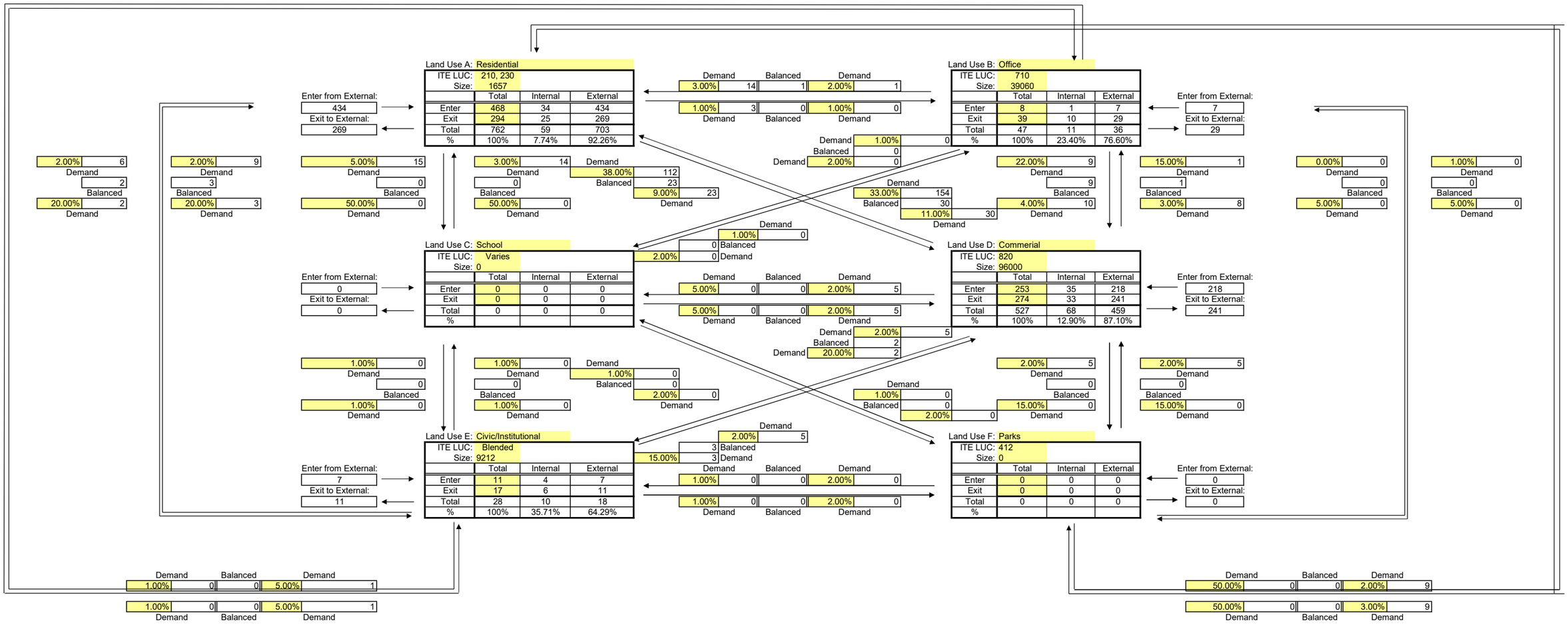
Category	Land Use A Civic / Instituti	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	6	61	75	111	13	133	399
Exit	11	344	100	121	80	356	1012
Total	17	405	175	232	93	489	**1411**
Single Use Trip Gen Estimate	28	436	236	295	110	520	**1625**
	39.29%	7.11%	25.85%	21.36%	15.45%	5.96%	

Internal Capture = 13.17%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 659



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

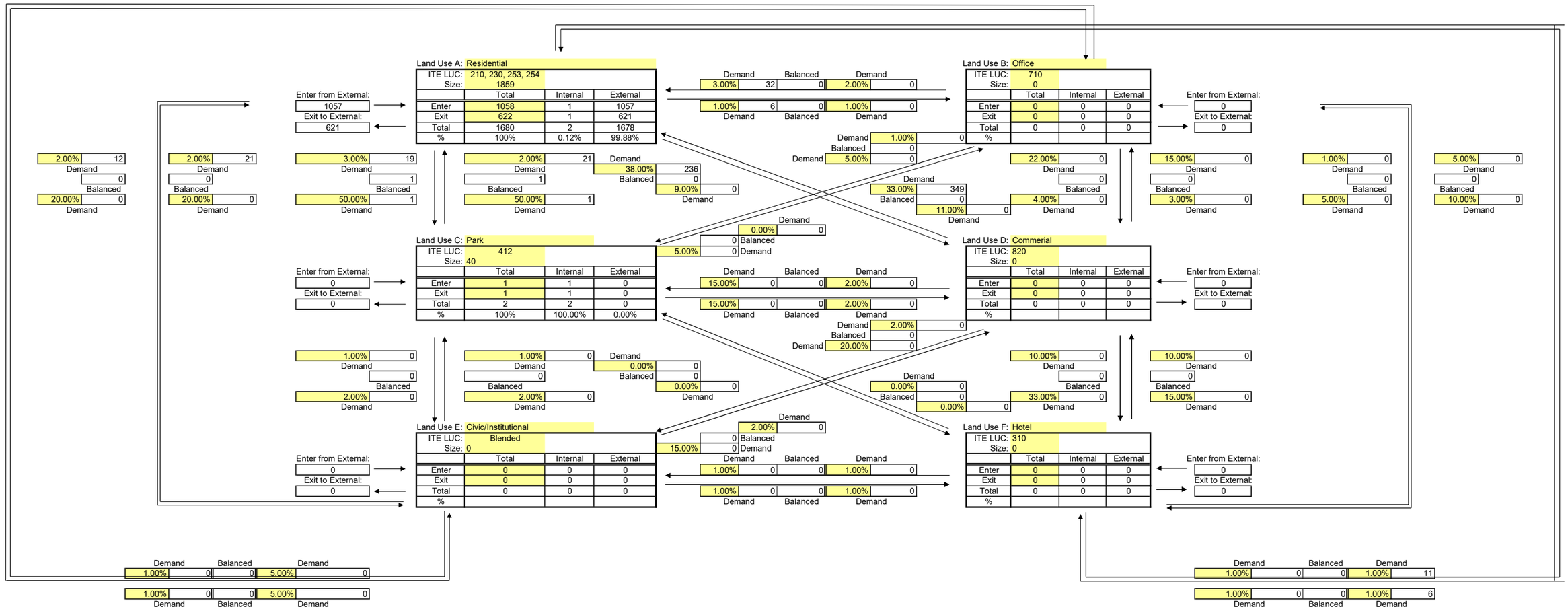
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	434	7	0	218	7	0	666
Exit	269	29	0	241	11	0	550
Total	703	36	0	459	18	0	**1216**
Single Use Trip Gen Estimate	762	47	0	527	28	0	**1364**
	7.74%	23.40%	0.00%	12.90%	35.71%	0.00%	

Internal Capture = 10.85%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 662



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

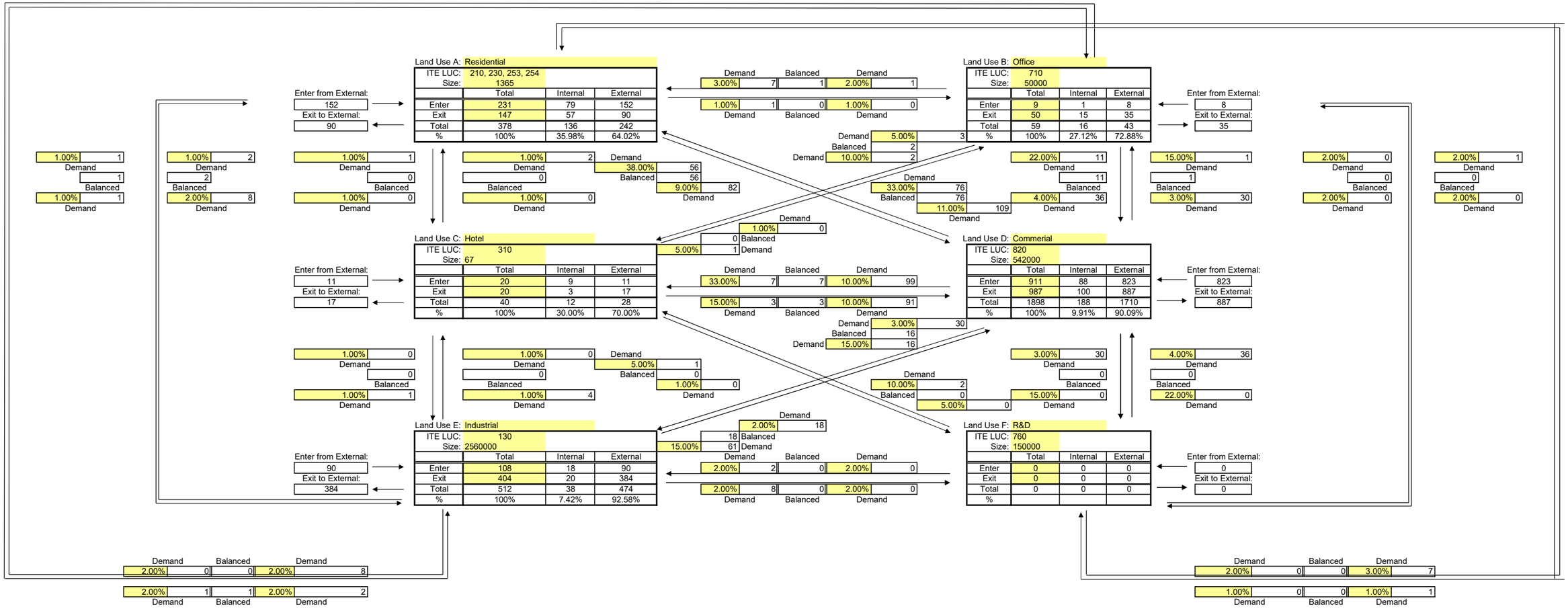
Category	Land Use A Residentia	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	1057	0	0	0	0	0	1057
Exit	621	0	0	0	0	0	621
Total	1678	0	0	0	0	0	**1678**
Single Use Trip Gen Estimate	1680	0	2	0	0	0	**1682**
	0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.24%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 661



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

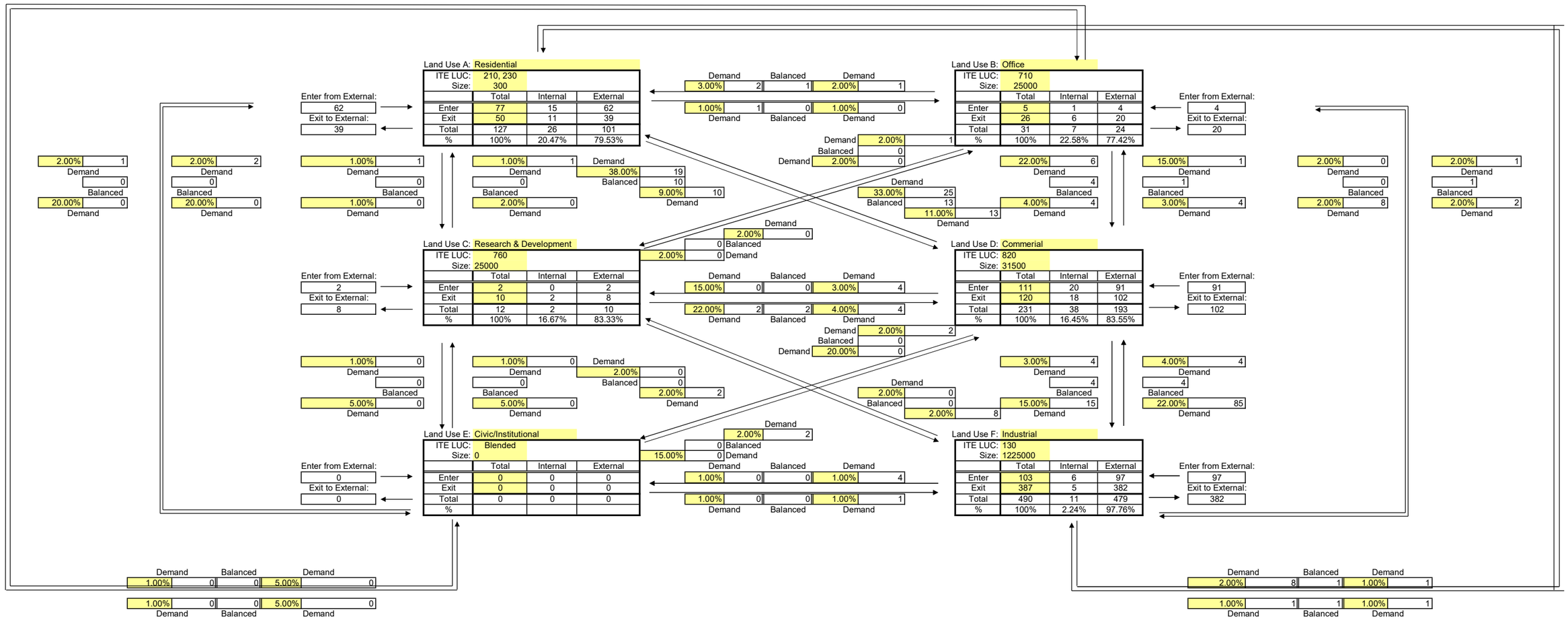
Category	Land Use						
	A	B	C	D	E	F	Total
	Residentia	Office	Hotel	Commerial	Industrial	R&D	
Enter	152	8	11	823	90	0	1084
Exit	90	35	17	887	384	0	1413
Total	242	43	28	1710	474	0	**2497**
Single Use Trip Gen Estimate	378	59	40	1898	512	0	**2887**
	35.98%	27.12%	30.00%	9.91%	7.42%	0.00%	

Internal Capture = 13.51%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 646



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

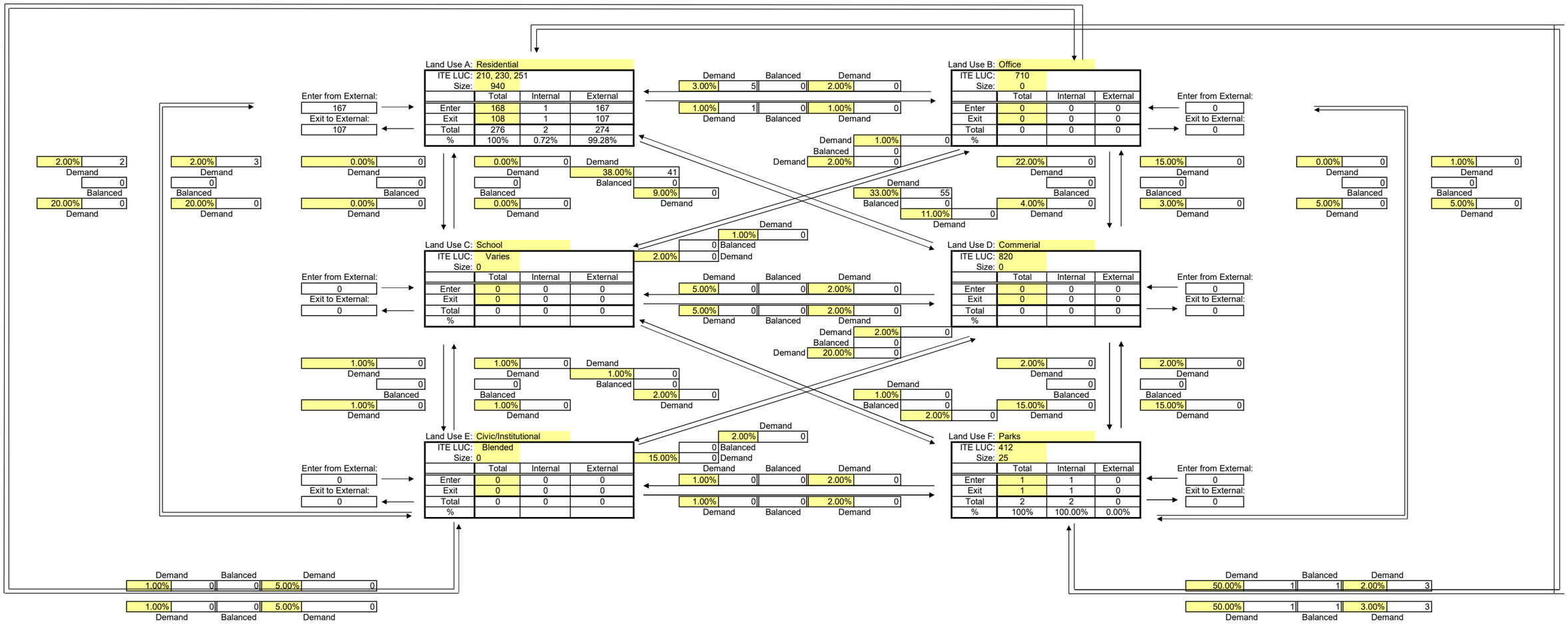
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial	Total
Enter	62	4	2	91	0	97	256
Exit	39	20	8	102	0	382	551
Total	101	24	10	193	0	479	**807**
Single Use Trip Gen Estimate	127	31	12	231	0	490	**891**
	20.47%	22.58%	16.67%	16.45%	0.00%	2.24%	

Internal Capture = 9.43%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 651



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

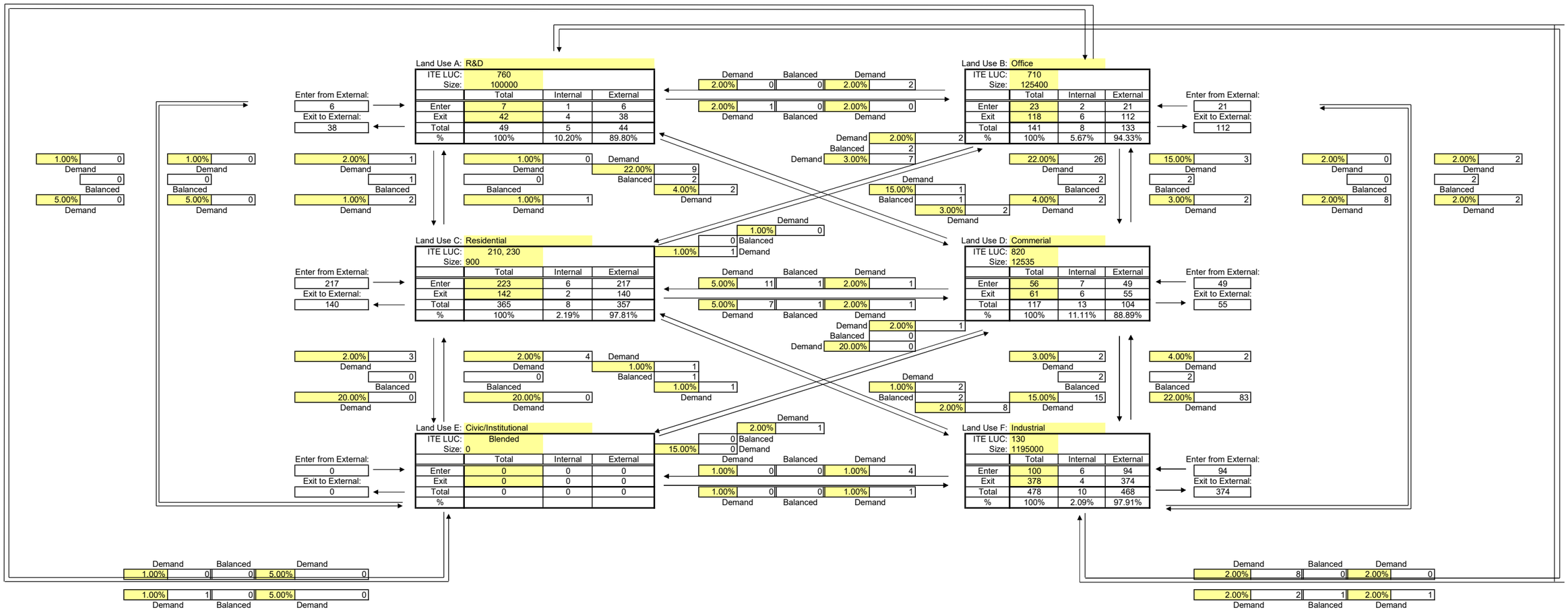
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	167	0	0	0	0	0	167
Exit	107	0	0	0	0	0	107
Total	274	0	0	0	0	0	**274**
Single Use Trip Gen Estimate	276	0	0	0	0	2	**278**
	0.72%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 1.44%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 660



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

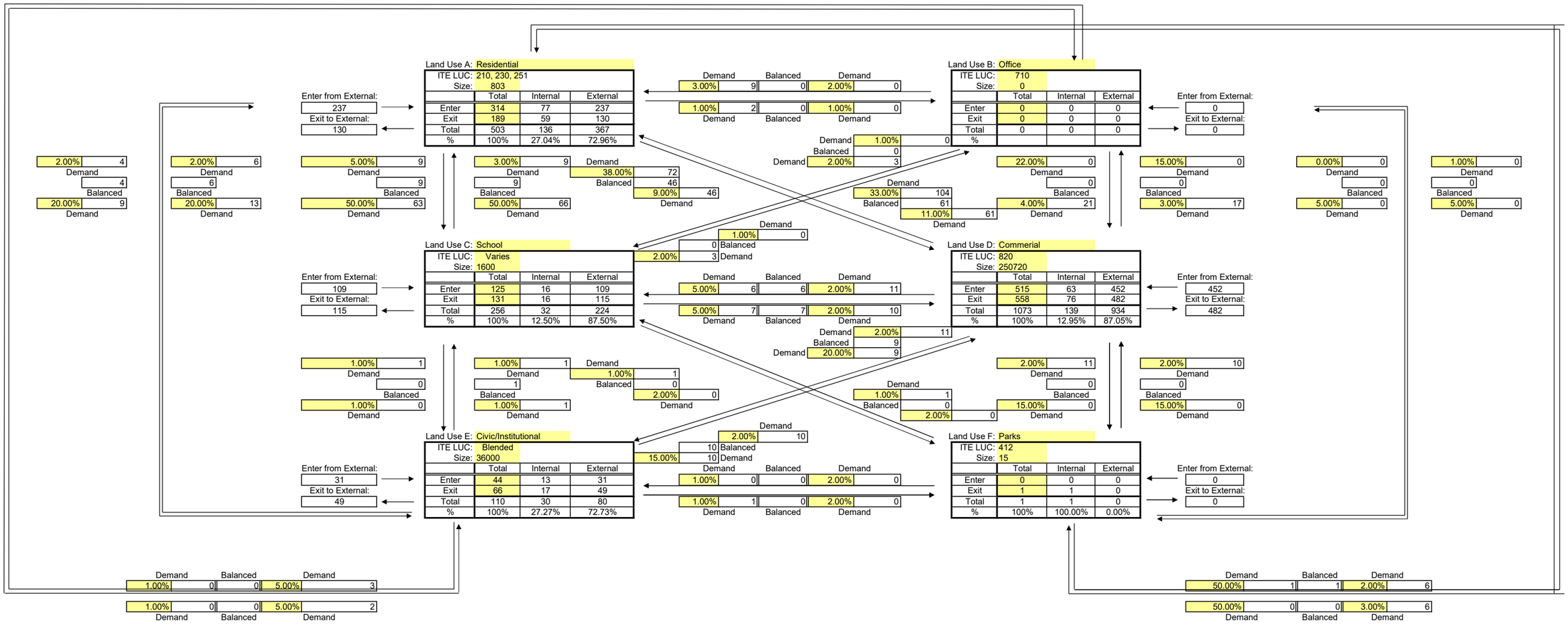
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institut	F Industrial	Total
Enter	6	21	217	49	0	94	387
Exit	38	112	140	55	0	374	719
Total	44	133	357	104	0	468	**1106**
Single Use Trip Gen Estimate	49	141	365	117	0	478	**1150**
	10.20%	5.67%	2.19%	11.11%	0.00%	2.09%	

Internal Capture = 3.83%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 663



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	237	0	109	452	31	0	829
Exit	130	0	115	482	49	0	776
Total	367	0	224	934	80	0	**1605**
Single Use Trip Gen Estimate	503	0	256	1073	110	1	**1943**
	27.04%	0.00%	12.50%	12.95%	27.27%	0.00%	

Internal Capture = 17.40%

EXHIBIT 3-1
Southern Groves DRI
Proposed Daily Trip Generation - Phase 3

TAZ	TRCPM TAZ	DRI	Gross Daily Trip Generation	Gross Trips (Trip Generation)	TAZ Internal Trips	TAZ Internal Trips	External Trips (Internal Capture)	Pass-by Trips	Pass-by Trips	External Daily Trip Generation	Net External Trips (Pass-by)	% Internal Among Proj. TAZ	Total Net External Trips (Internal Among TAZs)
481	664	Southern Grove	21,397	160,933	2,898	20,872	140,061	681	12,659	17,818	127,402	20.6%	101,157
482	659		16,691		1,800			1,295		13,596			
483	662		27,116		1,968			1,797		23,351			
484	661		34,362		6,414			4,081		23,867			
485	646		12,519		1,470			660		10,389			
486	651		11,096		1,632			1,348		8,116			
487	660		15,180		934			320		13,926			
488	663		22,572		3,756			2,477		16,339			

EXHIBIT 3-2

Southern Groves DRI

Proposed PM Peak Hour Trip Generation - PHASE 3

Area	TAZ	DRI	Gross Trip Generation			TAZ Internal Capture			Pass-by Capture	Net External TAZ Trips			Gross Trip Generation	External Trip Generation	Net External DRI Trips			% Internal among Project TAZs	Internal trips among Project TAZs	Net External DRI Trips		
			Total	In	Out	Total	In	Out	Total	Total	In	Out			Total	In	Out			Total	In	Out
664	**481**	**Southern Grove**	**1,703**	**518**	**1,185**	**220**	**110**	**110**	**59**	**1,424**	**379**	**1,045**										
659	**482**	**Southern Grove**	**1,397**	**753**	**644**	**172**	**86**	**86**	**116**	**1,109**	**609**	**500**										
662	**483**	**Southern Grove**	**2,718**	**1,554**	**1,164**	**188**	**94**	**94**	**166**	**2,364**	**1,377**	**987**										
661	**484**	**Southern Grove**	**3,244**	**1,364**	**1,880**	**430**	**215**	**215**	**431**	**2,383**	**933**	**1,450**	**14,678**	**12,998**	**11,783**	**5,165**	**6,619**	**20.6%**	**2,427**	**9,356**	**3,952**	**5,404**
646	**485**	**Southern Grove**	**1,245**	**416**	**829**	**120**	**60**	**60**	**57**	**1,068**	**328**	**741**										
651	**486**	**Southern Grove**	**923**	**471**	**452**	**144**	**72**	**72**	**122**	**657**	**338**	**319**										
660	**487**	**Southern Grove**	**1,371**	**480**	**891**	**62**	**31**	**31**	**26**	**1,283**	**436**	**847**										
663	**488**	**Southern Grove**	**2,077**	**1,056**	**1,021**	**344**	**172**	**172**	**238**	**1,495**	**765**	**730**										

WATS TAZ	TCRPM TAZ
381	664

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	393	rooms	[310]	T = 8.36*(X)	3,285
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	43,725	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	3,425
Service & Office	460,540	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	4,668
Research & Development(1)	275,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	3,018
Hospital	300	beds	[610]	T = 22.32*(X)	6,696
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	10,000	s.f.	-	T = 30.49*(X/1000)	305
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	21,397
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	21,397
				Internal Capture % among TAZ =	13.54%
				Internal Capture trips among TAZ =	2,898

Commercial Retail Pass-By Calculation:		
Intensity =	43,725	s.f.
0.75 * Intensity =	32,794	s.f.
External Trips from Matrix =	2,670	trips
0.75 * External Trips from Matrix =	2,003	trips
Pass-By Percent =	34%	
Pass-By Reduction =	681	trips

NET NEW EXTERNAL DAILY TRIPS =	**17,818**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	393	rooms	[310]	T = 0.60*(X); (51% in)	236	120	116
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	43,725	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	295	142	153
Service & Office[2]	460,540	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	486	78	408
Research & Development[1]	275,000	s.f.	[760]	T = 0.49*(X); (15% in)	135	20	115
Hospital	300	beds	[610]	T = 2.08*(X) - 104.00; (28% in)	520	146	374
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	10000	s.f.	-	T = 3.05*(X/1000); (40% in)	31	12	19
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,703	518	1,185
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	1,703	518	1,185
				Internal Capture % among TAZ =	12.92%	-	-
				Internal Capture trips among TAZ =	220	110	110

Commercial Retail Pass-By Calculation:		
Intensity =	43,725	s.f.
0.75 * Intensity =	32,794	s.f.
External Trips from Matrix =	232	trips
0.75 * External Trips from Matrix =	174	trips
Pass-By Percent =	34%	
Pass-By Reduction =	59	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,424**	**379**	**1,045**

WATS TAZ	TCRPM TAZ
382	659

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	173	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	1,722
Multi-Family Residential	1,484	d.u.	[221]	T = 5.45*(X)-1.75	8,086
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	96,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	5,847
Service & Office	39,060	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	426
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	20,000	s.f.	-	T = 30.49*(X/1000)	610
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	16,691
				Total Gross Residential Trips =	9,808
				Total Gross Non-Residential Trips =	6,883
				Internal Capture % among TAZ =	10.78%
				Internal Capture trips among TAZ =	1,800

Commercial Retail Pass-By Calculation:		
Intensity =	96,000	s.f.
0.75 * Intensity =	72,000	s.f.
External Trips from Matrix =	5,080	trips
0.75 * External Trips from Matrix =	3,810	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,295	trips

NET NEW EXTERNAL DAILY TRIPS =	**13,596**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	173	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	172	108	64
Multi-Family Residential	1,484	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	590	360	230
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	96,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	527	253	274
Service & Office[2]	39,060	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	47	8	39
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	20000	s.f.	-	T = 3.05*(X/1000); (40% in)	61	24	37
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,397	753	644
				Total Gross Residential Trips =	762	468	294
				Total Gross Non-Residential Trips =	635	285	350
				Internal Capture % among TAZ =	12.31%	-	-
				Internal Capture trips among TAZ =	172	86	86

Commercial Retail Pass-By Calculation:		
Intensity =	96,000	s.f.
0.75 * Intensity =	72,000	s.f.
External Trips from Matrix =	454	trips
0.75 * External Trips from Matrix =	341	trips
Pass-By Percent =	34%	
Pass-By Reduction =	116	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,109**	**609**	**500**

WATS TAZ	TCRPM TAZ
383	662

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	1,859	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	15,299
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	150,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	7,921
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	15,000	s.f.	-	T = 30.49*(X/1000)	457
Park	40	acres	[411]	T = 0.78*(X)	31
K-8 School	1,600	students	[522]	T = 2.13*(X)	3,408
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	27,116
				Total Gross Residential Trips =	15,299
				Total Gross Non-Residential Trips =	11,817
				Internal Capture % among TAZ =	8.30%
				Internal Capture trips among TAZ =	1,968

Commercial Retail Pass-By Calculation:		
Intensity =	150,000	s.f.
0.75 * Intensity =	112,500	s.f.
External Trips from Matrix =	7,046	trips
0.75 * External Trips from Matrix =	5,285	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,797	trips

NET NEW EXTERNAL DAILY TRIPS =	23,351

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,859	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	1,680	1,058	622
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	150,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	734	352	382
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	15000	s.f.	-	T = 3.05*(X/1000); (40% in)	46	18	28
Park	40	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
K-8 School	1600	students	[522]	T = 0.17*(X); (49% in)	256	125	131
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,718	1,554	1,164
				Total Gross Residential Trips =	1,680	1,058	622
				Total Gross Non-Residential Trips =	1,038	496	542
				Internal Capture % among TAZ =	6.92%	-	-
				Internal Capture trips among TAZ =	188	94	94

Commercial Retail Pass-By Calculation:		
Intensity =	150,000	s.f.
0.75 * Intensity =	112,500	s.f.
External Trips from Matrix =	652	trips
0.75 * External Trips from Matrix =	489	trips
Pass-By Percent =	34%	
Pass-By Reduction =	166	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,364**	**1,377**	**987**

WATS TAZ	TCRPM TAZ
384	661

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	800	d.u.	[221]	T = 5.45*(X)-1.75	4,358
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	147	rooms	[310]	T = 8.36*(X)	1,229
Industrial	1,867,349	s.f.	[130]	T = 3.37*(X/1000)	6,293
Commercial Retail	542,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	18,973
Service & Office	50,000	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	542
Research & Development(1)	150,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	1,739
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	415	d.u.	[253]	T = 2.02*(X)	838
Assisted Living Facility	150	beds	[254]	T = 2.60*(X)	390
				Total Gross Trips =	34,362
				Total Gross Residential Trips =	4,358
				Total Gross Non-Residential Trips =	30,004
				Internal Capture % among TAZ =	18.66%
				Internal Capture trips among TAZ =	6,414

Commercial Retail Pass-By Calculation:		
Intensity =	542,000	s.f.
0.75 * Intensity =	406,500	s.f.
External Trips from Matrix =	16,005	trips
0.75 * External Trips from Matrix =	12,004	trips
Pass-By Percent =	34%	
Pass-By Reduction =	4,081	trips

NET NEW EXTERNAL DAILY TRIPS =	**23,867**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	800	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	326	199	127
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	147	rooms	[310]	T = 0.60*(X); (51% in)	88	45	43
Industrial	1,867,349	s.f.	[130]	T = 0.40*(X/1000); (21% in)	747	157	590
Commercial Retail	542,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	1,898	911	987
Service & Office(2)	50,000	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	59	9	50
Research & Development(1)	150,000	s.f.	[760]	T = 0.49*(X); (15% in)	74	11	63
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	415	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)	23	14	9
Assisted Living Facility	150	beds	[254]	T = 0.19*(X); (63% in)	29	18	11
				Total Gross Trips =	3,244	1,364	1,880
				Total Gross Residential Trips =	326	199	127
				Total Gross Non-Residential Trips =	2,918	1,165	1,753
				Internal Capture % among TAZ =	13.26%	-	-
				Internal Capture trips among TAZ =	430	215	215

Commercial Retail Pass-By Calculation:		
Intensity =	542,000	s.f.
0.75 * Intensity =	406,500	s.f.
External Trips from Matrix =	1,691	trips
0.75 * External Trips from Matrix =	1,268	trips
Pass-By Percent =	34%	
Pass-By Reduction =	431	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,383**	**934**	**1,449**

WATS TAZ	TCRPM TAZ
385	646

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips	
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71		
Multi-Family Residential	300	d.u.	[221]	T = 5.45*(X)-1.75	1,633	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28		
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37		
Hotel	0	rooms	[310]	T = 8.36*(X)		
Industrial	1,693,256	s.f.	[130]	T = 3.37*(X/1000)	5,706	296.75
Commercial Retail	40,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	3,224	12.41
Service & Office	25,000	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	277	
Research & Development(1)	25,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	460	54.35
Hospital	0	beds	[610]	T = 22.32*(X)		
Civic Use	16,771	s.f.	-	T = 54.51*(X/1000)	914	
Institutional Use	10,000	s.f.	-	T = 30.49*(X/1000)	305	
Park	0	acres	[411]	T = 0.78*(X)		
K-8 School	0	students	[522]	T = 2.13*(X)		
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)		
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)		
				Total Gross Trips =	12,519	
				Total Gross Residential Trips =	1,633	
				Total Gross Non-Residential Trips =	10,886	
				Internal Capture % among TAZ =	11.74%	
				Internal Capture trips among TAZ =	1,470	

Commercial Retail Pass-By Calculation:		
Intensity =	40,000	s.f.
0.75 * Intensity =	30,000	s.f.
External Trips from Matrix =	2,588	trips
0.75 * External Trips from Matrix =	1,941	trips
Pass-By Percent =	34%	
Pass-By Reduction =	660	trips

NET NEW EXTERNAL DAILY TRIPS =	**10,389**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	300	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	127	77	50
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	1,693,256	s.f.	[130]	T = 0.40*(X/1000); (21% in)	677	142	535
Commercial Retail	40,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	276	132	144
Service & Office[2]	25,000	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	31	5	26
Research & Development[1]	25,000	s.f.	[760]	T = 0.49*(X); (15% in)	12	2	10
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	16771	s.f.	-	T = 5.45*(X/1000); (50% in)	91	46	45
Institutional Use	10000	s.f.	-	T = 3.05*(X/1000); (40% in)	31	12	19
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,245	416	829
				Total Gross Residential Trips =	127	77	50
				Total Gross Non-Residential Trips =	1,118	339	779
				Internal Capture % among TAZ =	9.64%	-	-
				Internal Capture trips among TAZ =	120	60	60

Commercial Retail Pass-By Calculation:		
Intensity =	40,000	s.f.
0.75 * Intensity =	30,000	s.f.
External Trips from Matrix =	225	trips
0.75 * External Trips from Matrix =	169	trips
Pass-By Percent =	34%	
Pass-By Reduction =	57	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,068**	**328**	**740**

WATS TAZ	TCRPM TAZ
386	651

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	940	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	4,042
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	100,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	6,012
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	33,519	s.f.	-	T = 30.49*(X/1000)	1,022
Park	25	acres	[411]	T = 0.78*(X)	20
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	11,096
				Total Gross Residential Trips =	4,042
				Total Gross Non-Residential Trips =	7,054
				Internal Capture % among TAZ =	14.71%
				Internal Capture trips among TAZ =	1,632

Commercial Retail Pass-By Calculation:		
Intensity =	100,000	s.f.
0.75 * Intensity =	75,000	s.f.
External Trips from Matrix =	5,286	trips
0.75 * External Trips from Matrix =	3,965	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,348	trips

NET NEW EXTERNAL DAILY TRIPS =	8,116

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	940	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)	276	168	108
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	100,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	543	261	282
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	33519	s.f.	-	T = 3.05*(X/1000); (40% in)	102	41	61
Park	25	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	923	471	452
				Total Gross Residential Trips =	276	168	108
				Total Gross Non-Residential Trips =	647	303	344
				Internal Capture % among TAZ =	15.60%	-	-
				Internal Capture trips among TAZ =	144	72	72

Commercial Retail Pass-By Calculation:		
Intensity =	100,000	s.f.
0.75 * Intensity =	75,000	s.f.
External Trips from Matrix =	478	trips
0.75 * External Trips from Matrix =	359	trips
Pass-By Percent =	34%	
Pass-By Reduction =	122	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**657**	**338**	**319**

WATS TAZ	TCRPM TAZ
387	660

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	900	d.u.	[221]	T = 5.45*(X)-1.75	4,903
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	100	rooms	[310]	T = 8.36*(X)	836
Industrial	1,519,512	s.f.	[130]	T = 3.37*(X/1000)	5,121
Commercial Retail	12,535	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	1,465
Service & Office	125,400	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	1,322
Research & Development(1)	100,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	1,228
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	10,000	s.f.	-	T = 30.49*(X/1000)	305
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	15,180
				Total Gross Residential Trips =	4,903
				Total Gross Non-Residential Trips =	10,277
				Internal Capture % among TAZ =	6.51%
				Internal Capture trips among TAZ =	934

Commercial Retail Pass-By Calculation:		
Intensity =	12,535	s.f.
0.75 * Intensity =	9,401	s.f.
External Trips from Matrix =	1,253	trips
0.75 * External Trips from Matrix =	940	trips
Pass-By Percent =	34%	
Pass-By Reduction =	320	trips

NET NEW EXTERNAL DAILY TRIPS =	**13,926**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	900	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	365	223	142
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	100	rooms	[310]	T = 0.60*(X); (51% in)	60	31	29
Industrial	1,519,512	s.f.	[130]	T = 0.40*(X/1000); (21% in)	608	128	480
Commercial Retail	12,535	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	117	56	61
Service & Office[2]	125,400	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	141	23	118
Research & Development[1]	100,000	s.f.	[760]	T = 0.49*(X); (15% in)	49	7	42
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	10000	s.f.	-	T = 3.05*(X/1000); (40% in)	31	12	19
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,371	480	891
				Total Gross Residential Trips =	365	223	142
				Total Gross Non-Residential Trips =	1,006	257	749
				Internal Capture % among TAZ =	4.52%	-	-
				Internal Capture trips among TAZ =	62	31	31

Commercial Retail Pass-By Calculation:		
Intensity =	12,535	s.f.
0.75 * Intensity =	9,401	s.f.
External Trips from Matrix =	102	trips
0.75 * External Trips from Matrix =	77	trips
Pass-By Percent =	34%	
Pass-By Reduction =	26	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,283**	**436**	**847**

WATS TAZ	TCRPM TAZ
388	663

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	364	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	3,413
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	439	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	2,068
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	250,720	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	11,232
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	8,386	s.f.	-	T = 54.51*(X/1000)	457
Institutional Use	65,000	s.f.	-	T = 30.49*(X/1000)	1,982
Park	15	acres	[411]	T = 0.78*(X)	12
K-8 School	1,600	students	[522]	T = 2.13*(X)	3,408
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	22,572
				Total Gross Residential Trips =	5,481
				Total Gross Non-Residential Trips =	17,091
				Internal Capture % among TAZ =	16.64%
				Internal Capture trips among TAZ =	3,756

Commercial Retail Pass-By Calculation:		
Intensity =	250,720	s.f.
0.75 * Intensity =	188,040	s.f.
External Trips from Matrix =	9,713	trips
0.75 * External Trips from Matrix =	7,285	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,477	trips

NET NEW EXTERNAL DAILY TRIPS =	16,339

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	364	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	351	221	130
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	439	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)	152	93	59
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	250,720	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	1,073	515	558
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	8386	s.f.	-	T = 5.45*(X/1000); (50% in)	46	23	23
Institutional Use	65000	s.f.	-	T = 3.05*(X/1000); (40% in)	198	79	119
Park	15	acres	[412]	T = 0.06*(X); (41% in)	1	0	1
K-8 School	1600	students	[522]	T = 0.17*(X); (49% in)	256	125	131
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,077	1,056	1,021
				Total Gross Residential Trips =	503	314	189
				Total Gross Non-Residential Trips =	1,574	742	832
				Internal Capture % among TAZ =	16.56%	-	-
				Internal Capture trips among TAZ =	344	172	172

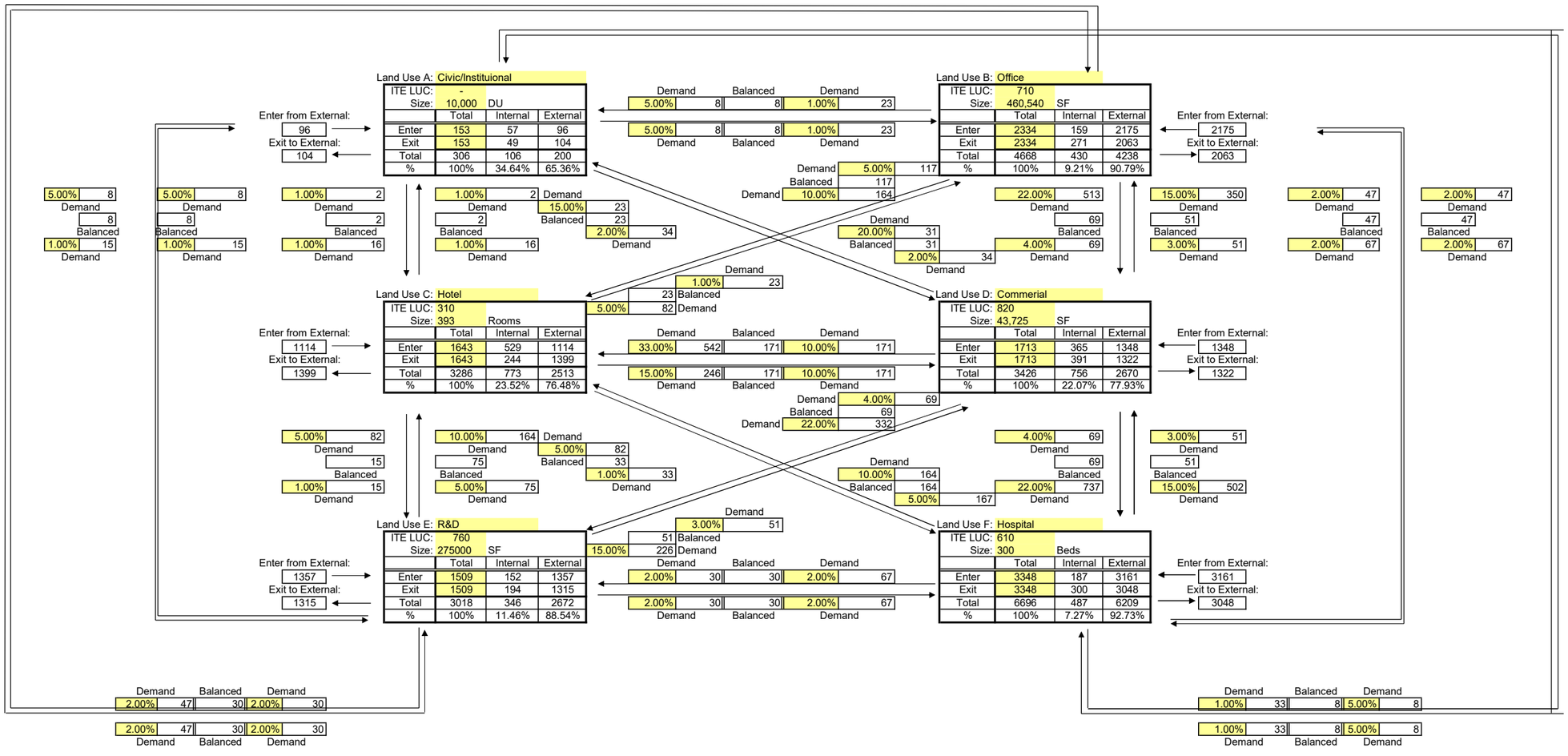
Commercial Retail Pass-By Calculation:		
Intensity =	250,720	s.f.
0.75 * Intensity =	188,040	s.f.
External Trips from Matrix =	932	trips
0.75 * External Trips from Matrix =	699	trips
Pass-By Percent =	34%	
Pass-By Reduction =	238	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,495**	**765**	**730**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 664



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

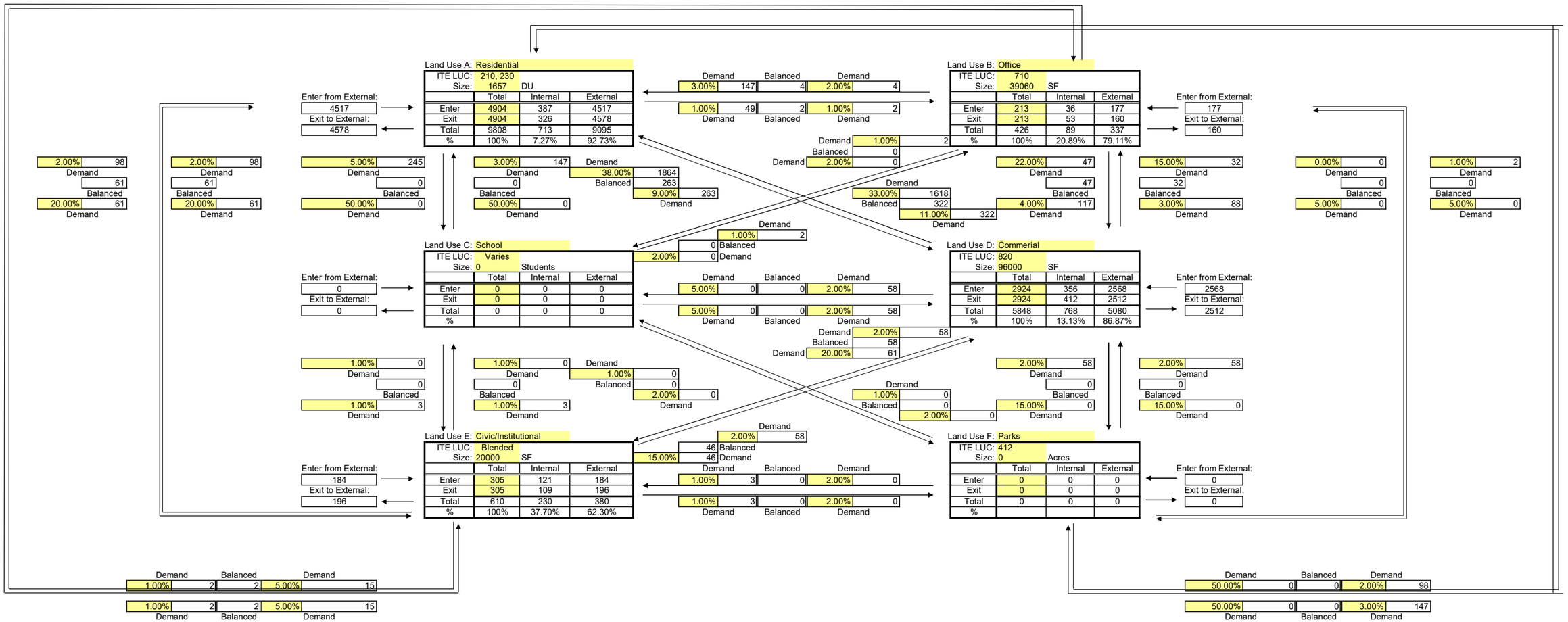
Category	Land Use A Civic/Instituid	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	96	2175	1114	1348	1357	3161	9251
Exit	104	2063	1399	1322	1315	3048	9251
Total	200	4238	2513	2670	2672	6209	**18502**
Single Use Trip Gen Estimate	306	4668	3286	3426	3018	6696	**21400**
	34.64%	9.21%	23.52%	22.07%	11.46%	7.27%	

Internal Capture = 13.54%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 659



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

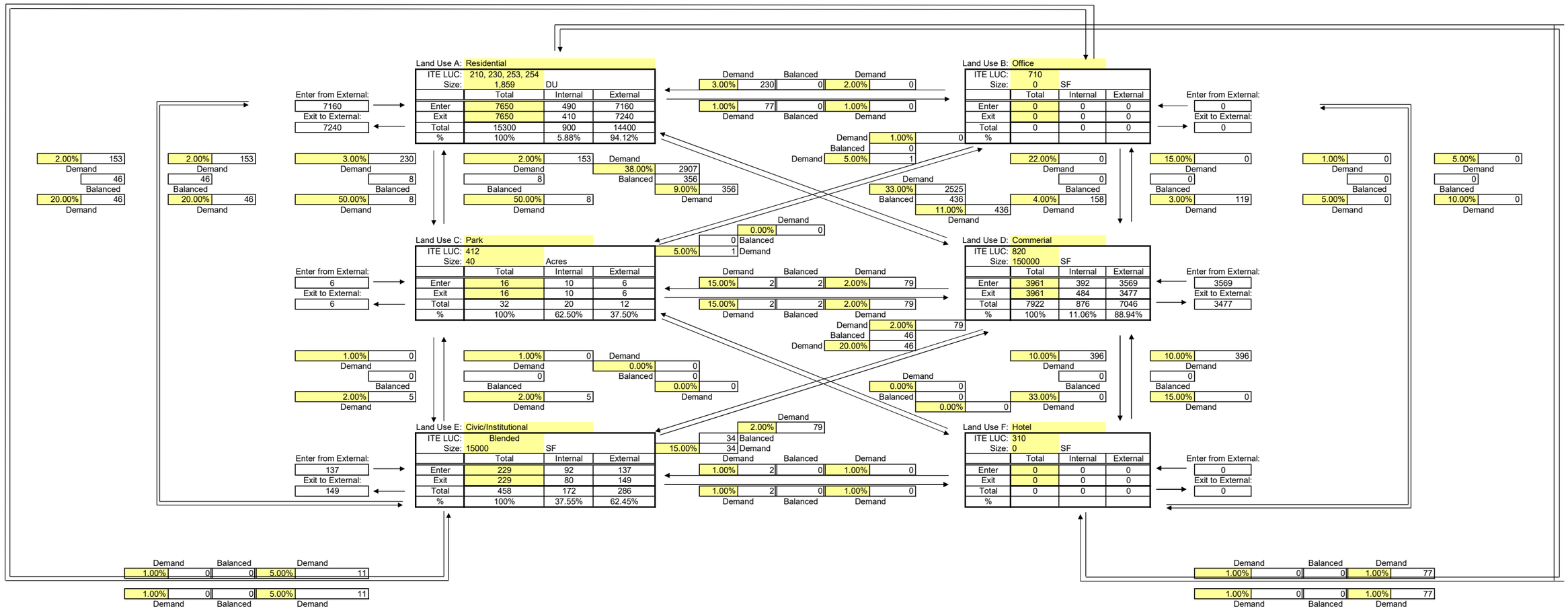
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	4517	177	0	2568	184	0	7446
Exit	4578	160	0	2512	196	0	7446
Total	9095	337	0	5080	380	0	**14892**
Single Use Trip Gen Estimate	9808	426	0	5848	610	0	**16692**
	7.27%	20.89%	0.00%	13.13%	37.70%	0.00%	

Internal Capture = 10.78%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 662



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

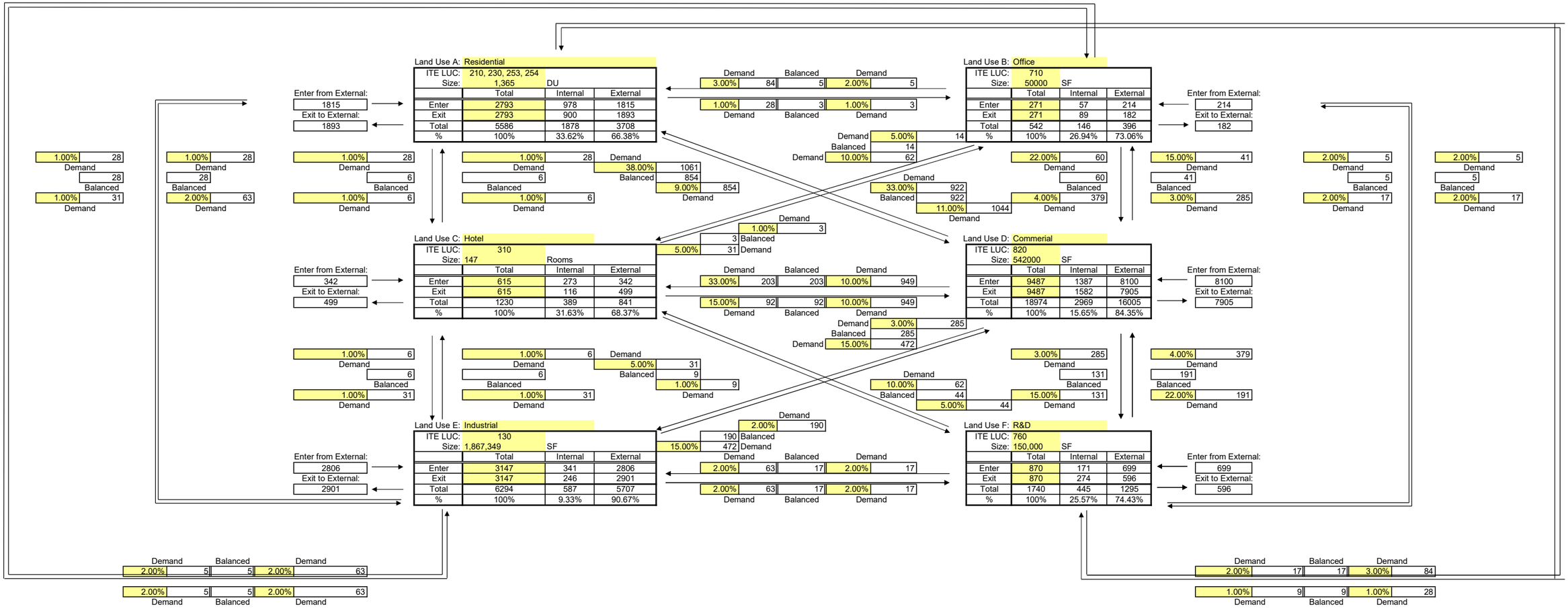
Category	Land Use A Residentia	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	7160	0	6	3569	137	0	10872
Exit	7240	0	6	3477	149	0	10872
Total	14400	0	12	7046	286	0	**21744**
Single Use Trip Gen Estimate	15300	0	32	7922	458	0	**23712**
	5.88%	0.00%	62.50%	11.06%	37.55%	0.00%	

Internal Capture = 8.30%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 661



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

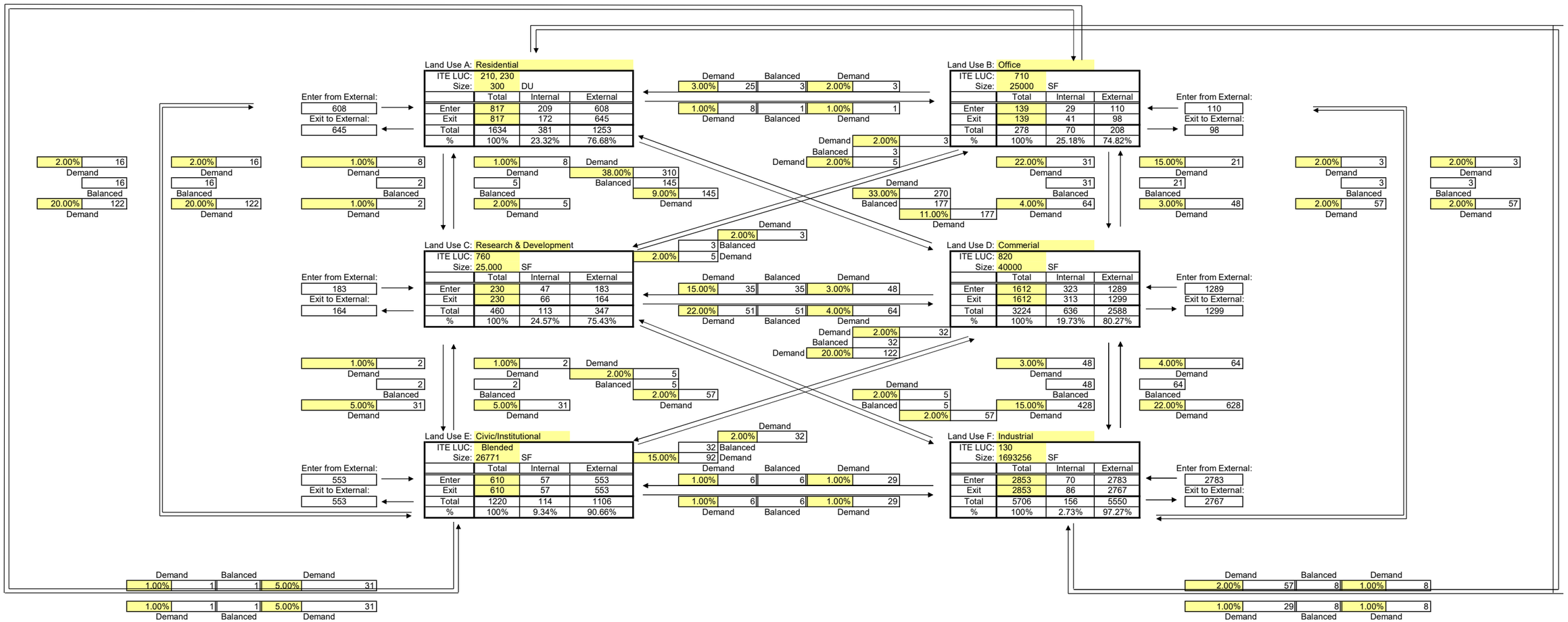
Category	Land Use A Residential	B Office	C Hotel	D Commerial	E Industrial	F R&D	Total
Enter	1815	214	342	8100	2806	699	13976
Exit	1893	182	499	7905	2901	596	13976
Total	3708	396	841	16005	5707	1295	**27952**
Single Use Trip Gen Estimate	5586	542	1230	18974	6294	1740	**34366**
	33.62%	26.94%	31.63%	15.65%	9.33%	25.57%	

Internal Capture = 18.66%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 646



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

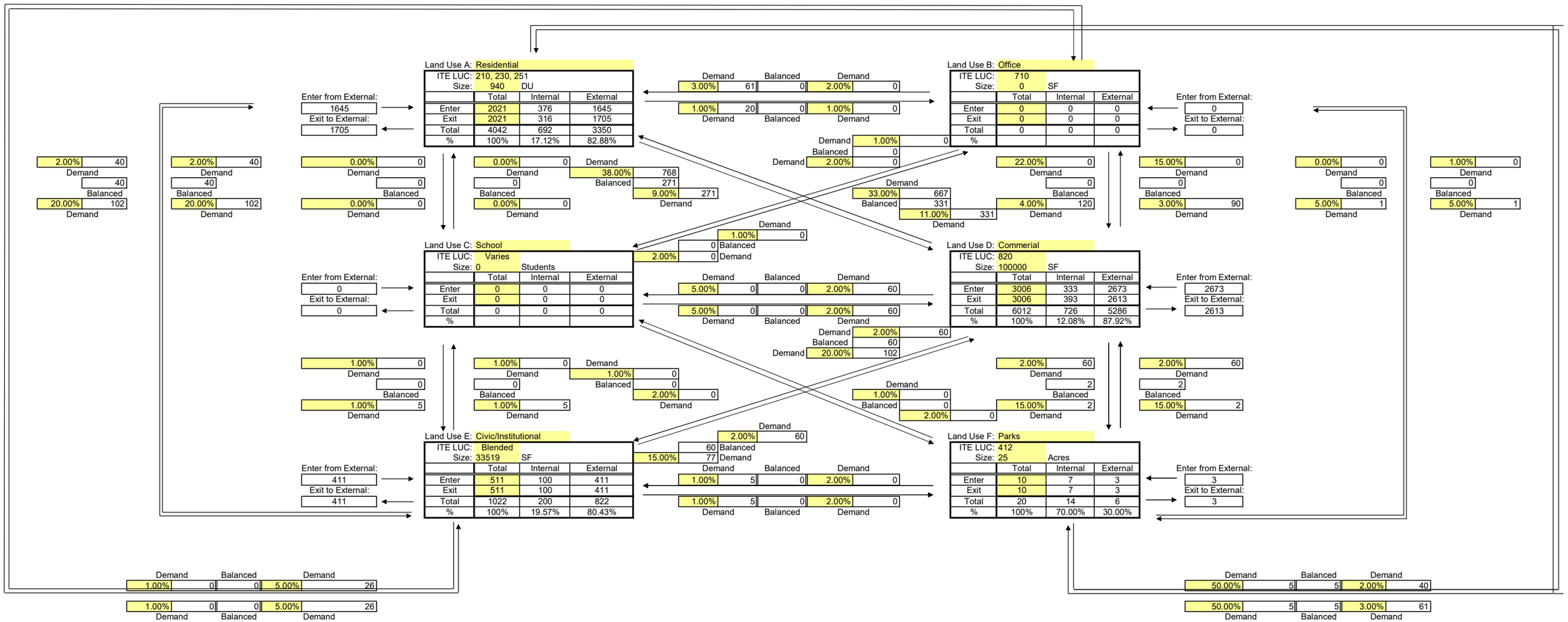
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial	Total
Enter	608	110	183	1289	553	2783	5526
Exit	645	98	164	1299	553	2767	5526
Total	1253	208	347	2588	1106	5550	**11052**
Single Use Trip Gen Estimate	1634	278	460	3224	1220	5706	**12522**
	23.32%	25.18%	24.57%	19.73%	9.34%	2.73%	

Internal Capture = 11.74%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 651



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

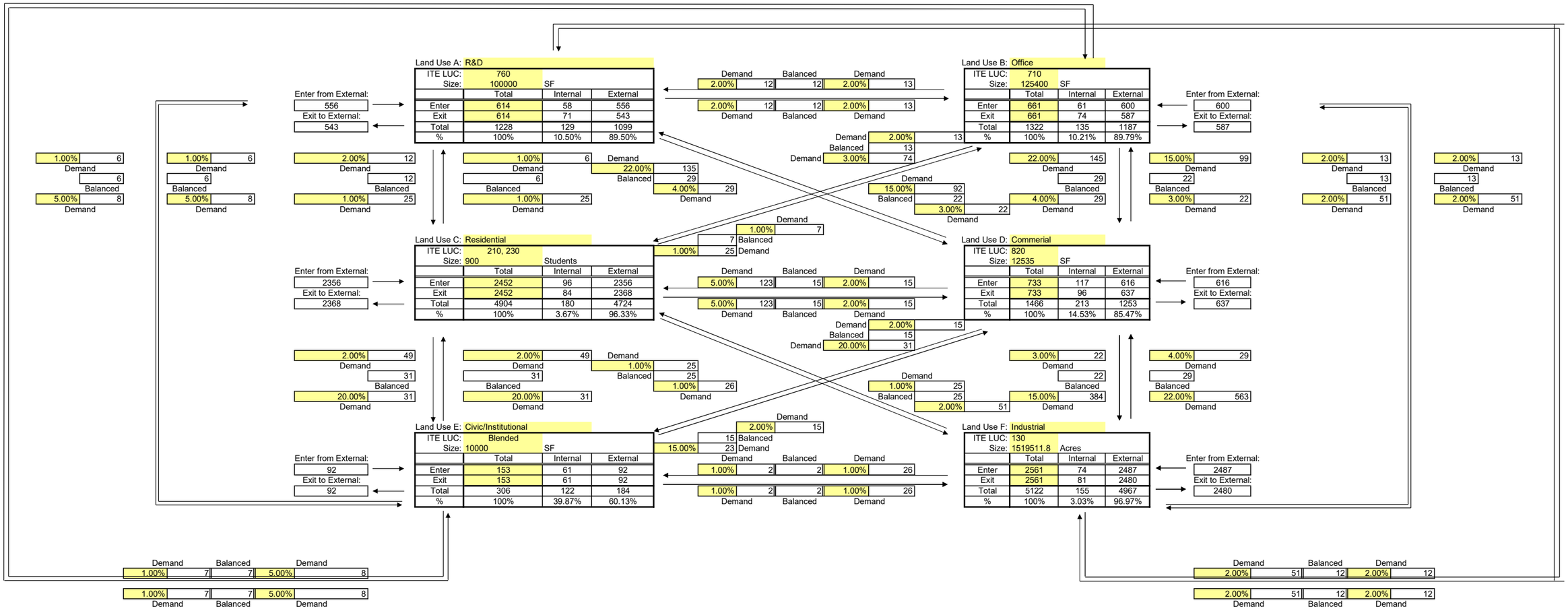
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1645	0	0	2673	411	3	4732
Exit	1705	0	0	2613	411	3	4732
Total	3350	0	0	5286	822	6	**9464**
Single Use Trip Gen Estimate	4042	0	0	6012	1022	20	**11096**
	17.12%	0.00%	0.00%	12.08%	19.57%	70.00%	

Internal Capture = 14.71%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 660



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

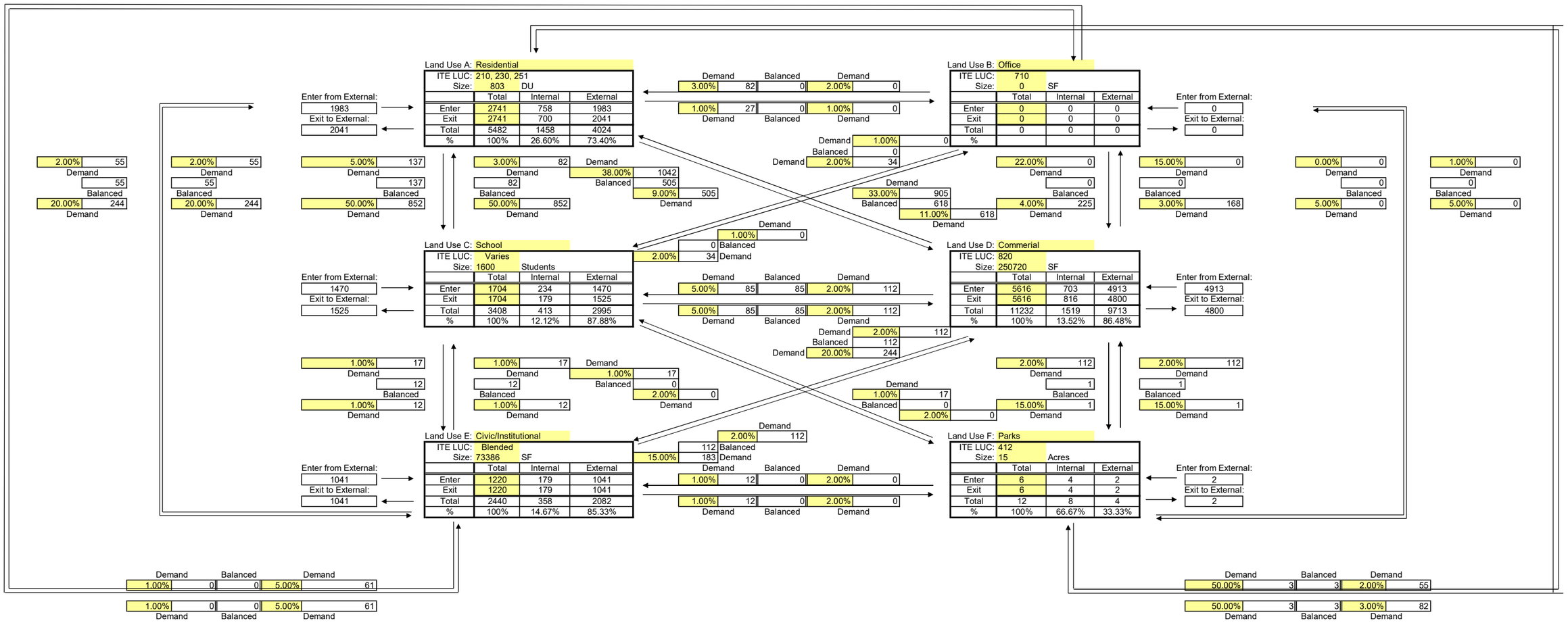
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institut	F Industrial	Total
Enter	556	600	2356	616	92	2487	6707
Exit	543	587	2368	637	92	2480	6707
Total	1099	1187	4724	1253	184	4967	**13414**
Single Use Trip Gen Estimate	1228	1322	4904	1466	306	5122	**14348**
	10.50%	10.21%	3.67%	14.53%	39.87%	3.03%	

Internal Capture = 6.51%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 663



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

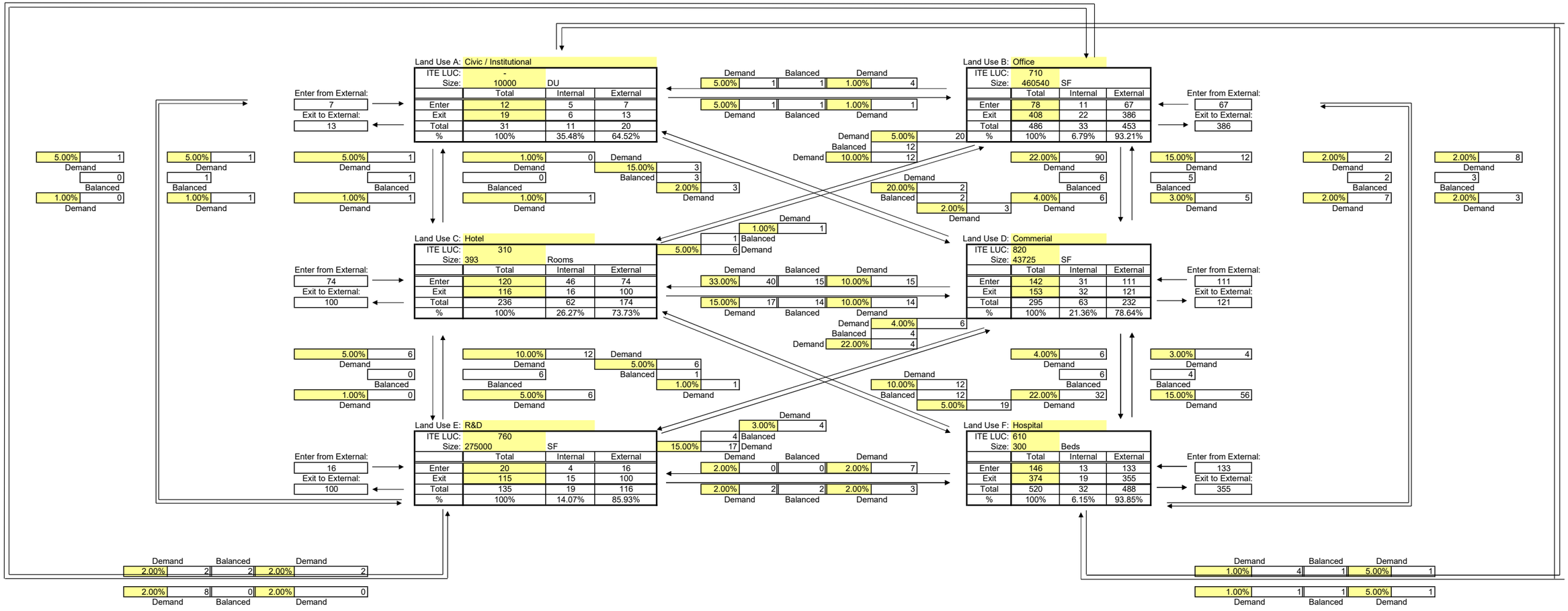
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1983	0	1470	4913	1041	2	9409
Exit	2041	0	1525	4800	1041	2	9409
Total	4024	0	2995	9713	2082	4	**18818**
Single Use Trip Gen Estimate	5482	0	3408	11232	2440	12	**22574**
	26.60%	0.00%	12.12%	13.52%	14.67%	66.67%	

Internal Capture = 16.64%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 664



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

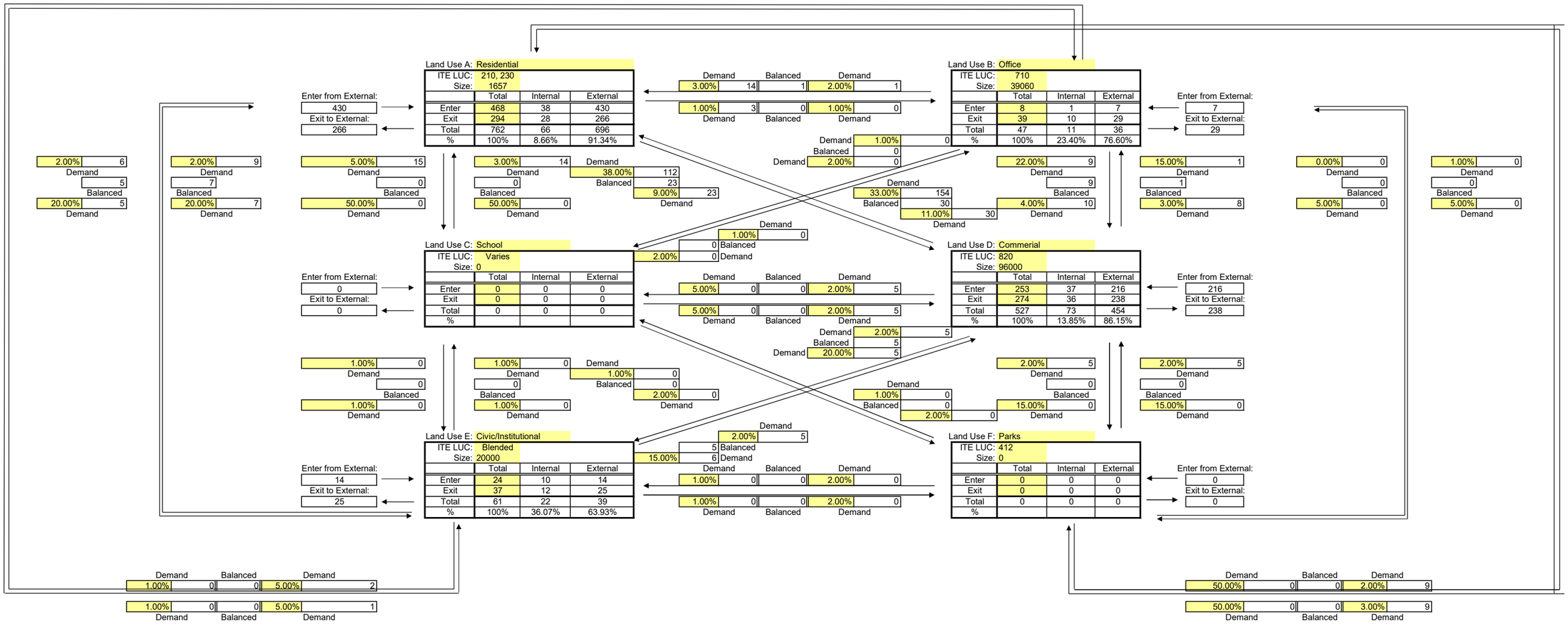
Category	Land Use A Civic / Instituti	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	7	67	74	111	16	133	408
Exit	13	386	100	121	100	355	1075
Total	20	453	174	232	116	488	**1483**
Single Use Trip Gen Estimate	31	486	236	295	135	520	**1703**
	35.48%	6.79%	26.27%	21.36%	14.07%	6.15%	

Internal Capture = 12.92%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 659



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

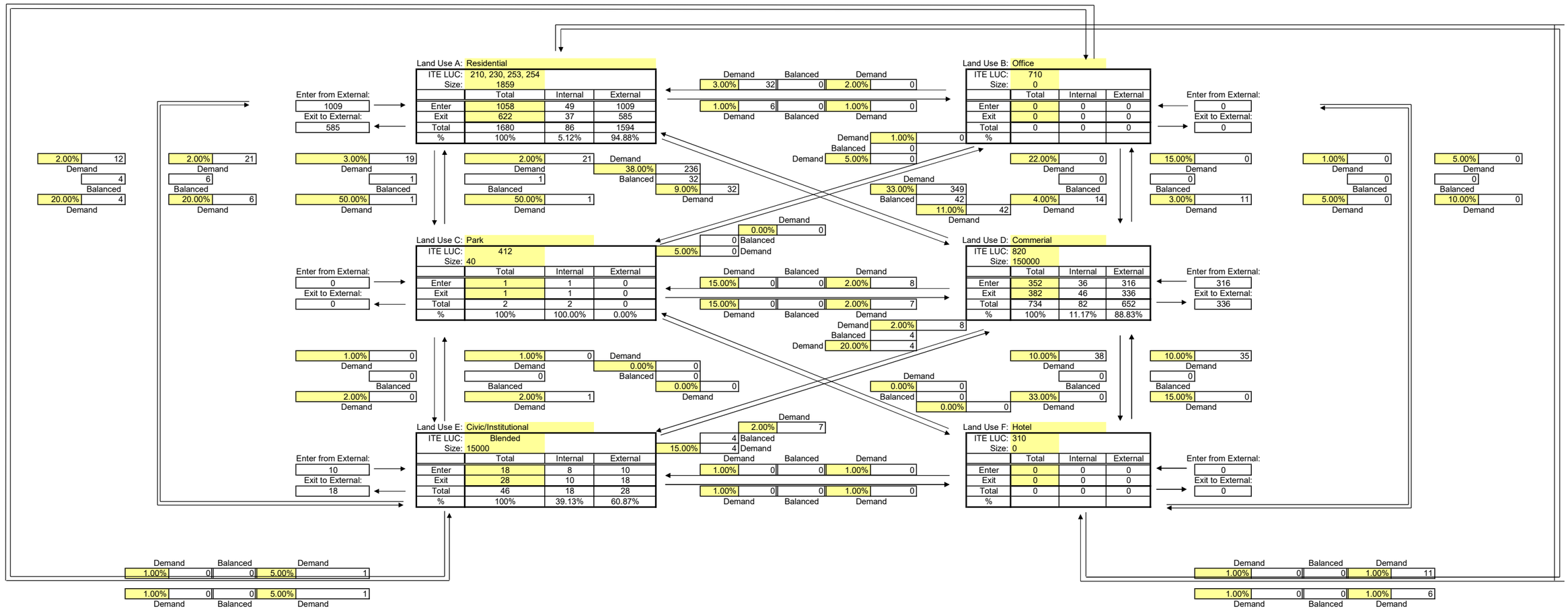
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	430	7	0	216	14	0	667
Exit	266	29	0	238	25	0	558
Total	696	36	0	454	39	0	**1225**
Single Use Trip Gen Estimate	762	47	0	527	61	0	**1397**
	8.66%	23.40%	0.00%	13.85%	36.07%	0.00%	

Internal Capture = 12.31%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 662



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

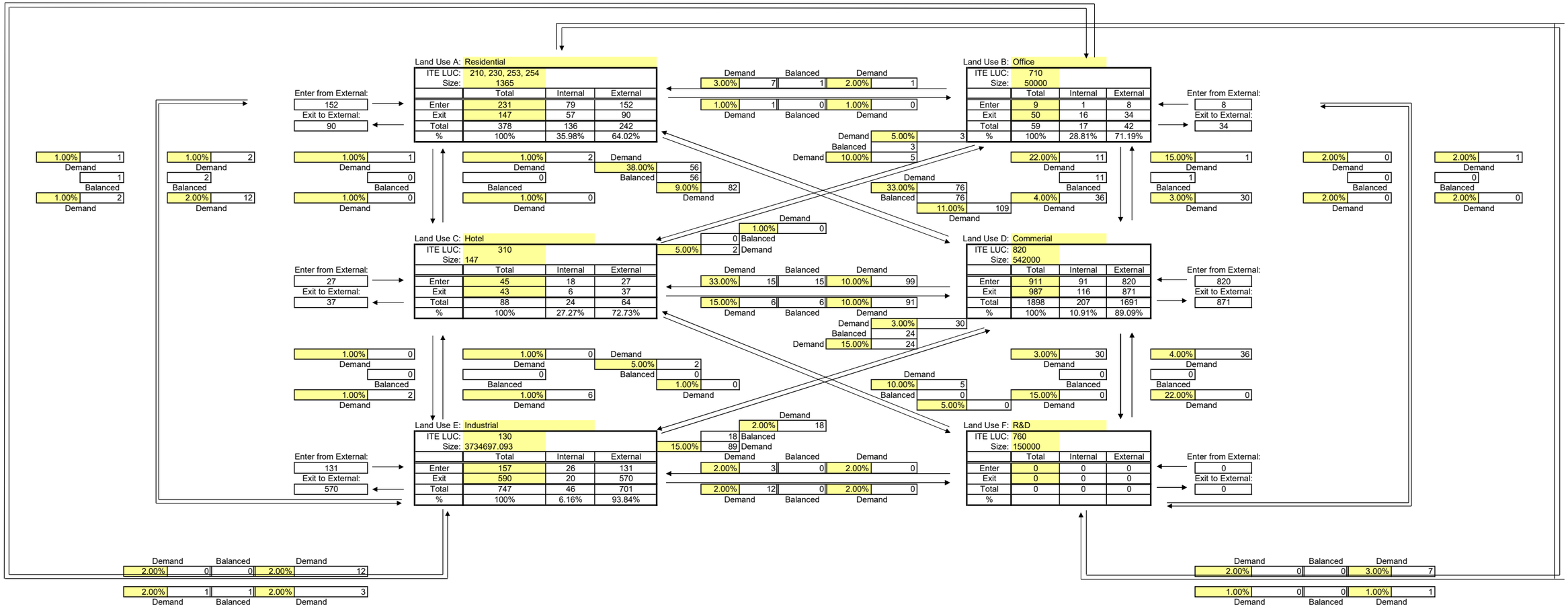
Category	Land Use						
	A	B	C	D	E	F	Total
	Residentia	Office	Park	Commerial	Civic/Institut	Hotel	
Enter	1009	0	0	316	10	0	1335
Exit	585	0	0	336	18	0	939
Total	1594	0	0	652	28	0	**2274**
Single Use Trip Gen Estimate	1680	0	2	734	46	0	**2462**
	5.12%	0.00%	0.00%	11.17%	39.13%	0.00%	

Internal Capture = 7.64%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 661



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

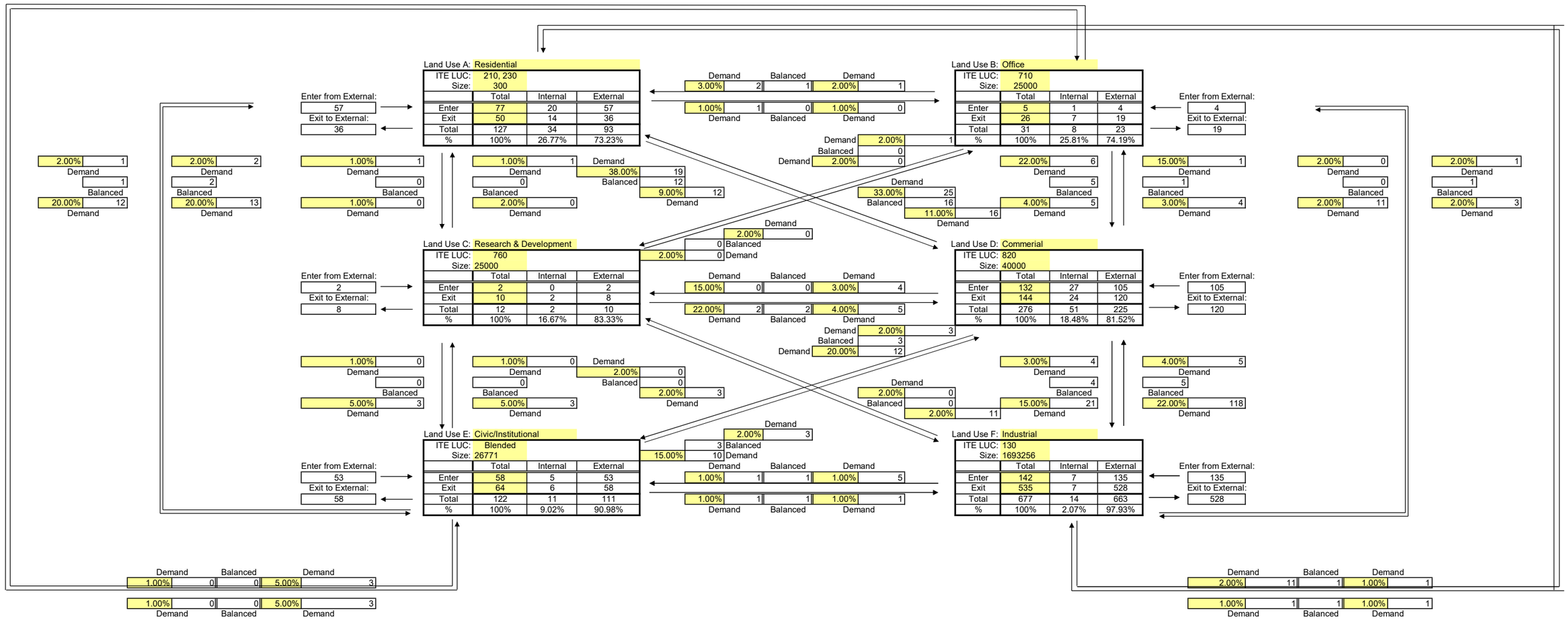
Category	Land Use A Residential	B Office	C Hotel	D Commerial	E Industrial	F R&D	Total
Enter	152	8	27	820	131	0	1138
Exit	90	34	37	871	570	0	1602
Total	242	42	64	1691	701	0	**2740**
Single Use Trip Gen Estimate	378	59	88	1898	747	0	**3170**
	35.98%	28.81%	27.27%	10.91%	6.16%	0.00%	

Internal Capture = 13.56%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 646



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

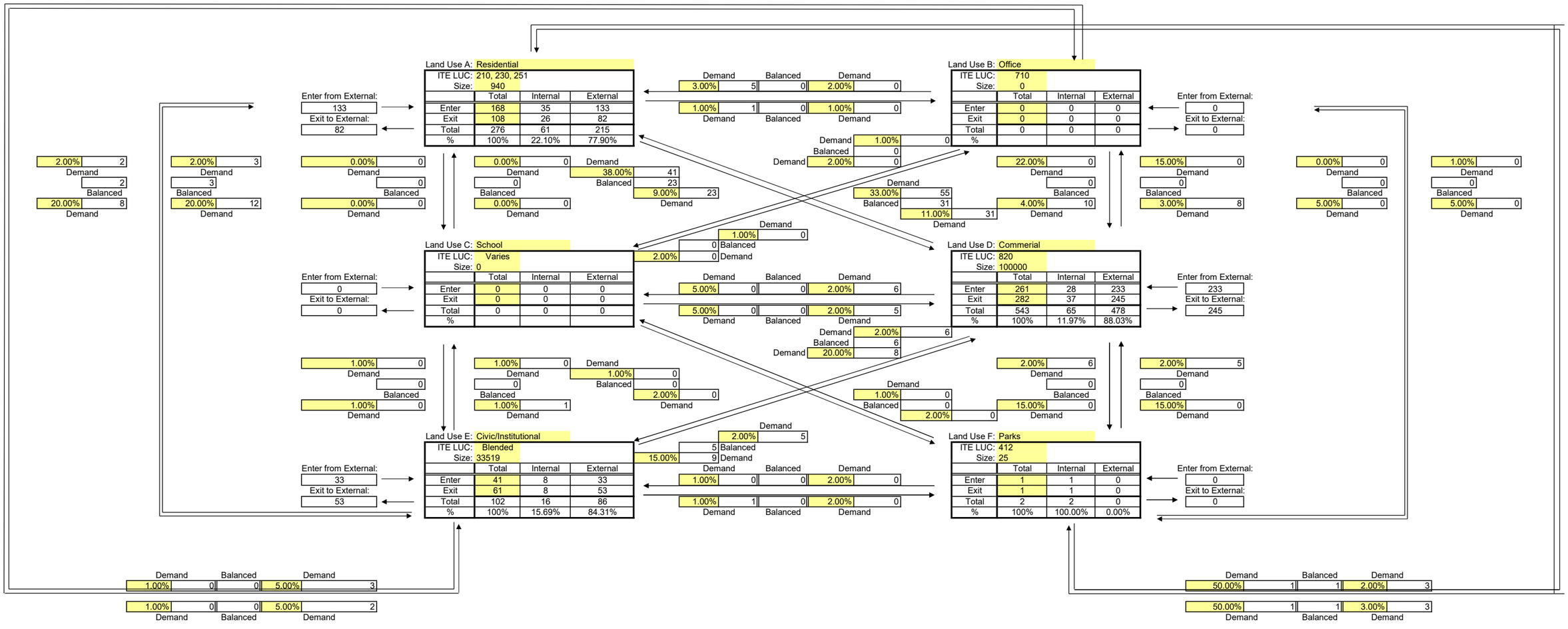
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial	Total
Enter	57	4	2	105	53	135	356
Exit	36	19	8	120	58	528	769
Total	93	23	10	225	111	663	**1125**
Single Use Trip Gen Estimate	127	31	12	276	122	677	**1245**
	26.77%	25.81%	16.67%	18.48%	9.02%	2.07%	

Internal Capture = 9.64%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 651



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

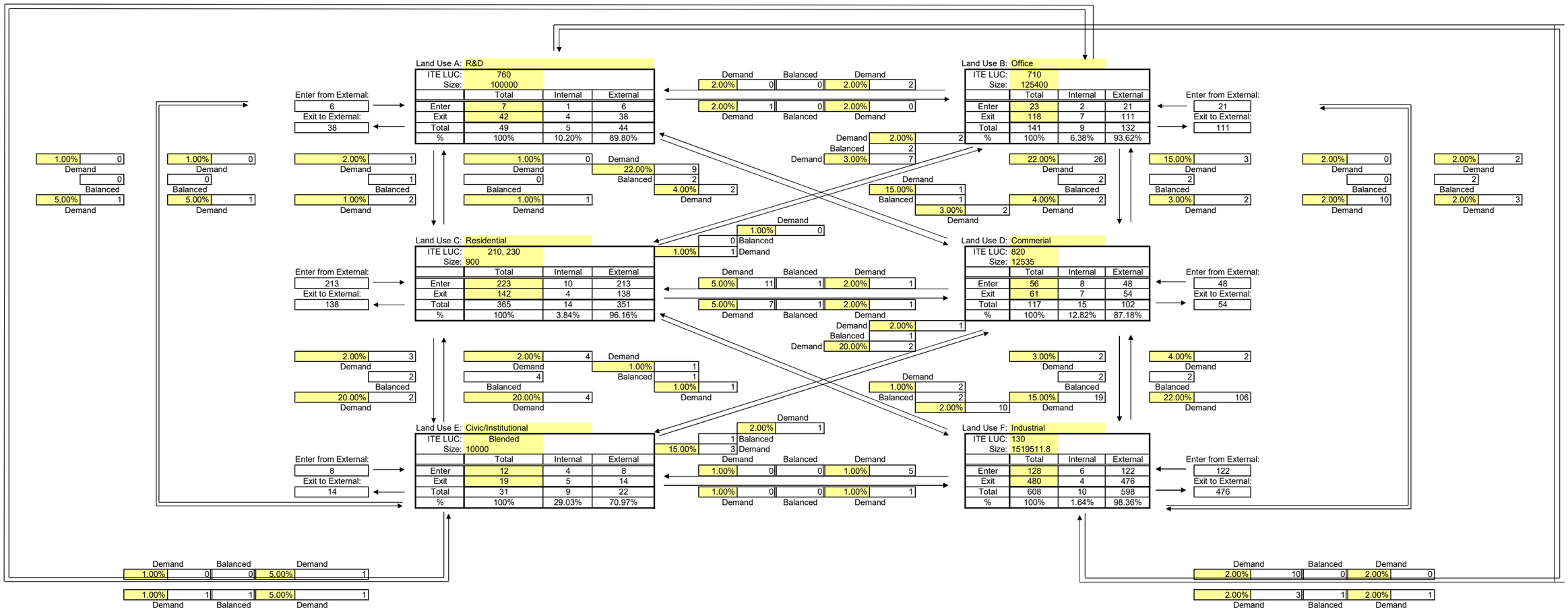
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	133	0	0	233	33	0	399
Exit	82	0	0	245	53	0	380
Total	215	0	0	478	86	0	**779**
Single Use Trip Gen Estimate	276	0	0	543	102	2	**923**
	22.10%	0.00%	0.00%	11.97%	15.69%	0.00%	

Internal Capture = 15.60%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 660



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

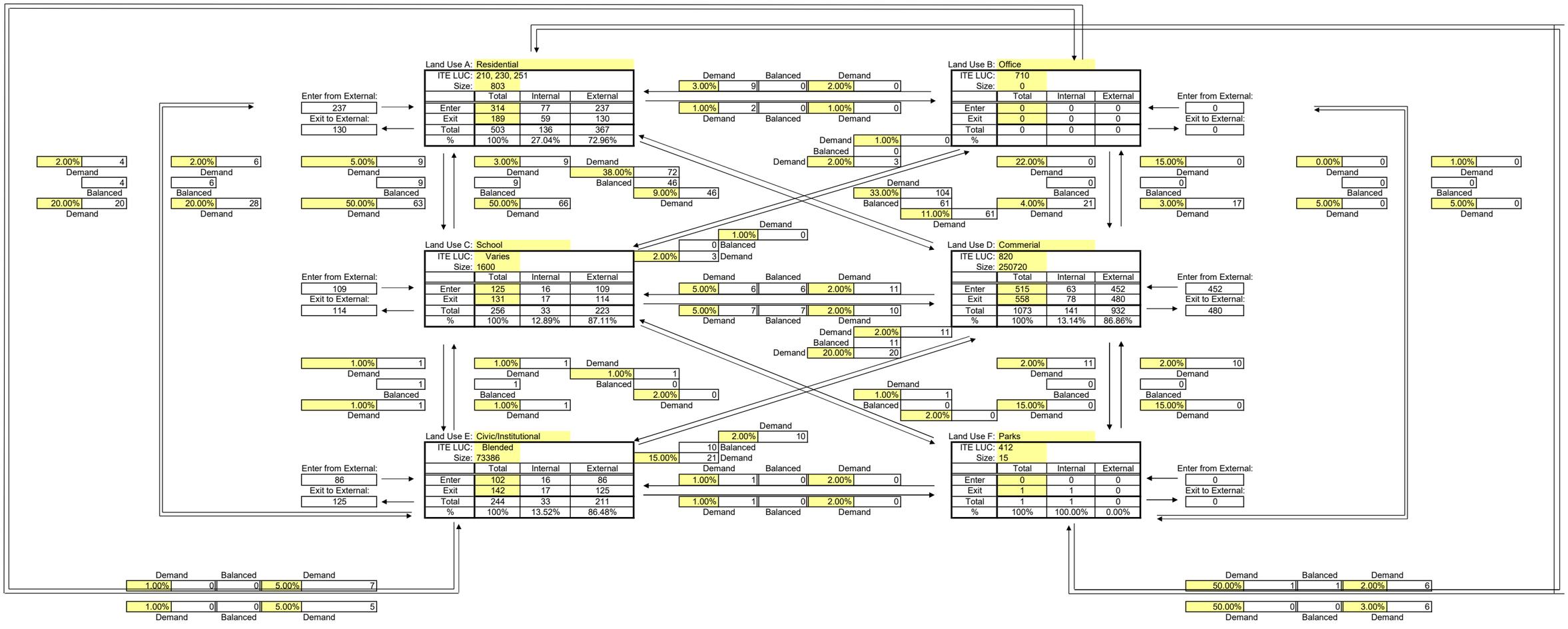
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institut	F Industrial	Total
Enter	6	21	213	48	8	122	418
Exit	38	111	138	54	14	476	831
Total	44	132	351	102	22	598	**1249**
Single Use Trip Gen Estimate	49	141	365	117	31	608	**1311**
	10.20%	6.38%	3.84%	12.82%	29.03%	1.64%	

Internal Capture = 4.73%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 663



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	237	0	109	452	86	0	884
Exit	130	0	114	480	125	0	849
Total	367	0	223	932	211	0	**1733**
Single Use Trip Gen Estimate	503	0	256	1073	244	1	**2077**
	27.04%	0.00%	12.89%	13.14%	13.52%	0.00%	

Internal Capture = 16.56%

EXHIBIT 4-1
Southern Groves DRI
Proposed Daily Trip Generation - Buildout

TRCPM TAZ	DRI	Gross Daily Trip Generation	Gross Trips (Trip Generation)	TAZ Internal Trips	TAZ Internal Trips	External Trips (Internal Capture)	Pass-by Trips	Pass-by Trips	External Daily Trip Generation	Net External Trips (Pass-by)	% Internal Among Proj. TAZ	Total Net External Trips (Internal Among TAZs)
862b		1,510		0			0		1,510			
862a		11,725		0			0		11,725			
670	Western Grove	19,375	55,160	2,570	4,002	51,158	2,160	2,160	14,645	48,998	11.2%	43,509
673		16,321		1,432			0		14,889			
668		6,229		0			0		6,229			
858		36,149		3,974			1,542		30,633			
645		11,150		0			0		11,150			
857		14,743		1,502			1,093		12,148			
859		8,487		0			0		8,487			
658		10,715		476			548		9,691			
855	Riverland	4,657	184,289	0	12,460	171,829	0	10,231	4,657	161,598	13.8%	139,297
655		16,941		2,520			2,066		12,355			
856		17,195		20			3,316		13,859			
860		19,435		380			0		19,055			
649		7,344		68			0		7,276			
657		13,014		974			1,118		10,922			
656		24,459		2,546			548		21,365			
664		32,301		3,996			677		27,628			
659		17,485		1,972			1,292		14,221			
662		33,704		3,794			3,050		26,860			
661	Southern Grove	42,860	216,090	8,648	30,278	185,812	4,423	17,168	29,789	168,644	24.4%	127,495
646		21,734		2,558			1,049		18,127			
651		14,859		2,444			2,106		10,309			
660		29,809		3,094			2,094		24,621			
663		23,338		3,772			2,477		17,089			
647		19,752		1,278			1,345		17,129			
648		19,549		392			0		19,157			
654	Wilson Groves	19,198	129,852	2,174	12,962	116,890	1,716	8,388	15,308	108,502	22.6%	83,981
861		17,724		1,530			1,755		14,439			
653		20,709		2,290			1,716		16,703			
652		32,920		5,298			1,856		25,766			

EXHIBIT 4-2
Southern Groves DRI
Proposed PM Peak Hour Trip Generation - Buildout

TAZ	DRI	Gross Trip Generation			TAZ Internal Capture			Pass-by Capture	Net External TAZ Trips			Gross Trip	External Trip	Net External DRI Trips			% Internal among	Internal trips among	Net External DRI Trips		
		Total	In	Out	Total	In	Out	Total	Total	In	Out	Generation	Generation	Total	In	Out	Project TAZs	Project TAZs	Total	In	Out
481	Southern Grove	2,504	663	1,841	262	131	131	58	2,184	503	1,681										
482	Southern Grove	1,476	785	691	178	89	89	116	1,182	638	544										
483	Southern Grove	3,395	1,872	1,523	372	186	186	296	2,727	1,538	1,189										
484	Southern Grove	4,095	1,662	2,433	616	308	308	475	3,004	1,117	1,888										
485	Southern Grove	2,237	691	1,546	200	100	100	97	1,940	543	1,398	20,002	17,578	15,896	6,368	9,532	24.4%	3,879	12,017	4,429	7,588
486	Southern Grove	1,301	649	652	224	112	112	199	878	438	441										
487	Southern Grove	2,841	1,007	1,834	228	114	114	203	2,410	792	1,619										
488	Southern Grove	2,153	1,090	1,063	344	172	172	238	1,571	799	772										

WATS TAZ	TCRPM TAZ
381	664

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	393	rooms	[310]	T = 8.36*(X)	3,285
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	43,725	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	3,425
Service & Office	920,443	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	9,137
Research & Development(1)	826,557	s.f.	[760]	T = 10.23*(X/1000)+204.68	8,660
Hospital	300	beds	[610]	T = 22.32*(X)	6,696
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	36,000	s.f.	-	T = 30.49*(X/1000)	1,098
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	32,301
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	32,301
				Internal Capture % among TAZ =	12.37%
				Internal Capture trips among TAZ =	3,996

Commercial Retail Pass-By Calculation:		
Intensity =	43,725	s.f.
0.75 * Intensity =	32,794	s.f.
External Trips from Matrix =	2,656	trips
0.75 * External Trips from Matrix =	1,992	trips
Pass-By Percent =	34%	
Pass-By Reduction =	677	trips

NET NEW EXTERNAL DAILY TRIPS =	**27,628**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	393	rooms	[310]	T = 0.60*(X); (51% in)	236	120	116
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	43,725	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	295	142	153
Service & Office[2]	920,443	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	938	150	788
Research & Development[1]	826,557	s.f.	[760]	T = 0.49*(X); (15% in)	405	61	344
Hospital	300	beds	[610]	T = 2.08*(X) - 104.00; (28% in)	520	146	374
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	36000	s.f.	-	T = 3.05*(X/1000); (40% in)	110	44	66
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,504	663	1,841
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	2,504	663	1,841
				Internal Capture % among TAZ =	10.46%	-	-
				Internal Capture trips among TAZ =	262	131	131

Commercial Retail Pass-By Calculation:		
Intensity =	43,725	s.f.
0.75 * Intensity =	32,794	s.f.
External Trips from Matrix =	229	trips
0.75 * External Trips from Matrix =	172	trips
Pass-By Percent =	34%	
Pass-By Reduction =	58	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,184**	**503**	**1,681**

WATS TAZ	TCRPM TAZ
382	659

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	173	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	1,722
Multi-Family Residential	1,484	d.u.	[221]	T = 5.45*(X)-1.75	8,086
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	96,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	5,847
Service & Office	39,060	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	426
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	46,046	s.f.	-	T = 30.49*(X/1000)	1,404
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	17,485
				Total Gross Residential Trips =	9,808
				Total Gross Non-Residential Trips =	7,677
				Internal Capture % among TAZ =	11.28%
				Internal Capture trips among TAZ =	1,972

Commercial Retail Pass-By Calculation:		
Intensity =	96,000	s.f.
0.75 * Intensity =	72,000	s.f.
External Trips from Matrix =	5,068	trips
0.75 * External Trips from Matrix =	3,801	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,292	trips

NET NEW EXTERNAL DAILY TRIPS =	**14,221**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	173	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	172	108	64
Multi-Family Residential	1,484	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	590	360	230
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	96,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	527	253	274
Service & Office[2]	39,060	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	47	8	39
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	46046	s.f.	-	T = 3.05*(X/1000); (40% in)	140	56	84
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,476	785	691
				Total Gross Residential Trips =	762	468	294
				Total Gross Non-Residential Trips =	714	317	397
				Internal Capture % among TAZ =	12.06%	-	-
				Internal Capture trips among TAZ =	178	89	89

Commercial Retail Pass-By Calculation:		
Intensity =	96,000	s.f.
0.75 * Intensity =	72,000	s.f.
External Trips from Matrix =	454	trips
0.75 * External Trips from Matrix =	341	trips
Pass-By Percent =	34%	
Pass-By Reduction =	116	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,182**	**638**	**544**

WATS TAZ	TCRPM TAZ
383	662

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	1,859	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	15,299
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	330,800	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	13,562
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	46,046	s.f.	-	T = 30.49*(X/1000)	1,404
Park	40	acres	[411]	T = 0.78*(X)	31
K-8 School	1,600	students	[522]	T = 2.13*(X)	3,408
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	33,704
				Total Gross Residential Trips =	15,299
				Total Gross Non-Residential Trips =	18,405
				Internal Capture % among TAZ =	12.52%
				Internal Capture trips among TAZ =	3,794

Commercial Retail Pass-By Calculation:		
Intensity =	330,800	s.f.
0.75 * Intensity =	248,100	s.f.
External Trips from Matrix =	11,961	trips
0.75 * External Trips from Matrix =	8,971	trips
Pass-By Percent =	34%	
Pass-By Reduction =	3,050	trips

NET NEW EXTERNAL DAILY TRIPS =	**26,860**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,859	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	1,680	1,058	622
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	330,800	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	1,317	632	685
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	46046	s.f.	-	T = 3.05*(X/1000); (40% in)	140	56	84
Park	40	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
K-8 School	1600	students	[522]	T = 0.17*(X); (49% in)	256	125	131
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	3,395	1,872	1,523
				Total Gross Residential Trips =	1,680	1,058	622
				Total Gross Non-Residential Trips =	1,715	814	901
				Internal Capture % among TAZ =	10.96%	-	-
				Internal Capture trips among TAZ =	372	186	186

Commercial Retail Pass-By Calculation:		
Intensity =	330,800	s.f.
0.75 * Intensity =	248,100	s.f.
External Trips from Matrix =	1,161	trips
0.75 * External Trips from Matrix =	871	trips
Pass-By Percent =	34%	
Pass-By Reduction =	296	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,727**	**1,538**	**1,189**

WATS TAZ	TCRPM TAZ
384	661

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	800	d.u.	[221]	T = 5.45*(X)-1.75	4,358
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	458	rooms	[310]	T = 8.36*(X)	3,829
Industrial	2,625,000	s.f.	[130]	T = 3.37*(X/1000)	8,846
Commercial Retail	642,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	21,288
Service & Office	150,000	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	1,572
Research & Development(1)	150,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	1,739
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	415	d.u.	[253]	T = 2.02*(X)	838
Assisted Living Facility	150	beds	[254]	T = 2.60*(X)	390
				Total Gross Trips =	42,860
				Total Gross Residential Trips =	4,358
				Total Gross Non-Residential Trips =	38,502
				Internal Capture % among TAZ =	20.18%
				Internal Capture trips among TAZ =	8,648

Commercial Retail Pass-By Calculation:		
Intensity =	642,000	s.f.
0.75 * Intensity =	481,500	s.f.
External Trips from Matrix =	17,344	trips
0.75 * External Trips from Matrix =	13,008	trips
Pass-By Percent =	34%	
Pass-By Reduction =	4,423	trips

NET NEW EXTERNAL DAILY TRIPS =	**29,789**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	800	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	326	199	127
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	458	rooms	[310]	T = 0.60*(X); (51% in)	275	140	135
Industrial	2,625,000	s.f.	[130]	T = 0.40*(X/1000); (21% in)	1,050	221	829
Commercial Retail	642,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	2,151	1,032	1,119
Service & Office[2]	150,000	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	167	27	140
Research & Development[1]	150,000	s.f.	[760]	T = 0.49*(X); (15% in)	74	11	63
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	415	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)	23	14	9
Assisted Living Facility	150	beds	[254]	T = 0.19*(X); (63% in)	29	18	11
				Total Gross Trips =	4,095	1,662	2,433
				Total Gross Residential Trips =	326	199	127
				Total Gross Non-Residential Trips =	3,769	1,463	2,306
				Internal Capture % among TAZ =	15.04%	-	-
				Internal Capture trips among TAZ =	616	308	308

Commercial Retail Pass-By Calculation:		
Intensity =	642,000	s.f.
0.75 * Intensity =	481,500	s.f.
External Trips from Matrix =	1,864	trips
0.75 * External Trips from Matrix =	1,398	trips
Pass-By Percent =	34%	
Pass-By Reduction =	475	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**3,004**	**1,117**	**1,887**

WATS TAZ	TCRPM TAZ
385	646

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	300	d.u.	[221]	T = 5.45*(X)-1.75	1,633
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	3,325,000	s.f.	[130]	T = 3.37*(X/1000)	11,205
Commercial Retail	81,500	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	5,231
Service & Office	75,000	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	803
Research & Development(1)	75,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	972
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	27,952	s.f.	-	T = 54.51*(X/1000)	1,524
Institutional Use	12,000	s.f.	-	T = 30.49*(X/1000)	366
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	21,734
				Total Gross Residential Trips =	1,633
				Total Gross Non-Residential Trips =	20,101
				Internal Capture % among TAZ =	11.77%
				Internal Capture trips among TAZ =	2,558

Commercial Retail Pass-By Calculation:		
Intensity =	81,500	s.f.
0.75 * Intensity =	61,125	s.f.
External Trips from Matrix =	4,114	trips
0.75 * External Trips from Matrix =	3,086	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,049	trips

NET NEW EXTERNAL DAILY TRIPS =	**18,127**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	300	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	127	77	50
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	3,325,000	s.f.	[130]	T = 0.40*(X/1000); (21% in)	1,330	279	1,051
Commercial Retail	81,500	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	467	224	243
Service & Office[2]	75,000	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	87	14	73
Research & Development[1]	75,000	s.f.	[760]	T = 0.49*(X); (15% in)	37	6	31
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	27952	s.f.	-	T = 5.45*(X/1000); (50% in)	152	76	76
Institutional Use	12000	s.f.	-	T = 3.05*(X/1000); (40% in)	37	15	22
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,237	691	1,546
				Total Gross Residential Trips =	127	77	50
				Total Gross Non-Residential Trips =	2,110	614	1,496
				Internal Capture % among TAZ =	8.94%	-	-
				Internal Capture trips among TAZ =	200	100	100

Commercial Retail Pass-By Calculation:		
Intensity =	81,500	s.f.
0.75 * Intensity =	61,125	s.f.
External Trips from Matrix =	379	trips
0.75 * External Trips from Matrix =	284	trips
Pass-By Percent =	34%	
Pass-By Reduction =	97	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,940**	**543**	**1,397**

WATS TAZ	TCRPM TAZ
386	651

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	940	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	4,042
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	192,720	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	9,392
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	46,065	s.f.	-	T = 30.49*(X/1000)	1,405
Park	25	acres	[411]	T = 0.78*(X)	20
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	14,859
				Total Gross Residential Trips =	4,042
				Total Gross Non-Residential Trips =	10,817
				Internal Capture % among TAZ =	16.45%
				Internal Capture trips among TAZ =	2,444

Commercial Retail Pass-By Calculation:		
Intensity =	192,720	s.f.
0.75 * Intensity =	144,540	s.f.
External Trips from Matrix =	8,260	trips
0.75 * External Trips from Matrix =	6,195	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,106	trips

NET NEW EXTERNAL DAILY TRIPS =	**10,309**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	940	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)	276	168	108
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	192,720	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	883	424	459
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	46065	s.f.	-	T = 3.05*(X/1000); (40% in)	140	56	84
Park	25	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,301	649	652
				Total Gross Residential Trips =	276	168	108
				Total Gross Non-Residential Trips =	1,025	481	544
				Internal Capture % among TAZ =	17.22%	-	-
				Internal Capture trips among TAZ =	224	112	112

Commercial Retail Pass-By Calculation:		
Intensity =	192,720	s.f.
0.75 * Intensity =	144,540	s.f.
External Trips from Matrix =	778	trips
0.75 * External Trips from Matrix =	584	trips
Pass-By Percent =	34%	
Pass-By Reduction =	199	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**878**	**438**	**440**

WATS TAZ	TCRPM TAZ
387	660

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	900	d.u.	[221]	T = 5.45*(X)-1.75	4,903
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	200	rooms	[310]	T = 8.36*(X)	1,672
Industrial	2,795,000	s.f.	[130]	T = 3.37*(X/1000)	9,419
Commercial Retail	194,000	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	9,435
Service & Office	225,400	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	2,334
Research & Development(1)	150,000	s.f.	[760]	T = 10.23*(X/1000)+204.68	1,739
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	10,064	s.f.	-	T = 30.49*(X/1000)	307
Park	0	acres	[411]	T = 0.78*(X)	
K-8 School	0	students	[522]	T = 2.13*(X)	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	29,809
				Total Gross Residential Trips =	4,903
				Total Gross Non-Residential Trips =	24,906
				Internal Capture % among TAZ =	10.99%
				Internal Capture trips among TAZ =	3,094

Commercial Retail Pass-By Calculation:		
Intensity =	194,000	s.f.
0.75 * Intensity =	145,500	s.f.
External Trips from Matrix =	8,212	trips
0.75 * External Trips from Matrix =	6,159	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,094	trips

NET NEW EXTERNAL DAILY TRIPS =	**24,621**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)			
Multi-Family Residential	900	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)	365	223	142
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	200	rooms	[310]	T = 0.60*(X); (51% in)	120	61	59
Industrial	2,795,000	s.f.	[130]	T = 0.40*(X/1000); (21% in)	1,118	235	883
Commercial Retail	194,000	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	887	426	461
Service & Office[2]	225,400	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	246	39	207
Research & Development[1]	150,000	s.f.	[760]	T = 0.49*(X); (15% in)	74	11	63
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	10064	s.f.	-	T = 3.05*(X/1000); (40% in)	31	12	19
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
K-8 School	0	students	[522]	T = 0.17*(X); (49% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,841	1,007	1,834
				Total Gross Residential Trips =	365	223	142
				Total Gross Non-Residential Trips =	2,476	784	1,692
				Internal Capture % among TAZ =	8.03%	-	-
				Internal Capture trips among TAZ =	228	114	114

Commercial Retail Pass-By Calculation:		
Intensity =	194,000	s.f.
0.75 * Intensity =	145,500	s.f.
External Trips from Matrix =	796	trips
0.75 * External Trips from Matrix =	597	trips
Pass-By Percent =	34%	
Pass-By Reduction =	203	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,410**	**792**	**1,618**

WATS TAZ	TCRPM TAZ
388	663

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (10th Ed)	Daily Trips
Single-Family Residential	364	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	3,413
Multi-Family Residential	0	d.u.	[221]	T = 5.45*(X)-1.75	
Age-Restricted Single-Family	439	d.u.	[251]	Ln(T) = 0.88*Ln(X) + 2.28	2,068
Age-Restricted Multi-Family	0	d.u.	[252]	T = 4.02*(X) - 25.37	
Hotel	0	rooms	[310]	T = 8.36*(X)	
Industrial	0	s.f.	[130]	T = 3.37*(X/1000)	
Commercial Retail	250,720	s.f.	[820]	Ln(T) = 0.68*Ln(X/1000) + 5.57	11,232
Service & Office	0	s.f.	[710]	Ln(T) = 0.97*Ln(X/1000) + 2.5	
Research & Development(1)	0	s.f.	[760]	T = 10.23*(X/1000)+204.68	
Hospital	0	beds	[610]	T = 22.32*(X)	
Civic Use	13,975	s.f.	-	T = 54.51*(X/1000)	762
Institutional Use	80,129	s.f.	-	T = 30.49*(X/1000)	2,443
Park	15	acres	[411]	T = 0.78*(X)	12
K-8 School	1,600	students	[522]	T = 2.13*(X)	3,408
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	23,338
				Total Gross Residential Trips =	5,481
				Total Gross Non-Residential Trips =	17,857
				Internal Capture % among TAZ =	16.16%
				Internal Capture trips among TAZ =	3,772

Commercial Retail Pass-By Calculation:		
Intensity =	250,720	s.f.
0.75 * Intensity =	188,040	s.f.
External Trips from Matrix =	9,713	trips
0.75 * External Trips from Matrix =	7,285	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,477	trips

NET NEW EXTERNAL DAILY TRIPS =	17,089

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	364	d.u.	[210]	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)	351	221	130
Multi-Family Residential	0	d.u.	[221]	Ln(T) = 096*Ln(X) - 0.63; (61% in)			
Age-Restricted Single-Family	439	d.u.	[251]	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)	152	93	59
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.24*(X) + 2.26; (55% in)			
Hotel	0	rooms	[310]	T = 0.60*(X); (51% in)			
Industrial	0	s.f.	[130]	T = 0.40*(X/1000); (21% in)			
Commercial Retail	250,720	s.f.	[820]	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	1,073	515	558
Service & Office[2]	0	s.f.	[710]	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)			
Research & Development[1]	0	s.f.	[760]	T = 0.49*(X); (15% in)			
Hospital	0	beds	[610]	T = 2.08*(X) - 104.00; (28% in)			
Civic Use	13975	s.f.	-	T = 5.45*(X/1000); (50% in)	76	38	38
Institutional Use	80129	s.f.	-	T = 3.05*(X/1000); (40% in)	244	98	146
Park	15	acres	[412]	T = 0.06*(X); (41% in)	1	0	1
K-8 School	1600	students	[522]	T = 0.17*(X); (49% in)	256	125	131
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,153	1,090	1,063
				Total Gross Residential Trips =	503	314	189
				Total Gross Non-Residential Trips =	1,650	776	874
				Internal Capture % among TAZ =	15.98%	-	-
				Internal Capture trips among TAZ =	344	172	172

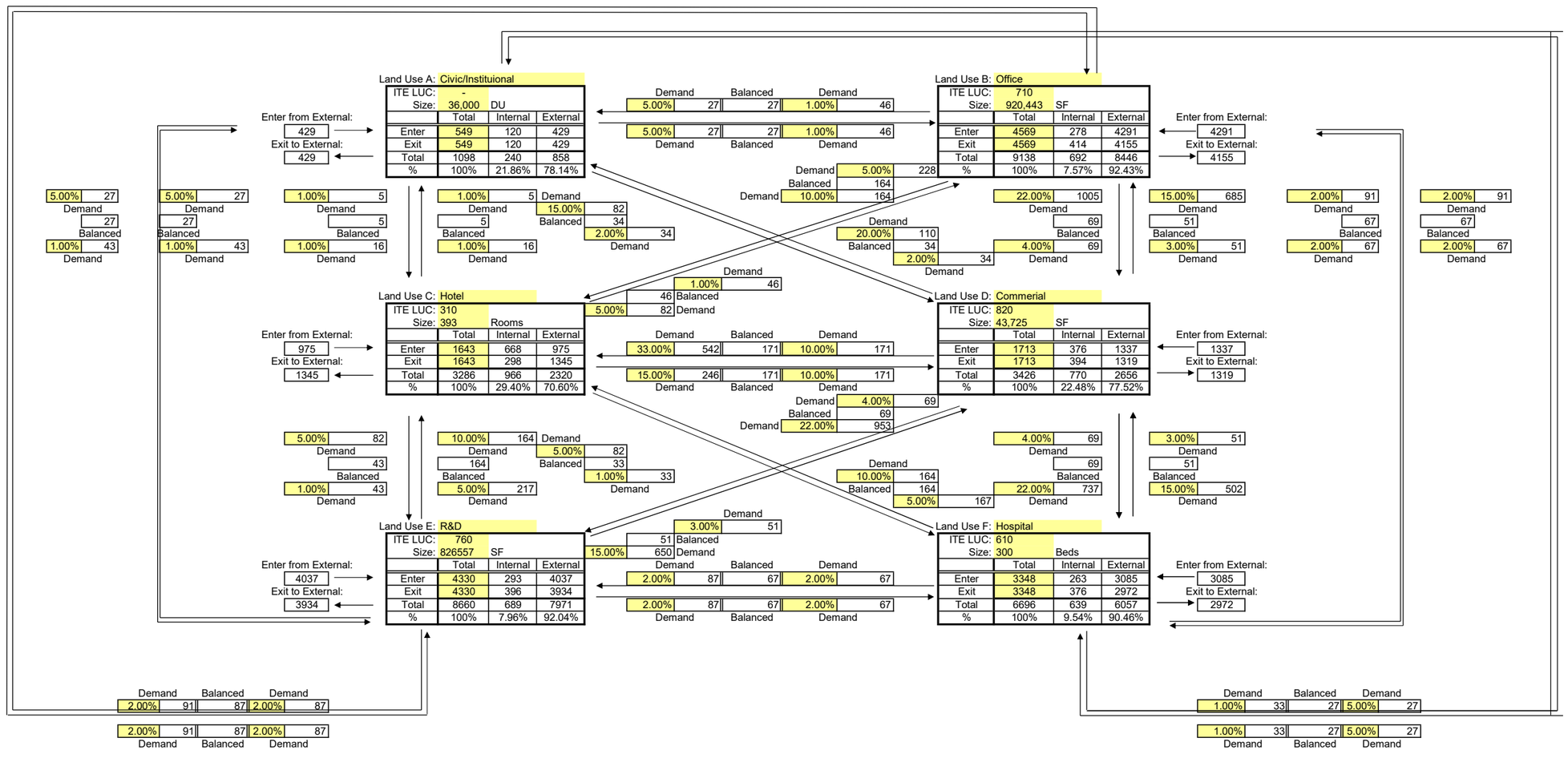
Commercial Retail Pass-By Calculation:		
Intensity =	250,720	s.f.
0.75 * Intensity =	188,040	s.f.
External Trips from Matrix =	932	trips
0.75 * External Trips from Matrix =	699	trips
Pass-By Percent =	34%	
Pass-By Reduction =	238	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,571**	**799**	**772**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: ########

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 664



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

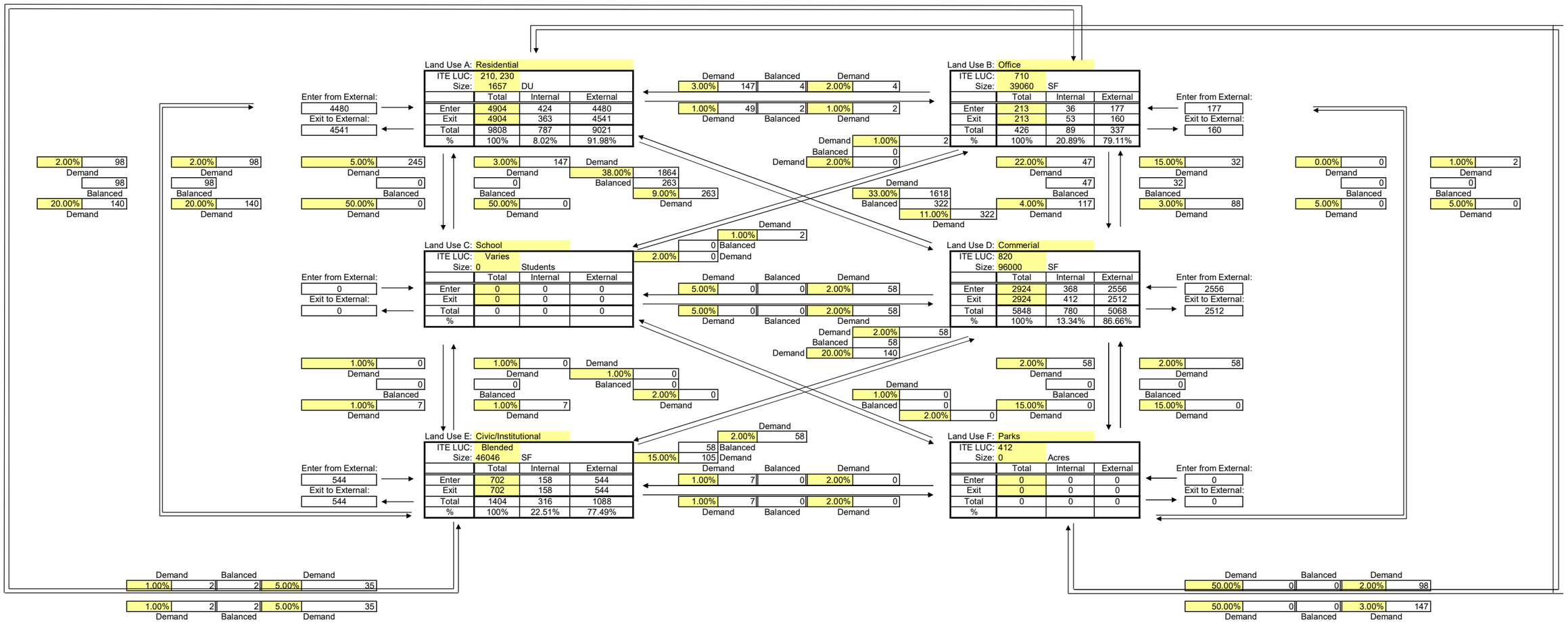
Category	Land Use A Civic/Instituio	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	429	4291	975	1337	4037	3085	14154
Exit	429	4155	1345	1319	3934	2972	14154
Total	858	8446	2320	2656	7971	6057	**28308**
Single Use Trip Gen Estimate	1098	9138	3286	3426	8660	6696	**32304**
	21.86%	7.57%	29.40%	22.48%	7.96%	9.54%	

Internal Capture = 12.37%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 659



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

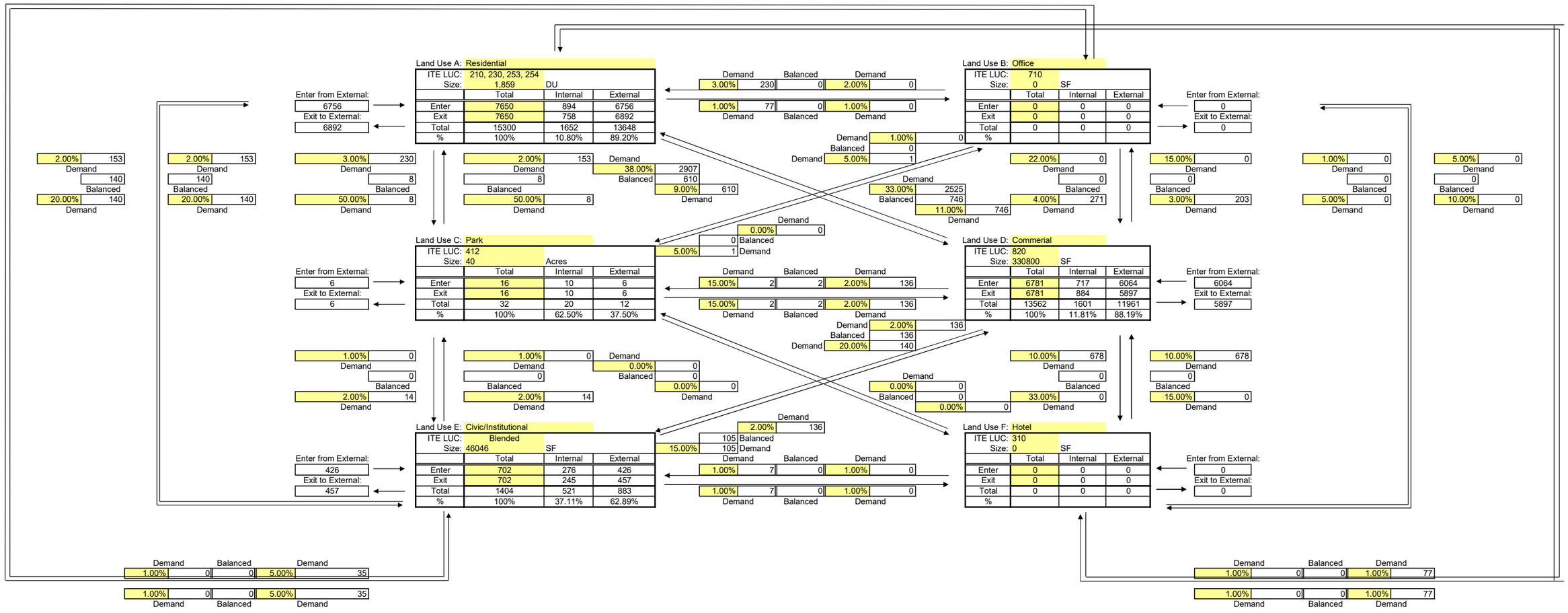
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	4480	177	0	2556	544	0	7757
Exit	4541	160	0	2512	544	0	7757
Total	9021	337	0	5068	1088	0	**15514**
Single Use Trip Gen Estimate	9808	426	0	5848	1404	0	**17486**
	8.02%	20.89%	0.00%	13.34%	22.51%	0.00%	

Internal Capture = 11.28%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 662



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

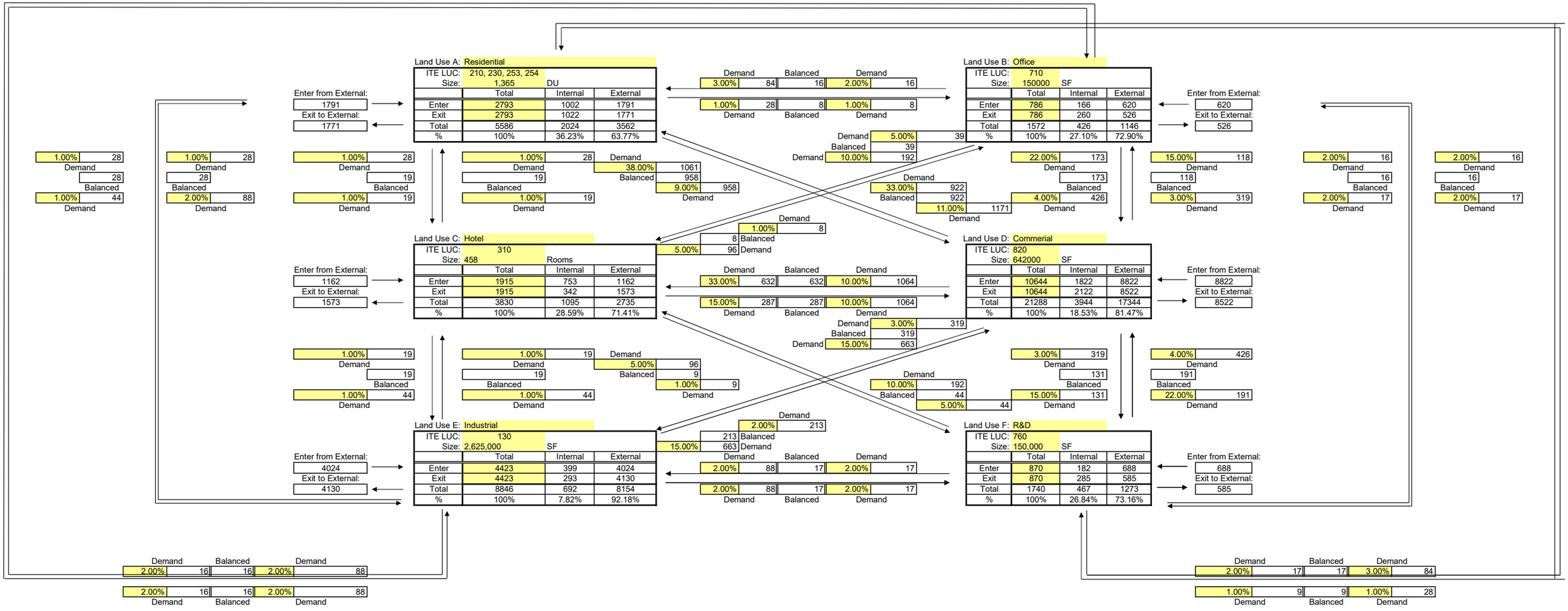
Category	Land Use A Residentia	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	6756	0	6	6064	426	0	13252
Exit	6892	0	6	5897	457	0	13252
Total	13648	0	12	11961	883	0	**26504**
Single Use Trip Gen Estimate	15300	0	32	13562	1404	0	**30298**
	10.80%	0.00%	62.50%	11.81%	37.11%	0.00%	

Internal Capture = 12.52%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 661



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

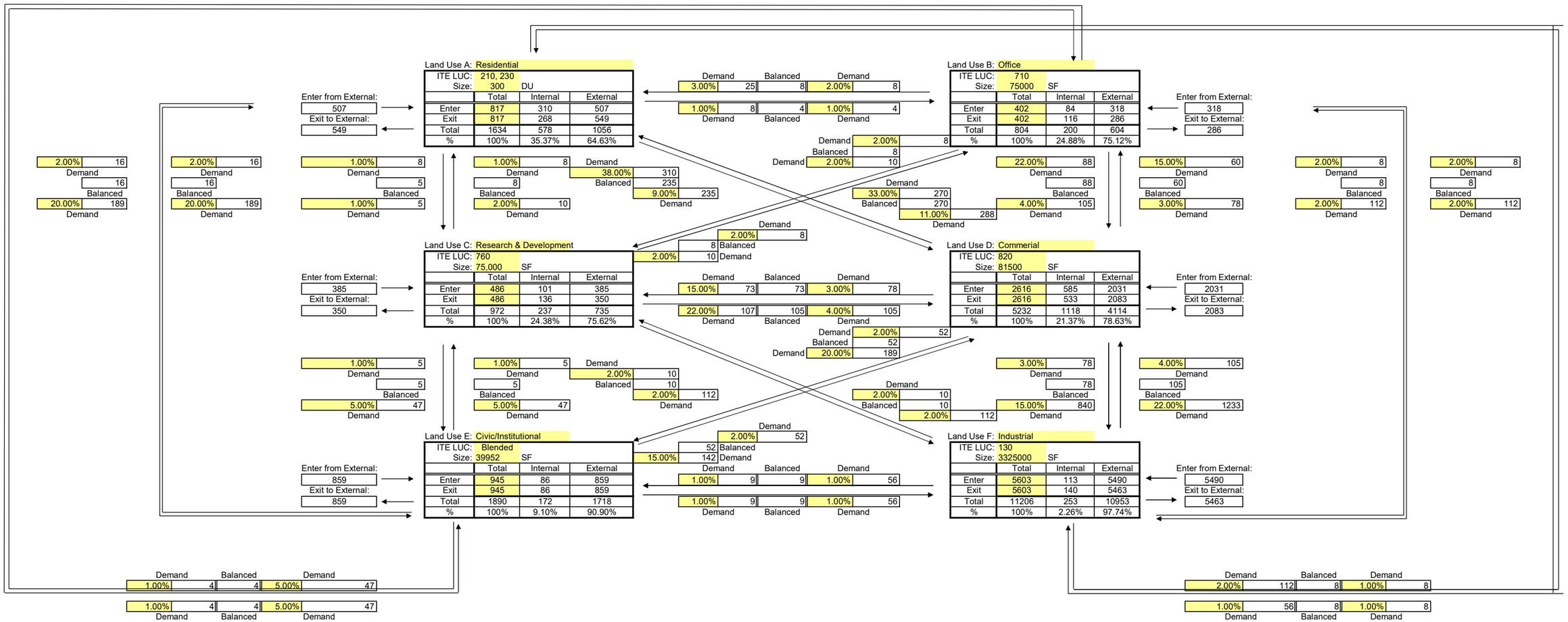
Category	Land Use A Residential	B Office	C Hotel	D Commerial	E Industrial	F R&D	Total
Enter	1791	620	1162	8822	4024	688	17107
Exit	1771	526	1573	8522	4130	585	17107
Total	3562	1146	2735	17344	8154	1273	**34214**
Single Use Trip Gen Estimate	5586	1572	3830	21288	8846	1740	**42862**
	36.23%	27.10%	28.59%	18.53%	7.82%	26.84%	

Internal Capture = 20.18%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 646



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

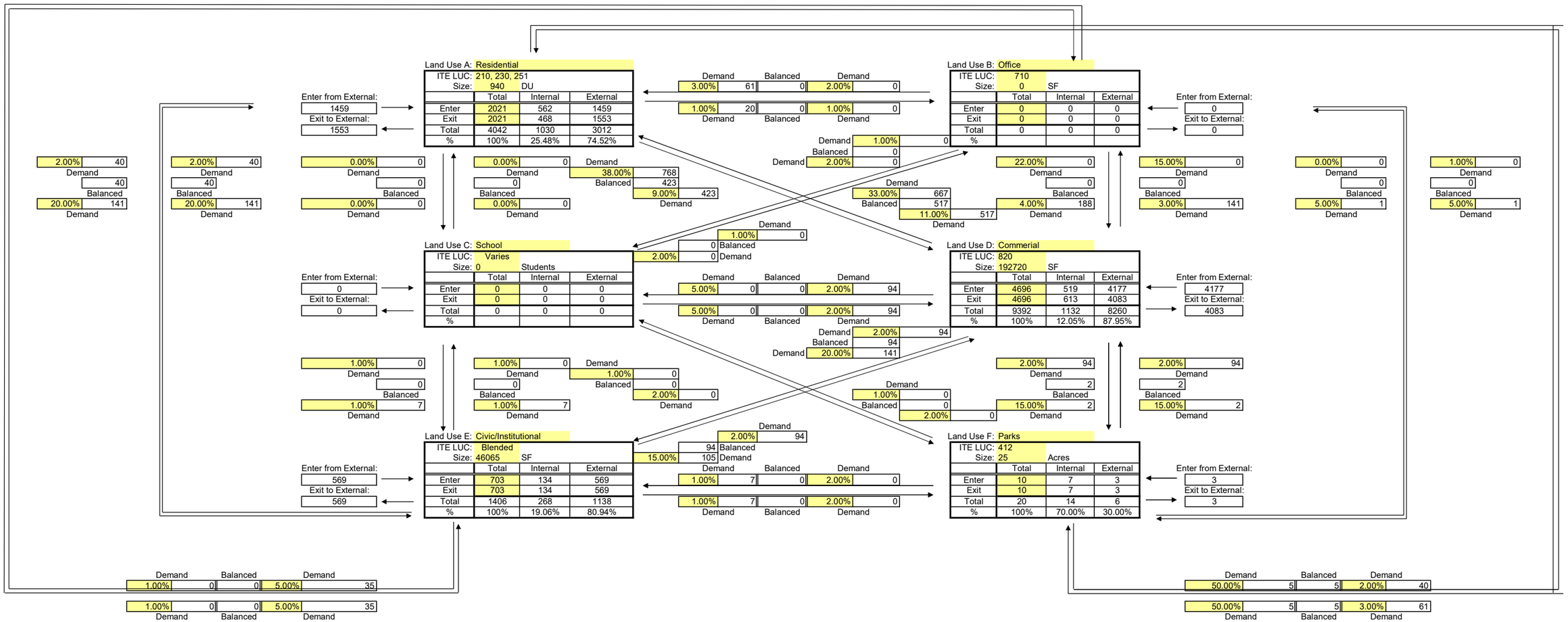
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial	Total
Enter	507	318	385	2031	859	5490	9590
Exit	549	286	350	2083	859	5463	9590
Total	1056	604	735	4114	1718	10953	**19180**
Single Use Trip Gen Estimate	1634	804	972	5232	1890	11206	**21738**
	35.37%	24.88%	24.38%	21.37%	9.10%	2.26%	

Internal Capture = 11.77%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 651



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

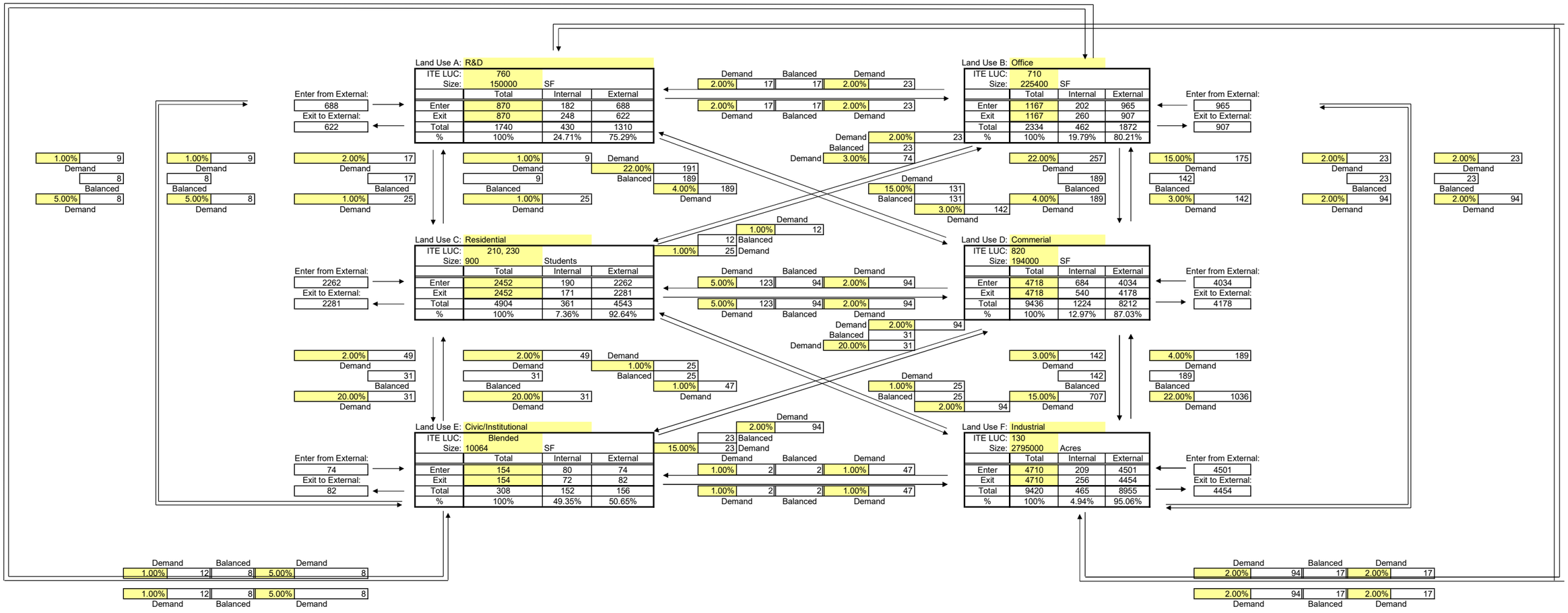
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1459	0	0	4177	569	3	6208
Exit	1553	0	0	4083	569	3	6208
Total	3012	0	0	8260	1138	6	**12416**
Single Use Trip Gen Estimate	4042	0	0	9392	1406	20	**14860**
	25.48%	0.00%	0.00%	12.05%	19.06%	70.00%	

Internal Capture = 16.45%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 660



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

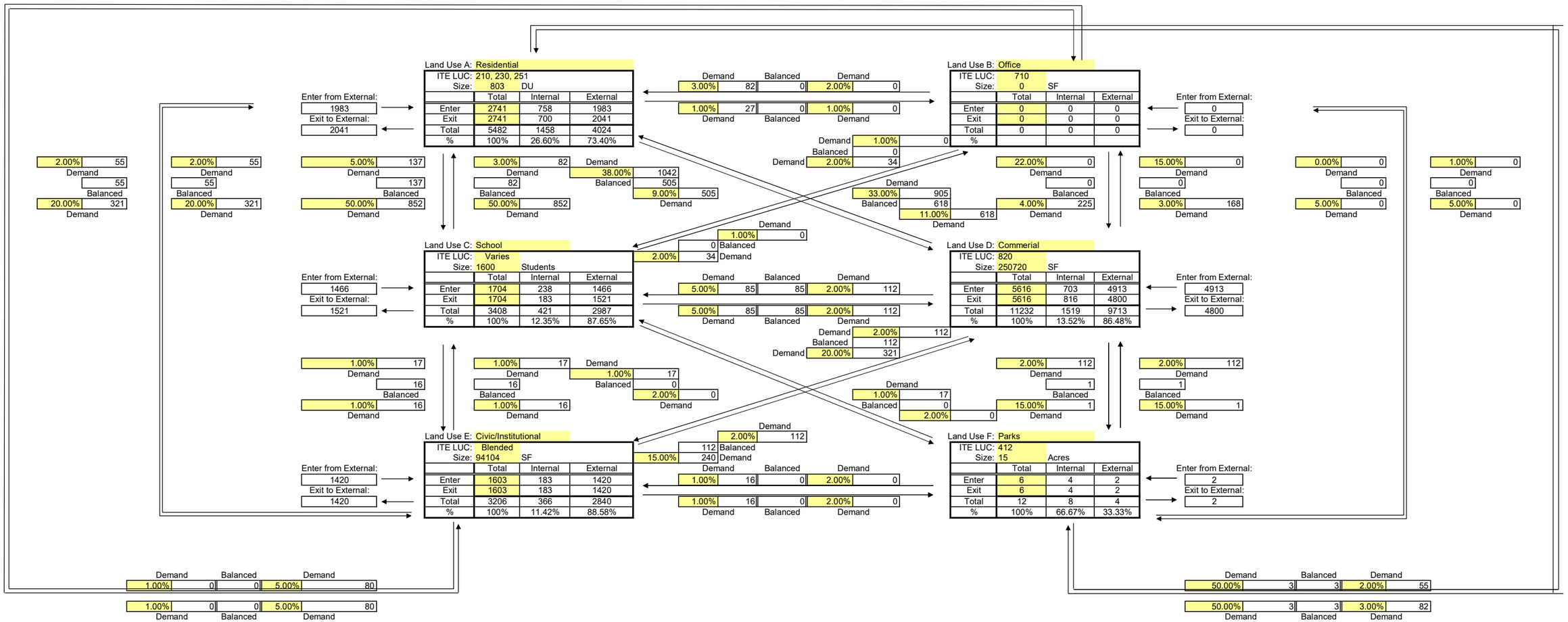
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institut	F Industrial	Total
Enter	688	965	2262	4034	74	4501	12524
Exit	622	907	2281	4178	82	4454	12524
Total	1310	1872	4543	8212	156	8955	**25048**
Single Use Trip Gen Estimate	1740	2334	4904	9436	308	9420	**28142**
	24.71%	19.79%	7.36%	12.97%	49.35%	4.94%	

Internal Capture = 10.99%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 7/14/2021

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 663



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

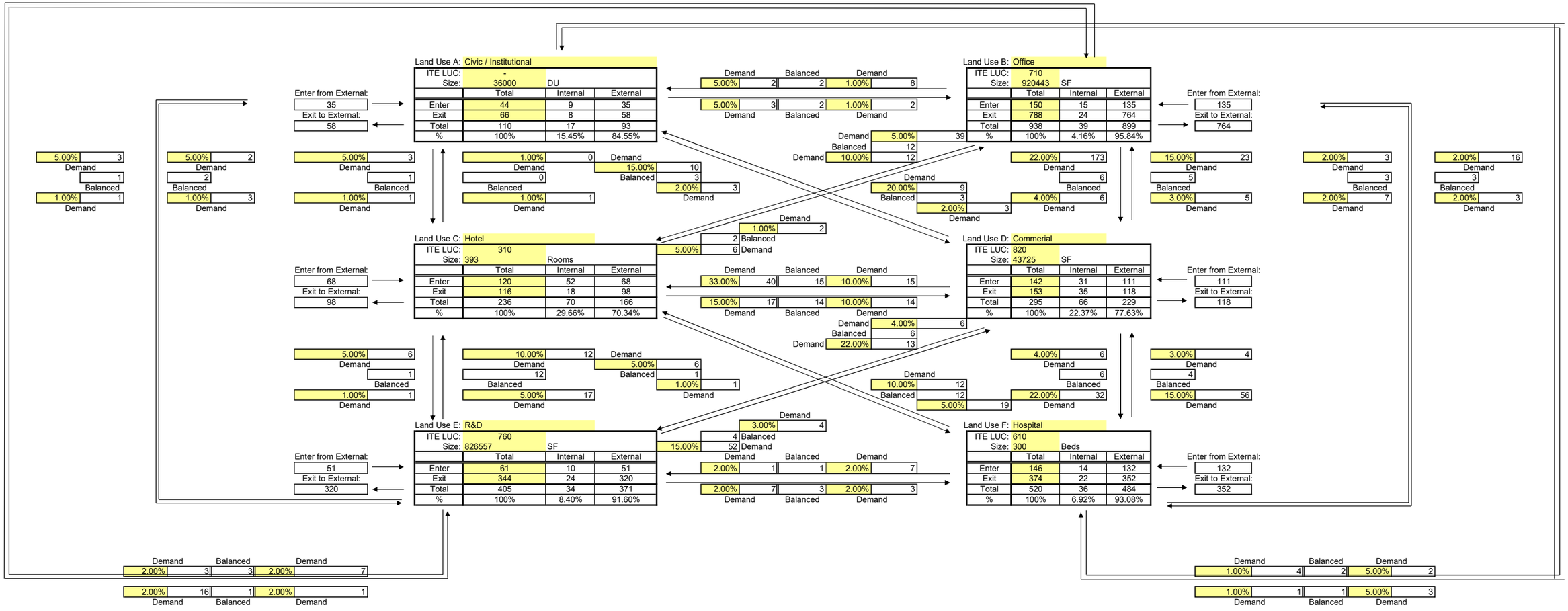
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1983	0	1466	4913	1420	2	9784
Exit	2041	0	1521	4800	1420	2	9784
Total	4024	0	2987	9713	2840	4	**19568**
Single Use Trip Gen Estimate	5482	0	3408	11232	3206	12	**23340**
	26.60%	0.00%	12.35%	13.52%	11.42%	66.67%	

Internal Capture = 16.16%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 664



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

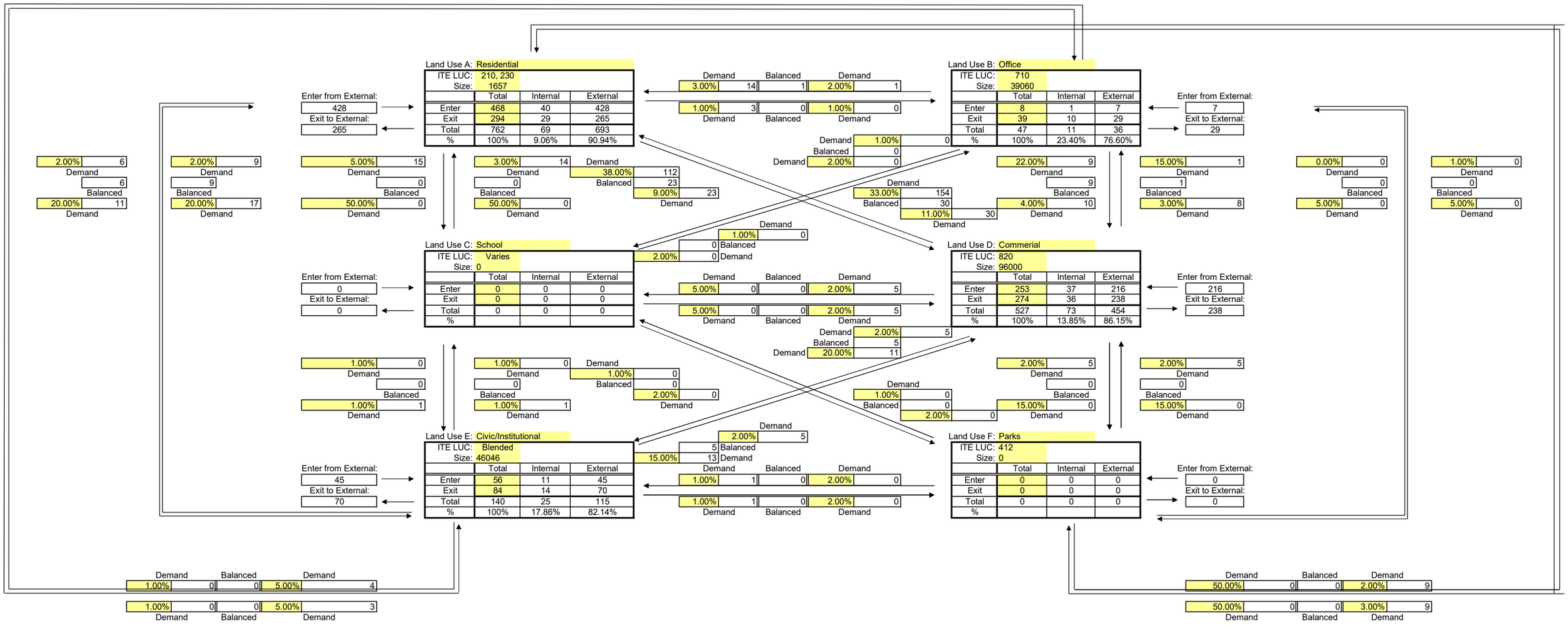
Category	Land Use A Civic / Institutional	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	35	135	68	111	51	132	532
Exit	58	764	98	118	320	352	1710
Total	93	899	166	229	371	484	**2242**
Single Use Trip Gen Estimate	110	938	236	295	405	520	**2504**
	15.45%	4.16%	29.66%	22.37%	8.40%	6.92%	

Internal Capture = 10.46%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 659



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

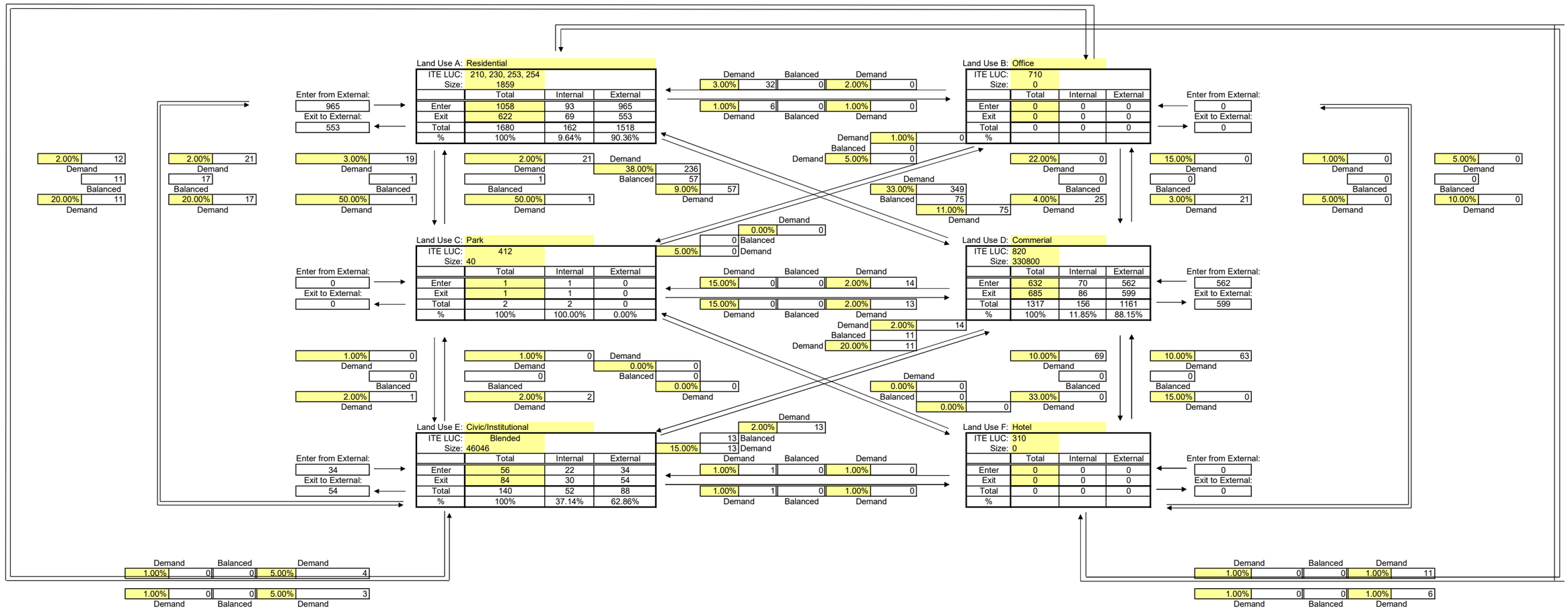
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	428	7	0	216	45	0	696
Exit	265	29	0	238	70	0	602
Total	693	36	0	454	115	0	**1298**
Single Use Trip Gen Estimate	762	47	0	527	140	0	**1476**
	9.06%	23.40%	0.00%	13.85%	17.86%	0.00%	

Internal Capture = 12.06%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 662



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

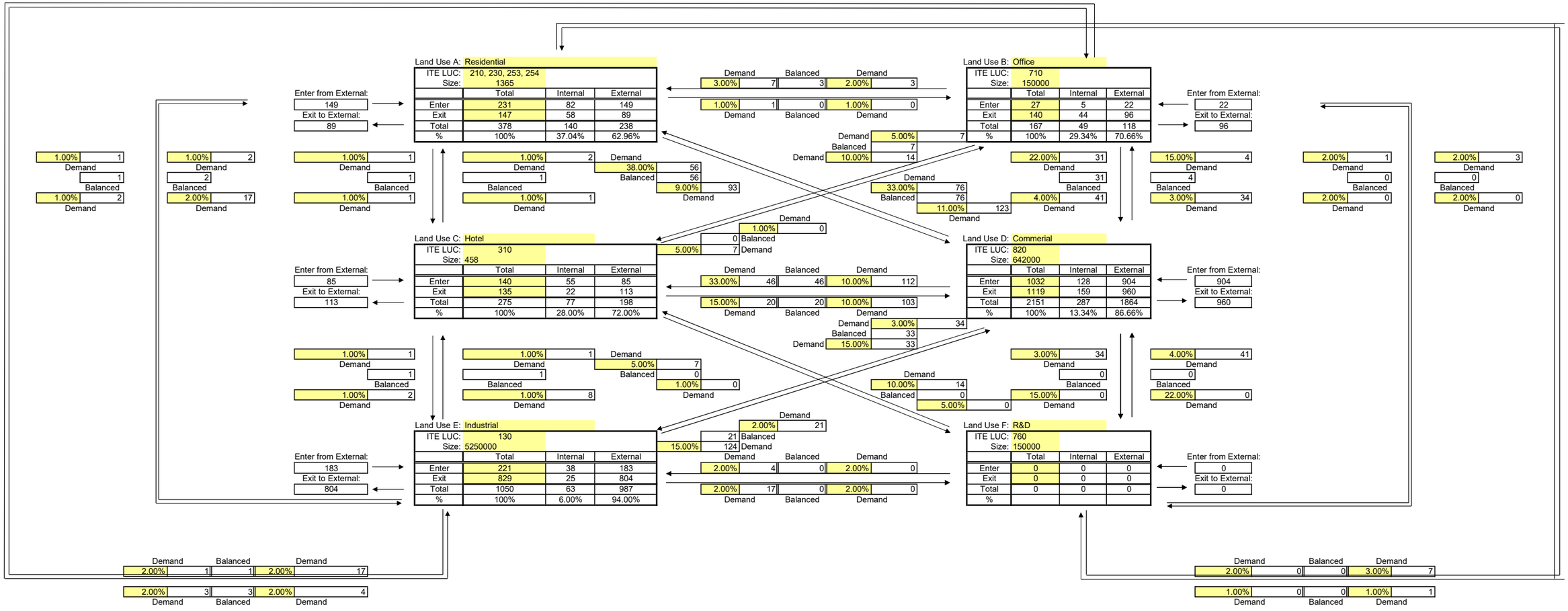
Category	Land Use A Residentia	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	965	0	0	562	34	0	1561
Exit	553	0	0	599	54	0	1206
Total	1518	0	0	1161	88	0	**2767**
Single Use Trip Gen Estimate	1680	0	2	1317	140	0	**3139**
	9.64%	0.00%	0.00%	11.85%	37.14%	0.00%	

Internal Capture = 11.85%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 661



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

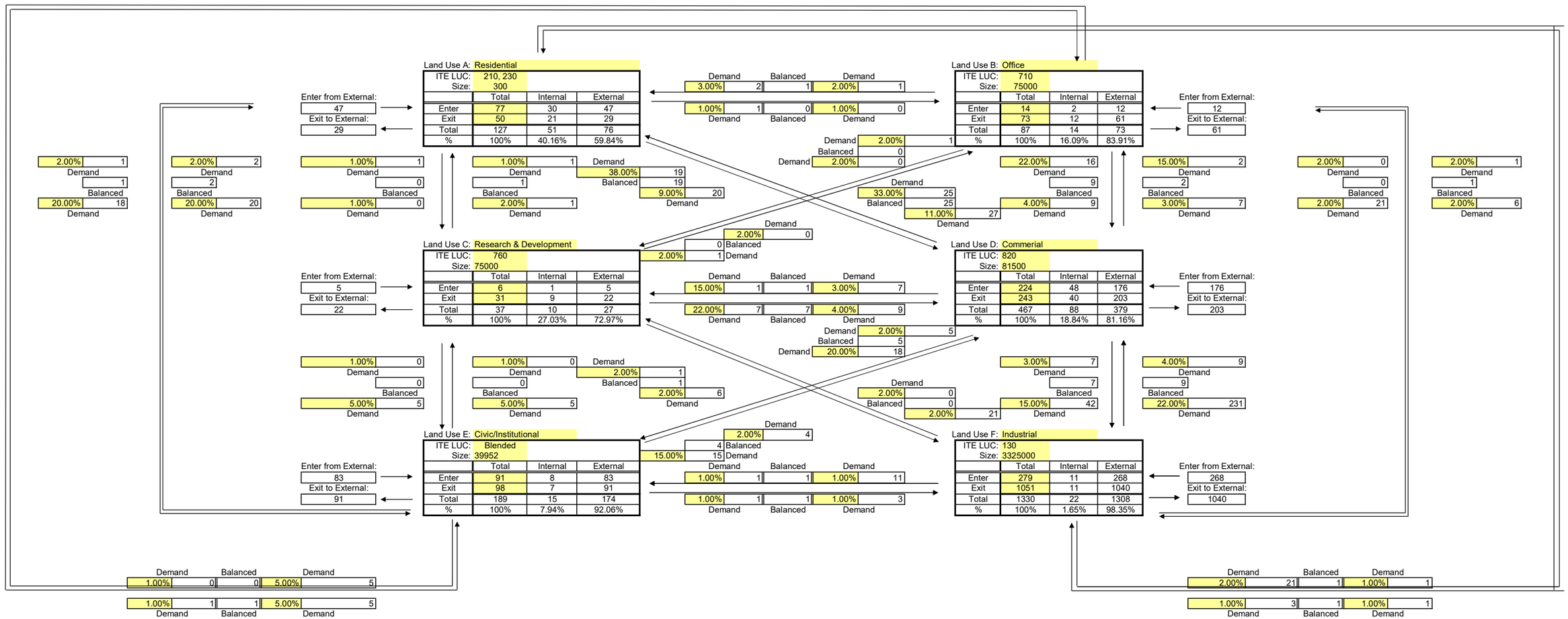
Category	Land Use A Residential	B Office	C Hotel	D Commerial	E Industrial	F R&D	Total
Enter	149	22	85	904	183	0	1343
Exit	89	96	113	960	804	0	2062
Total	238	118	198	1864	987	0	**3405**
Single Use Trip Gen Estimate	378	167	275	2151	1050	0	**4021**
	37.04%	29.34%	28.00%	13.34%	6.00%	0.00%	

Internal Capture = 15.32%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 646



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

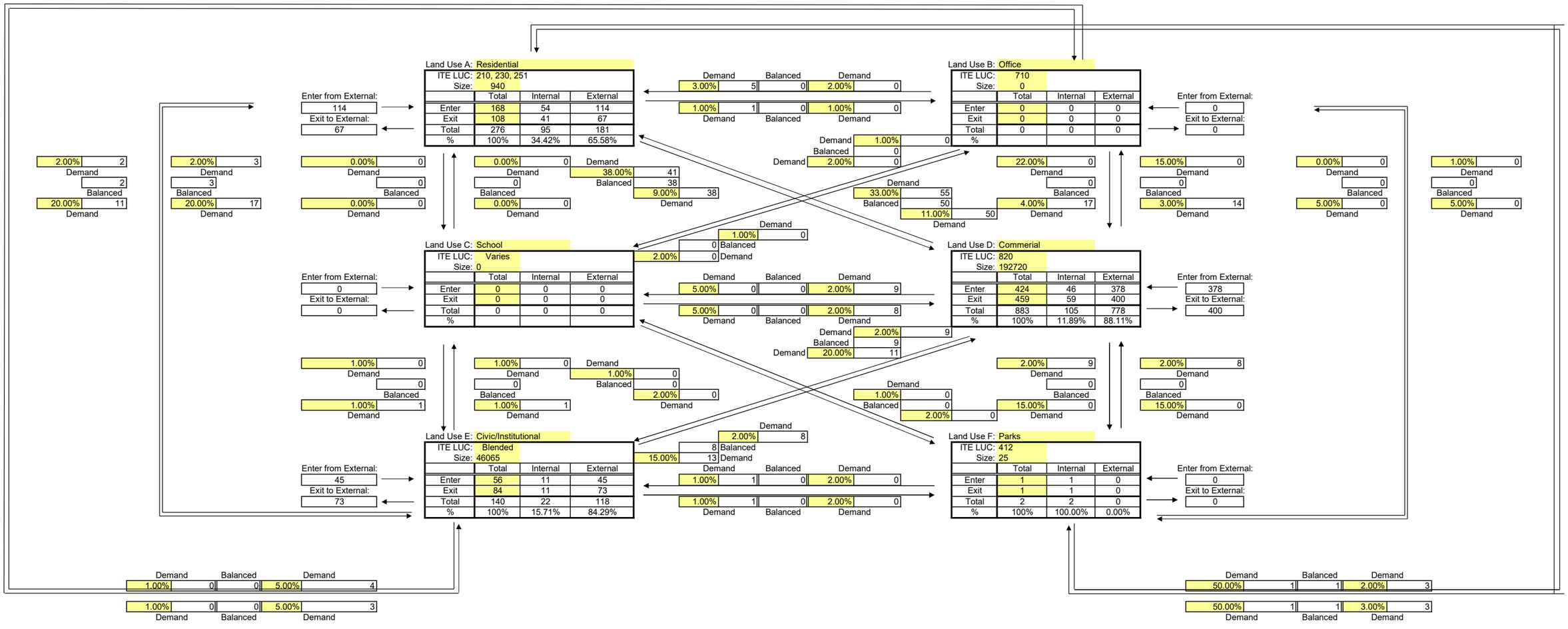
Category	Land Use A Residential	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial	Total
Enter	47	12	5	176	83	268	591
Exit	29	61	22	203	91	1040	1446
Total	76	73	27	379	174	1308	**2037**
Single Use Trip Gen Estimate	127	87	37	467	189	1330	**2237**
	40.16%	16.09%	27.03%	18.84%	7.94%	1.65%	

Internal Capture = 8.94%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 651



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

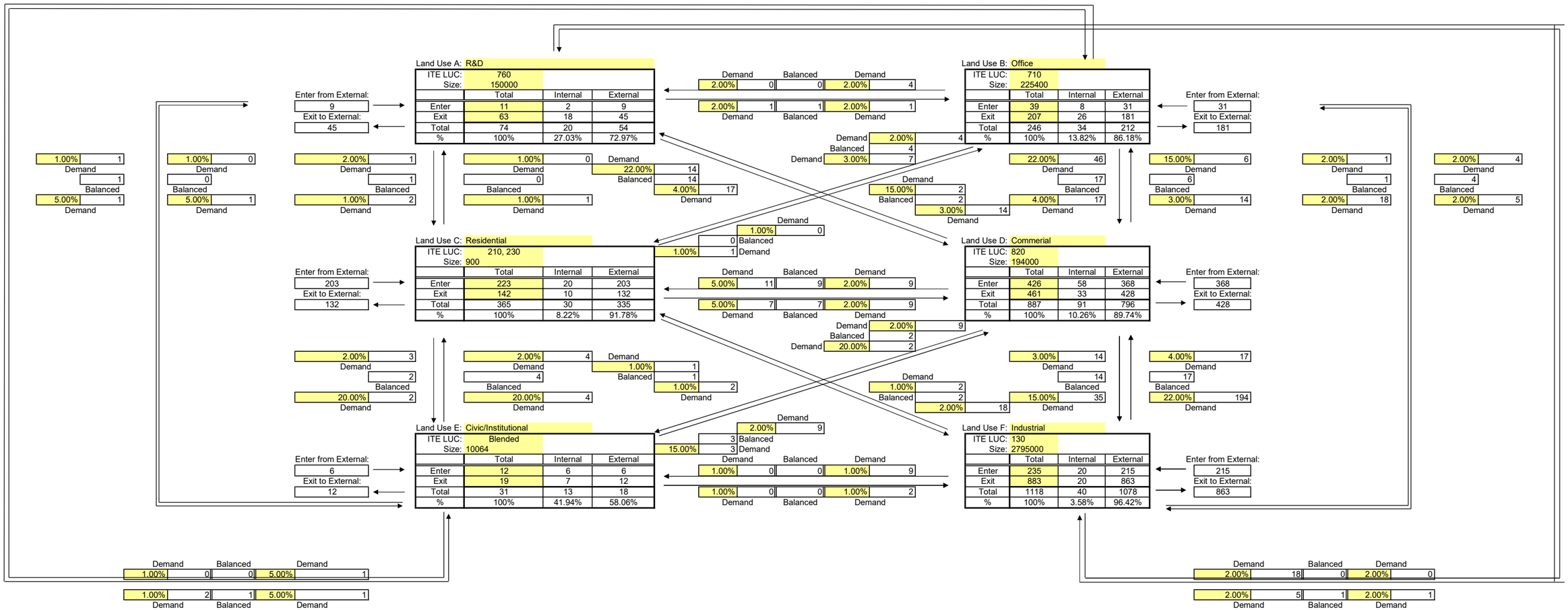
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	114	0	0	378	45	0	537
Exit	67	0	0	400	73	0	540
Total	181	0	0	778	118	0	**1077**
Single Use Trip Gen Estimate	276	0	0	883	140	2	**1301**
	34.42%	0.00%	0.00%	11.89%	15.71%	0.00%	

Internal Capture = 17.22%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 660



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

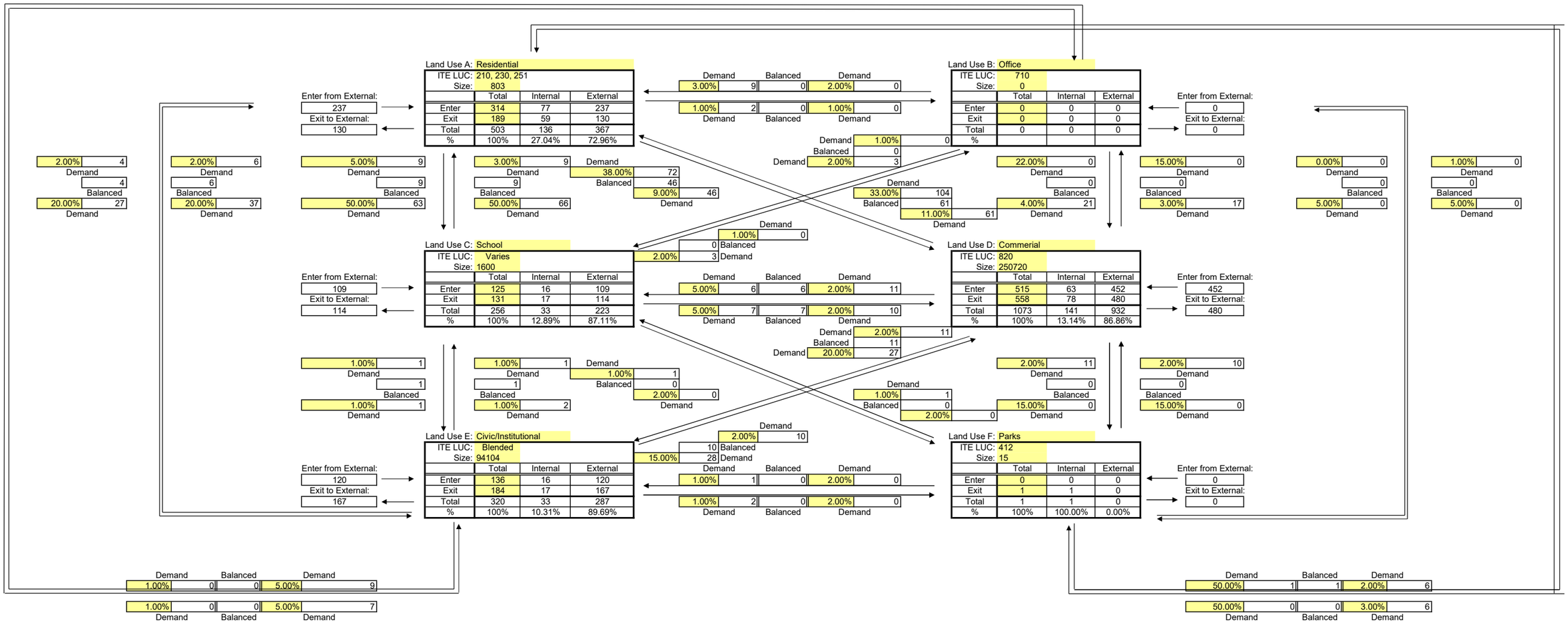
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institut	F Industrial	Total
Enter	9	31	203	368	6	215	832
Exit	45	181	132	428	12	863	1661
Total	54	212	335	796	18	1078	**2493**
Single Use Trip Gen Estimate	74	246	365	887	31	1118	**2721**
	27.03%	13.82%	8.22%	10.26%	41.94%	3.58%	

Internal Capture = 8.38%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 663



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	237	0	109	452	120	0	918
Exit	130	0	114	480	167	0	891
Total	367	0	223	932	287	0	**1809**
Single Use Trip Gen Estimate	503	0	256	1073	320	1	**2153**
	27.04%	0.00%	12.89%	13.14%	10.31%	0.00%	

Internal Capture = 15.98%

MacKenzie
Engineering & Planning, Inc.

Appendix C

Committed Improvements

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Web Application

Office of Work Program and Budget Lisa Saliba - Director

Five Year Work Program

Selection Criteria	
District 04 **(Updated: 1/15/2020-21.15.01)** **Category:**Highways **Item Number:**431752-5	**2020-2025 G1** **St Lucie County** **Phase:**Construction

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: NON-INTRASTATE OFF STATE HIGHW — District 04 - St Lucie County
Description: PORT ST LUCIE BLVD FR SOUTH OF PAAR DR TO SOUTH OF ALCANTARRA BLVD
Type of Work: ADD LANES & RECONSTRUCT — View Scheduled Activities
Item Number: 431752-5
Length: 1.076 — View Map of Item

Project Detail

Fiscal Year:	2020	2021	2022	2023	2024	2025
Highways/Railroad & Utilities						
Amount:					$58,189	
Highways/Construction						
Amount:						$14,216,593
Item Total:					**$58,189**	**$14,216,593**

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For additional information please e-mail questions or comments to:
Office of Work Program and Budget
Lisa Saliba: Lisa.Saliba@dot.state.fl.us Or call 850-414-4622

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Florida Department of

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Web Application

Office of Work Program and Budget Lisa Saliba - Director

Five Year Work Program

Selection Criteria	
District 04 **(Updated: 1/15/2020-21.15.01)** **Category:**Highways **Item Number:**431752-6	**2020-2025 G1** **St Lucie County** **Phase:**Construction

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: NON-INTRASTATE OFF STATE HIGHW — District 04 - St Lucie County
Description: PORT ST.LUCIE BLVD FROM SOUTH OF ALCANTARRA BV TO SOUTH OF DARWIN BLVD
Type of Work: ADD LANES & RECONSTRUCT — View Scheduled Activities
Item Number: 431752-6
Length: 0.713 — View Map of Item

Project Detail

Fiscal Year:	2020	2021	2022	2023	2024	2025
Highways/Railroad & Utilities						
Amount:			$41,811			
Highways/Construction						
Amount:			$11,304,767			
Highways/Contract Incentives						
Amount:				$125,433		
Item Total:			**$11,346,578**	**$125,433**		

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Office of Work Program and Budget Lisa Saliba - Director

Five Year Work Program

Selection Criteria	
District 04 **(Updated: 1/15/2020-21.15.01)** **Category:**Highways **Item Number:**435337-1	**2020-2025 G1** **St Lucie County** **Phase:**Construction

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: INTRASTATE INTERSTATE — District 04 - St Lucie County
Description: SR-9/I-95 AT ST LUCIE WEST BLVD
Type of Work: INTERCHANGE - ADD LANES — View Scheduled Activities
Item Number: 435337-1 — **SIS**
Length: 1.814 — View Map of Item

Project Detail

Fiscal Year:	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Highways/Preliminary Engineering						***(On-Going)***
Amount:	$377,214					
Highways/Railroad & Utilities						
Amount:		$400,000				
Highways/Construction						
Amount:			$14,380,027	$69,602		
Highways/Contract Incentives						
Amount:			$150,000			
Highways/Environmental						***(On-Going)***
Amount:	$82,987					
Item Total:	**$460,201**	**$400,000**	**$14,530,027**	**$69,602**		

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Office of Work Program and Budget Lisa Saliba - Director

Five Year Work Program

Selection Criteria	
District 04 **(Updated: 1/15/2020-21.15.01)** **Category:**Highways **Item Number:**436870-1	**2020-2025 G1** **Martin County** **Phase:**Construction

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: INTRASTATE STATE HIGHWAY — District 04 - Martin County
Description: SR-714/SW MARTIN HWY FROM CITRUS BLVD TO SW MARTIN DOWNS BLVD
Type of Work: ADD LANES & RECONSTRUCT — View Scheduled Activities
Item Number: 436870-1
Length: 1.127 — View Map of Item

Project Detail

Fiscal Year:	2020	2021	2022	2023	2024	2025
Highways/PD & E						***(On-Going)***
Amount:						
Highways/Preliminary Engineering						***(On-Going)***
Amount:	$253,568					
Highways/Right of Way						***(On-Going)***
Amount:	$821,124	$501,007	$1,427,990	$2,000,000		
Highways/Railroad & Utilities						***(On-Going)***
Amount:	$150,000					
Highways/Construction						***(On-Going)***
Amount:		$19,801,640	$88,359			
Highways/Environmental						***(On-Going)***
Amount:	$49,375					
Item Total:	**$1,274,067**	**$20,302,647**	**$1,516,349**	**$2,000,000**		

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Updated: 7/9/2021 12:4(

Five Year Work Program

Selection Criteria	
District 04	**2022-2026 AD**
St Lucie County	**Item Number:**422681-6

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Display current records in an Excel Document

Project Summary

Transportation System: INTRASTATE INTERSTATE — District 04 - St Lucie C
Description: I-95 FROM MARTIN/ST. LUCIE COUNTY LINE TO SR-70
Type of Work: PD&E/EMO STUDY — View Scheduled Ac
Item Number: 422681-6
Length: 15.499 — View Map (

Project Detail

Fiscal Year:	2022	2023	2024	2025	
Highways/PD & E					
Amount:			$550,000	$2,110,000	

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Office of Work Program and Budget

Updated: 7/9/2021 12:4(

Five Year Work Program

Selection Criteria	
District 04	**2022-2026 AD**
St Lucie County	**Item Number:**439761-1

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: INTRASTATE INTERSTATE — District 04 - St Luci
Description: SR-9/I-95 NORTHBOUND AND SOUTHBOUND OFF-RAMPS AT GATLIN BLVD.
Type of Work: INTERCHANGE - ADD LANES — View Scheduled
Item Number: 439761-1
Length: 1.704 — View Ma

Project Detail

Fiscal Year:	**2022**	**2023**	**2024**	**2025**	
Highways/Preliminary Engineering					***(O***
Amount:	$586				
Highways/Construction					
Amount:	$5,744,421	$16,437			
Highways/Environmental					***(O***
Amount:					
Item Total:	**$5,745,007**	**$16,437**			

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Office of Work Program and Budget

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Five Year Work Program

Selection Criteria	
District 04	**2022-2026 AD**
St Lucie County	**Item Number:**439754-1

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: INTRASTATE INTERSTATE — District 04 - St Luci
Description: SR-9/I-95 NORTHBOUND AND SOUTHBOUND OFF-RAMPS AT MIDWAY RD.
Type of Work: INTERCHANGE - ADD LANES — View Scheduled
Item Number: 439754-1
Length: 0.460 — View Ma

Project Detail

Fiscal Year:	**2022**	**2023**	**2024**	**2025**	
Highways/Preliminary Engineering					***(O***
Amount:	$565				
Highways/Construction					
Amount:		$1,481,235			
Highways/Environmental					***(O***
Amount:					
Item Total:	**$565**	**$1,481,235**			

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Five Year Work Program

Selection Criteria	
District 04	**2022-2026 AD**
St Lucie County	**Item Number:**431752-3

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: NON-INTRASTATE OFF STATE HIWAY — District 04 - St Lucie
Description: PORT ST. LUCIE BLVD FROM BECKER ROAD TO PAAR DRIVE
Type of Work: ADD LANES & RECONSTRUCT — View Scheduled A
Item Number: 431752-3
Length: 1.119 — View Map

Project Detail

Fiscal Year:	2022	2023	2024	2025	
Highways/Preliminary Engineering					***(On-***
Amount:	$4,572				
Highways/Right of Way					
Amount:		$986,768			
Highways/Environmental					
Amount:	$100,000				
Item Total:	**$104,572**	**$986,768**			

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Office Home: Office of Work Program and Budget

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Five Year Work Program

Selection Criteria	
District 04	**2022-2026 AD**
St Lucie County	**Item Number:**231440-3

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: NON-INTRASTATE OFF STATE HIWAY — District 04 - St Lucie County
Description: W. MIDWAY RD/CR-712 FROM GLADES CUT OFF ROAD TO SELVITZ ROAD
Type of Work: ADD LANES & RECONSTRUCT — View Scheduled Activities
Item Number: 231440-3
Length: 1.577 — View Map of Item

Project Detail

Fiscal Year:	2022	2023	2024	2025	2026
Highways/PD & E					***(On-Going)***
Amount:	$39,093				
Highways/Preliminary Engineering					***(On-Going)***
Amount:	$37,927				
Highways/Right of Way					***(On-Going)***
Amount:	$52,722	$494,625	$973,875		
Highways/Railroad & Utilities					***(On-Going)***
Amount:					
Highways/Environmental					***(On-Going)***
Amount:	$21,895				
Item Total:	**$151,637**	**$494,625**	**$973,875**		

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Appendix D

Planned Improvements

Table 6-7: Cost Feasible Plan Funding Details – Roadway and Walk/Bike

		PD&E / PE ($ millions)				Right-Of-Way ($ millions)				Construction ($ millions)				Total ($millions)
Project #	Project Limits	PDC Cost	Source	Timing	YOE Cost	PDC Cost	Source	Timing	YOE Cost	PDC Cost	Source	Timing	YOE Cost	YOE Cost
State Roadways														
402a	Kings Hwy from N. of I-95 Overpass to St. Lucie Blvd	$2.92	OA	2021-2025	$3.82	$6.63	OA	2021-2025	$8.69	$11.44	OA	2021-2025	$14.99	$27.51
402b	Kings Hwy from St. Lucie Blvd to Indrio Rd	$3.87	OA	2021-2025	$5.08	$8.80	OA	2021-2025	$11.53	$15.19	OA	2026-2030	$23.39	$40.00
500	US 1 from Martin County to Indian River County, Operational Improvements									$5.15	OA	2021-2025	$6.75	$59.35
										$11.43	OA	2026-2030	$17.60	
										$17.77	OA	2031-2040	$35.00	
401	Kings Hwy from Indrio Rd to US 1	$4.19	Unfunded		$0.00	$9.52	Unfunded		$0.00	$21.89	Unfunded		$0.00	$0.00
	Congestion Management Program - State Roads									$3.37	OA	2021-2025	$4.41	$66.09
										$6.41	OA	2026-2030	$9.87	
										$26.30	OA	2031-2040	$51.81	
	Walk / Bike Improvements on State Roads	$0.61	OA	2026-2030	$0.94					$4.70	OA	2031-2040	$9.25	$10.19
Local Roads														
408	Port St. Lucie Blvd from Paar Dr. to Darwin Rd.		Completed			$0.37	Underway		$0.00	$12.60	TMA	2021-2025	$16.51	$17.80
										$0.98	OA	2021-2025	$1.29	
413	Midway Rd. from Glades Cut-Off Rd. to Selvitz Rd.	$2.15	Committed			$3.39	OA	2021-2025	$4.44	$9.58	TMA	2026-2030	$14.76	$24.05
										$3.16	OA	2026-2030	$4.86	
407	Port St. Lucie Blvd from Becker Rd to Paar Dr.	$1.14	TMA	2026-2030	$1.75	$4.12	TMA	2031-2040	$8.12	$1.48	TMA	2031-2040	$2.68	$29.36
		$0.68	OA	2026-2030	$1.04					$8.00	OA	2031-2040	$15.77	
414	St. Lucie West Blvd from E of I-95 to Cashmere Blvd	$3.01	Unfunded		$0.00	$6.84	Unfunded		$0.00	$15.73	Unfunded		$0.00	$0.00
450a	Jenkins Rd. from Midway Rd to Okeechobee Rd	$5.46	Unfunded		$0.00	$12.41	Unfunded		$0.00	$29.72	Unfunded		$0.00	$0.00
450c	Jenkins Rd from Angle Rd to St Lucie Blvd	$2.18	TMA	2031-2040	$4.30	$4.96	TMA	2031-2040	$9.77	$4.14	TMA	2031-2040	$8.15	$36.54
										$7.27	OA	2031-2040	$14.32	
404	Selvitz Rd from Glades Cut-Off Rd to Edwards Rd	$1.09	Unfunded		$0.00	$2.48	Unfunded		$0.00	$5.71	Unfunded		$0.00	$0.00
450b	Jenkins Rd from Okeechobee Rd to Angle Rd	$6.82	Unfunded		$0.00	$15.50	Unfunded		$0.00	$37.09	Unfunded		$0.00	$0.00
403	Glades Cut-Off Rd from Commerce Ctr Dr to Selvitz Rd	$8.25	Unfunded		$0.00	$18.74	Unfunded		$0.00	$43.11	Unfunded		$0.00	$0.00
2702	Airport Connector from I-95 to Kings Highway	$4.78	Unfunded		$0.00	$10.86	Unfunded		$0.00	$24.99	Unfunded		$0.00	$0.00
2703	North Mid-County Connector from Midway Rd to Florida's Turnpike	$15.33	Unfunded		$0.00	$34.85	Unfunded		$0.00	$80.16	Unfunded		$0.00	$0.00
415	Floresta Dr from South Bend Blvd to Port St Lucie Blvd	$0.94	Unfunded		$0.00	$2.13	Unfunded		$0.00	$4.89	Unfunded		$0.00	$0.00

		PD&E / PE ($ millions)				Right-Of-Way ($ millions)				Construction ($ millions)				Total ($millions)
Project #	Project Limits	PDC Cost	Source	Timing	YOE Cost	PDC Cost	Source	Timing	YOE Cost	PDC Cost	Source	Timing	YOE Cost	YOE Cost
428	Savona Blvd from Gatlin Blvd to California Blvd	$1.65	Unfunded		$0.00	$3.75	Unfunded		$0.00	$8.63	Unfunded		$0.00	$0.00
406	East Torino Pkwy from Cashmere Blvd to Midway Rd	$3.73	Unfunded		$0.00	$8.48	Unfunded		$0.00	$19.51	Unfunded		$0.00	$0.00
416	South Bend Blvd from Becker Rd to Floresta Dr	$6.40	Unfunded		$0.00	$14.54	Unfunded		$0.00	$33.44	Unfunded		$0.00	$0.00
405	California Blvd from Savona Blvd to St Lucie West Blvd	$4.63	Unfunded		$0.00	$10.51	Unfunded		$0.00	$24.18	Unfunded		$0.00	$0.00
500	Floresta Dr from Port St Lucie Blvd to Crosstown Parkway, Operational Improvements									$15.00	Unfunded		$0.00	$0.00
	Congestion Management Program- St Lucie County									$2.53	Unfunded		$0.00	$0.00
	Congestion Management Program - Port St. Lucie									$1.31	Unfunded		$0.00	$0.00
	Congestion Management Program - Fort Pierce									$1.31	Unfunded		$0.00	$0.00
	Pavement Management Program - St Lucie County									$23.49	Unfunded		$0.00	$0.00
	Pavement Management Program - Port St Lucie									$18.75	Unfunded		$0.00	$0.00
	Pavement Management Program - Fort Pierce									$4.66	Unfunded		$0.00	$0.00
	Walk / Bike Improvements on non-State Roads (illustrative projects in Table 6-4)	$0.37	TA	2021-2025	$0.49					$2.12	TA	2021-2025	$2.78	$13.08
		$0.32	TA	2026-2030	$0.49					$1.80	TA	2026-2030	$2.78	
		$0.50	TA	2031-2040	$0.98					$2.82	TA	2031-2040	$5.56	
Developer Roads														
2501	E-W-Road 6 from Shinn Rd to Glades Cut-Off Rd	$4.98		2031-2040	$9.82	$11.33		2031-2040	$22.31	$26.05		2031-2040	$51.32	$83.44
2502	Williams Rd from Shinn Rd to Mccarty Rd	$2.17		2031-2040	$4.27	$4.93		2031-2040	$9.71	$11.33		2031-2040	$22.32	$36.30
2503	Williams Ext from Mccarty Rd to Glades Cutoff Rd	$3.87		2031-2040	$7.63	$8.80		2031-2040	$17.34	$20.25		2031-2040	$39.89	$64.87
2504	Newell Rd from Shinn Rd to Arterial A	$5.50		2031-2040	$10.83	$12.49		2031-2040	$24.61	$28.73		2031-2040	$56.59	$92.03
2505	Range Line Rd from Glades Cut-Off Rd to Midway Rd	$5.54		2031-2040	$10.92	$12.60		2031-2040	$24.82	$28.98		2031-2040	$57.08	$92.82
2506	Shinn Rd from Midway Rd to Glades Cut-Off Rd	$5.03		2031-2040	$9.91	$11.44		2031-2040	$22.53	$26.30		2031-2040	$51.82	$84.26
2507	Mccarty Rd from Williams Rd to Midway Rd	$1.92		2031-2040	$3.78	$4.36		2031-2040	$8.59	$10.03		2031-2040	$19.75	$32.12
2508	Mccarty Rd from Glades Cut-Off Rd to Williams Rd	$4.27		2031-2040	$8.42	$9.71		2031-2040	$19.13	$22.33		2031-2040	$43.99	$71.53
2509	Arterial A from Glades Cut-Off Rd to Midway Rd	$5.05		2031-2040	$9.95	$11.48		2031-2040	$22.61	$26.40		2031-2040	$52.01	$84.57
2601	Becker Rd from Village Pkwy to Range Line Rd	$9.20		2031-2040	$18.12	$20.90		2031-2040	$41.18	$48.07		2031-2040	$94.70	$154.00
2602	Paar Dr (West) from Village Pkwy to Range Line Rd	$9.17		2031-2040	$18.07	$20.85		2031-2040	$41.08	$47.96		2031-2040	$94.48	$153.63
2603	Open View Dr (West) from Village Pkwy to Range Line Rd	$8.49		2031-2040	$16.72	$19.29		2031-2040	$38.00	$44.36		2031-2040	$87.40	$142.12

		PD&E / PE ($ millions)				Right-Of-Way ($ millions)				Construction ($ millions)				Total ($millions)
Project #	Project Limits	PDC Cost	Source	Timing	YOE Cost	PDC Cost	Source	Timing	YOE Cost	PDC Cost	Source	Timing	YOE Cost	YOE Cost
2604	E-W Road 2 from Village Pkwy to N-S Road A	$5.77		2031-2040	$11.36	$13.11		2031-2040	$25.83	$30.15		2031-2040	$59.40	$96.59
2605	Discovery Way from Village Pkwy to Community Blvd	$0.41		2031-2040	$0.82	$0.94		2031-2040	$1.86	$2.17		2031-2040	$4.27	$6.95
2606	Discovery Way from Community Blvd to Range Line Rd	$6.56		2031-2040	$12.93	$14.92		2031-2040	$29.39	$34.31		2031-2040	$67.60	$109.92
2607	Stony Creek Way from Range Line Rd to Tradition Pkwy	$3.62		2031-2040	$7.14	$8.23		2031-2040	$16.22	$18.94		2031-2040	$37.31	$60.66
2608	Tradition Pkwy from Range Line Rd to Stony Creek Way	$4.46		2031-2040	$8.79	$10.14		2031-2040	$19.98	$23.32		2031-2040	$45.95	$74.72
2609	Crosstown Pkwy from Range Line Rd to Village Pkwy	$5.86		2031-2040	$11.54	$13.32		2031-2040	$26.23	$30.63		2031-2040	$60.34	$98.11
2610	N-S Road A from Crosstown Pkwy to Becker Rd	$11.10		2031-2040	$21.86	$25.22		2031-2040	$49.68	$58.00		2031-2040	$114.26	$185.79
2611	N-S Road B from Becker Rd to Discovery Way	$6.06		2031-2040	$11.94	$13.77		2031-2040	$27.13	$31.68		2031-2040	$62.41	$101.48
2612	Community Blvd from Discovery Way to Becker Rd	$6.05		2031-2040	$11.92	$13.75		2031-2040	$27.09	$31.62		2031-2040	$62.30	$101.30
2701	Turnpike/I-95 Connector from Florida's Turnpike to I-95	$11.10		2031-2040	$21.86	$4.77		2031-2040	$9.39	$79.95		2031-2040	$157.51	$188.75

PDC: Present Day Costs *YOE: Year of Expenditure* *OA: Other Arterial* *TMA: Transportation Management Area* *TA: Transportation Alternatives*

Table 6-8: Cost Feasible Plan Funding Details – Transit

Transit Service Description	Service Start Year ($ millions)	Capital Cost ($ millions)	Operating Cost ($ millions)	Total Cost ($ millions)
Transit System				
Continue Existing Fixed-Route Service (Routes 1 through 6)	On-Going	$18.95	$45.72	$64.66
Continue Existing Paratransit Service (ADA and TD)	On-Going	$23.66	$97.74	$121.41
Lakewood Park - New Local Service	2015	$1.42	$5.71	$7.13
Bus Stop Infrastructure Upgrades	On-Going	$0.44	$0.00	$0.44
Existing Service Improvements				
Route 1 - Improve Frequency to 30 mins	2016	$0.61	$11.43	$12.03
Route 1 - Expand Service: 6:00AM to 8:00PM	2016	$0.00	$3.12	$3.12
Route 1 - Add Saturday Service	2016	$0.00	$2.33	$2.33
Route 2 - Expand Service: 6:00AM to 8:00PM	2016	$0.00	$1.56	$1.56
Route 2 - Add Saturday Service	2016	$0.00	$1.17	$1.17
Route 2 - Improve Frequency to 30 mins	2016	$0.61	$7.27	$7.88
Route 3 - Expand Service: 6:00AM to 8:00PM	2016	$0.00	$1.56	$1.56
Route 3 - Add Saturday Service	2016	$0.00	$1.17	$1.17
Route 3 - Improve Frequency to 30 mins	2016	$0.61	$7.27	$7.88
Expanded Paratransit Servcie (ADA and TD)	2016	$0.00	$3.32	$3.32
PSL Trolley - Combine with Route 5	Unfunded	$0.00	$0.00	$0.00
Route 5 - Extend to US 1	Unfunded	$0.00	$0.00	$0.00
New Service Expansion				
Ft. Pierce/PSL Express	Unfunded	$0.00	$0.00	$0.00
Midway Rd/Health Dept	Unfunded	$0.00	$0.00	$0.00
Tri-Rail Express Connection	Unfunded	$0.00	$0.00	$0.00
Sunrise Blvd/Lawnwood/IRSC	Unfunded	$0.00	$0.00	$0.00
I-95 Palm Beach Express	Unfunded	$0.00	$0.00	$0.00
Tradition Circulator	Unfunded	$0.00	$0.00	$0.00
Turnpike Palm Beach Express	Unfunded	$0.00	$0.00	$0.00
North Hutchinson Island	Unfunded	$0.00	$0.00	$0.00
South County Circulator	Unfunded	$0.00	$0.00	$0.00
Torino Flex	Unfunded	$0.00	$0.00	$0.00
New Administration & Operation Facility	Unfunded	$0.00	$0.00	$0.00

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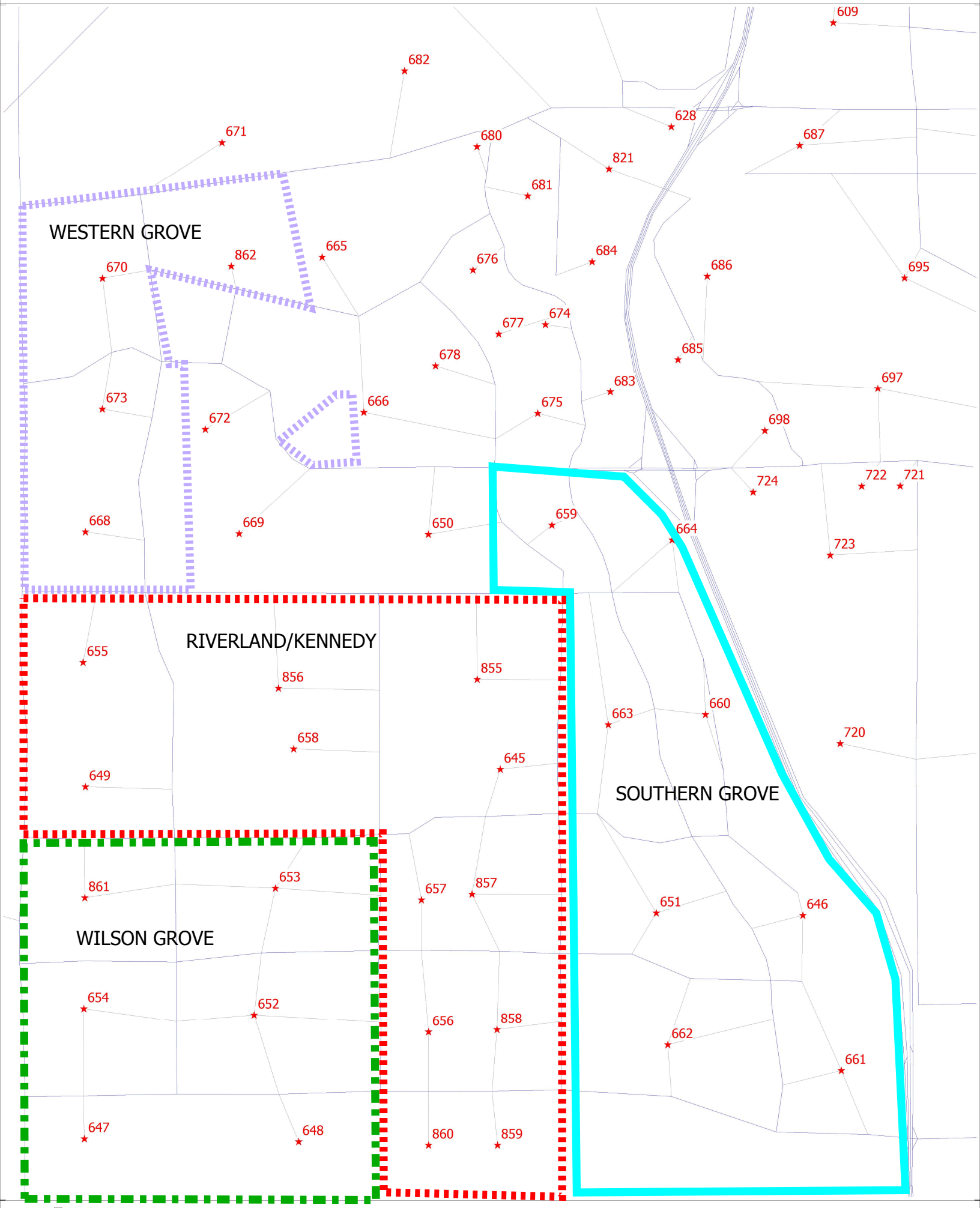
Appendix E

Traffic Analysis Zone Map

2040 TAZ MAP



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Appendix F

Western Annexation DRI Use and TAZ Numbers

Southern Grove DRI
PHASE 2 Land Use WITH GFC CHANGES

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	SF Age-Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	High School (Students)	Indepndnt Living Facility (Units)	ALF (Beds)
-	862	Western Grove	750															
-	862		150															
371	670		1,000					100,000	30,000				14,520					
372	673		1,400					0	0				14,520	25	1,600			
373	668		700										6,000					
374	858	Riverland	1,009	0	0		0	112,000	0			0	0	8	1,600	0		
400	656		0	374	0		0	208,668	0			101,781	171,327	54.5	0	2,500		
375	645		1,132	256	0		0	0	0			0	0	0	0	0		
379	855		1,020	300	0		0	0	0			0	0	10	0	0		
376	857		592	0	0		0	60,000	0			0	69,000	6.3	0	0		
399	657		700	350	0		0	60,000	0			0	0	0	0	0		
377	859		0	926	0		0	0	0			0	0	0	0	0		
378	658		1,209	0	0		0	20,000	0			0	0	0	0	0		
396	856		983	0	0		0	272,000	0			0	0	29	0	0		
380	655		550	0	0		0	0	0			0	0	11.0	0	0		
397	860		0	0	0		544,500	0	544,500			0	0	0	0	0		
398	649		1,000	0	0		0	0	0			0	0	29	0	0		
381	664	Southern Grove	-	-	0	393	-	43,725	410,540	225,000	300	0	9,212	0	0	0	0	0
382	659		173	1,484	0	0	-	96,000	39,060	-	0	0	9,212	0	0	0	0	0
383	662		1,859	-	0	0	-	-	-	-	0	0	0	40	0	0	0	0
384	661		-	800	0	67	1,280,000	542,000	50,000	150,000	0	0	0	0	0	0	415	150
385	646		-	300	0	0	1,225,000	31,500	25,000	25,000	0	0	0	0	0	0	0	0
386	651		-	-	940	0	-	-	-	-	0	0	0	25	0	0	0	0
387	660		-	900	0	100	1,195,000	12,535	125,400	100,000	0	0	0	0	0	0	0	0
388	663		364	-	439	0	-	250,720	-	-	0	0	36,000	15	1,600	0	0	0
389	647	Wilson Groves	1,294	425	0		0	40,000	0			0	0	0	0	0		
390	648		0	0	0		544,500	0	544,500			0	0	0	0	0		
392	654		977	0	0		0	120,000	0			0	50,638	0	0	0		
393	861		732	100	0		0	0	0			0	0	0	0	0		
394	653		800	100	0		0	120,000	0			0	0	0	0	0		
395	652		1,272	594	0		0	50,000	62,000			0	0	50	0	0		

DRI	Single Family (DU)	Multi Family (DU)	SF Age-Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	High School (Students)	Indepndnt Living Facility (Units)	ALF (Beds)
Western Grove	4,000	0	0	0	0	100,000	30,000	0	0	0	35,040	25	1,600	0	0	0
Riverland	8,195	2,206	0	0	544,500	732,668	544,500	0	0	101,781	240,327	148	1,600	2,500	0	0
Southern Grove	2,396	3,484	1,379	560	3,700,000	976,480	650,000	500,000	300	0	54,424	80	1,600	0	415	150
Wilson Groves	5,075	1,219	0	0	544,500	330,000	606,500	0	0	0	50,638	50	0	0	0	0

Southern Grove DRI
Phase 3 Land Use WITH GFC CHANGES

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	SF Age-Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	High School (Students)	Indepndnt Living Facility (Units)	ALF (Beds)
-	862	Western Grove	750															
-	862		150															
371	670		1,000					200,000	50,000				18,150					
372	673		1,400					0	0				36,300	25	1,600			
373	668		700															
374	858	Riverland	1,009		0		0	112,000	0			0	0	8	1,600	0		
400	656			500			0	208,668	0			101,781	171,327	54.5	0	2,500		
375	645		1,132	256	0		0	0	0			0	0		0	0		
379	855		1,020	300			0	0	0			0	0	10	0	0		
376	857		992		0		0	60,000	0			0	69,000	6.3	0	0		
399	657		700	350			0	60,000	0			0	0		0	0		
377	859			1,870			0	0	0			0	0		0	0		
378	658		1,209				0	20,000	0			0	0		0	0		
396	856		983				0	272,000	0			0	0	29	0	0		
380	655		550				0	160,000	0			0	87,000	35.3	0	0		
397	860						952,875	0	952,785			0	0		0	0		
398	649		829				0	0	0			0	0	29	0	0		
381	664	Southern Grove	-	-	0	393	-	43,725	460,540	275,000	300	0	10,000	0	0	0	0	0
382	659		173	1,484	0	0	-	96,000	39,060	-	0	0	20,000	0	0	0	0	0
383	662		1,859	-	0	0	-	150,000	-	-	0	0	15,000	40	1,600	0	0	0
384	661		-	800	0	147	1,867,349	542,000	50,000	150,000	0	0	0	0	0	0	415	150
385	646		-	300	0	0	1,693,256	40,000	25,000	25,000	0	16,771	10,000	0	0	0	0	0
386	651		-	-	940	0	-	100,000	-	-	0	0	33,519	25	0	0	0	0
387	660		-	900	0	100	1,519,512	12,535	125,400	100,000	0	0	10,000	0	0	0	0	0
388	663		364	-	439	0	-	250,720	-	-	0	8,386	65,000	15	1,600	0	0	0
389	647	Wilson Groves	1,294	550			0	80,000	0			0	0	35	0			
			1,272	214	0													
390	648		0	0		0	952,875	0	952,875			0	0		0			
392	654		977	0			0	120,000	0			0	101,277	0	0			
393	861		1,032	200	0		0	120,000	0			0	0		0			
394	653		1,200	200	0		0	120,000	0			0	54,450		0			
395	652		1,272	975			0	150,000	142,000			40,347	30,000	58	1,600			

DRI	Single Family (DU)	Multi Family (DU)	SF Age-Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	High School (Students)	Indepndnt Living Facility (Units)	ALF (Beds)
Western Grove	4,000	0	0	0	0	200,000	50,000	0	0	0	54,450	25	1,600	0	0	0
Riverland	8,424	3,276	0	0	952,875	892,668	952,785	0	0	101,781	327,327	172	1,600	2,500	0	0
Southern Grove	2,396	3,484	1,379	640	5,080,116	1,234,980	700,000	550,000	300	25,157	163,519	80	3,200	0	415	150
Wilson Groves	5,775	1,925	0	0	952,875	590,000	1,094,875	0	0	40,347	185,727	93	1,600	0	0	0

Southern Grove DRI
Buildout Land Use WITH GFC CHANGES

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	SF Age-Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	High School (Students)	Indepndnt Living Facility (Units)	ALF (Beds)
-	862	Western Grove	750															
-	862		150															
371	670		1,000					200,000	50,000				18,150					
372	673		1,400					0	0				36,300	25	1,600			
373	668		700															
374	858	Riverland	1,009		0			112,000	112,000			112,000	112,000	8	1,600			
400	656			500				208,668				101,781	171,327	54.5		2,500		
375	645		1,132	256											0			
379	855		0	0	1,250									10				
376	857		888		0			60,000					69,000	6.3				
399	657		700	350				60,000										
377	859			1,940														
378	658		687		522			20,000										
396	856				1,087			272,000						29				
380	655		550					160,000					87,000	35.3				
397	860						1,361,250		1,361,250									
398	649		829											29				
381	664	Southern Grove	-	-	0	393	-	43,725	920,443	826,557	300	0	36,000	0	0	0	0	0
382	659		173	1,484	0	0	-	96,000	39,060	-	0	0	46,046	0	0	0	0	0
383	662		1,859	-	0	0	-	330,800	-	-	0	0	46,046	40	1,600	0	0	0
384	661		-	800	0	458	2,625,000	642,000	150,000	150,000	0	0	0	0	0	0	415	150
385	646		-	300	0	0	3,325,000	81,500	75,000	75,000	0	27,952	12,000	0	0	0	0	0
386	651		-	-	940	0	-	192,720	-	-	0	0	46,065	25	0	0	0	0
387	660		-	900	0	200	2,795,000	194,000	225,400	150,000	0	0	10,064	0	0	0	0	0
388	663		364	-	439	0	-	250,720	-	-	0	13,975	80,129	15	1,600	0	0	0
389	647	Wilson Groves	1,294	550			0	80,000	0				0	35	0			
			1,272	214	0		0	0	0				0	8				
390	648		0	0		0	1,361,250		1,361,250			0	0	50				
392	654		977	0			0	120,000	0				101,277	0				
393	861		1,032	200	0		0	120,000	0				0	0				
394	653		1,200	200	0		0	120,000	0				54,450	0				
395	652		1,272	975				150,000	142,000			40,347	30,000	50	1,600			

DRI	Single Family (DU)	Multi Family (DU)	SF Age-Restricted (DU)	Hotel (Rooms)	Industrial (SF)	Commercial Retail (SF)	Service & Office (SF)	R&D (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	K-8 School (Students)	High School (Students)	Indepndnt Living Facility (Units)	ALF (Beds)
Western Grove	4,000	0	0	0	0	200,000	50,000	0	0	0	54,450	25	1,600	0	0	0
Riverland	8,424	3,276	0	0	1,361,250	892,668	1,473,250	0	0	213,781	439,327	172	1,600	2,500	0	0
Southern Grove	2,396	3,484	1,379	1,051	8,745,000	1,831,465	1,409,903	1,201,557	300	41,927	276,350	80	3,200	0	415	150
Wilson Groves	5,775	1,925	0	0	1,361,250	590,000	1,503,250	0	0	40,347	185,727	135	1,600	0	0	0

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Appendix G

Western Annexation DRI Trip Generation and Internal Capture

WATS TAZ	TCRPM TAZ
-	**862**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	750	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	6,704
Multi-Family Residential	150	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	915
Age-Restricted Single-Family		d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family		d.u.	[252]	T = 3.44*(X)	
Hotel		rooms	[310]	T = 8.92*(X)	
Industrial Park		s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail		s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office		s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	
Research & Development(1)		s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital		beds	[610]	T = 12.94*(X)	
Civic Use		s.f.	-	T = 54.51*(X/1000)	
Institutional Use		s.f.	-	T = 30.49*(X/1000)	
Park		acres	[412]	T = 2.28*(X)	
Elementary School		students	[520]	T = 1.29*(X)	
K-8 School		students	[522]	T = 1.62*(X)	
High School		students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	7,619
				Total Gross Residential Trips =	7,619
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	
				Internal Capture trips among TAZ =	

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =		trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**7,619**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	750	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	644	406	238
Multi-Family Residential	150	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	84	56	28
Age-Restricted Single-Family		d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family		d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel		rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park		s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail		s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)			
Service & Office[2]		s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[1]		s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital		beds	[610]	T = 1.42*(X); (33% in)			
Civic Use		s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use		s.f.	-	T = 3.05*(X/1000); (40% in)			
Park		acres	[412]	T = 0.09*(X); (61% in)			
Elementary School		students	[520]	T = 0.15*(X); (49% in)			
K-8 School		students	[522]	T = 0.16*(X); (49% in)			
High School		students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	728	462	266
				Total Gross Residential Trips =	728	462	266
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**728**	**462**	**266**

WATS TAZ	TCRPM TAZ
371	**670**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	1,000	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	8,735
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.44*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail	200,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	10,656
Service & Office	50,000	s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	775
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital	0	beds	[610]	T = 12.94*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	18,150	s.f.	-	T = 30.49*(X/1000)	553
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	20,719
				Total Gross Residential Trips =	8,735
				Total Gross Non-Residential Trips =	11,984
				Internal Capture % among TAZ =	13.86%
				Internal Capture trips among TAZ =	2,872

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	200,000	s.f.
External Trips from Matrix =	9,350	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,384	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,463**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,000	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	835	526	309
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail	200,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)	953	457	496
Service & Office[2]	50,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	75	13	62
Research & Development[1]	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital	0	beds	[610]	T = 1.42*(X); (33% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	18150	s.f.	-	T = 3.05*(X/1000); (40% in)	55	22	33
Park	0	acres	[412]	T = 0.09*(X); (61% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,918	1,018	900
				Total Gross Residential Trips =	835	526	309
				Total Gross Non-Residential Trips =	1,083	492	591
				Internal Capture % among TAZ =	13.97%	-	-
				Internal Capture trips among TAZ =	268	134	134

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	200,000	s.f.
External Trips from Matrix =	832	trips
Pass-By Percent =	34%	
Pass-By Reduction =	212	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,438**	**778**	**660**

WATS TAZ	TCRPM TAZ
372	**673**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	1,400	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	11,905
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.44*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	0
Service & Office	0	s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	0
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital	0	beds	[610]	T = 12.94*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	30,300	s.f.	-	T = 30.49*(X/1000)	924
Park	25	acres	[412]	T = 2.28*(X)	57
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	1,600	students	[522]	T = 1.62*(X)	2,592
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	15,478
				Total Gross Residential Trips =	11,905
				Total Gross Non-Residential Trips =	3,573
				Internal Capture % among TAZ =	9.11%
				Internal Capture trips among TAZ =	1,410

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**14,068**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,400	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	1,130	712	418
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)			
Service & Office[2]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[1]	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital	0	beds	[610]	T = 1.42*(X); (33% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	30300	s.f.	-	T = 3.05*(X/1000); (40% in)	92	37	55
Park	25	acres	[412]	T = 0.09*(X); (61% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	1600	students	[522]	T = 0.16*(X); (49% in)	256	125	131
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,480	875	605
				Total Gross Residential Trips =	1,130	712	418
				Total Gross Non-Residential Trips =	350	163	187
				Internal Capture % among TAZ =	8.51%	-	-
				Internal Capture trips among TAZ =	126	63	63

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,354**	**812**	**542**

WATS TAZ	TCRPM TAZ
373	**668**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	6,292
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.44*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	0
Service & Office	0	s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	0
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital	0	beds	[610]	T = 12.94*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	6,000	s.f.	-	T = 30.49*(X/1000)	183
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	6,475
				Total Gross Residential Trips =	6,292
				Total Gross Non-Residential Trips =	183
				Internal Capture % among TAZ =	1.11%
				Internal Capture trips among TAZ =	72

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**6,403**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	605	381	224
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital	0	beds	[610]	T = 1.42*(X); (33% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	6000	s.f.	-	T = 3.05*(X/1000); (40% in)	18	7	11
Park	0	acres	[412]	T = 0.09*(X); (61% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	623	388	235
				Total Gross Residential Trips =	605	381	224
				Total Gross Non-Residential Trips =	18	7	11
				Internal Capture % among TAZ =	0.96%	-	-
				Internal Capture trips among TAZ =	6	3	3

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**617**	**385**	**232**

WATS TAZ	TCRPM TAZ
374	**858**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,009	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,720
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	112,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,310
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	8	acres	[412]	T = 2.28*(X)	18
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	1,600	students	[522]	T = 1.62*(X)	2,592
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	18,640
				Total Gross Residential Trips =	8,720
				Total Gross Non-Residential Trips =	9,920
				Internal Capture % among TAZ =	13.11%
				Internal Capture trips among TAZ =	2,444

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	112,000	s.f.
External Trips from Matrix =	6,447	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,644	trips

NET NEW EXTERNAL DAILY TRIPS =	**14,552**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,009	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	841	530	311
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	112,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	686	336	350
Service & Office(2)	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	8	acres	[412]	T = 0.06*(X); (41% in)	0	0	0
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	1600	students	[522]	T = 0.16*(X); (49% in)	256	125	131
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,783	991	792
				Total Gross Residential Trips =	841	530	311
				Total Gross Non-Residential Trips =	942	461	481
				Internal Capture % among TAZ =	12.79%	-	-
				Internal Capture trips among TAZ =	228	114	114

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	112,000	s.f.
External Trips from Matrix =	604	trips
Pass-By Percent =	34%	
Pass-By Reduction =	154	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,401**	**800**	**601**

WATS TAZ	TCRPM TAZ
400	**656**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	500	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	2,609
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	208,668	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	10,954
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	101,781	s.f.	-	T = 54.51*(X/1000)	5,548
Institutional Use	171,327	s.f.	-	T = 30.49*(X/1000)	5,224
Park	55	acres	[412]	T = 2.28*(X)	124
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	24,459
				Total Gross Residential Trips =	2,609
				Total Gross Non-Residential Trips =	21,850
				Internal Capture % among TAZ =	10.41%
				Internal Capture trips among TAZ =	2,546

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	208,668	s.f.
External Trips from Matrix =	9,792	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,497	trips

NET NEW EXTERNAL DAILY TRIPS =	**19,416**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	500	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	225	151	74
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	208,668	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,041	510	531
Service & Office[2]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[1]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	101,781	s.f.	-	T = 5.45*(X/1000); (50% in)	555	278	277
Institutional Use	171,327	s.f.	-	T = 3.05*(X/1000); (40% in)	523	209	314
Park	55	acres	[412]	T = 0.06*(X); (41% in)	3	1	2
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,347	1,149	1,198
				Total Gross Residential Trips =	225	151	74
				Total Gross Non-Residential Trips =	2,122	998	1,124
				Internal Capture % among TAZ =	8.95%	-	-
				Internal Capture trips among TAZ =	210	105	105

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	208,668	s.f.
External Trips from Matrix =	942	trips
Pass-By Percent =	34%	
Pass-By Reduction =	240	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,897**	**924**	**973**

WATS TAZ	TCRPM TAZ
375	**645**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,132	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	9,693
Multi-Family Residential	256	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,457
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	11,150
				Total Gross Residential Trips =	11,150
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	0.00%
				Internal Capture trips among TAZ =	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**11,150**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,132	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	933	588	345
Multi-Family Residential	256	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	130	87	43
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,063	675	388
				Total Gross Residential Trips =	1,063	675	388
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,063**	**675**	**388**

WATS TAZ	TCRPM TAZ
379	**855**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,020	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,807
Multi-Family Residential	300	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,673
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	10	acres	[412]	T = 2.28*(X)	23
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	10,503
				Total Gross Residential Trips =	10,480
				Total Gross Non-Residential Trips =	23
				Internal Capture % among TAZ =	0.23%
				Internal Capture trips among TAZ =	24

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**10,479**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,020	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	850	536	314
Multi-Family Residential	300	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	148	99	49
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	10	acres	[412]	T = 0.06*(X); (41% in)	1	0	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	999	635	364
				Total Gross Residential Trips =	998	635	363
				Total Gross Non-Residential Trips =	1	0	1
				Internal Capture % among TAZ =	0.20%	-	-
				Internal Capture trips among TAZ =	2	1	1

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**997**	**634**	**363**

WATS TAZ	TCRPM TAZ
376	**857**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	592	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	5,339
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	4,872
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	69,000	s.f.	-	T = 30.49*(X/1000)	2,104
Park	6.3	acres	[412]	T = 2.28*(X)	14
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	12,329
				Total Gross Residential Trips =	5,339
				Total Gross Non-Residential Trips =	6,990
				Internal Capture % among TAZ =	11.37%
				Internal Capture trips among TAZ =	1,402

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	4,285	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,093	trips

NET NEW EXTERNAL DAILY TRIPS =	**9,834**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	592	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	521	328	193
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	452	221	231
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	69000	s.f.	-	T = 3.05*(X/1000); (40% in)	210	84	126
Park	6	acres	[412]	T = 0.06*(X); (41% in)	0	0	0
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,183	633	550
				Total Gross Residential Trips =	521	328	193
				Total Gross Non-Residential Trips =	662	305	357
				Internal Capture % among TAZ =	10.99%	-	-
				Internal Capture trips among TAZ =	130	65	65

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	398	trips
Pass-By Percent =	34%	
Pass-By Reduction =	102	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**951**	**517**	**434**

WATS TAZ	TCRPM TAZ
399	**657**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	6,229
Multi-Family Residential	350	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,913
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	4,872
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	13,014
				Total Gross Residential Trips =	8,142
				Total Gross Non-Residential Trips =	4,872
				Internal Capture % among TAZ =	7.48%
				Internal Capture trips among TAZ =	974

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	4,385	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,118	trips

NET NEW EXTERNAL DAILY TRIPS =	**10,922**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	605	381	224
Multi-Family Residential	350	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	168	113	55
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	452	221	231
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,225	715	510
				Total Gross Residential Trips =	773	494	279
				Total Gross Non-Residential Trips =	452	221	231
				Internal Capture % among TAZ =	7.35%	-	-
				Internal Capture trips among TAZ =	90	45	45

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	407	trips
Pass-By Percent =	34%	
Pass-By Reduction =	104	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,031**	**618**	**413**

WATS TAZ	TCRPM TAZ
377	**859**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	1,870	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	8,220
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	8,220
				Total Gross Residential Trips =	8,220
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	0.00%
				Internal Capture trips among TAZ =	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**8,220**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	1,870	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	664	445	219
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	664	445	219
				Total Gross Residential Trips =	664	445	219
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**664**	**445**	**219**

WATS TAZ	TCRPM TAZ
378	**658**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,209	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,298
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	20,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	2,386
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	12,684
				Total Gross Residential Trips =	10,298
				Total Gross Non-Residential Trips =	2,386
				Internal Capture % among TAZ =	3.75%
				Internal Capture trips among TAZ =	476

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	20,000	s.f.
External Trips from Matrix =	2,148	trips
Pass-By Percent =	34%	
Pass-By Reduction =	548	trips

NET NEW EXTERNAL DAILY TRIPS =	**11,660**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,209	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	990	624	366
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	20,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	216	106	110
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,206	730	476
				Total Gross Residential Trips =	990	624	366
				Total Gross Non-Residential Trips =	216	106	110
				Internal Capture % among TAZ =	3.65%	-	-
				Internal Capture trips among TAZ =	44	22	22

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	20,000	s.f.
External Trips from Matrix =	194	trips
Pass-By Percent =	34%	
Pass-By Reduction =	50	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,112**	**683**	**429**

WATS TAZ	TCRPM TAZ
396	**856**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	983	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,513
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	272,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	13,014
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	29	acres	[412]	T = 2.28*(X)	66
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	21,593
				Total Gross Residential Trips =	8,513
				Total Gross Non-Residential Trips =	13,080
				Internal Capture % among TAZ =	12.47%
				Internal Capture trips among TAZ =	2,692

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	272,000	s.f.
External Trips from Matrix =	11,702	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,984	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,917**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	983	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	822	518	304
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	272,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,244	610	634
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	29	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,068	1,129	939
				Total Gross Residential Trips =	822	518	304
				Total Gross Non-Residential Trips =	1,246	611	635
				Internal Capture % among TAZ =	12.28%	-	-
				Internal Capture trips among TAZ =	254	127	127

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	272,000	s.f.
External Trips from Matrix =	1,119	trips
Pass-By Percent =	34%	
Pass-By Reduction =	285	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,529**	**860**	**669**

WATS TAZ	TCRPM TAZ
380	**655**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	550	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	4,990
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	160,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	9,218
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	87,000	s.f.	-	T = 30.49*(X/1000)	2,653
Park	35.3	acres	[412]	T = 2.28*(X)	80
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	16,941
				Total Gross Residential Trips =	4,990
				Total Gross Non-Residential Trips =	11,951
				Internal Capture % among TAZ =	14.87%
				Internal Capture trips among TAZ =	2,520

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	160,000	s.f.
External Trips from Matrix =	8,100	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,066	trips

NET NEW EXTERNAL DAILY TRIPS =	**12,355**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	550	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	487	307	180
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	160,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	872	427	445
Service & Office(2)	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	87000	s.f.	-	T = 3.05*(X/1000); (40% in)	265	106	159
Park	35	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,626	841	785
				Total Gross Residential Trips =	487	307	180
				Total Gross Non-Residential Trips =	1,139	534	605
				Internal Capture % among TAZ =	14.39%	-	-
				Internal Capture trips among TAZ =	234	117	117

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	160,000	s.f.
External Trips from Matrix =	767	trips
Pass-By Percent =	34%	
Pass-By Reduction =	196	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,196**	**626**	**570**

WATS TAZ	TCRPM TAZ
397	**860**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	952,875	s.f.	[130]	T = 6.96*(X/1000)	6,632
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	952,785	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	7,568
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	14,200
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	14,200
				Internal Capture % among TAZ =	1.86%
				Internal Capture trips among TAZ =	264

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**13,936**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	952,875	s.f.	[130]	T = 0.86*(X/1000); (21% in)	819	172	647
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	952,785	s.f.	[710]	T = 1.12*(X/1000)+78.81; (17% in)	1,146	195	951
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,965	367	1,598
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	1,965	367	1,598
				Internal Capture % among TAZ =	0.71%	-	-
				Internal Capture trips among TAZ =	14	7	7

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,951**	**360**	**1,591**

WATS TAZ	TCRPM TAZ
398	**649**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,229	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,455
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	29	acres	[412]	T = 2.28*(X)	66
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	10,521
				Total Gross Residential Trips =	10,455
				Total Gross Non-Residential Trips =	66
				Internal Capture % among TAZ =	0.65%
				Internal Capture trips among TAZ =	68

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**10,453**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,229	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	1,005	633	372
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	29	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,007	634	373
				Total Gross Residential Trips =	1,005	633	372
				Total Gross Non-Residential Trips =	2	1	1
				Internal Capture % among TAZ =	0.40%	-	-
				Internal Capture trips among TAZ =	4	2	2

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,003**	**632**	**371**

WATS TAZ	TCRPM TAZ
389	**647**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,294	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,963
Multi-Family Residential	550	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	2,835
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	80,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	5,874
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	35	acres	[412]	T = 2.28*(X)	80
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	19,752
				Total Gross Residential Trips =	13,798
				Total Gross Non-Residential Trips =	5,954
				Internal Capture % among TAZ =	6.47%
				Internal Capture trips among TAZ =	1,278

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	80,000	s.f.
External Trips from Matrix =	5,275	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,345	trips

NET NEW EXTERNAL DAILY TRIPS =	**17,129**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,294	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	1,053	663	390
Multi-Family Residential	550	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	243	163	80
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	80,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	548	269	279
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	35	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,846	1,096	750
				Total Gross Residential Trips =	1,296	826	470
				Total Gross Non-Residential Trips =	550	270	280
				Internal Capture % among TAZ =	6.18%	-	-
				Internal Capture trips among TAZ =	114	57	57

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	80,000	s.f.
External Trips from Matrix =	493	trips
Pass-By Percent =	34%	
Pass-By Reduction =	126	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,606**	**976**	**630**

WATS TAZ	TCRPM TAZ
390	**648**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	952,875	s.f.	[130]	T = 6.96*(X/1000)	6,632
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	952,875	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	7,569
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	14,201
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	14,201
				Internal Capture % among TAZ =	1.86%
				Internal Capture trips among TAZ =	264

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**13,937**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	952,875	s.f.	[130]	T = 0.86*(X/1000); (21% in)	819	172	647
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	952,875	s.f.	[710]	T = 1.12*(X/1000)+78.81; (17% in)	1,146	195	951
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,965	367	1,598
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	1,965	367	1,598
				Internal Capture % among TAZ =	0.71%	-	-
				Internal Capture trips among TAZ =	14	7	7

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,951**	**360**	**1,591**

WATS TAZ	TCRPM TAZ
392	**654**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	977	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,465
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,645
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	101,277	s.f.	-	T = 30.49*(X/1000)	3,088
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	19,198
				Total Gross Residential Trips =	8,465
				Total Gross Non-Residential Trips =	10,733
				Internal Capture % among TAZ =	11.32%
				Internal Capture trips among TAZ =	2,174

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	6,729	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,716	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,308**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	977	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	817	515	302
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	719	352	367
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	101277	s.f.	-	T = 3.05*(X/1000); (40% in)	309	124	185
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,845	991	854
				Total Gross Residential Trips =	817	515	302
				Total Gross Non-Residential Trips =	1,028	476	552
				Internal Capture % among TAZ =	11.06%	-	-
				Internal Capture trips among TAZ =	204	102	102

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	633	trips
Pass-By Percent =	34%	
Pass-By Reduction =	162	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,479**	**808**	**671**

WATS TAZ	TCRPM TAZ
393	**861**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,032	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,903
Multi-Family Residential	200	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,176
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,645
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	17,724
				Total Gross Residential Trips =	10,079
				Total Gross Non-Residential Trips =	7,645
				Internal Capture % among TAZ =	8.63%
				Internal Capture trips among TAZ =	1,530

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	6,881	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,755	trips

NET NEW EXTERNAL DAILY TRIPS =	**14,439**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,032	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	859	541	318
Multi-Family Residential	200	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	106	71	35
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	719	352	367
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,684	964	720
				Total Gross Residential Trips =	965	612	353
				Total Gross Non-Residential Trips =	719	352	367
				Internal Capture % among TAZ =	8.55%	-	-
				Internal Capture trips among TAZ =	144	72	72

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	647	trips
Pass-By Percent =	34%	
Pass-By Reduction =	165	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,375**	**810**	**565**

WATS TAZ	TCRPM TAZ
394	**653**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,200	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,228
Multi-Family Residential	200	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,176
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,645
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	54,450	s.f.	-	T = 30.49*(X/1000)	1,660
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	20,709
				Total Gross Residential Trips =	11,404
				Total Gross Non-Residential Trips =	9,305
				Internal Capture % among TAZ =	11.06%
				Internal Capture trips among TAZ =	2,290

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	6,729	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,716	trips

NET NEW EXTERNAL DAILY TRIPS =	**16,703**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,200	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	983	619	364
Multi-Family Residential	200	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	106	71	35
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	719	352	367
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	54450	s.f.	-	T = 3.05*(X/1000); (40% in)	166	66	100
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,974	1,108	866
				Total Gross Residential Trips =	1,089	690	399
				Total Gross Non-Residential Trips =	885	418	467
				Internal Capture % among TAZ =	10.94%	-	-
				Internal Capture trips among TAZ =	216	108	108

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	633	trips
Pass-By Percent =	34%	
Pass-By Reduction =	162	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,596**	**919**	**677**

WATS TAZ	TCRPM TAZ
395	**652**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,272	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,791
Multi-Family Residential	975	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	4,664
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	150,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	8,839
Service & Office	142,000	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	1,748
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	40,347	s.f.	-	T = 54.51*(X/1000)	2,199
Institutional Use	30,000	s.f.	-	T = 30.49*(X/1000)	915
Park	58	acres	[412]	T = 2.28*(X)	132
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	1,600	students	[522]	T = 1.62*(X)	2,592
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	31,880
				Total Gross Residential Trips =	15,455
				Total Gross Non-Residential Trips =	16,425
				Internal Capture % among TAZ =	16.35%
				Internal Capture trips among TAZ =	5,214

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	150,000	s.f.
External Trips from Matrix =	7,322	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,867	trips

NET NEW EXTERNAL DAILY TRIPS =	**24,799**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,272	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	1,036	653	383
Multi-Family Residential	975	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	389	261	128
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	150,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	835	409	426
Service & Office[(2)]	142,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	212	36	176
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	40347	s.f.	-	T = 5.45*(X/1000); (50% in)	220	110	110
Institutional Use	30000	s.f.	-	T = 3.05*(X/1000); (40% in)	92	37	55
Park	58	acres	[412]	T = 0.06*(X); (41% in)	3	1	2
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	1600	students	[522]	T = 0.16*(X); (49% in)	256	125	131
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	3,043	1,632	1,411
				Total Gross Residential Trips =	1,425	914	511
				Total Gross Non-Residential Trips =	1,618	718	900
				Internal Capture % among TAZ =	14.99%	-	-
				Internal Capture trips among TAZ =	456	228	228

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

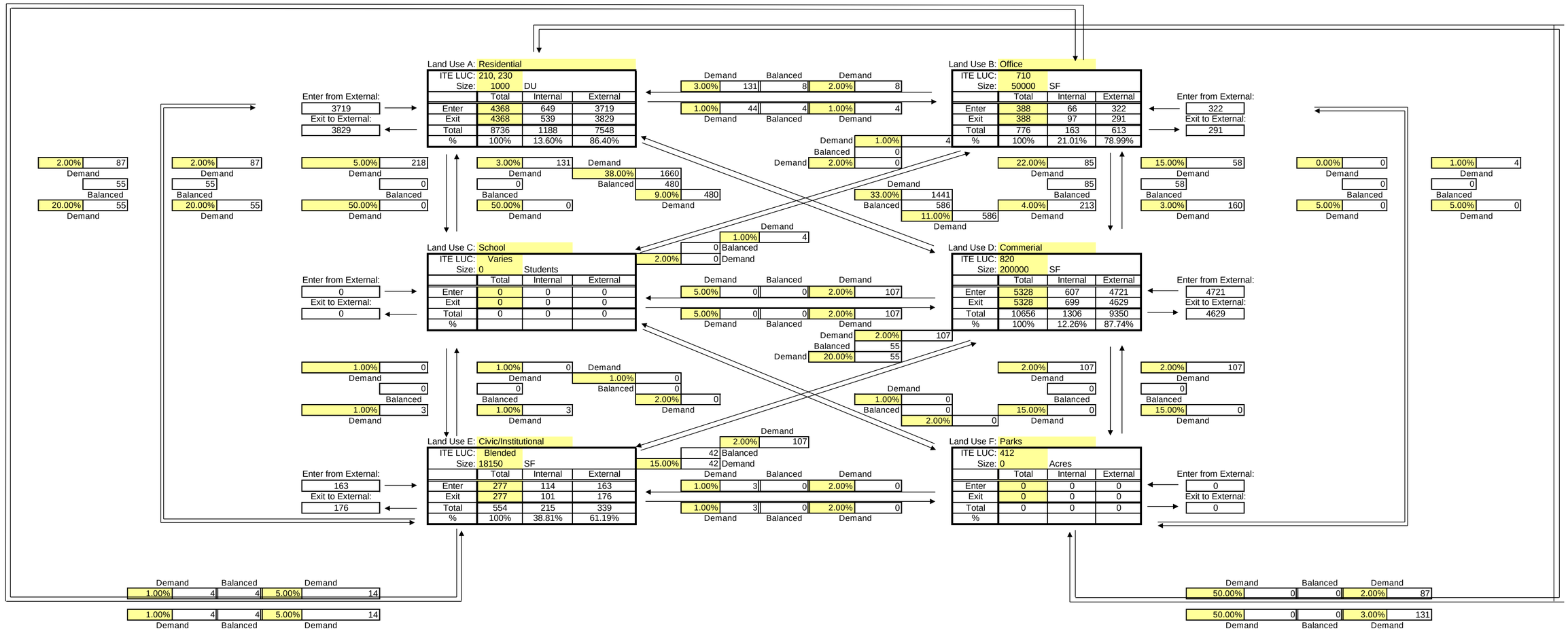
Commercial Retail Pass-By Calculation:		
Intensity =	150,000	s.f.
External Trips from Matrix =	700	trips
Pass-By Percent =	34%	
Pass-By Reduction =	179	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,408**	**1,315**	**1,093**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 670



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

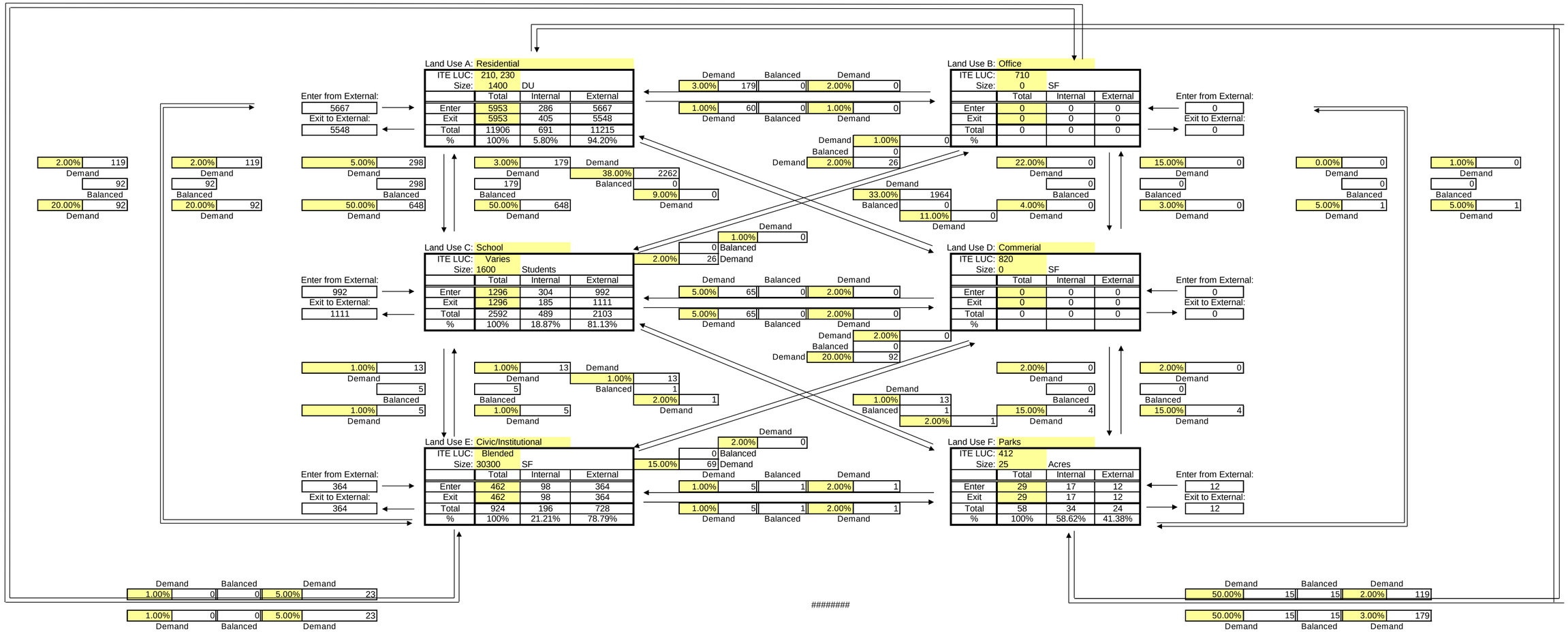
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3719	322	0	4721	163	0	8925
Exit	3829	291	0	4629	176	0	8925
Total	7548	613	0	9350	339	0	**17850**
Single Use Trip Gen Estimate	8736	776	0	10656	554	0	**20722**
	13.60%	21.01%	0.00%	12.26%	38.81%	0.00%	

Internal Capture = 13.86%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 673



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

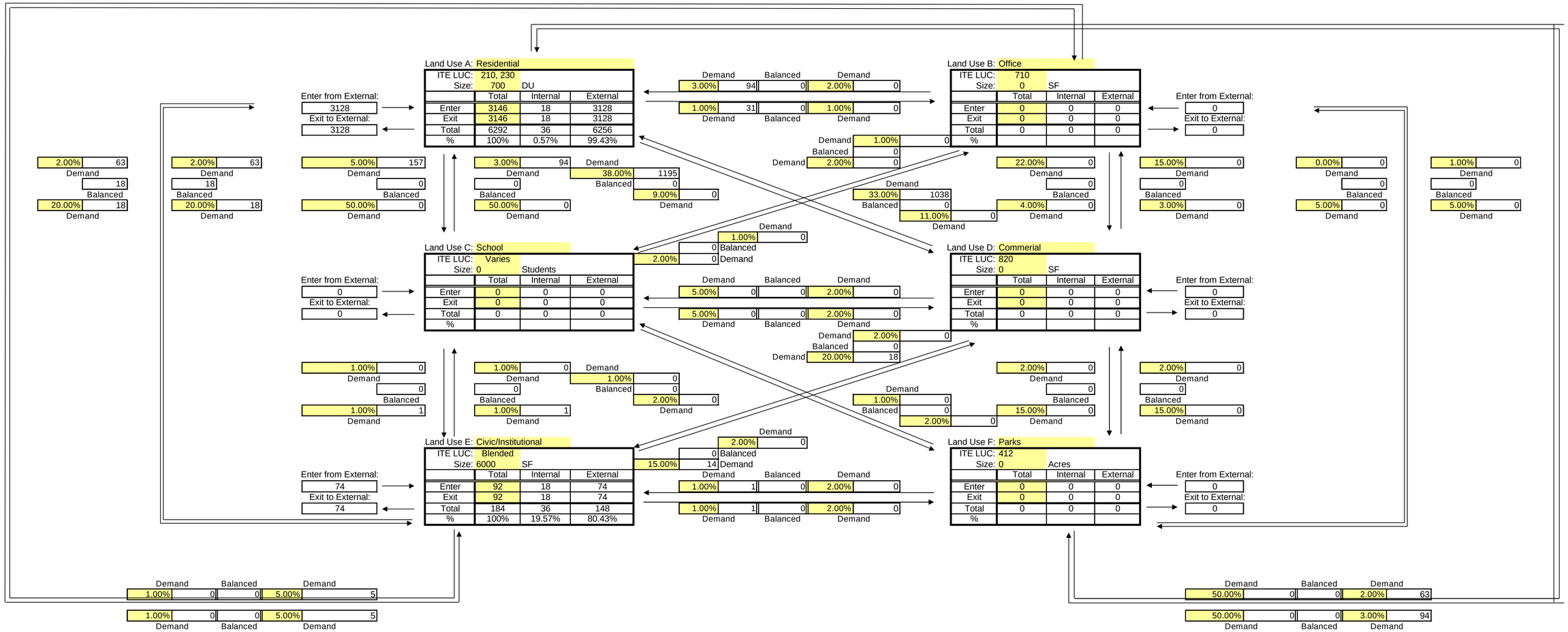
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5667	0	992	0	364	12	7035
Exit	5548	0	1111	0	364	12	7035
Total	11215	0	2103	0	728	24	**14070**
Single Use Trip Gen Estimate	11906	0	2592	0	924	58	**15480**
	5.80%	0.00%	18.87%	0.00%	21.21%	58.62%	

Internal Capture = 9.11%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 668



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

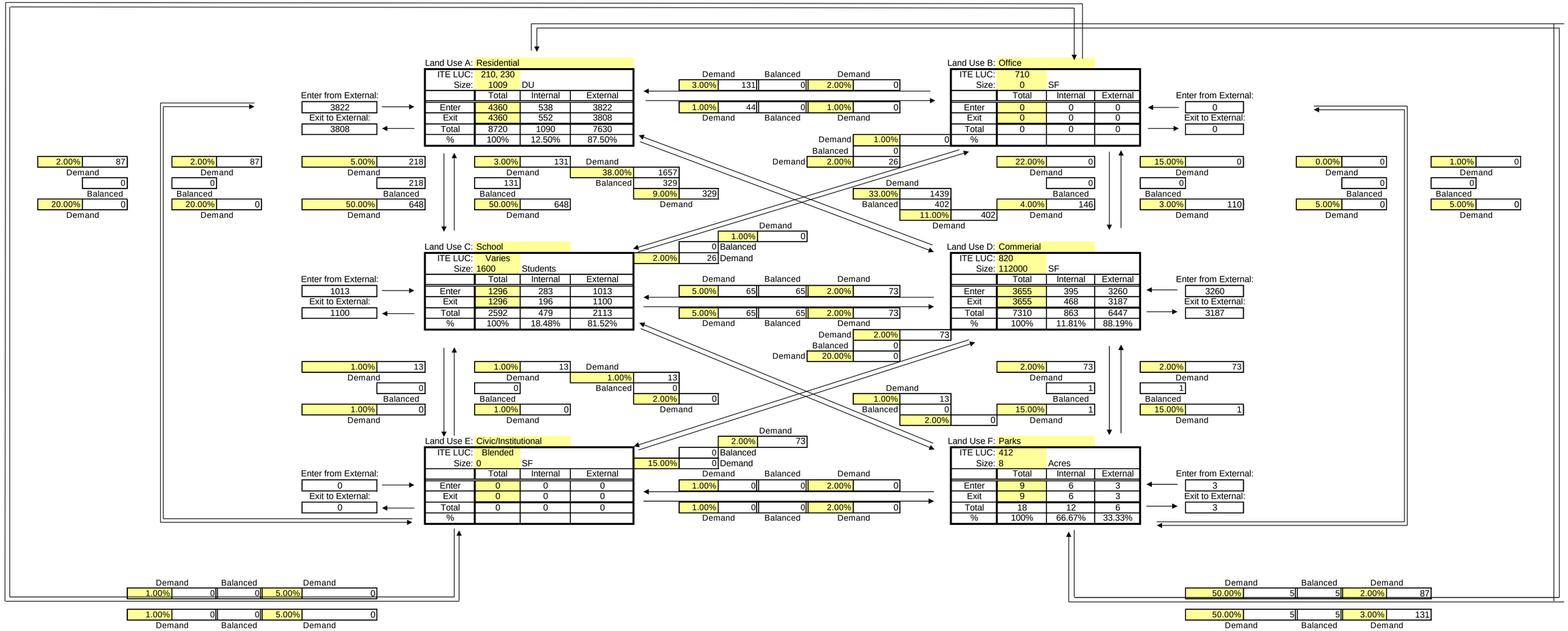
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3128	0	0	0	74	0	3202
Exit	3128	0	0	0	74	0	3202
Total	6256	0	0	0	148	0	**6404**
Single Use Trip Gen Estimate	6292	0	0	0	184	0	**6476**
	0.57%	0.00%	0.00%	0.00%	19.57%	0.00%	

Internal Capture = 1.11%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 858



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

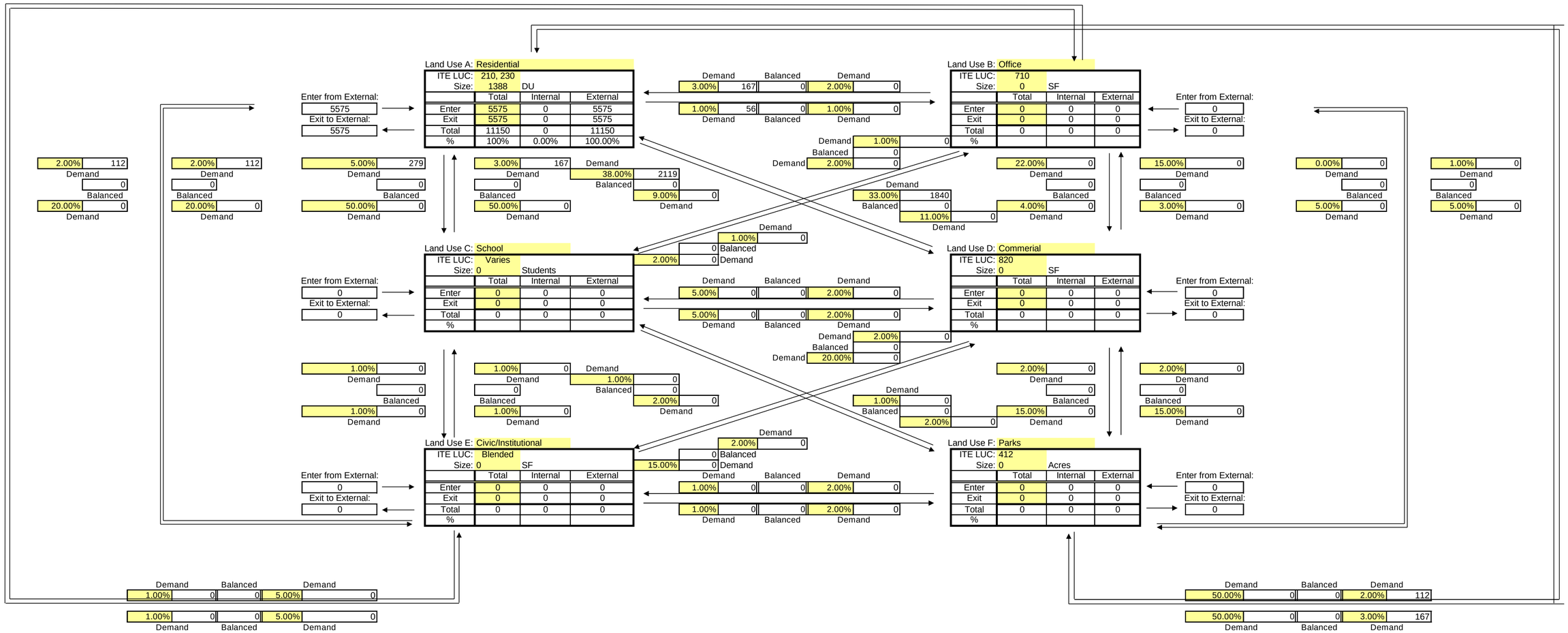
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3822	0	1013	3260	0	3	8098
Exit	3808	0	1100	3187	0	3	8098
Total	7630	0	2113	6447	0	6	**16196**
Single Use Trip Gen Estimate	8720	0	2592	7310	0	18	**18640**
	12.50%	0.00%	18.48%	11.81%	0.00%	66.67%	

Internal Capture = 13.11%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 645



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

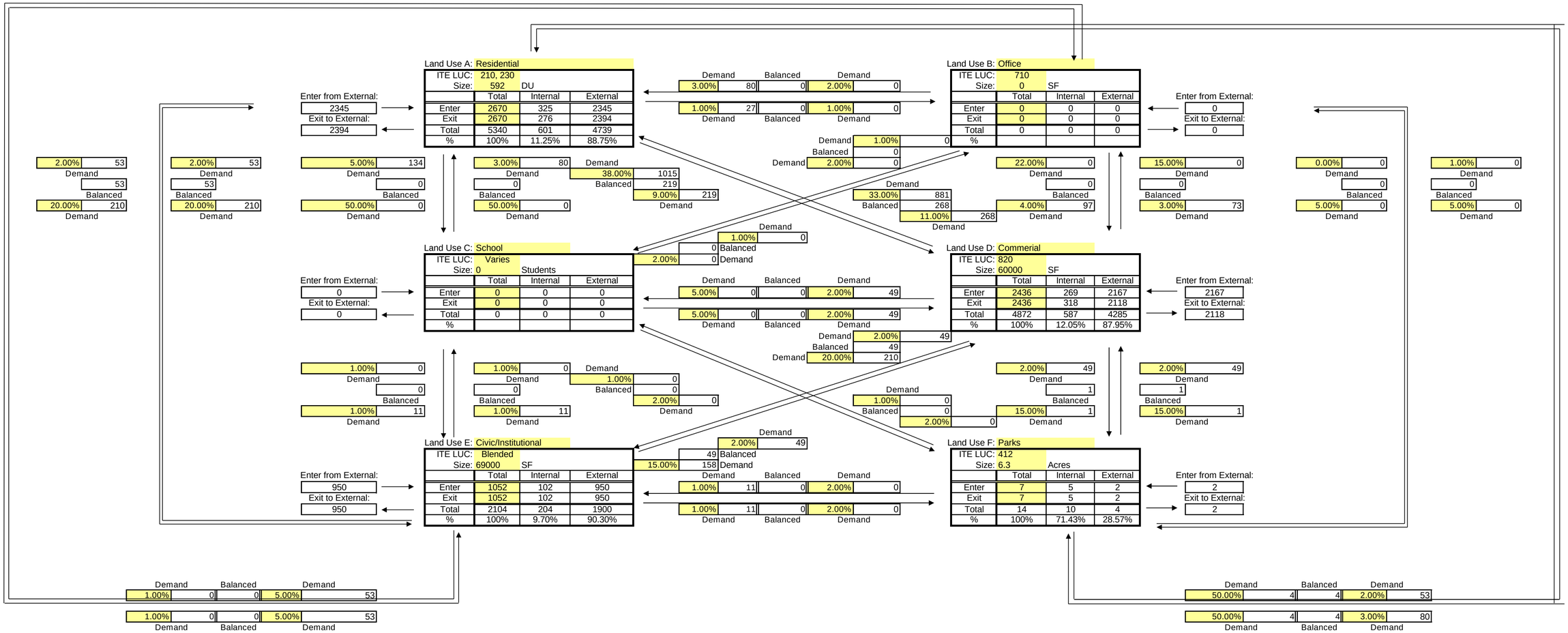
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5575	0	0	0	0	0	5575
Exit	5575	0	0	0	0	0	5575
Total	11150	0	0	0	0	0	**11150**
Single Use Trip Gen Estimate	11150	0	0	0	0	0	**11150**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 857



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

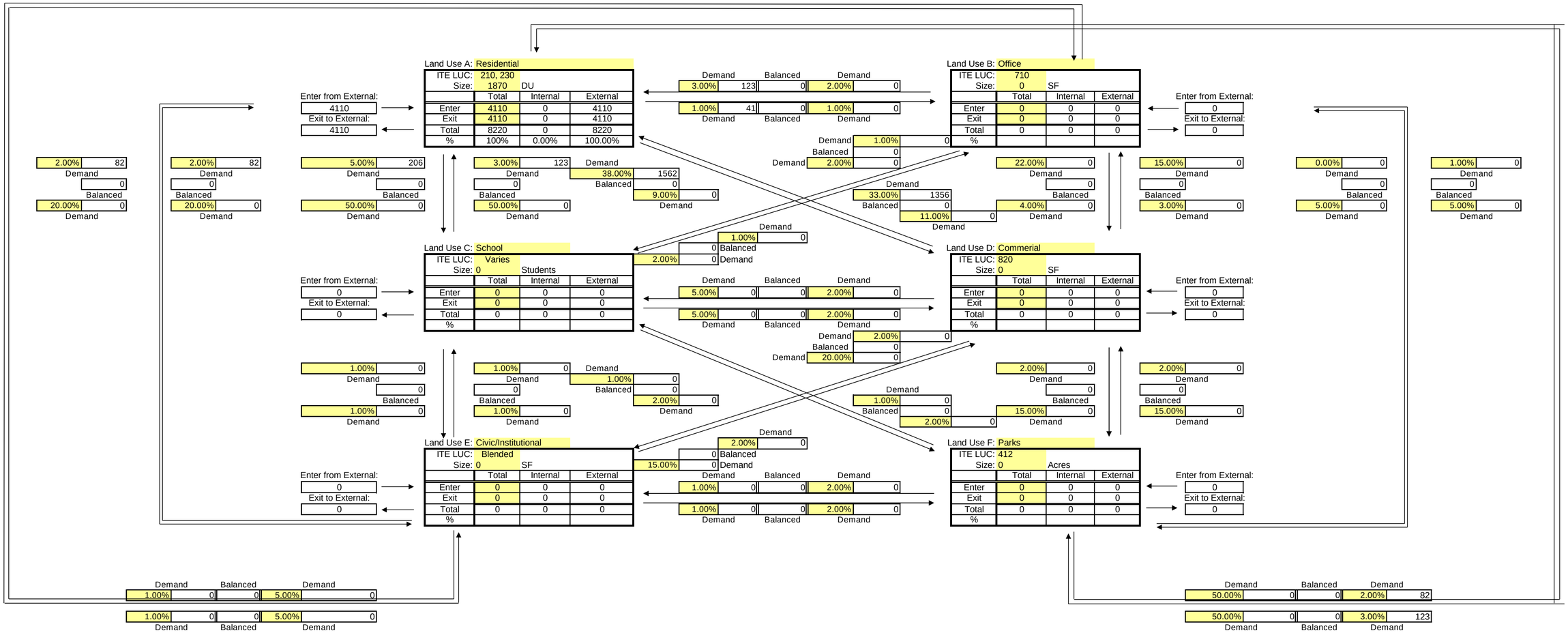
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2345	0	0	2167	950	2	5464
Exit	2394	0	0	2118	950	2	5464
Total	4739	0	0	4285	1900	4	**10928**
Single Use Trip Gen Estimate	5340	0	0	4872	2104	14	**12330**
	11.25%	0.00%	0.00%	12.05%	9.70%	71.43%	

Internal Capture = 11.37%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 859



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

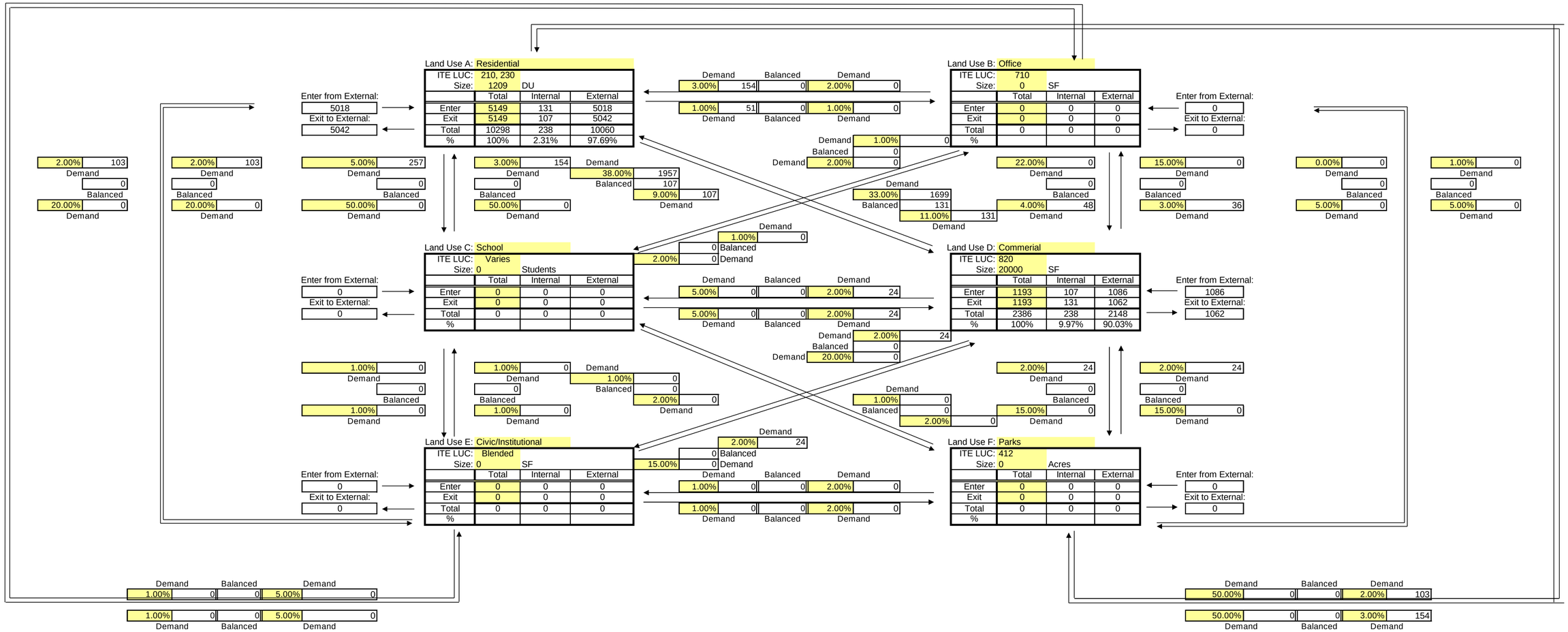
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	4110	0	0	0	0	0	4110
Exit	4110	0	0	0	0	0	4110
Total	8220	0	0	0	0	0	**8220**
Single Use Trip Gen Estimate	8220	0	0	0	0	0	**8220**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 658



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

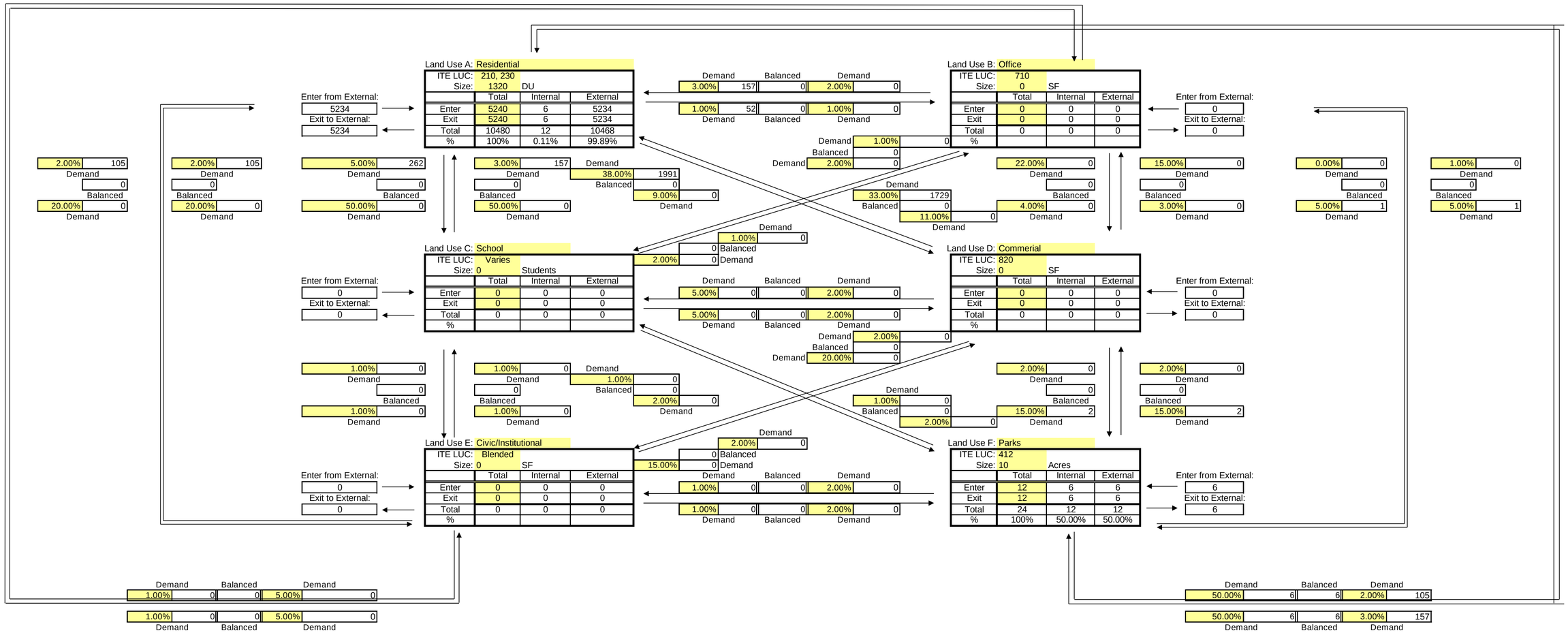
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5018	0	0	1086	0	0	6104
Exit	5042	0	0	1062	0	0	6104
Total	10060	0	0	2148	0	0	**12208**
Single Use Trip Gen Estimate	10298	0	0	2386	0	0	**12684**
	2.31%	0.00%	0.00%	9.97%	0.00%	0.00%	

Internal Capture = 3.75%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 855



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

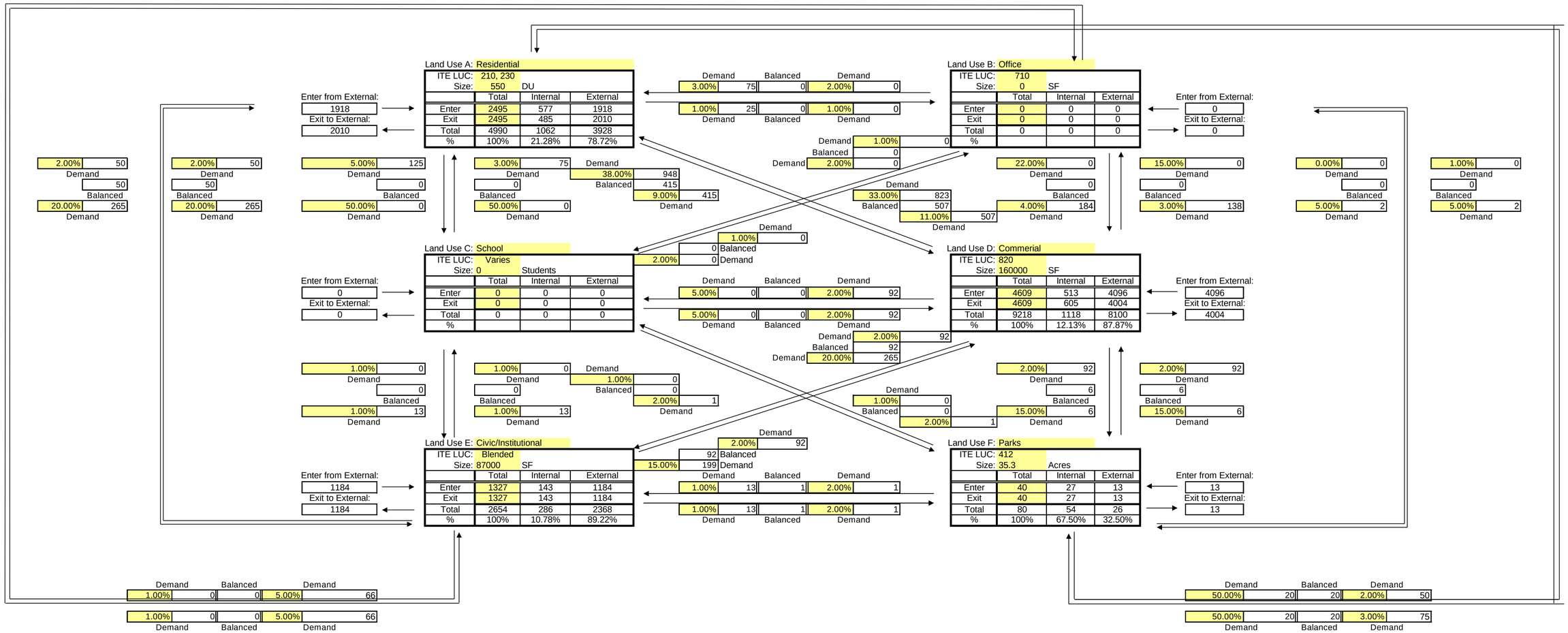
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5234	0	0	0	0	6	5240
Exit	5234	0	0	0	0	6	5240
Total	10468	0	0	0	0	12	**10480**
Single Use Trip Gen Estimate	10480	0	0	0	0	24	**10504**
	0.11%	0.00%	0.00%	0.00%	0.00%	50.00%	

Internal Capture = 0.23%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 655



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

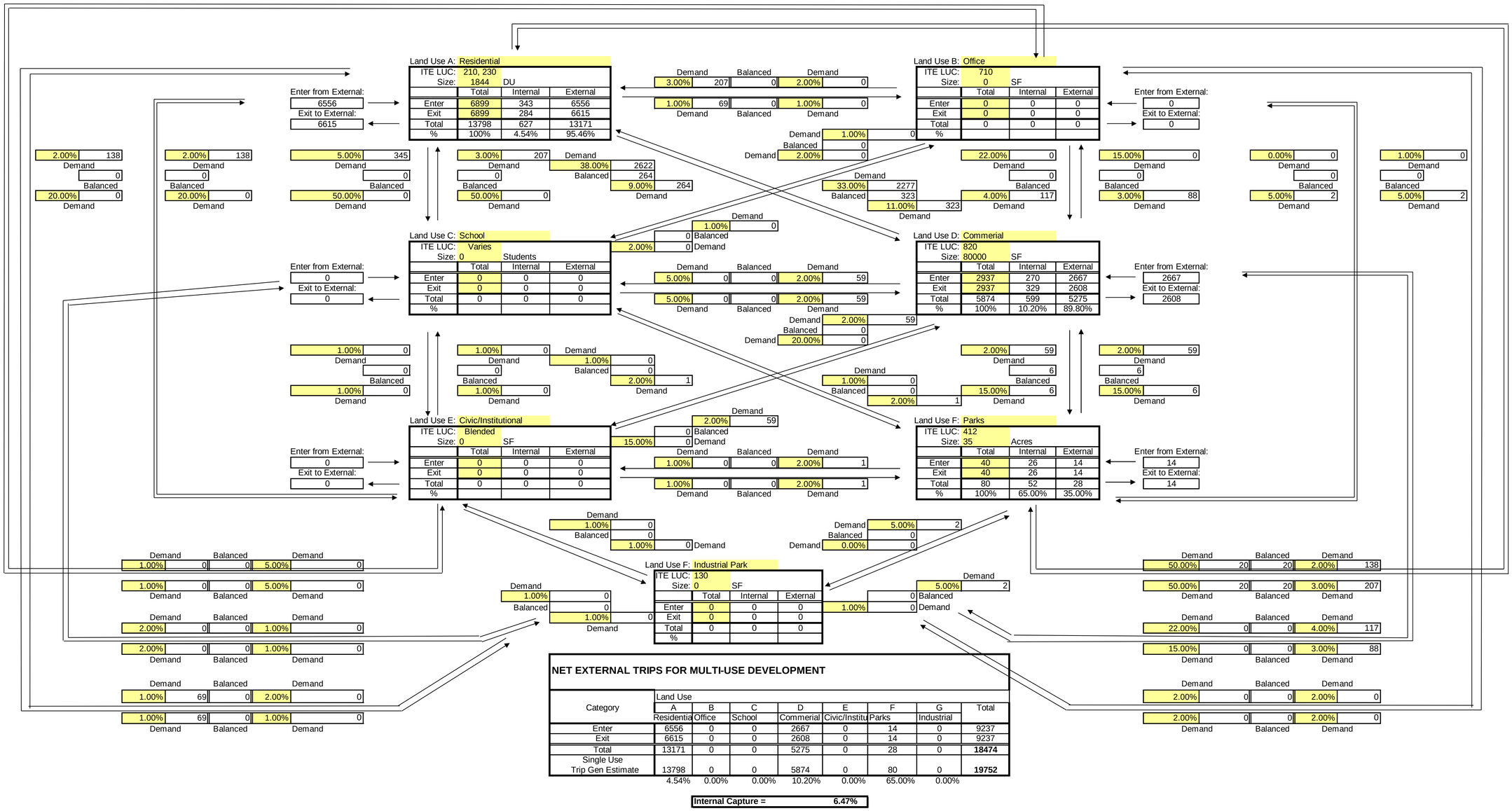
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1918	0	0	4096	1184	13	7211
Exit	2010	0	0	4004	1184	13	7211
Total	3928	0	0	8100	2368	26	**14422**
Single Use Trip Gen Estimate	4990	0	0	9218	2654	80	**16942**
	21.28%	0.00%	0.00%	12.13%	10.78%	67.50%	

Internal Capture = 14.87%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 647 POD C



Land Use A: Residential	Total	Internal	External
Enter	6899	343	6556
Exit	6899	284	6615
Total	13798	627	13171
%	100%	4.54%	95.46%

Land Use B: Office	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

Land Use C: School	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

Land Use D: Commerial	Total	Internal	External
Enter	2937	270	2667
Exit	2937	329	2608
Total	5874	599	5275
%	100%	10.20%	89.80%

Land Use E: Civic/Institutional	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

Land Use F: Parks	Total	Internal	External
Enter	40	26	14
Exit	40	26	14
Total	80	52	28
%	100%	65.00%	35.00%

Land Use F: Industrial Park	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

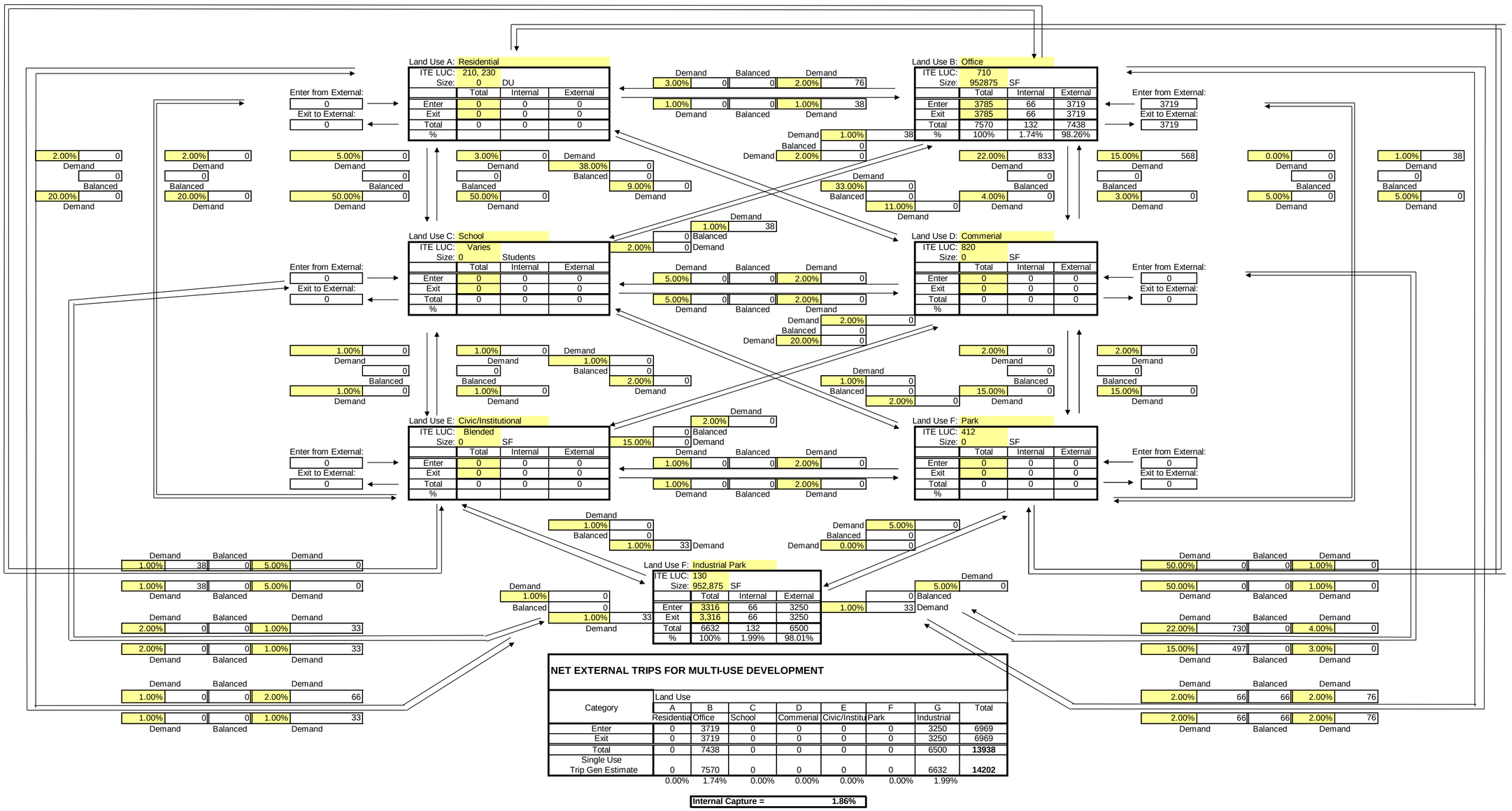
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	6556	0	0	2667	0	14	0	9237
Exit	6615	0	0	2608	0	14	0	9237
Total	13171	0	0	5275	0	28	0	**18474**
Single Use Trip Gen Estimate	13798	0	0	5874	0	80	0	**19752**
	4.54%	0.00%	0.00%	10.20%	0.00%	65.00%	0.00%	

Internal Capture = 6.47%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 648 POD A



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

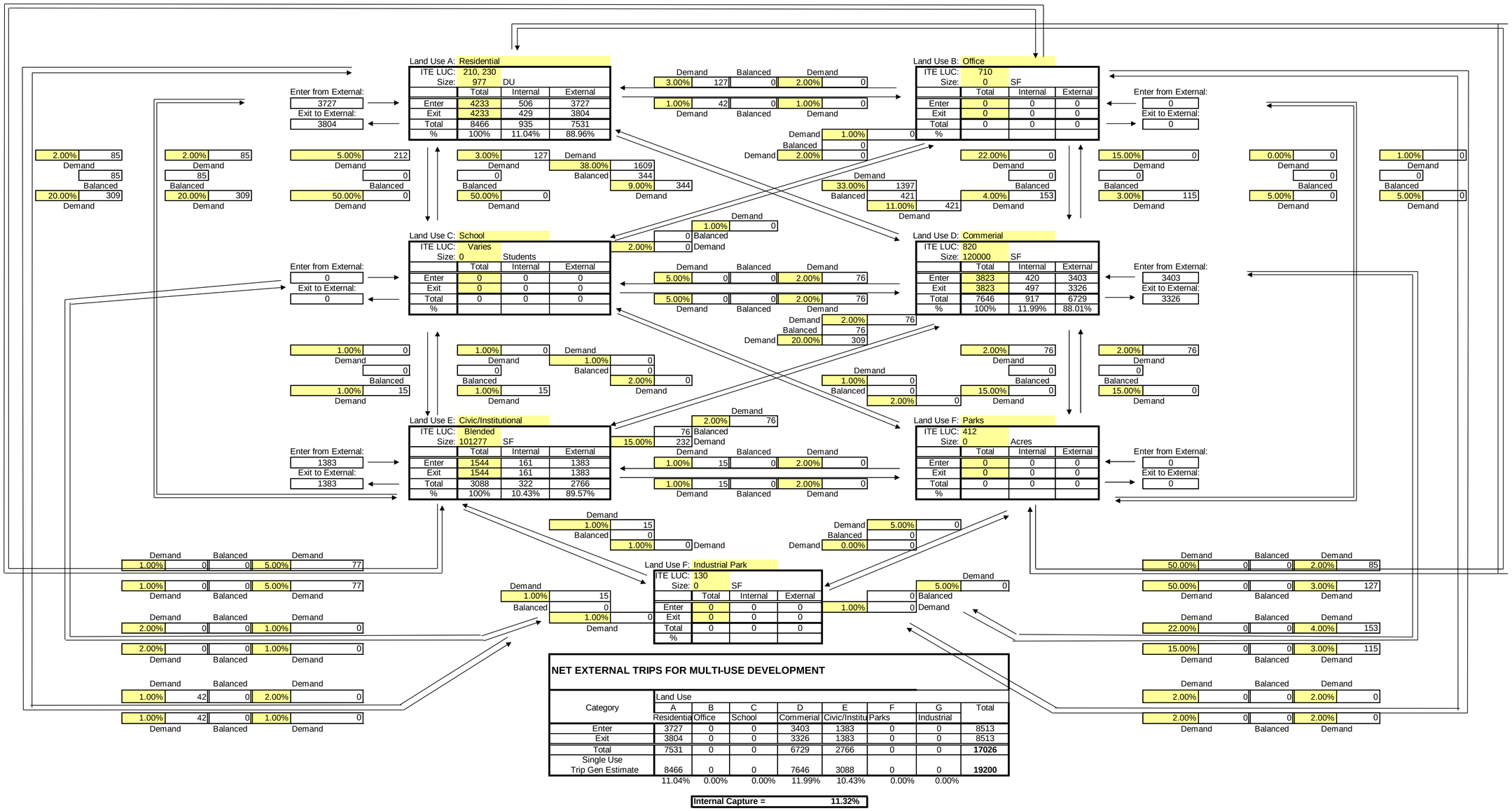
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	3719	0	0	0	0	3250	6969
Exit	0	3719	0	0	0	0	3250	6969
Total	0	7438	0	0	0	0	6500	**13938**
Single Use Trip Gen Estimate	0	7570	0	0	0	0	6632	**14202**
	0.00%	1.74%	0.00%	0.00%	0.00%	0.00%	1.99%	

Internal Capture = 1.86%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 654 POD D



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

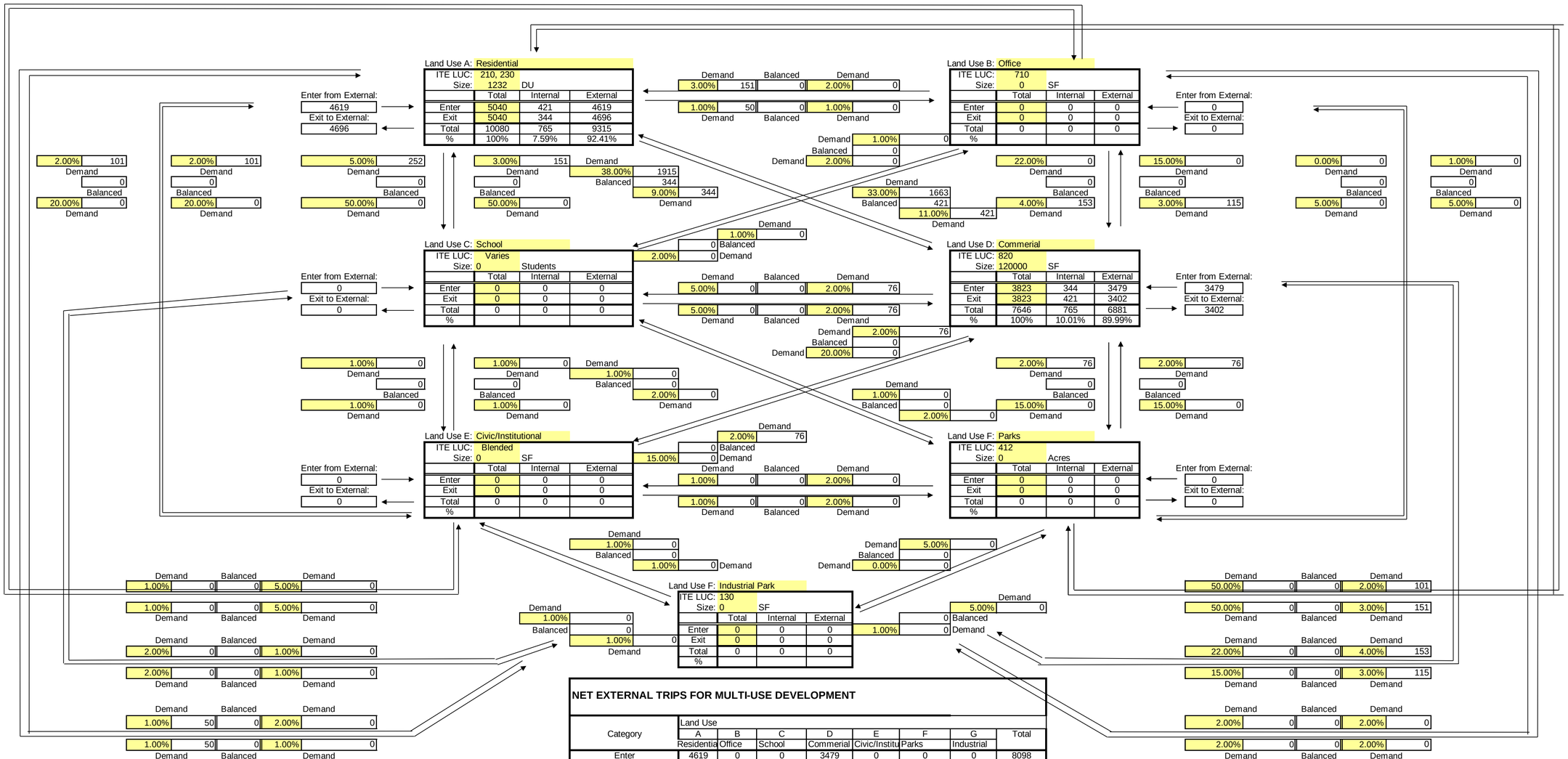
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	3727	0	0	3403	1383	0	0	8513
Exit	3804	0	0	3326	1383	0	0	8513
Total	7531	0	0	6729	2766	0	0	**17026**
Single Use Trip Gen Estimate	8466	0	0	7646	3088	0	0	**19200**
	11.04%	0.00%	0.00%	11.99%	10.43%	0.00%	0.00%	

Internal Capture = 11.32%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 861 POD F



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

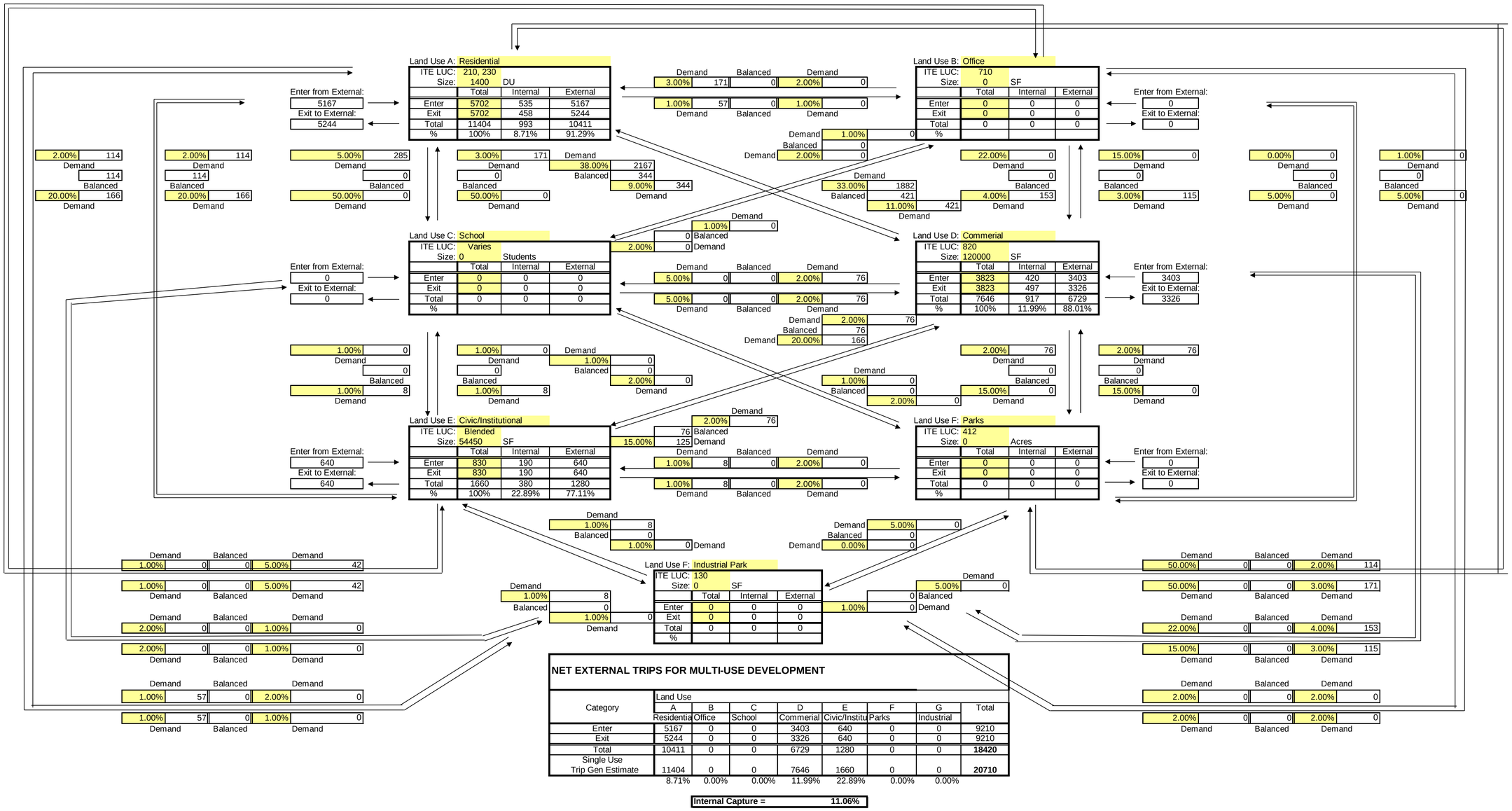
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	4619	0	0	3479	0	0	0	8098
Exit	4696	0	0	3402	0	0	0	8098
Total	9315	0	0	6881	0	0	0	**16196**
Single Use Trip Gen Estimate	10080	0	0	7646	0	0	0	**17726**
	7.59%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

Internal Capture = 8.63%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 653 POD E



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

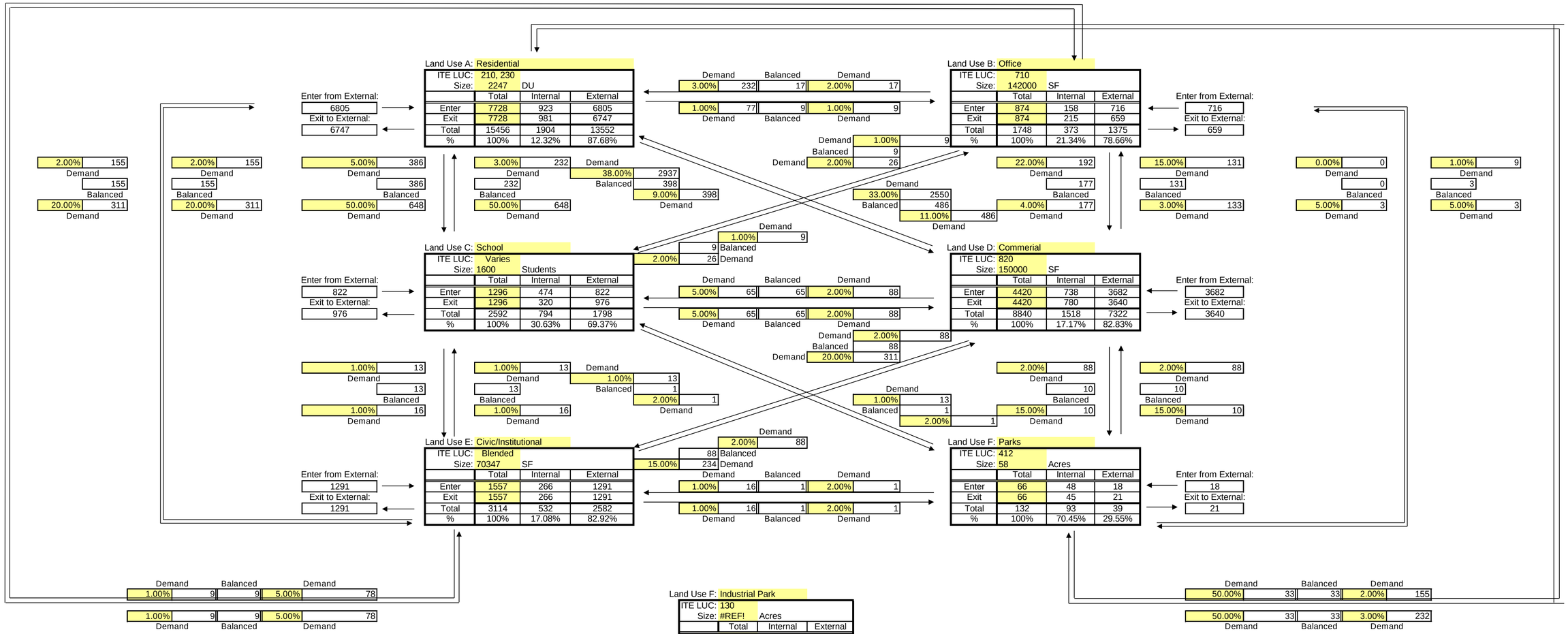
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	5167	0	0	3403	640	0	0	9210
Exit	5244	0	0	3326	640	0	0	9210
Total	10411	0	0	6729	1280	0	0	**18420**
Single Use Trip Gen Estimate	11404	0	0	7646	1660	0	0	**20710**
	8.71%	0.00%	0.00%	11.99%	22.89%	0.00%	0.00%	

Internal Capture = 11.06%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 652



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

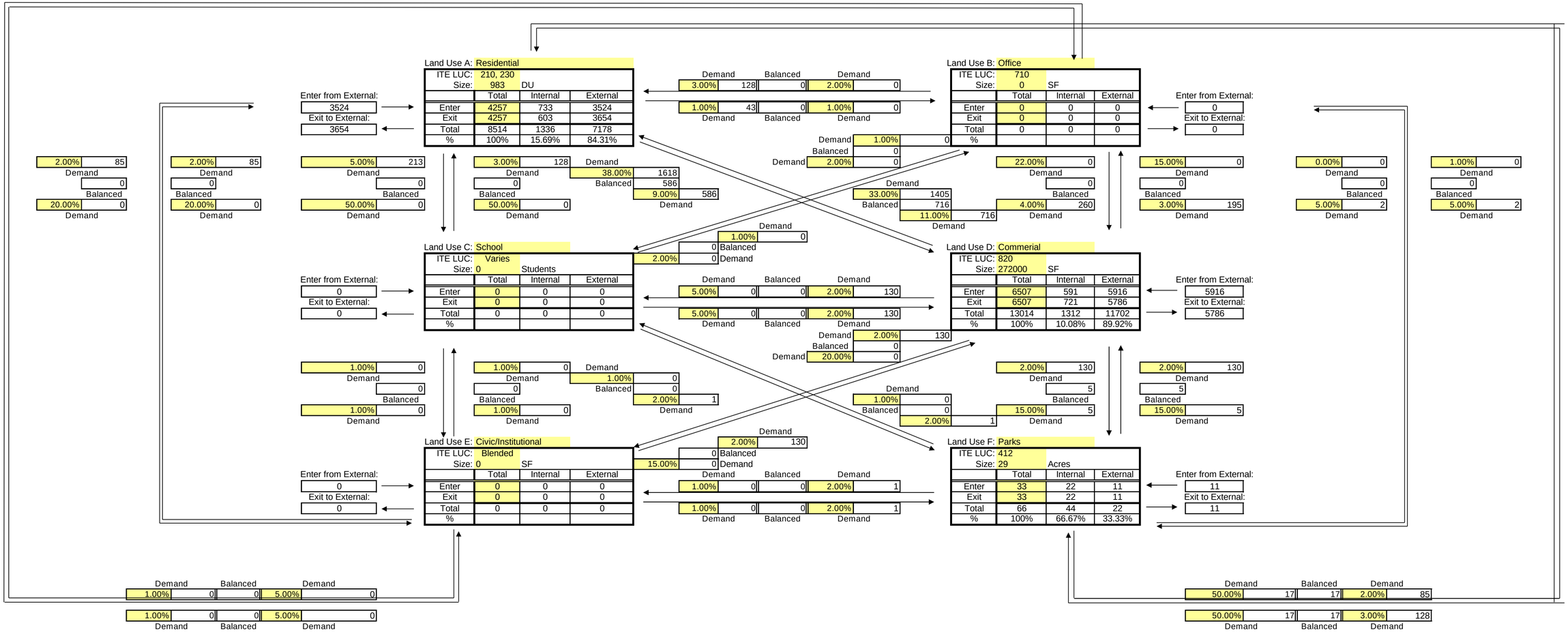
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	6805	716	822	3682	1291	18	13334
Exit	6747	659	976	3640	1291	21	13334
Total	13552	1375	1798	7322	2582	39	**26668**
Single Use Trip Gen Estimate	15456	1748	2592	8840	3114	132	**31882**
	12.32%	21.34%	30.63%	17.17%	17.08%	70.45%	

Internal Capture = 16.35%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 856



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

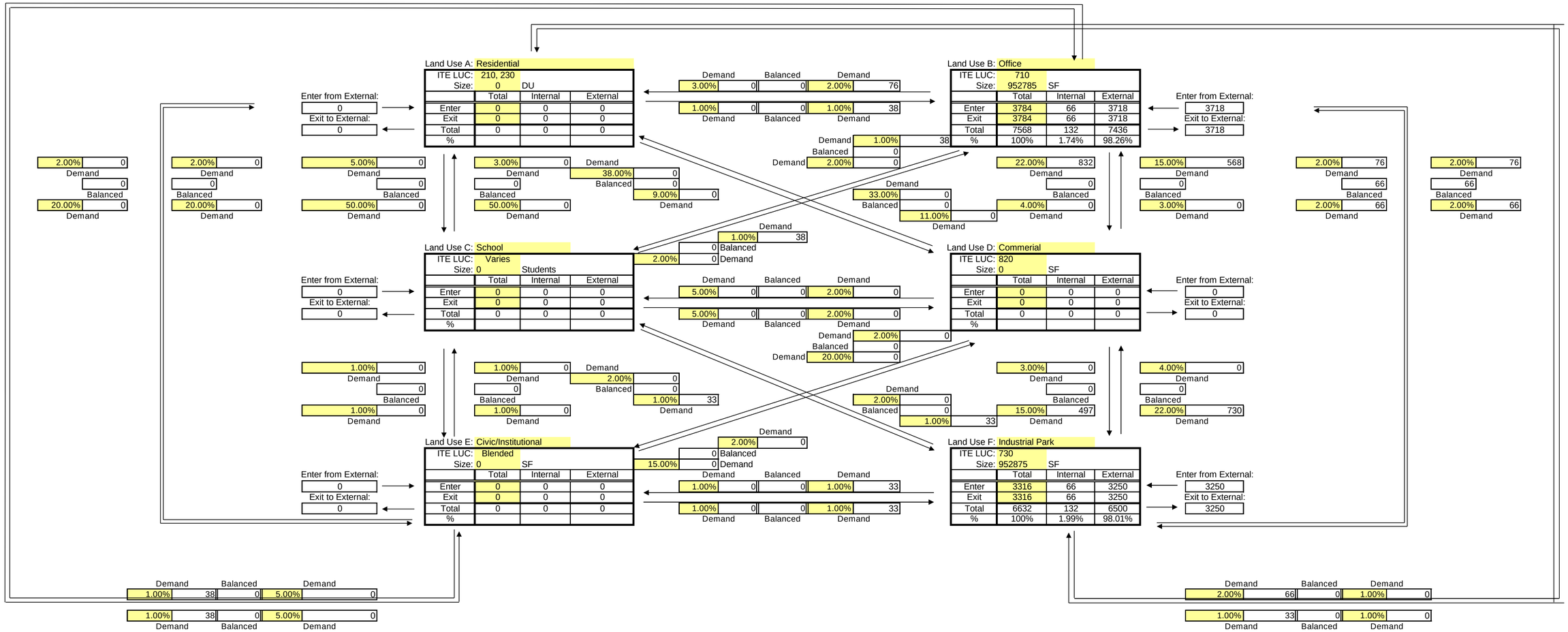
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3524	0	0	5916	0	11	9451
Exit	3654	0	0	5786	0	11	9451
Total	7178	0	0	11702	0	22	**18902**
Single Use Trip Gen Estimate	8514	0	0	13014	0	66	**21594**
	15.69%	0.00%	0.00%	10.08%	0.00%	66.67%	

Internal Capture = 12.47%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 860



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

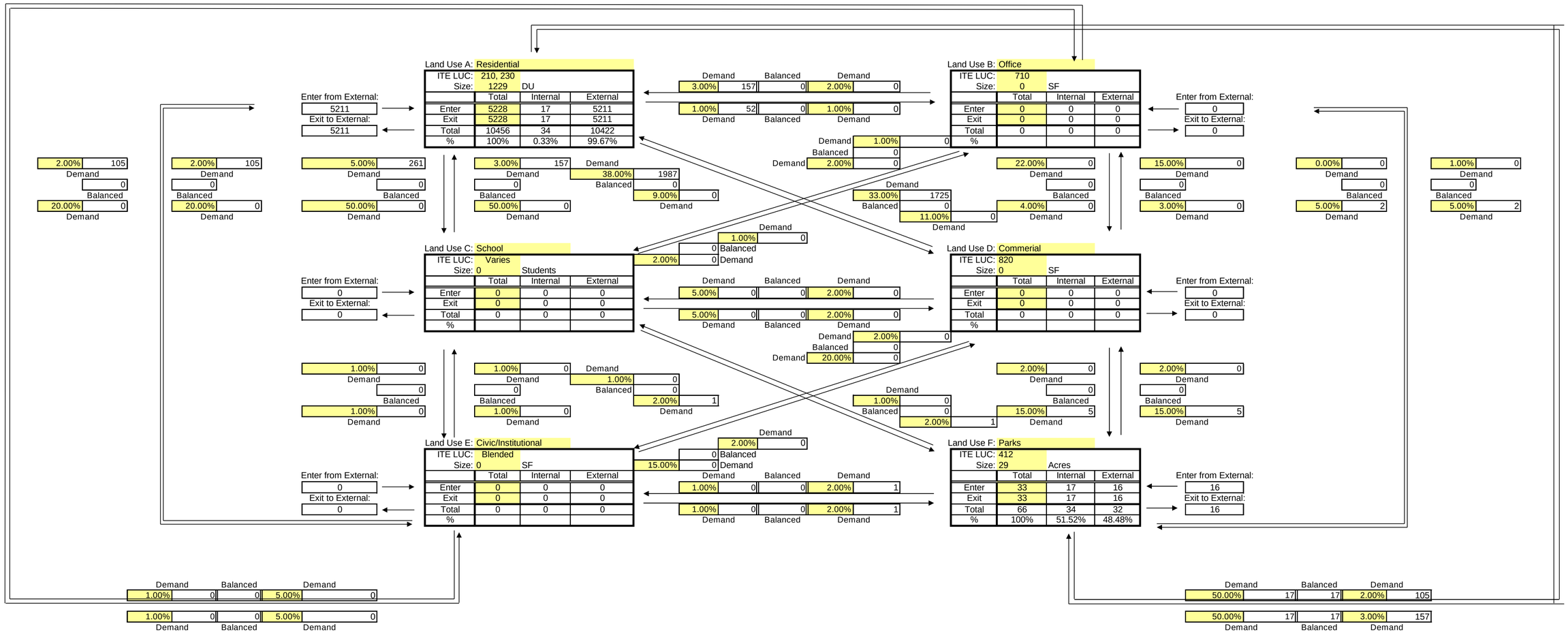
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	3718	0	0	0	3250	6968
Exit	0	3718	0	0	0	3250	6968
Total	0	7436	0	0	0	6500	**13936**
Single Use Trip Gen Estimate	0	7568	0	0	0	6632	**14200**
	0.00%	1.74%	0.00%	0.00%	0.00%	1.99%	

Internal Capture = 1.86%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 649



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

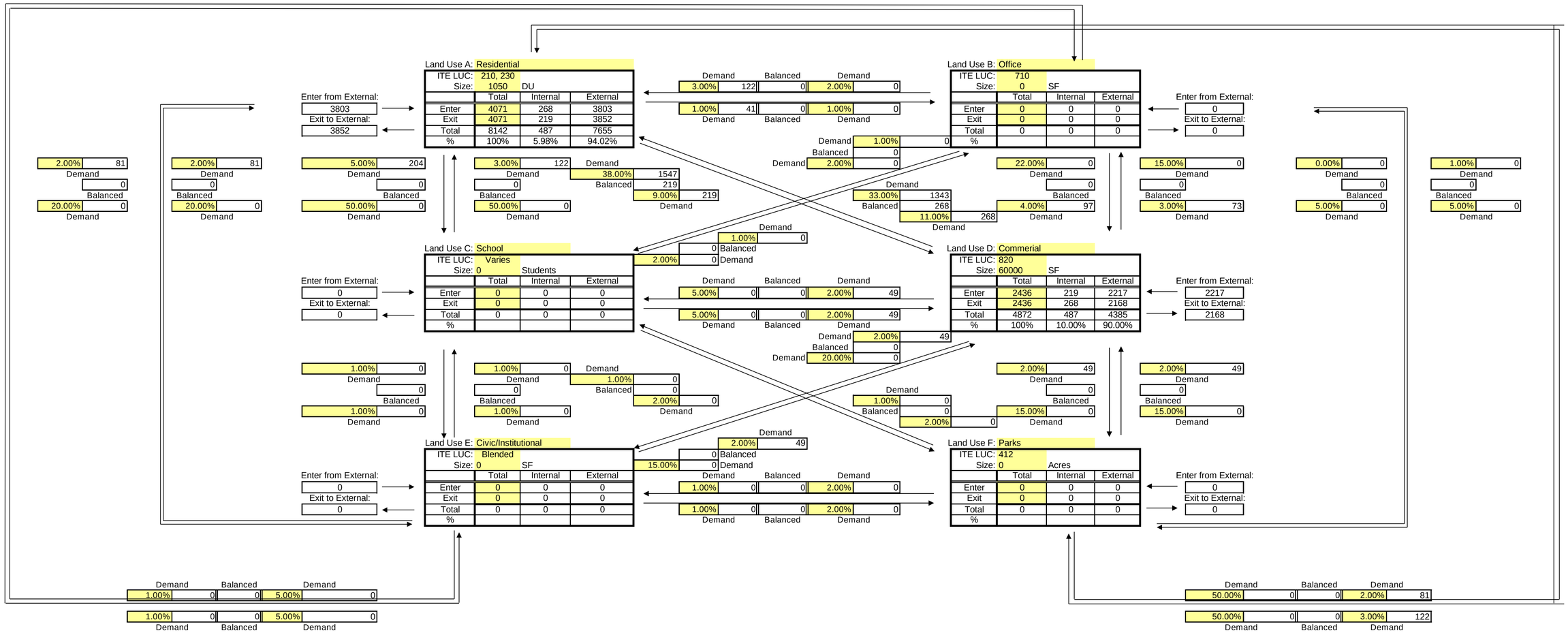
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5211	0	0	0	0	16	5227
Exit	5211	0	0	0	0	16	5227
Total	10422	0	0	0	0	32	**10454**
Single Use Trip Gen Estimate	10456	0	0	0	0	66	**10522**
	0.33%	0.00%	0.00%	0.00%	0.00%	51.52%	

Internal Capture = 0.65%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 657



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

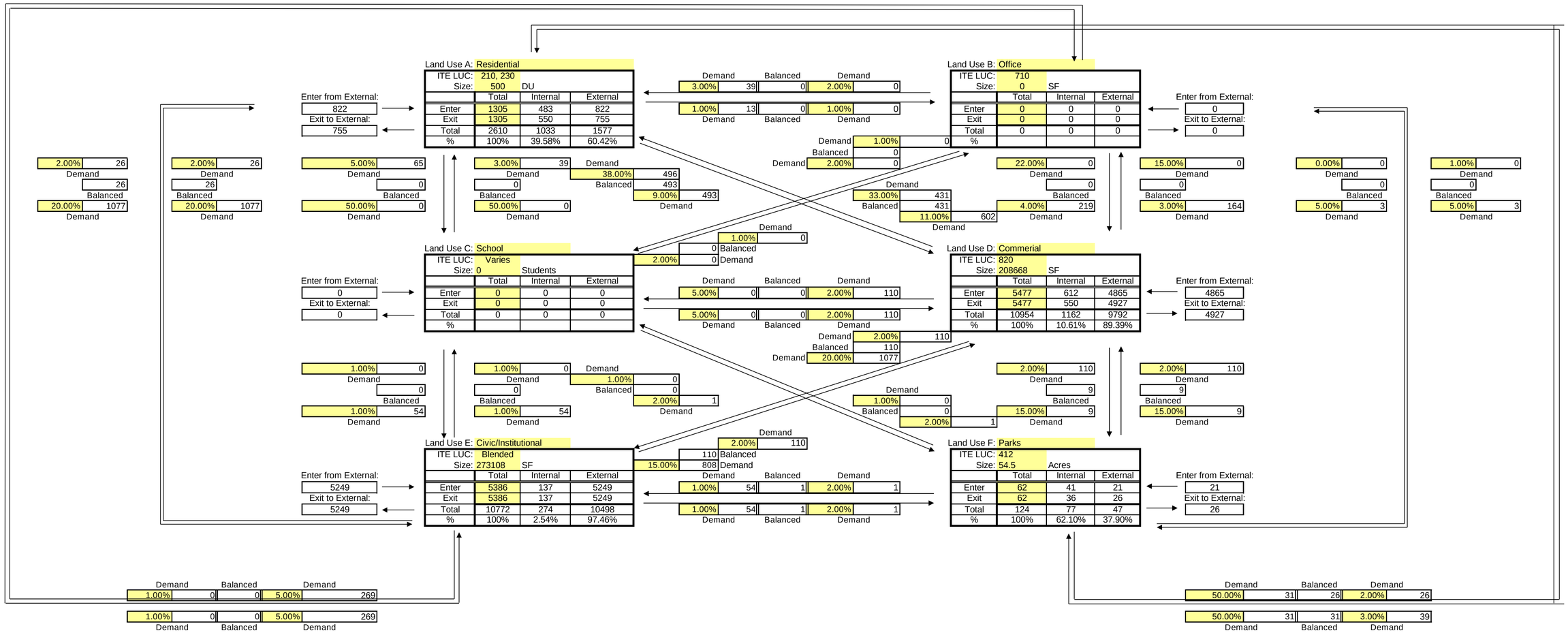
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3803	0	0	2217	0	0	6020
Exit	3852	0	0	2168	0	0	6020
Total	7655	0	0	4385	0	0	**12040**
Single Use Trip Gen Estimate	8142	0	0	4872	0	0	**13014**
	5.98%	0.00%	0.00%	10.00%	0.00%	0.00%	

Internal Capture = 7.48%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 656



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

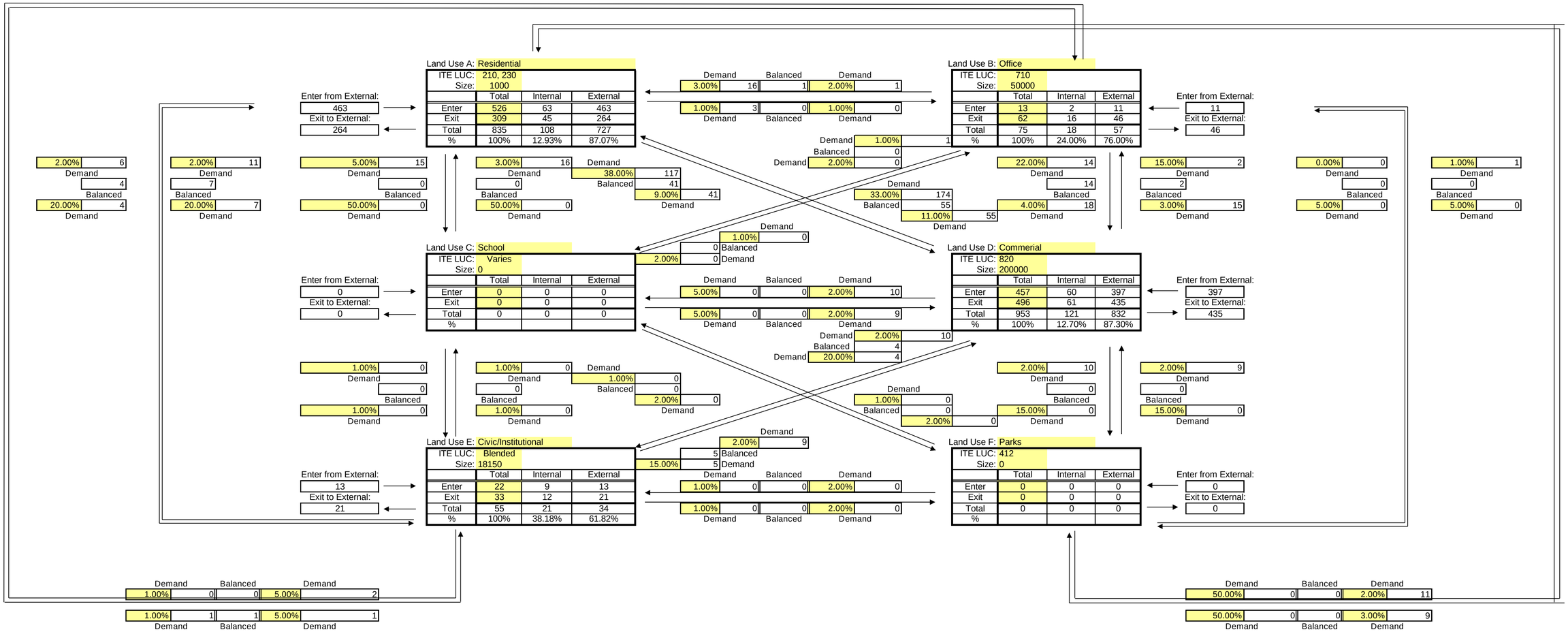
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	822	0	0	4865	5249	21	10957
Exit	755	0	0	4927	5249	26	10957
Total	1577	0	0	9792	10498	47	**21914**
Single Use Trip Gen Estimate	2610	0	0	10954	10772	124	**24460**
	39.58%	0.00%	0.00%	10.61%	2.54%	62.10%	

Internal Capture = 10.41%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 670



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

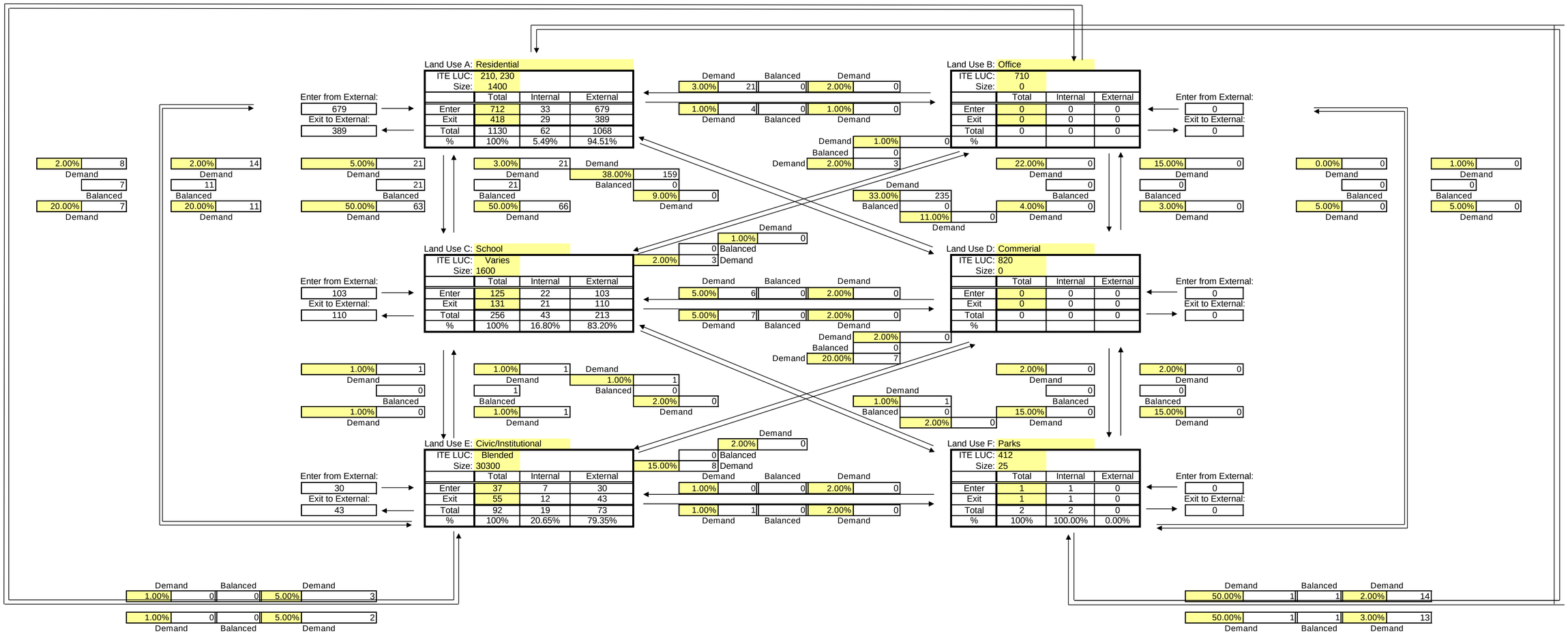
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	463	11	0	397	13	0	884
Exit	264	46	0	435	21	0	766
Total	727	57	0	832	34	0	**1650**
Single Use Trip Gen Estimate	835	75	0	953	55	0	**1918**
	12.93%	24.00%	0.00%	12.70%	38.18%	0.00%	

Internal Capture = 13.97%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 673



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

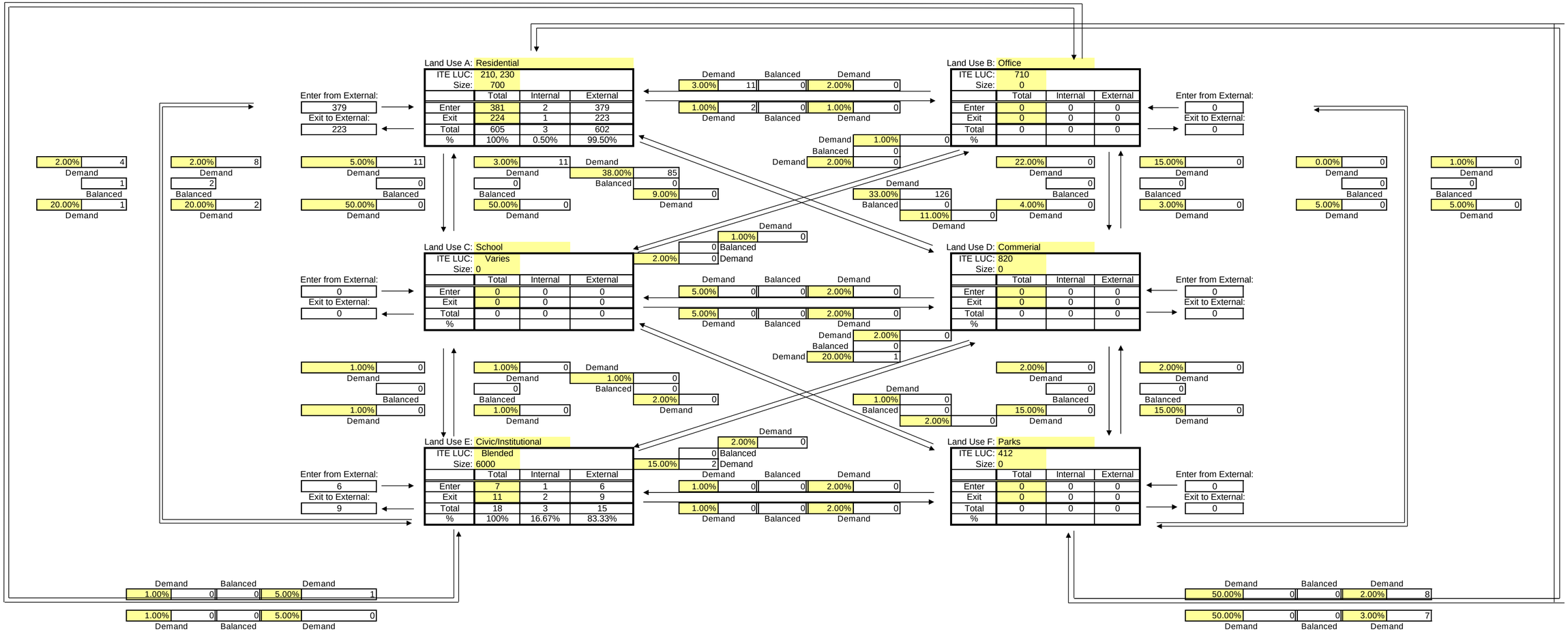
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	679	0	103	0	30	0	812
Exit	389	0	110	0	43	0	542
Total	1068	0	213	0	73	0	**1354**
Single Use Trip Gen Estimate	1130	0	256	0	92	2	**1480**
	5.49%	0.00%	16.80%	0.00%	20.65%	0.00%	

Internal Capture = 8.51%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 668



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

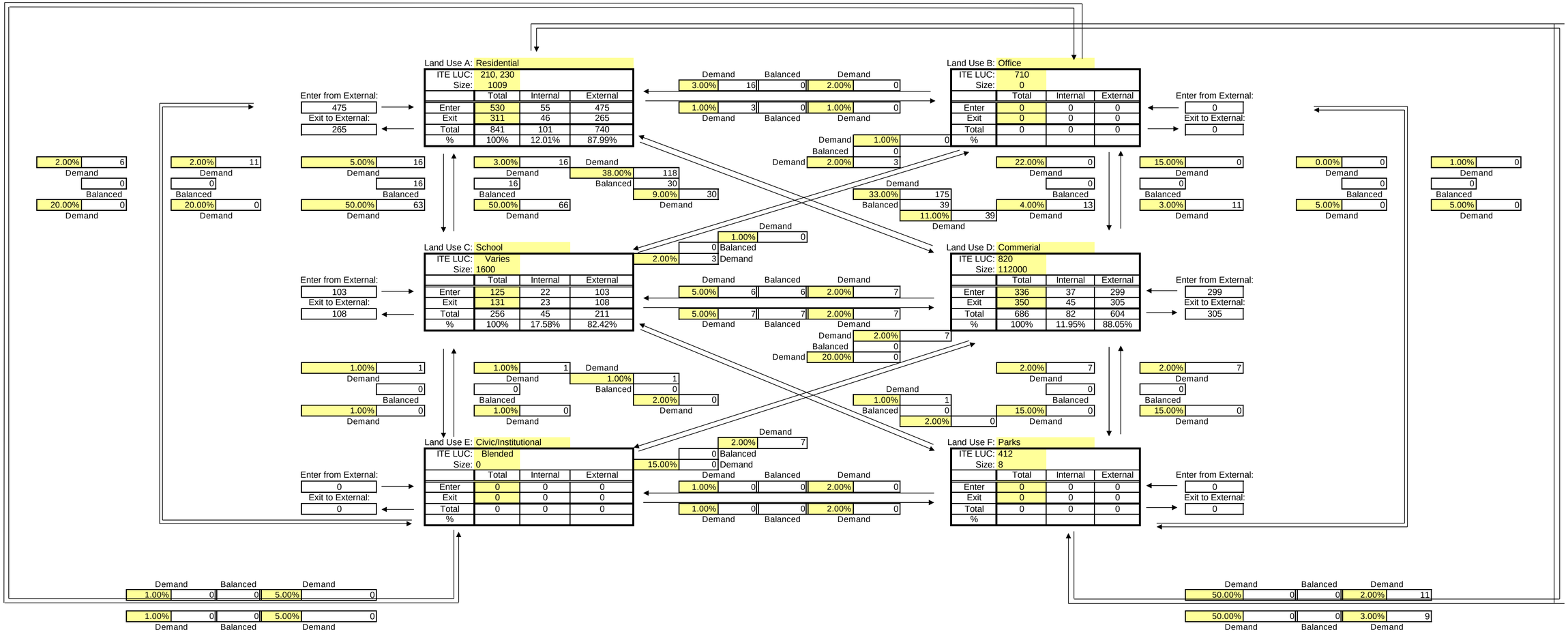
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	379	0	0	0	6	0	385
Exit	223	0	0	0	9	0	232
Total	602	0	0	0	15	0	**617**
Single Use Trip Gen Estimate	605	0	0	0	18	0	**623**
	0.50%	0.00%	0.00%	0.00%	16.67%	0.00%	

Internal Capture = 0.96%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 858



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

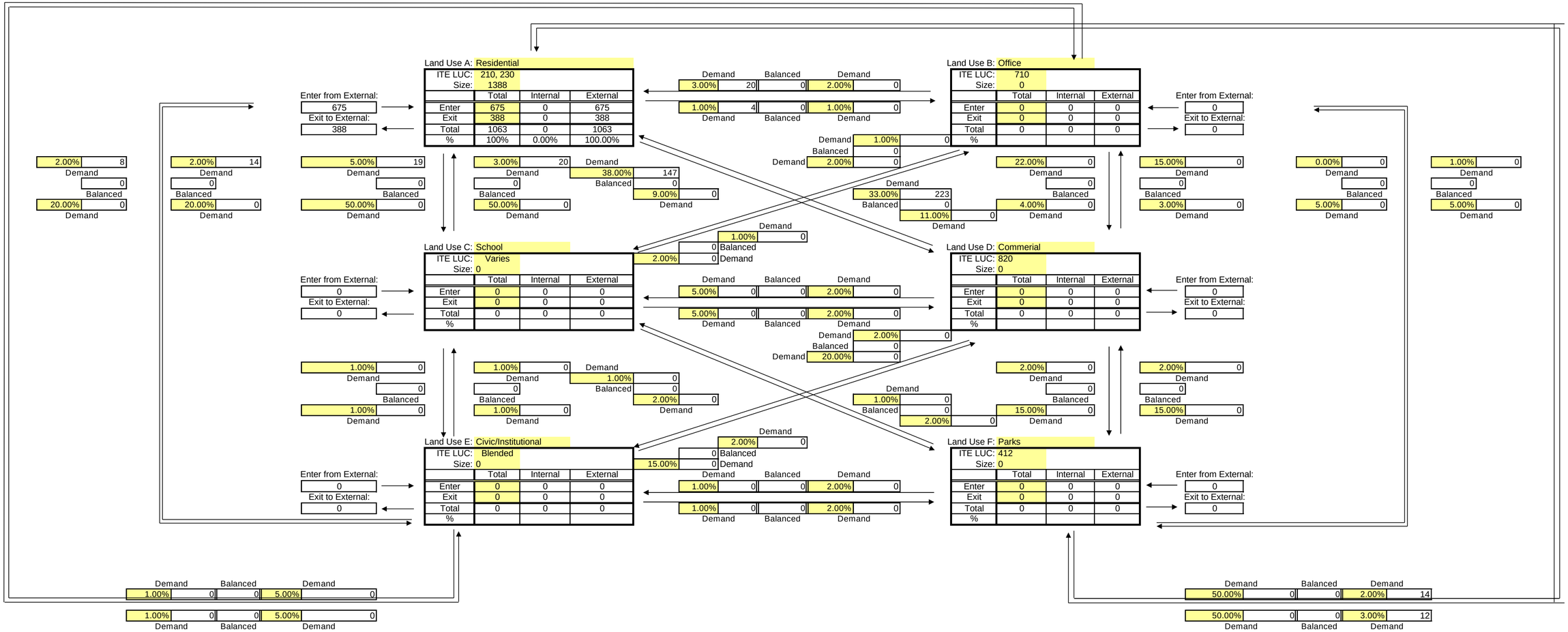
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	475	0	103	299	0	0	877
Exit	265	0	108	305	0	0	678
Total	740	0	211	604	0	0	**1555**
Single Use Trip Gen Estimate	841	0	256	686	0	0	**1783**
	12.01%	0.00%	17.58%	11.95%	0.00%	0.00%	

Internal Capture = 12.79%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 645



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

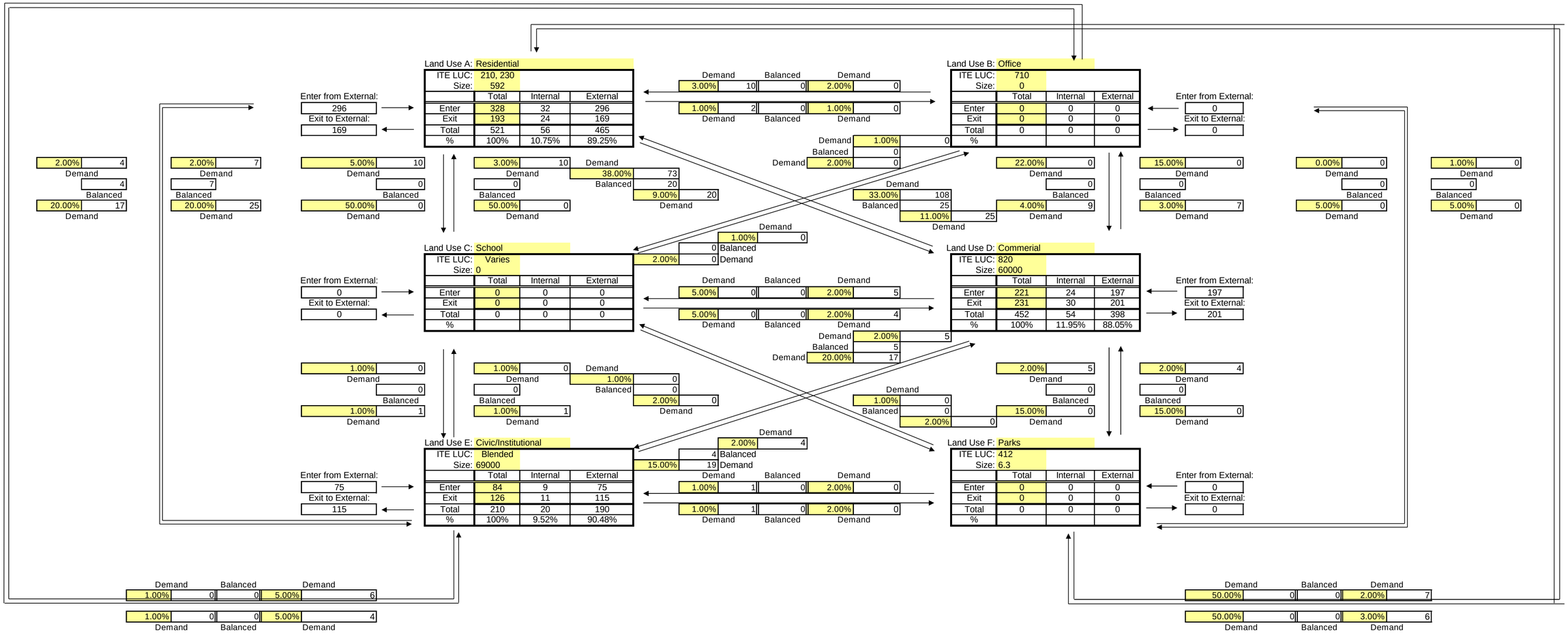
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	675	0	0	0	0	0	675
Exit	388	0	0	0	0	0	388
Total	1063	0	0	0	0	0	**1063**
Single Use Trip Gen Estimate	1063	0	0	0	0	0	**1063**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 857



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

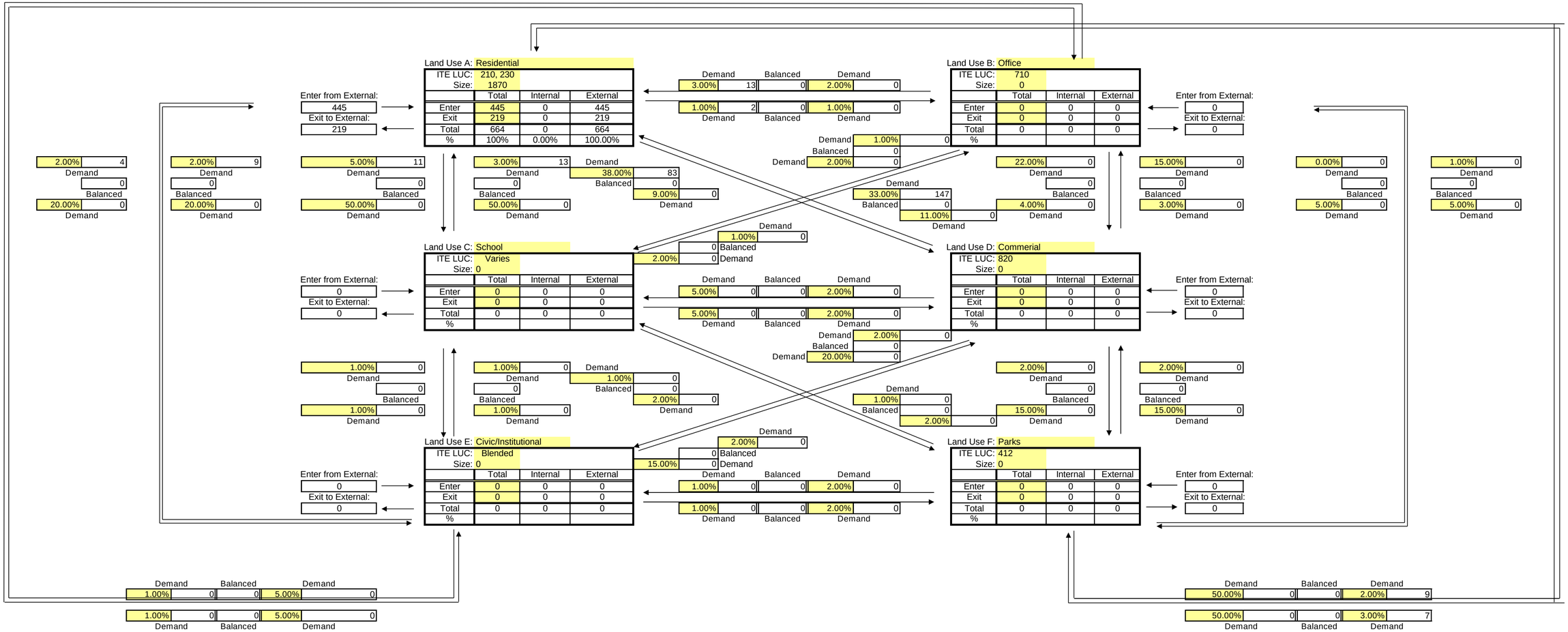
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	296	0	0	197	75	0	568
Exit	169	0	0	201	115	0	485
Total	465	0	0	398	190	0	**1053**
Single Use Trip Gen Estimate	521	0	0	452	210	0	**1183**
	10.75%	0.00%	0.00%	11.95%	9.52%	0.00%	

Internal Capture = 10.99%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 859



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

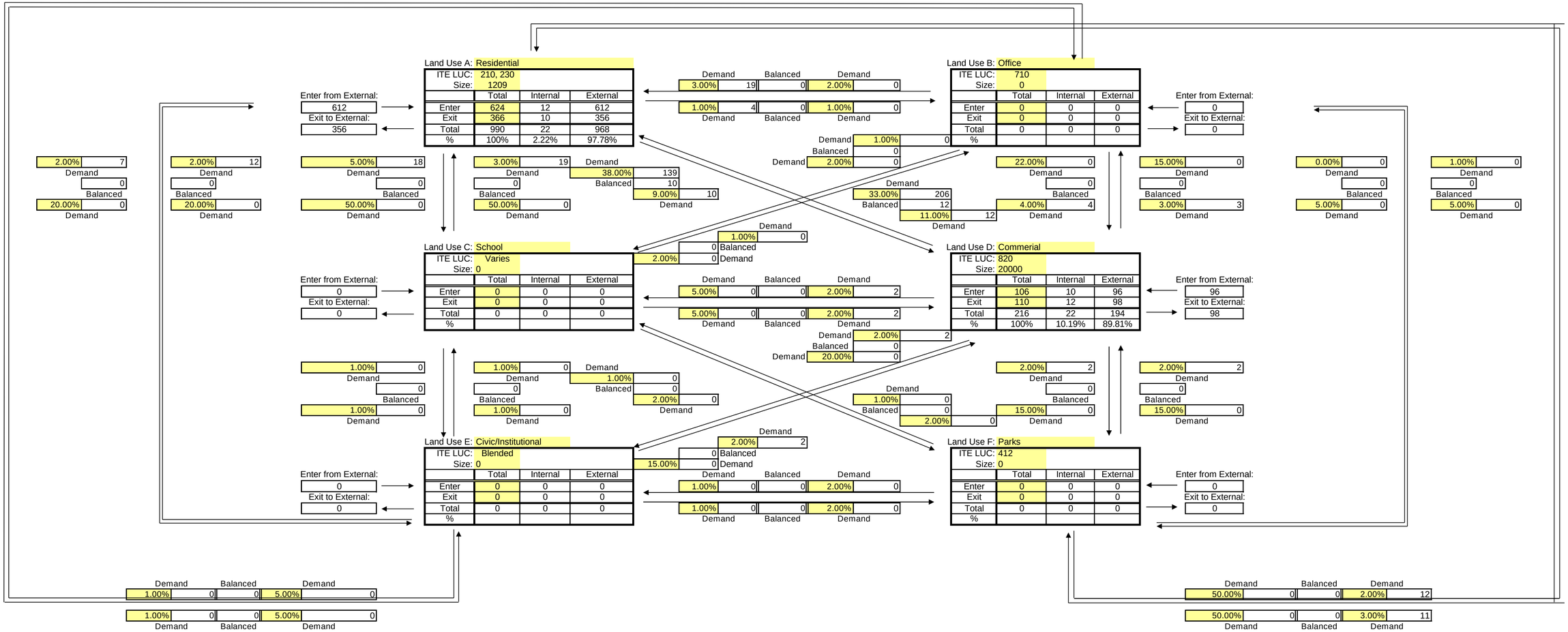
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	445	0	0	0	0	0	445
Exit	219	0	0	0	0	0	219
Total	664	0	0	0	0	0	**664**
Single Use Trip Gen Estimate	664	0	0	0	0	0	**664**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 658



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

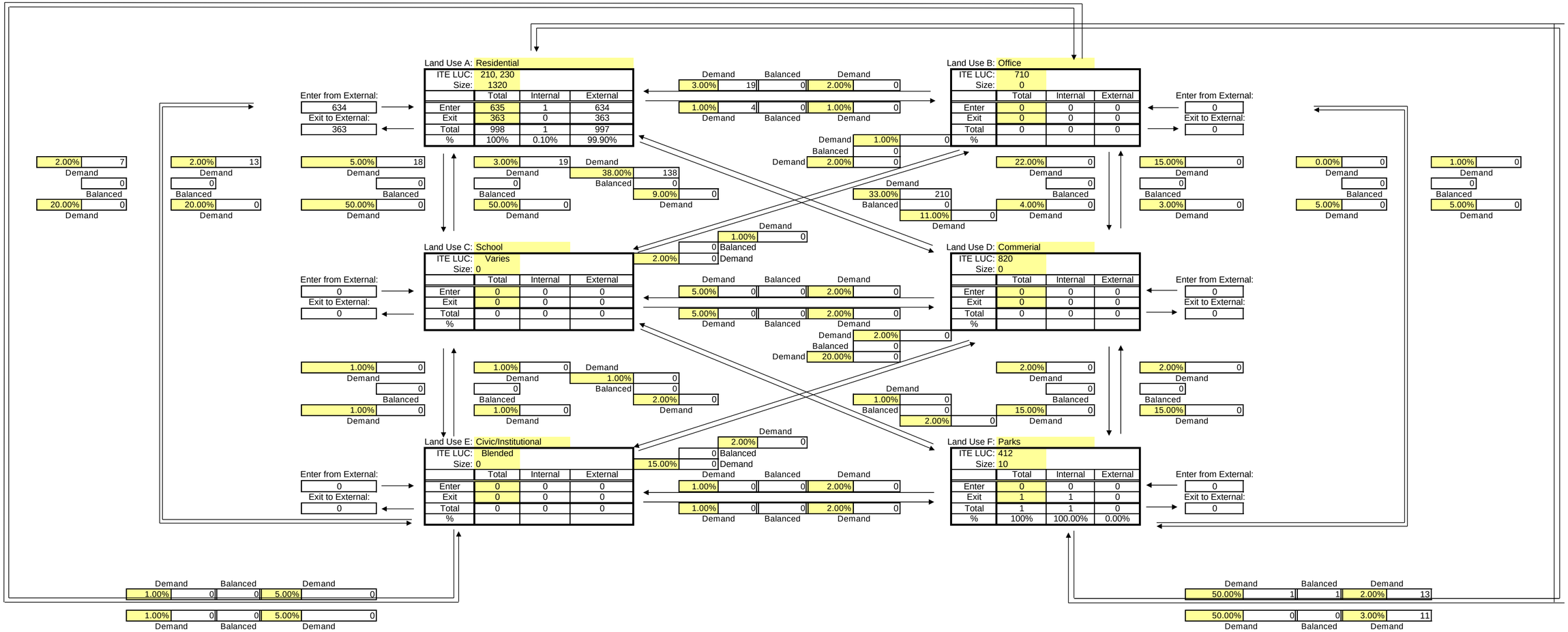
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	612	0	0	96	0	0	708
Exit	356	0	0	98	0	0	454
Total	968	0	0	194	0	0	**1162**
Single Use Trip Gen Estimate	990	0	0	216	0	0	**1206**
	2.22%	0.00%	0.00%	10.19%	0.00%	0.00%	

Internal Capture = 3.65%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 855



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

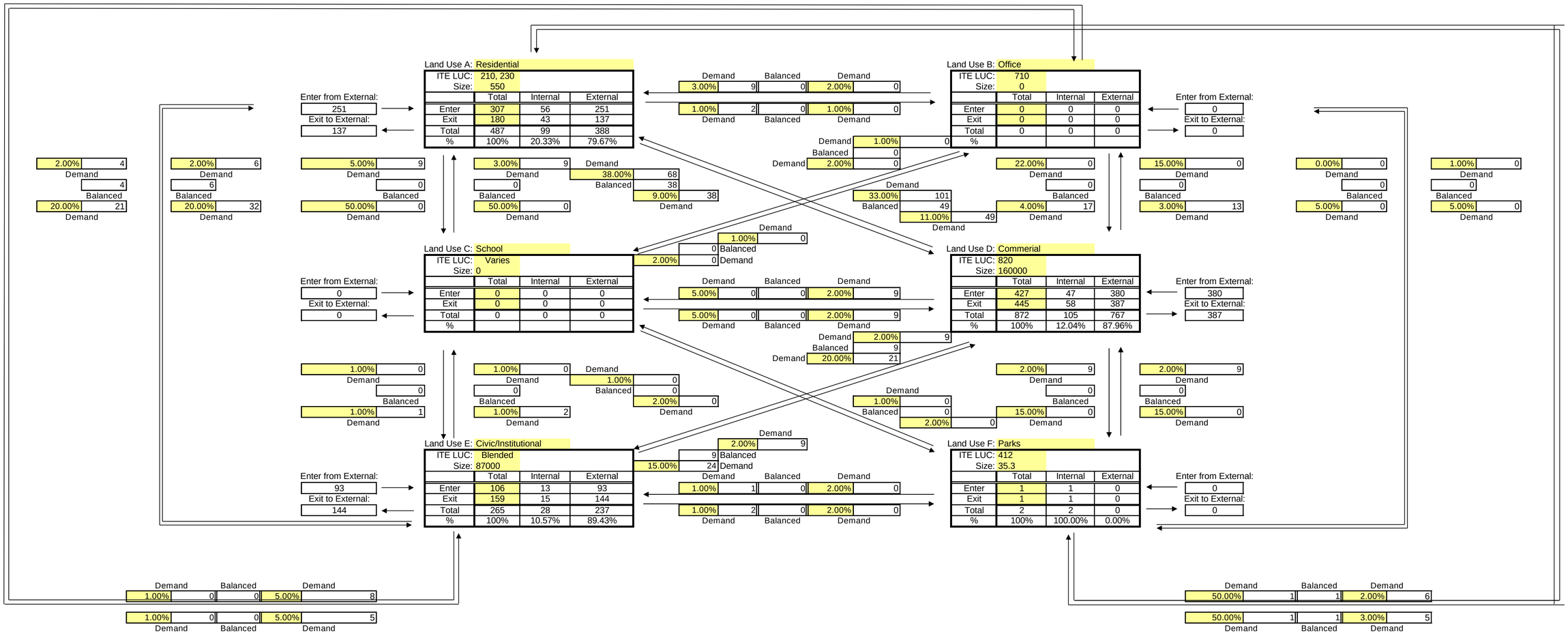
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	634	0	0	0	0	0	634
Exit	363	0	0	0	0	0	363
Total	997	0	0	0	0	0	**997**
Single Use Trip Gen Estimate	998	0	0	0	0	1	**999**
	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.20%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 655



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

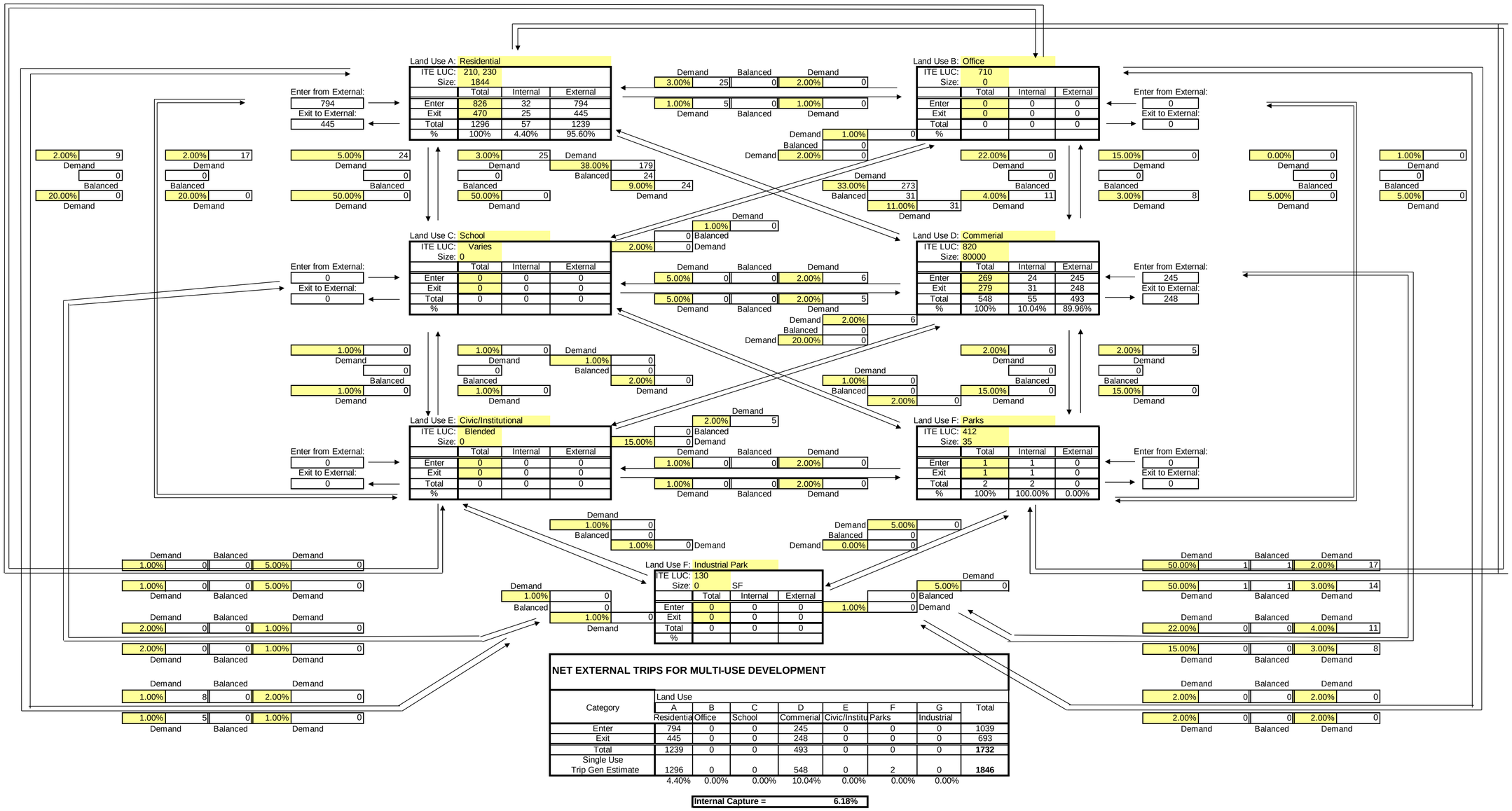
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	251	0	0	380	93	0	724
Exit	137	0	0	387	144	0	668
Total	388	0	0	767	237	0	**1392**
Single Use Trip Gen Estimate	487	0	0	872	265	2	**1626**
	20.33%	0.00%	0.00%	12.04%	10.57%	0.00%	

Internal Capture = 14.39%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 647 POD C



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

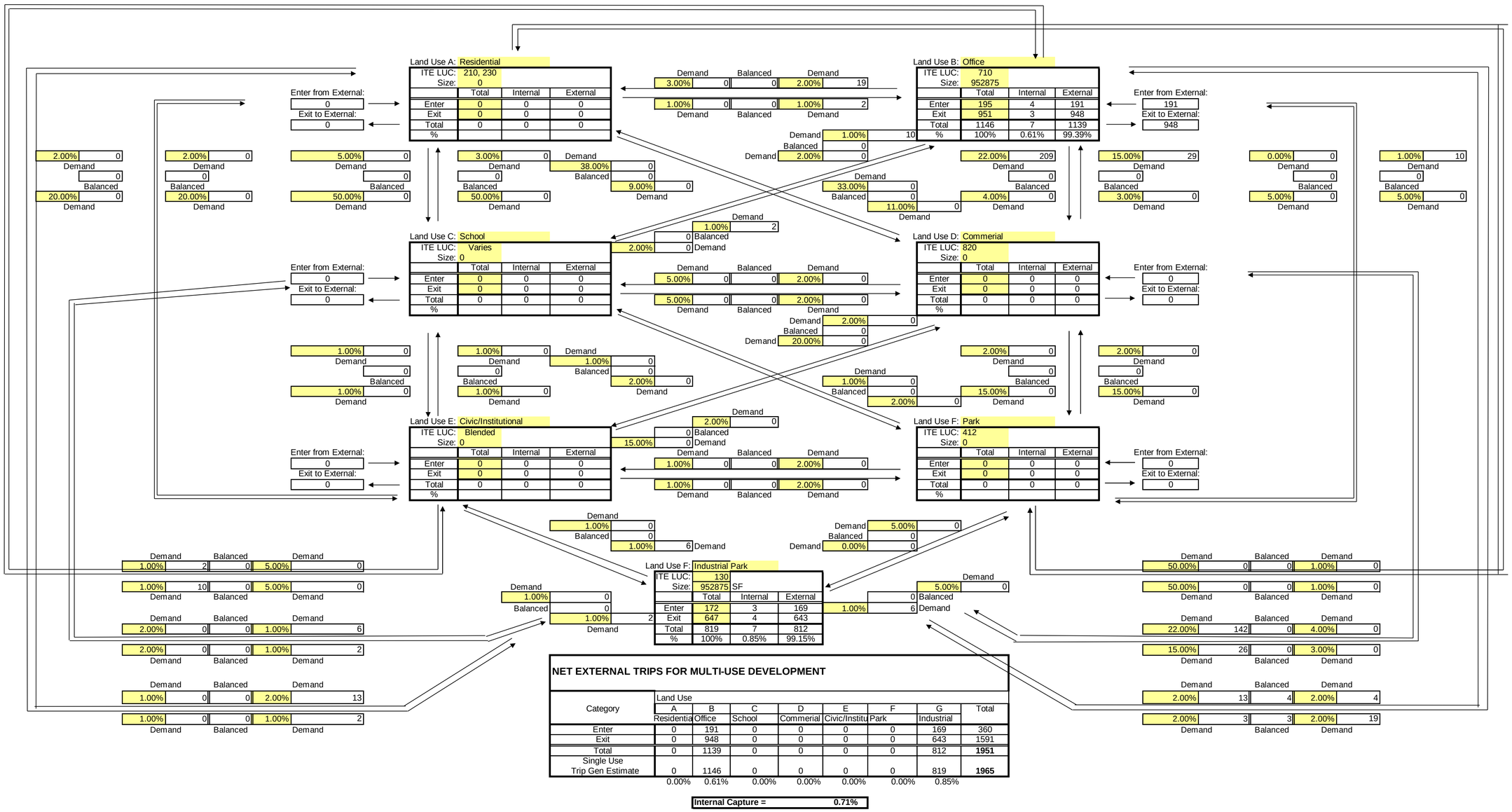
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	794	0	0	245	0	0	0	1039
Exit	445	0	0	248	0	0	0	693
Total	1239	0	0	493	0	0	0	**1732**
Single Use Trip Gen Estimate	1296	0	0	548	0	2	0	**1846**
	4.40%	0.00%	0.00%	10.04%	0.00%	0.00%	0.00%	

Internal Capture = 6.18%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: _____

Project Number: _____ **Task Number:** _____
Project Name: Southern Grove
Scenario: TAZ 648 POD A



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

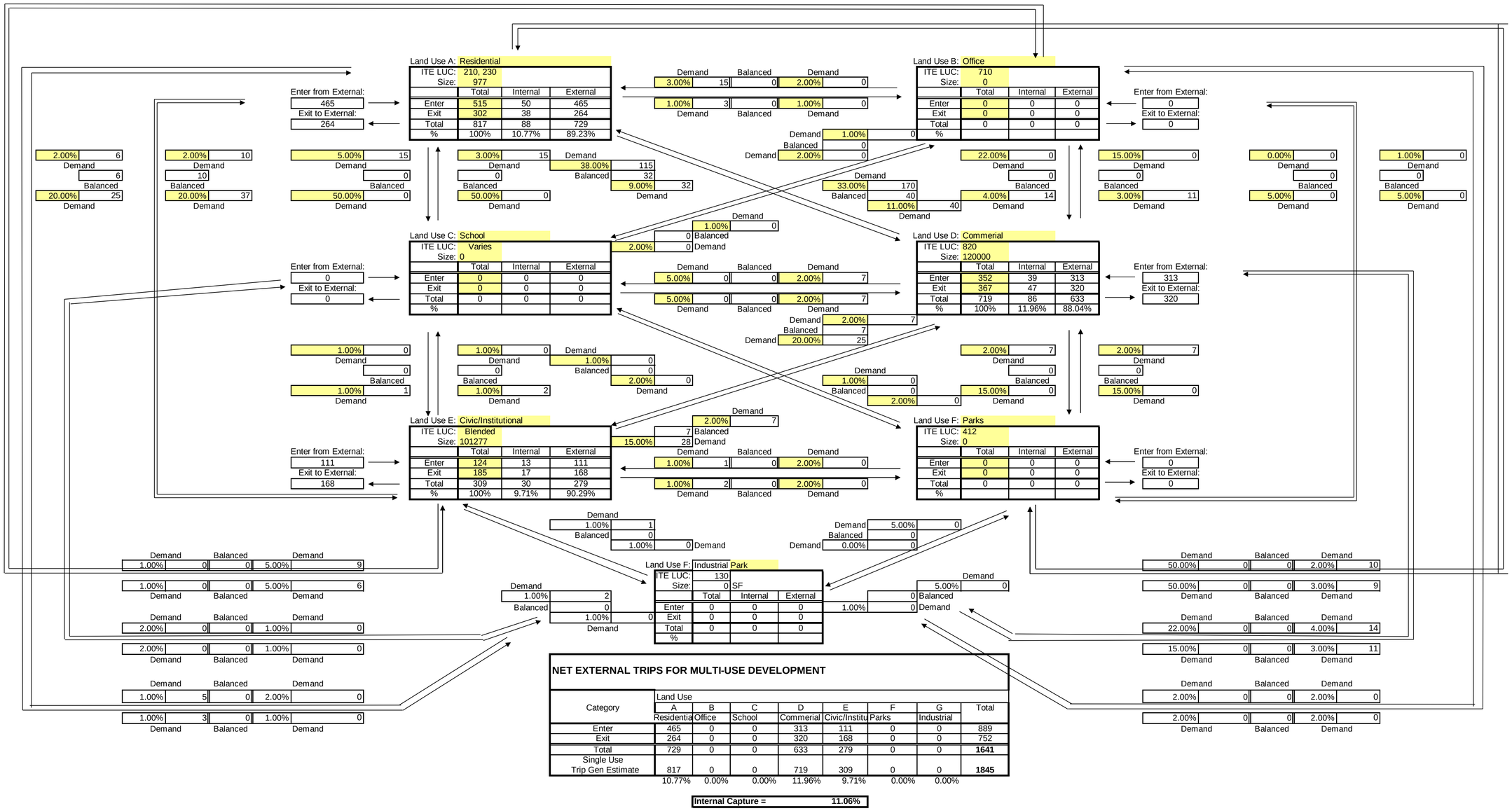
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	191	0	0	0	0	169	360
Exit	0	948	0	0	0	0	643	1591
Total	0	1139	0	0	0	0	812	**1951**
Single Use Trip Gen Estimate	0	1146	0	0	0	0	819	**1965**
	0.00%	0.61%	0.00%	0.00%	0.00%	0.00%	0.85%	

Internal Capture = 0.71%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 654 POD D



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

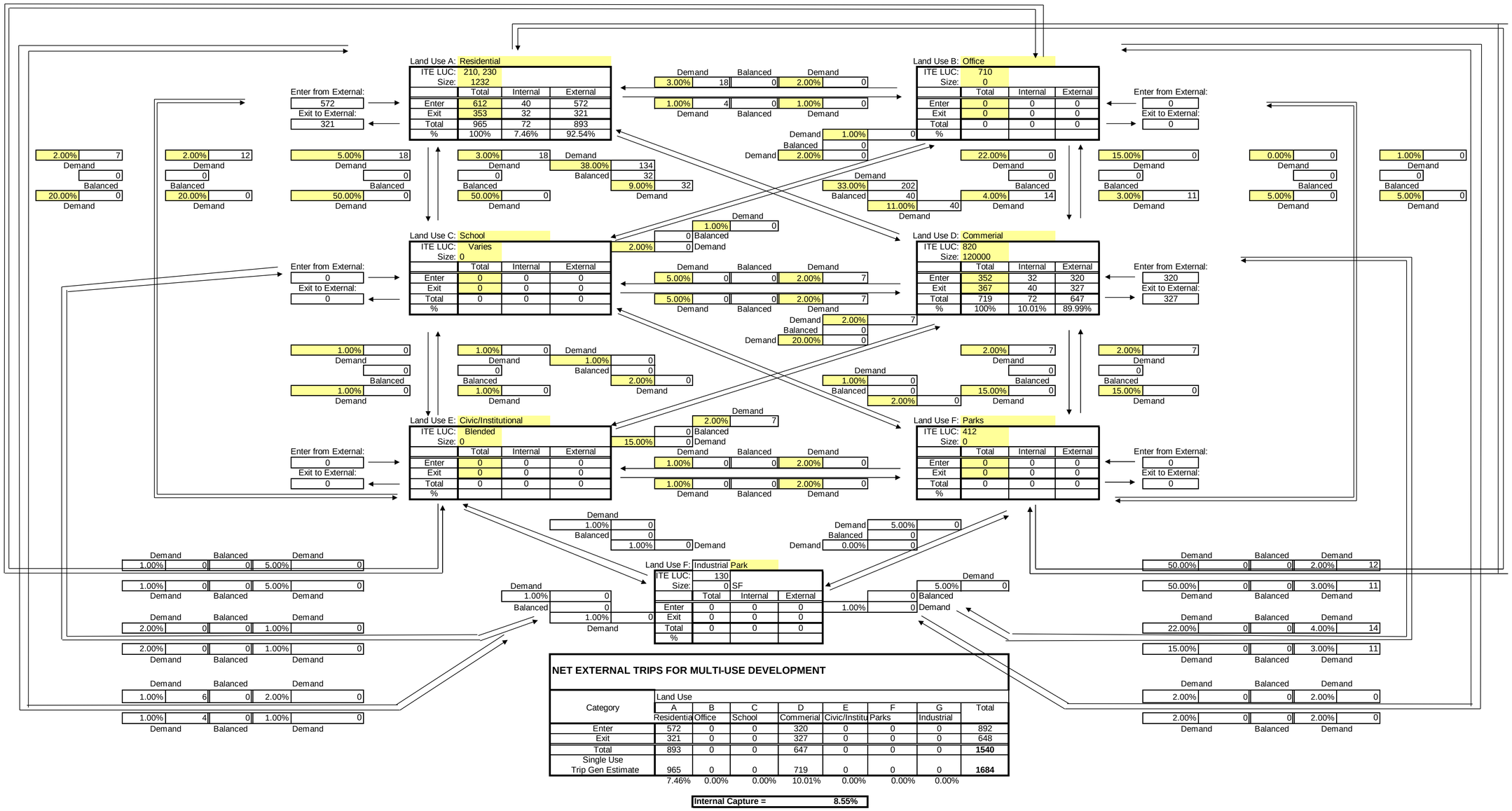
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	465	0	0	313	111	0	0	889
Exit	264	0	0	320	168	0	0	752
Total	729	0	0	633	279	0	0	**1641**
Single Use Trip Gen Estimate	817	0	0	719	309	0	0	**1845**
	10.77%	0.00%	0.00%	11.96%	9.71%	0.00%	0.00%	

Internal Capture = 11.06%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 861 POD F



	Total	Internal	External
Enter	612	40	572
Exit	353	32	321
Total	965	72	893
%	100%	7.46%	92.54%

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	352	32	320
Exit	367	40	327
Total	719	72	647
%	100%	10.01%	89.99%

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

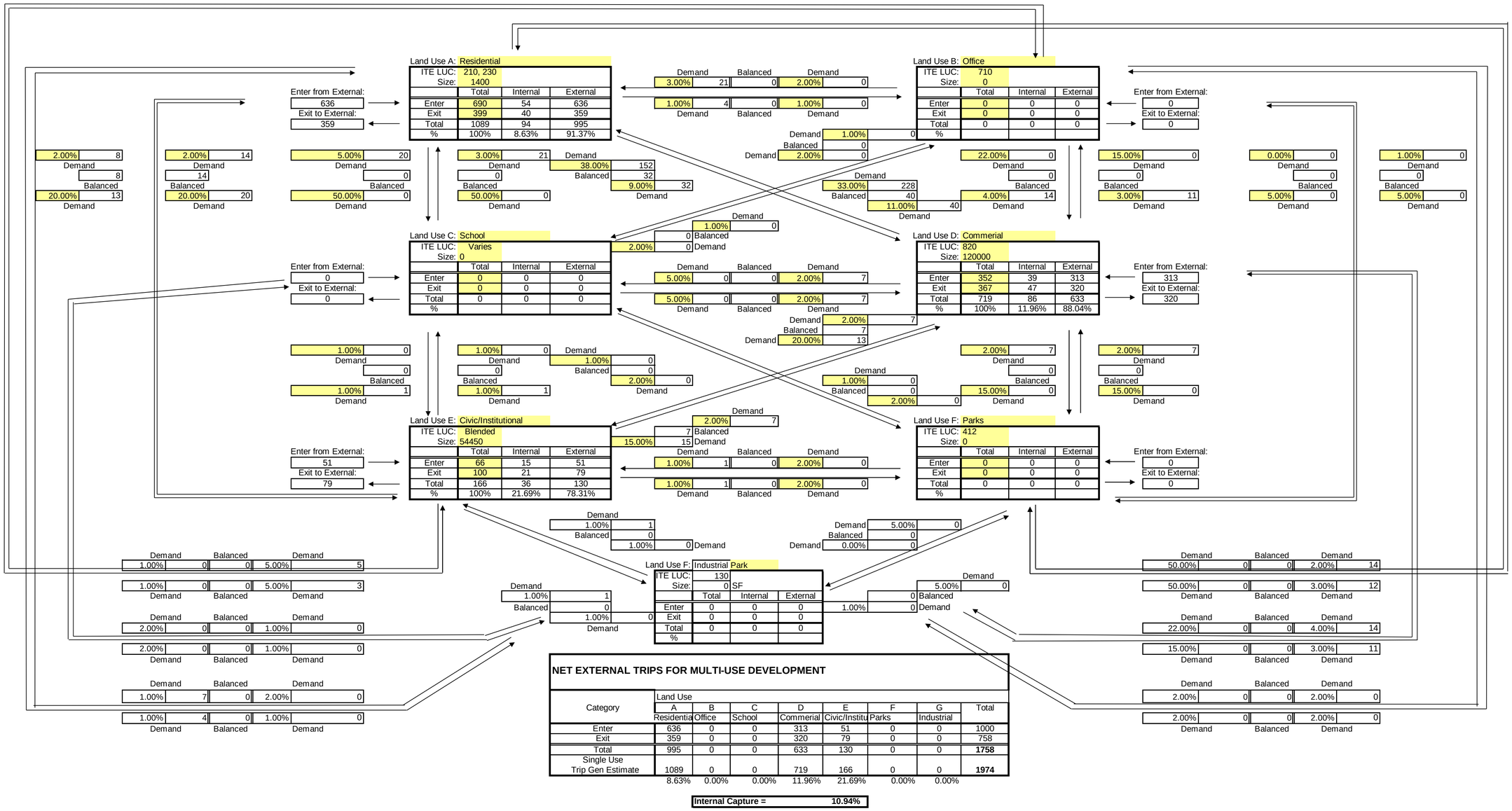
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	572	0	0	320	0	0	0	892
Exit	321	0	0	327	0	0	0	648
Total	893	0	0	647	0	0	0	**1540**
Single Use Trip Gen Estimate	965	0	0	719	0	0	0	**1684**
	7.46%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

Internal Capture = 8.55%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 653 POD E



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

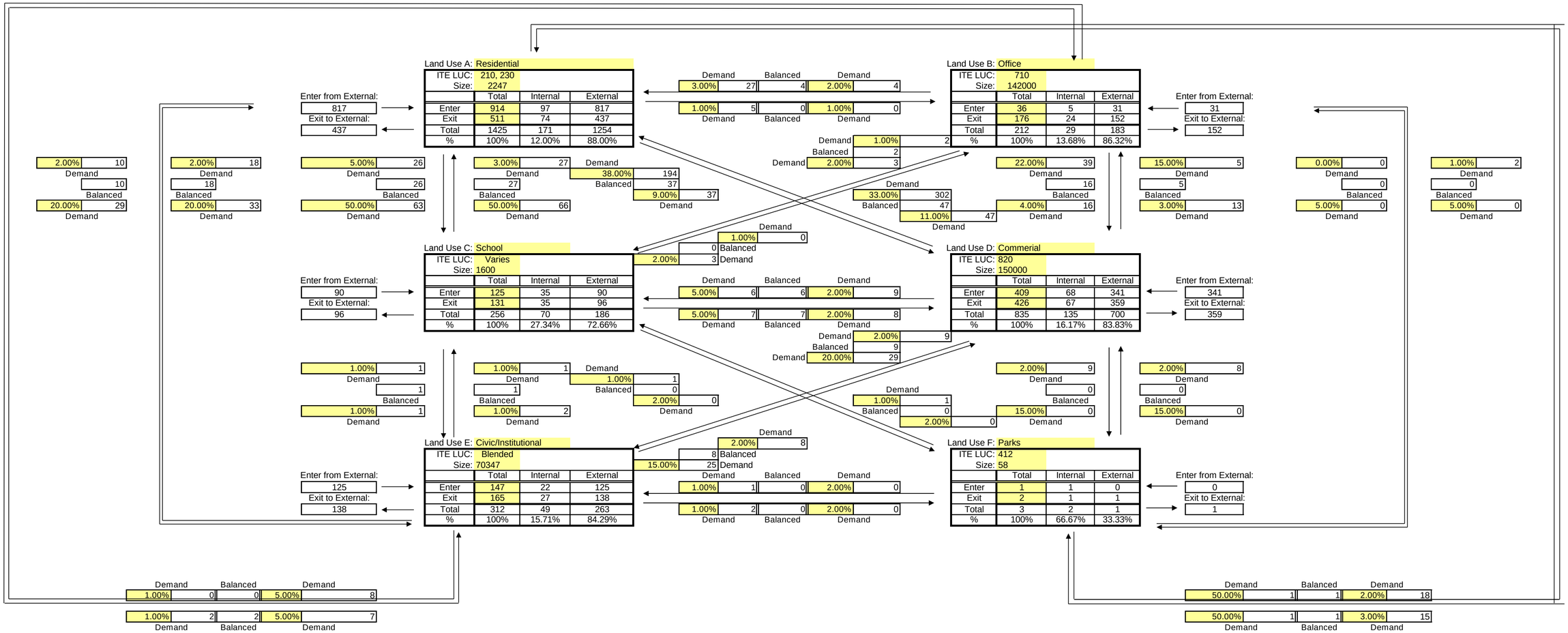
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	636	0	0	313	51	0	0	1000
Exit	359	0	0	320	79	0	0	758
Total	995	0	0	633	130	0	0	**1758**
Single Use Trip Gen Estimate	1089	0	0	719	166	0	0	**1974**
	8.63%	0.00%	0.00%	11.96%	21.69%	0.00%	0.00%	

Internal Capture = 10.94%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 652 POD C



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

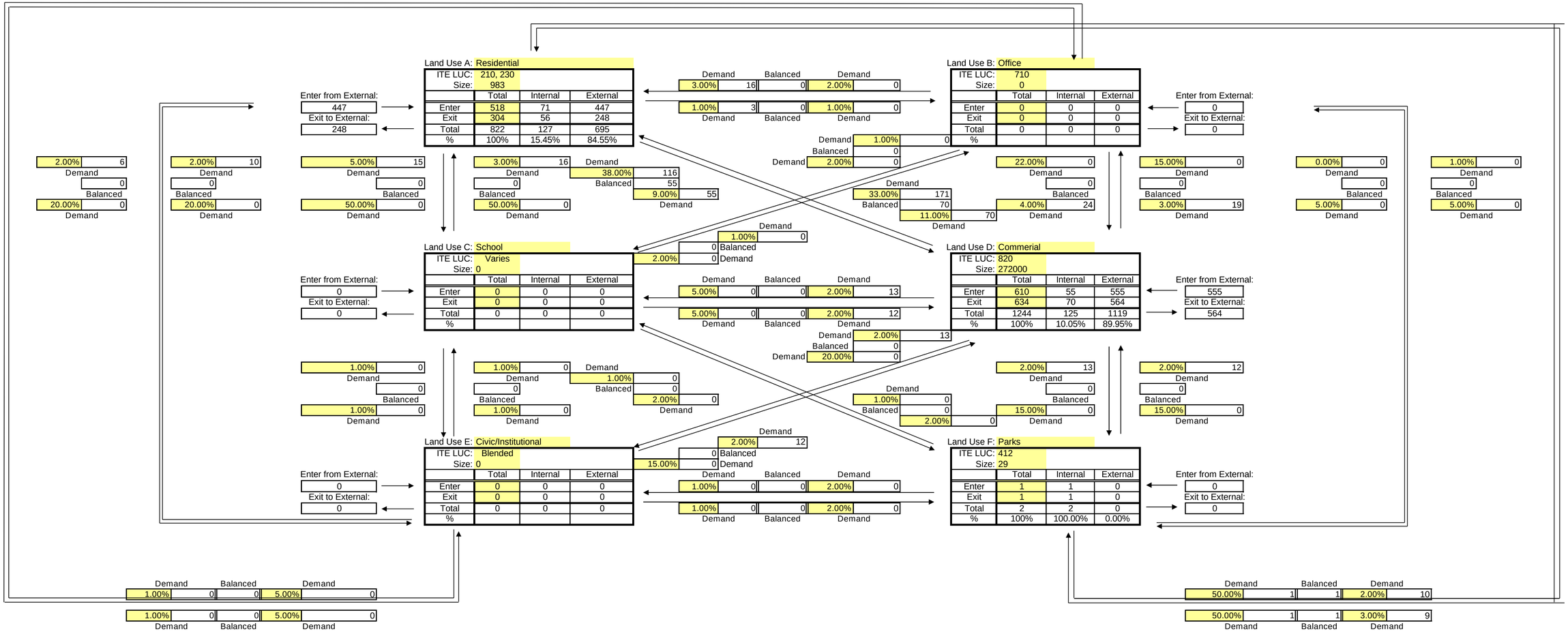
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	817	31	90	341	125	0	1404
Exit	437	152	96	359	138	1	1183
Total	1254	183	186	700	263	1	**2587**
Single Use Trip Gen Estimate	1425	212	256	835	312	3	**3043**
	12.00%	13.68%	27.34%	16.17%	15.71%	66.67%	

Internal Capture = 14.99%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 856



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

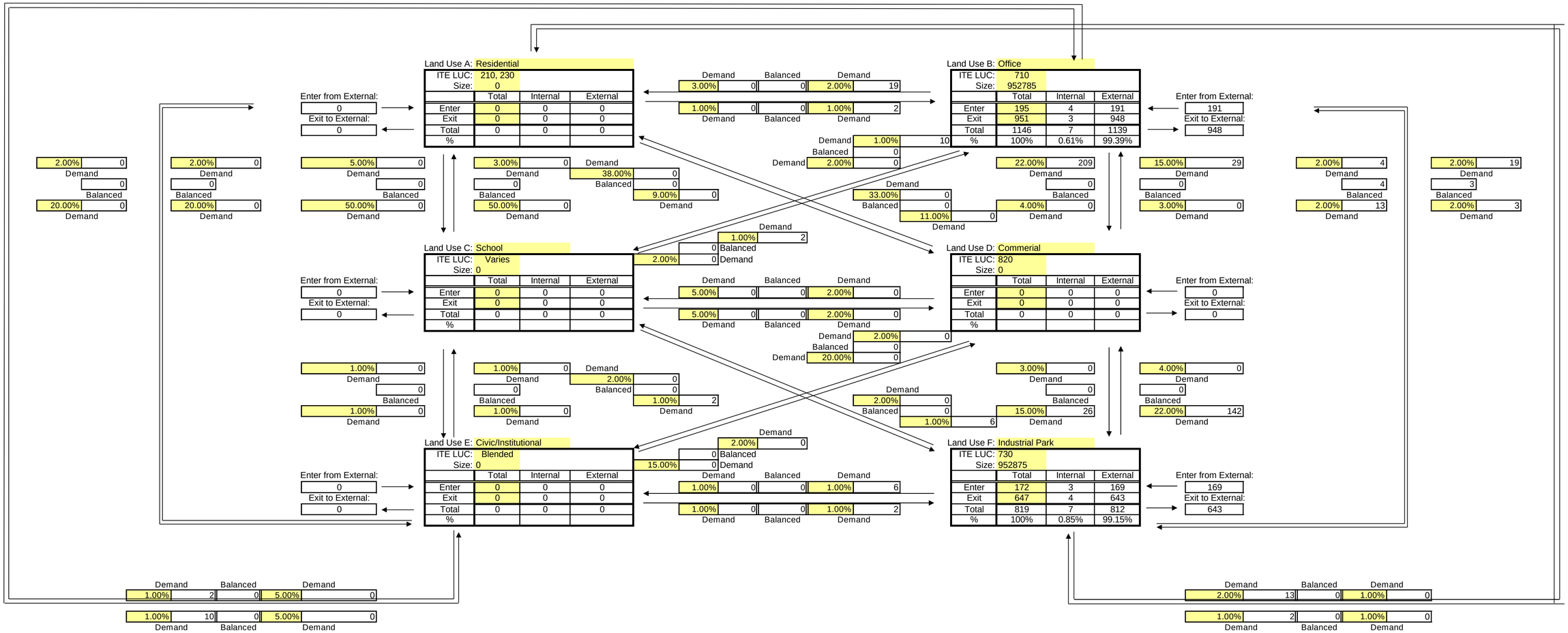
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	447	0	0	555	0	0	1002
Exit	248	0	0	564	0	0	812
Total	695	0	0	1119	0	0	**1814**
Single Use Trip Gen Estimate	822	0	0	1244	0	2	**2068**
	15.45%	0.00%	0.00%	10.05%	0.00%	0.00%	

Internal Capture = 12.28%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 860



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

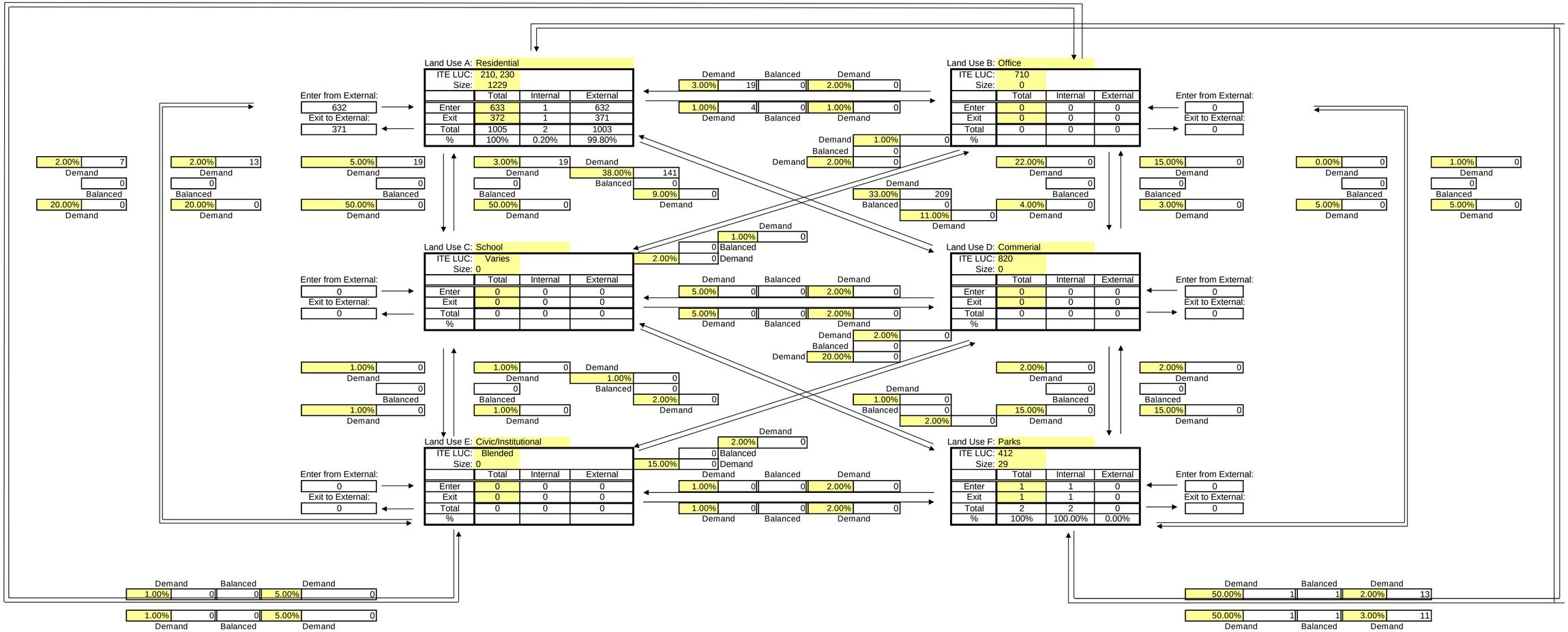
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	191	0	0	0	169	360
Exit	0	948	0	0	0	643	1591
Total	0	1139	0	0	0	812	**1951**
Single Use Trip Gen Estimate	0	1146	0	0	0	819	**1965**
	0.00%	0.61%	0.00%	0.00%	0.00%	0.85%	

Internal Capture = 0.71%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 649



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

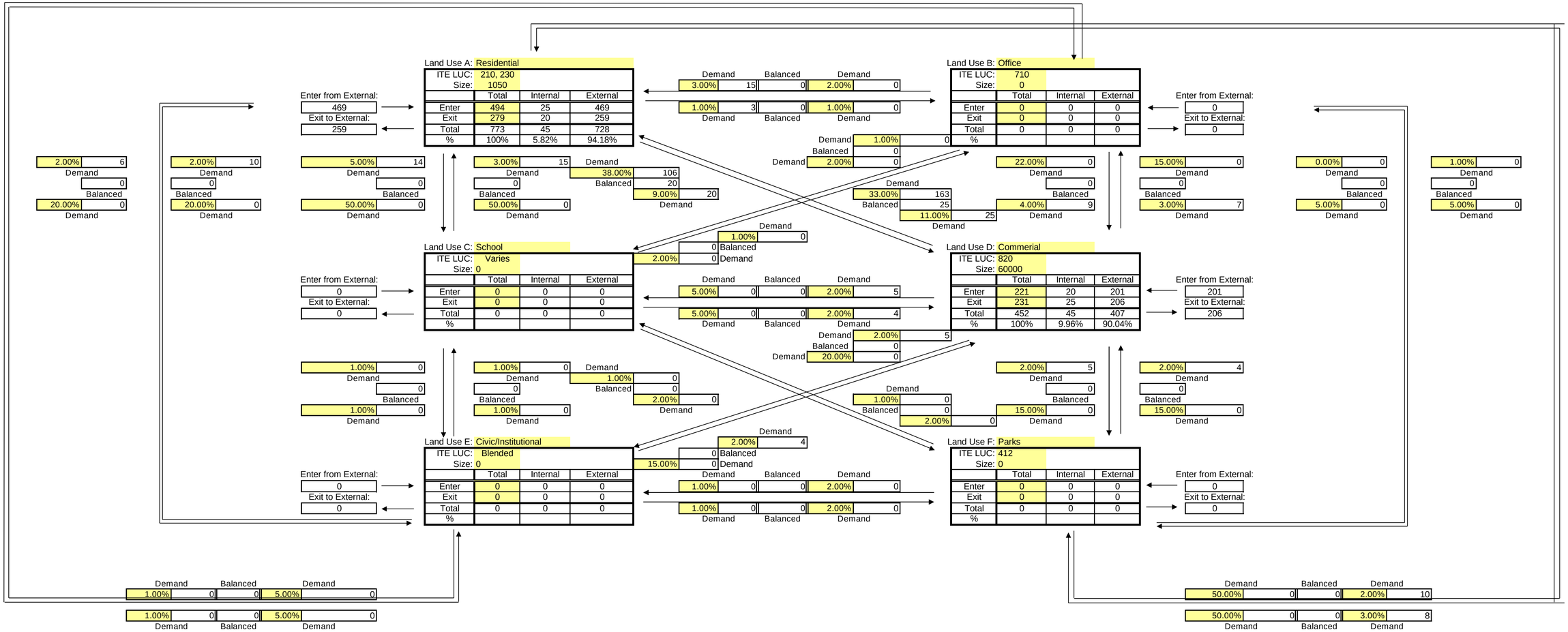
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	632	0	0	0	0	0	632
Exit	371	0	0	0	0	0	371
Total	1003	0	0	0	0	0	**1003**
Single Use Trip Gen Estimate	1005	0	0	0	0	2	**1007**
	0.20%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.40%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 657



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

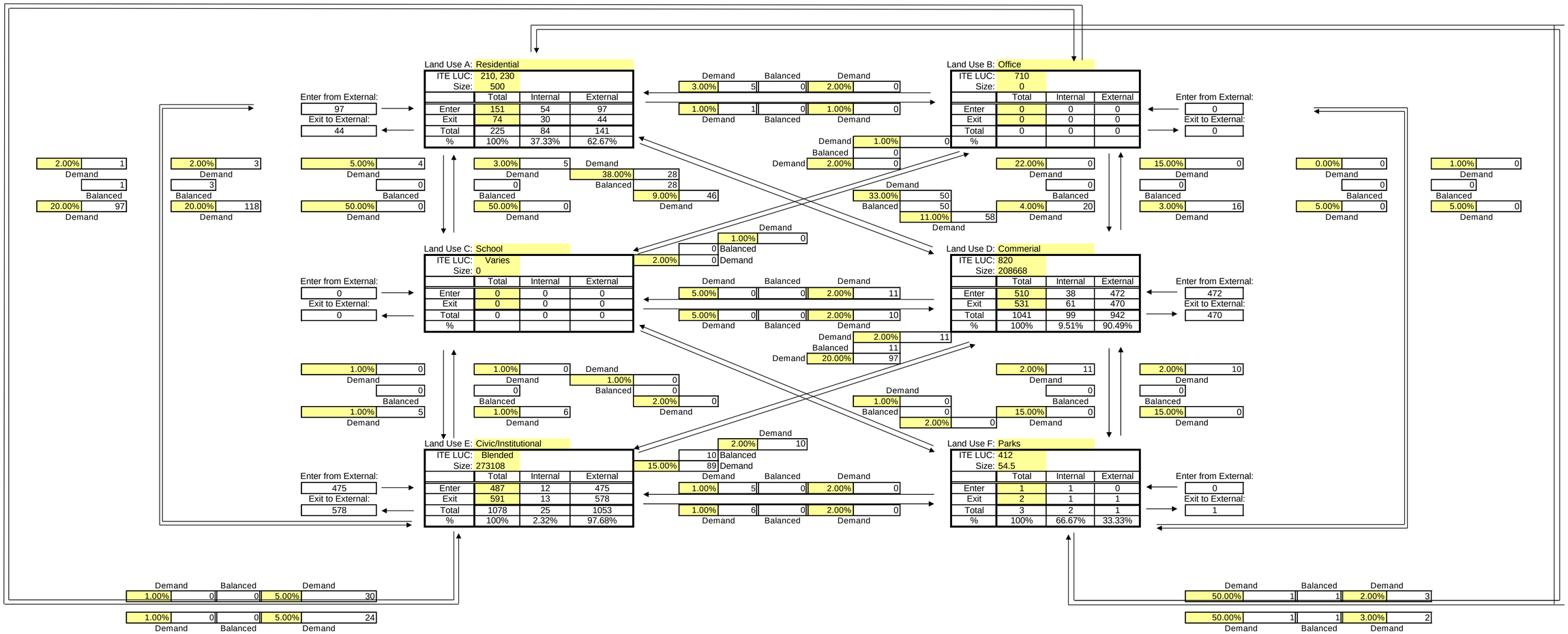
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	469	0	0	201	0	0	670
Exit	259	0	0	206	0	0	465
Total	728	0	0	407	0	0	**1135**
Single Use Trip Gen Estimate	773	0	0	452	0	0	**1225**
	5.82%	0.00%	0.00%	9.96%	0.00%	0.00%	

Internal Capture = 7.35%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 656



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	97	0	0	472	475	0	1044
Exit	44	0	0	470	578	1	1093
Total	141	0	0	942	1053	1	**2137**
Single Use Trip Gen Estimate	225	0	0	1041	1078	3	**2347**
	37.33%	0.00%	0.00%	9.51%	2.32%	66.67%	

Internal Capture = 8.95%

MacKenzie
Engineering & Planning, Inc.

Appendix G

Western Annexation DRI Trip Generation and Internal Capture

PHASE 2

WATS TAZ	TCRPM TAZ
-	**862**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	750	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	6,704
Multi-Family Residential	150	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	915
Age-Restricted Single-Family		d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family		d.u.	[252]	T = 3.44*(X)	
Hotel		rooms	[310]	T = 8.92*(X)	
Industrial Park		s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail		s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office		s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	
Research & Development(1)		s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital		beds	[610]	T = 12.94*(X)	
Civic Use		s.f.	-	T = 54.51*(X/1000)	
Institutional Use		s.f.	-	T = 30.49*(X/1000)	
Park		acres	[412]	T = 2.28*(X)	
Elementary School		students	[520]	T = 1.29*(X)	
K-8 School		students	[522]	T = 1.62*(X)	
High School		students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	7,619
				Total Gross Residential Trips =	7,619
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	
				Internal Capture trips among TAZ =	

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =		trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**7,619**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	750	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	644	406	238
Multi-Family Residential	150	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	84	56	28
Age-Restricted Single-Family		d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family		d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel		rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park		s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail		s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)			
Service & Office[2]		s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[1]		s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital		beds	[610]	T = 1.42*(X); (33% in)			
Civic Use		s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use		s.f.	-	T = 3.05*(X/1000); (40% in)			
Park		acres	[412]	T = 0.09*(X); (61% in)			
Elementary School		students	[520]	T = 0.15*(X); (49% in)			
K-8 School		students	[522]	T = 0.16*(X); (49% in)			
High School		students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	728	462	266
				Total Gross Residential Trips =	728	462	266
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**728**	**462**	**266**

WATS TAZ	TCRPM TAZ
371	**670**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	1,000	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	8,735
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.44*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail	100,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	6,791
Service & Office	30,000	s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	526
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital	0	beds	[610]	T = 12.94*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	14,520	s.f.	-	T = 30.49*(X/1000)	443
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	16,495
				Total Gross Residential Trips =	8,735
				Total Gross Non-Residential Trips =	7,760
				Internal Capture % among TAZ =	11.59%
				Internal Capture trips among TAZ =	1,912

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	100,000	s.f.
External Trips from Matrix =	5,938	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,514	trips

NET NEW EXTERNAL DAILY TRIPS =	**13,069**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,000	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	835	526	309
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail	100,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)	599	288	311
Service & Office[2]	30,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	45	8	37
Research & Development[1]	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital	0	beds	[610]	T = 1.42*(X); (33% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	14520	s.f.	-	T = 3.05*(X/1000); (40% in)	44	18	26
Park	0	acres	[412]	T = 0.09*(X); (61% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,523	840	683
				Total Gross Residential Trips =	835	526	309
				Total Gross Non-Residential Trips =	688	314	374
				Internal Capture % among TAZ =	11.42%	-	-
				Internal Capture trips among TAZ =	174	87	87

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	100,000	s.f.
External Trips from Matrix =	522	trips
Pass-By Percent =	34%	
Pass-By Reduction =	133	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,216**	**687**	**529**

WATS TAZ	TCRPM TAZ
372	**673**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	1,400	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	11,905
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.44*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	0
Service & Office	0	s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	0
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital	0	beds	[610]	T = 12.94*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	14,520	s.f.	-	T = 30.49*(X/1000)	443
Park	25	acres	[412]	T = 2.28*(X)	57
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	1,600	students	[522]	T = 1.62*(X)	2,592
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	14,997
				Total Gross Residential Trips =	11,905
				Total Gross Non-Residential Trips =	3,092
				Internal Capture % among TAZ =	8.04%
				Internal Capture trips among TAZ =	1,206

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**13,791**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,400	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	1,130	712	418
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)			
Service & Office(2)	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital	0	beds	[610]	T = 1.42*(X); (33% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	14520	s.f.	-	T = 3.05*(X/1000); (40% in)	44	18	26
Park	25	acres	[412]	T = 0.09*(X); (61% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	1600	students	[522]	T = 0.16*(X); (49% in)	256	125	131
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,432	856	576
				Total Gross Residential Trips =	1,130	712	418
				Total Gross Non-Residential Trips =	302	144	158
				Internal Capture % among TAZ =	7.40%	-	-
				Internal Capture trips among TAZ =	106	53	53

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,326**	**803**	**523**

WATS TAZ	TCRPM TAZ
373	**668**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	6,292
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.44*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	0
Service & Office	0	s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	0
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital	0	beds	[610]	T = 12.94*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	6,000	s.f.	-	T = 30.49*(X/1000)	183
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	6,475
				Total Gross Residential Trips =	6,292
				Total Gross Non-Residential Trips =	183
				Internal Capture % among TAZ =	1.11%
				Internal Capture trips among TAZ =	72

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**6,403**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	605	381	224
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital	0	beds	[610]	T = 1.42*(X); (33% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	6000	s.f.	-	T = 3.05*(X/1000); (40% in)	18	7	11
Park	0	acres	[412]	T = 0.09*(X); (61% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	623	388	235
				Total Gross Residential Trips =	605	381	224
				Total Gross Non-Residential Trips =	18	7	11
				Internal Capture % among TAZ =	0.96%	-	-
				Internal Capture trips among TAZ =	6	3	3

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**617**	**385**	**232**

WATS TAZ	TCRPM TAZ
374	**858**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,009	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,720
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	112,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,310
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	8	acres	[412]	T = 2.28*(X)	18
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	1,600	students	[522]	T = 1.62*(X)	2,592
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	18,640
				Total Gross Residential Trips =	8,720
				Total Gross Non-Residential Trips =	9,920
				Internal Capture % among TAZ =	13.11%
				Internal Capture trips among TAZ =	2,444

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	112,000	s.f.
External Trips from Matrix =	6,447	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,644	trips

NET NEW EXTERNAL DAILY TRIPS =	**14,552**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,009	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	841	530	311
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	112,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	686	336	350
Service & Office(2)	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	8	acres	[412]	T = 0.06*(X); (41% in)	0	0	0
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	1600	students	[522]	T = 0.16*(X); (49% in)	256	125	131
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,783	991	792
				Total Gross Residential Trips =	841	530	311
				Total Gross Non-Residential Trips =	942	461	481
				Internal Capture % among TAZ =	12.79%	-	-
				Internal Capture trips among TAZ =	228	114	114

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	112,000	s.f.
External Trips from Matrix =	604	trips
Pass-By Percent =	34%	
Pass-By Reduction =	154	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,401**	**800**	**601**

WATS TAZ	TCRPM TAZ
400	**656**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	374	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	2,027
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	208,668	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	10,954
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	101,781	s.f.	-	T = 54.51*(X/1000)	5,548
Institutional Use	171,327	s.f.	-	T = 30.49*(X/1000)	5,224
Park	55	acres	[412]	T = 2.28*(X)	124
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	23,877
				Total Gross Residential Trips =	2,027
				Total Gross Non-Residential Trips =	21,850
				Internal Capture % among TAZ =	8.79%
				Internal Capture trips among TAZ =	2,100

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	208,668	s.f.
External Trips from Matrix =	9,996	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,549	trips

NET NEW EXTERNAL DAILY TRIPS =	19,228

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	374	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	177	119	58
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	208,668	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,041	510	531
Service & Office[2]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[1]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	101,781	s.f.	-	T = 5.45*(X/1000); (50% in)	555	278	277
Institutional Use	171,327	s.f.	-	T = 3.05*(X/1000); (40% in)	523	209	314
Park	55	acres	[412]	T = 0.06*(X); (41% in)	3	1	2
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,299	1,117	1,182
				Total Gross Residential Trips =	177	119	58
				Total Gross Non-Residential Trips =	2,122	998	1,124
				Internal Capture % among TAZ =	7.57%	-	-
				Internal Capture trips among TAZ =	174	87	87

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	208,668	s.f.
External Trips from Matrix =	959	trips
Pass-By Percent =	34%	
Pass-By Reduction =	244	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,881**	**908**	**973**

WATS TAZ	TCRPM TAZ
375	**645**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,132	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	9,693
Multi-Family Residential	256	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,457
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	11,150
				Total Gross Residential Trips =	11,150
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	0.00%
				Internal Capture trips among TAZ =	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**11,150**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,132	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	933	588	345
Multi-Family Residential	256	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	130	87	43
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,063	675	388
				Total Gross Residential Trips =	1,063	675	388
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,063**	**675**	**388**

WATS TAZ	TCRPM TAZ
379	**855**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,020	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,807
Multi-Family Residential	300	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,673
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	10	acres	[412]	T = 2.28*(X)	23
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	10,503
				Total Gross Residential Trips =	10,480
				Total Gross Non-Residential Trips =	23
				Internal Capture % among TAZ =	0.23%
				Internal Capture trips among TAZ =	24

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**10,479**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,020	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	850	536	314
Multi-Family Residential	300	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	148	99	49
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	10	acres	[412]	T = 0.06*(X); (41% in)	1	0	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	999	635	364
				Total Gross Residential Trips =	998	635	363
				Total Gross Non-Residential Trips =	1	0	1
				Internal Capture % among TAZ =	0.20%	-	-
				Internal Capture trips among TAZ =	2	1	1

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**997**	**634**	**363**

WATS TAZ	TCRPM TAZ
376	**857**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	592	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	5,339
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	4,872
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	69,000	s.f.	-	T = 30.49*(X/1000)	2,104
Park	6.3	acres	[412]	T = 2.28*(X)	14
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	12,329
				Total Gross Residential Trips =	5,339
				Total Gross Non-Residential Trips =	6,990
				Internal Capture % among TAZ =	11.37%
				Internal Capture trips among TAZ =	1,402

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	4,285	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,093	trips

NET NEW EXTERNAL DAILY TRIPS =	**9,834**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	592	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	521	328	193
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	452	221	231
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	69000	s.f.	-	T = 3.05*(X/1000); (40% in)	210	84	126
Park	6	acres	[412]	T = 0.06*(X); (41% in)	0	0	0
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,183	633	550
				Total Gross Residential Trips =	521	328	193
				Total Gross Non-Residential Trips =	662	305	357
				Internal Capture % among TAZ =	10.99%	-	-
				Internal Capture trips among TAZ =	130	65	65

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	398	trips
Pass-By Percent =	34%	
Pass-By Reduction =	102	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**951**	**517**	**434**

WATS TAZ	TCRPM TAZ
399	**657**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	6,229
Multi-Family Residential	350	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,913
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	4,872
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	13,014
				Total Gross Residential Trips =	8,142
				Total Gross Non-Residential Trips =	4,872
				Internal Capture % among TAZ =	7.48%
				Internal Capture trips among TAZ =	974

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	4,385	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,118	trips

NET NEW EXTERNAL DAILY TRIPS =	**10,922**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	605	381	224
Multi-Family Residential	350	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	168	113	55
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	452	221	231
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,225	715	510
				Total Gross Residential Trips =	773	494	279
				Total Gross Non-Residential Trips =	452	221	231
				Internal Capture % among TAZ =	7.35%	-	-
				Internal Capture trips among TAZ =	90	45	45

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	407	trips
Pass-By Percent =	34%	
Pass-By Reduction =	104	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,031**	**618**	**413**

WATS TAZ	TCRPM TAZ
377	**859**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	926	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	4,460
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	4,460
				Total Gross Residential Trips =	4,460
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	0.00%
				Internal Capture trips among TAZ =	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**4,460**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	926	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	373	250	123
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	373	250	123
				Total Gross Residential Trips =	373	250	123
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**373**	**250**	**123**

WATS TAZ	TCRPM TAZ
378	**658**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,209	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,298
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	20,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	2,386
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	12,684
				Total Gross Residential Trips =	10,298
				Total Gross Non-Residential Trips =	2,386
				Internal Capture % among TAZ =	3.75%
				Internal Capture trips among TAZ =	476

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	20,000	s.f.
External Trips from Matrix =	2,148	trips
Pass-By Percent =	34%	
Pass-By Reduction =	548	trips

NET NEW EXTERNAL DAILY TRIPS =	**11,660**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,209	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	990	624	366
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	20,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	216	106	110
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,206	730	476
				Total Gross Residential Trips =	990	624	366
				Total Gross Non-Residential Trips =	216	106	110
				Internal Capture % among TAZ =	3.65%	-	-
				Internal Capture trips among TAZ =	44	22	22

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	20,000	s.f.
External Trips from Matrix =	194	trips
Pass-By Percent =	34%	
Pass-By Reduction =	50	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,112**	**683**	**429**

WATS TAZ	TCRPM TAZ
396	**856**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	983	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,513
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	272,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	13,014
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	29	acres	[412]	T = 2.28*(X)	66
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	21,593
				Total Gross Residential Trips =	8,513
				Total Gross Non-Residential Trips =	13,080
				Internal Capture % among TAZ =	12.47%
				Internal Capture trips among TAZ =	2,692

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	272,000	s.f.
External Trips from Matrix =	11,702	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,984	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,917**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	983	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	822	518	304
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	272,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,244	610	634
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	29	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,068	1,129	939
				Total Gross Residential Trips =	822	518	304
				Total Gross Non-Residential Trips =	1,246	611	635
				Internal Capture % among TAZ =	12.28%	-	-
				Internal Capture trips among TAZ =	254	127	127

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	272,000	s.f.
External Trips from Matrix =	1,119	trips
Pass-By Percent =	34%	
Pass-By Reduction =	285	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,529**	**860**	**669**

WATS TAZ	TCRPM TAZ
380	**655**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	550	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	4,990
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	11.0	acres	[412]	T = 2.28*(X)	25
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	5,015
				Total Gross Residential Trips =	4,990
				Total Gross Non-Residential Trips =	25
				Internal Capture % among TAZ =	0.56%
				Internal Capture trips among TAZ =	28

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**4,987**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	550	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	487	307	180
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	11	acres	[412]	T = 0.06*(X); (41% in)	1	0	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	488	307	181
				Total Gross Residential Trips =	487	307	180
				Total Gross Non-Residential Trips =	1	0	1
				Internal Capture % among TAZ =	0.41%	-	-
				Internal Capture trips among TAZ =	2	1	1

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**486**	**306**	**180**

WATS TAZ	TCRPM TAZ
397	**860**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	544,500	s.f.	[130]	T = 6.96*(X/1000)	3,790
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	544,500	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	4,919
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	8,709
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	8,709
				Internal Capture % among TAZ =	1.75%
				Internal Capture trips among TAZ =	152

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**8,557**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	544,500	s.f.	[130]	T = 0.86*(X/1000); (21% in)	468	98	370
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	544,500	s.f.	[710]	T = 1.12*(X/1000)+78.81; (17% in)	689	117	572
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,157	215	942
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	1,157	215	942
				Internal Capture % among TAZ =	0.69%	-	-
				Internal Capture trips among TAZ =	8	4	4

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,149**	**211**	**938**

WATS TAZ	TCRPM TAZ
398	**649**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,000	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,648
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	29	acres	[412]	T = 2.28*(X)	66
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	8,714
				Total Gross Residential Trips =	8,648
				Total Gross Non-Residential Trips =	66
				Internal Capture % among TAZ =	0.78%
				Internal Capture trips among TAZ =	68

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**8,646**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,000	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	835	526	309
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	29	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	837	527	310
				Total Gross Residential Trips =	835	526	309
				Total Gross Non-Residential Trips =	2	1	1
				Internal Capture % among TAZ =	0.48%	-	-
				Internal Capture trips among TAZ =	4	2	2

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**833**	**525**	**308**

WATS TAZ	TCRPM TAZ
389	**647**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,294	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,963
Multi-Family Residential	425	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	2,265
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	40,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	3,743
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	16,971
				Total Gross Residential Trips =	13,228
				Total Gross Non-Residential Trips =	3,743
				Internal Capture % among TAZ =	4.41%
				Internal Capture trips among TAZ =	748

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	40,000	s.f.
External Trips from Matrix =	3,370	trips
Pass-By Percent =	34%	
Pass-By Reduction =	860	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,363**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,294	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	1,053	663	390
Multi-Family Residential	425	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	197	132	65
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	40,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	344	169	175
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,594	964	630
				Total Gross Residential Trips =	1,250	795	455
				Total Gross Non-Residential Trips =	344	169	175
				Internal Capture % among TAZ =	4.27%	-	-
				Internal Capture trips among TAZ =	68	34	34

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	40,000	s.f.
External Trips from Matrix =	310	trips
Pass-By Percent =	34%	
Pass-By Reduction =	79	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,447**	**891**	**556**

WATS TAZ	TCRPM TAZ
390	**648**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	544,500	s.f.	[130]	T = 6.96*(X/1000)	3,790
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	544,500	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	4,919
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	8,709
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	8,709
				Internal Capture % among TAZ =	1.75%
				Internal Capture trips among TAZ =	152

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**8,557**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	544,500	s.f.	[130]	T = 0.86*(X/1000); (21% in)	468	98	370
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	544,500	s.f.	[710]	T = 1.12*(X/1000)+78.81; (17% in)	689	117	572
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,157	215	942
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	1,157	215	942
				Internal Capture % among TAZ =	0.69%	-	-
				Internal Capture trips among TAZ =	8	4	4

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,149**	**211**	**938**

WATS TAZ	TCRPM TAZ
392	**654**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	977	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,465
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,645
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	50,638	s.f.	-	T = 30.49*(X/1000)	1,544
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	17,654
				Total Gross Residential Trips =	8,465
				Total Gross Non-Residential Trips =	9,189
				Internal Capture % among TAZ =	12.31%
				Internal Capture trips among TAZ =	2,174

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	6,729	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,716	trips

NET NEW EXTERNAL DAILY TRIPS =	**13,764**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	977	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	817	515	302
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	719	352	367
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	50638	s.f.	-	T = 3.05*(X/1000); (40% in)	154	62	92
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,690	929	761
				Total Gross Residential Trips =	817	515	302
				Total Gross Non-Residential Trips =	873	414	459
				Internal Capture % among TAZ =	12.07%	-	-
				Internal Capture trips among TAZ =	204	102	102

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	633	trips
Pass-By Percent =	34%	
Pass-By Reduction =	162	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,324**	**746**	**578**

WATS TAZ	TCRPM TAZ
393	**861**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	732	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	6,491
Multi-Family Residential	100	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	643
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	7,134
				Total Gross Residential Trips =	7,134
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	0.00%
				Internal Capture trips among TAZ =	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**7,134**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	732	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	630	397	233
Multi-Family Residential	100	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	60	40	20
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office(2)	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	690	437	253
				Total Gross Residential Trips =	690	437	253
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**690**	**437**	**253**

WATS TAZ	TCRPM TAZ
394	**653**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	800	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	7,043
Multi-Family Residential	100	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	643
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,645
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	15,331
				Total Gross Residential Trips =	7,686
				Total Gross Non-Residential Trips =	7,645
				Internal Capture % among TAZ =	9.98%
				Internal Capture trips among TAZ =	1,530

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	6,881	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,755	trips

NET NEW EXTERNAL DAILY TRIPS =	**12,046**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	800	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	683	430	253
Multi-Family Residential	100	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	60	40	20
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	719	352	367
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,462	822	640
				Total Gross Residential Trips =	743	470	273
				Total Gross Non-Residential Trips =	719	352	367
				Internal Capture % among TAZ =	9.85%	-	-
				Internal Capture trips among TAZ =	144	72	72

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	647	trips
Pass-By Percent =	34%	
Pass-By Reduction =	165	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,153**	**668**	**485**

WATS TAZ	TCRPM TAZ
395	**652**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,272	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,791
Multi-Family Residential	594	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	3,031
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	50,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	4,328
Service & Office	62,000	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	923
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	50	acres	[412]	T = 2.28*(X)	114
Elementary School	820	students	[520]	T = 1.29*(X)	1,058
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	20,245
				Total Gross Residential Trips =	13,822
				Total Gross Non-Residential Trips =	6,423
				Internal Capture % among TAZ =	11.99%
				Internal Capture trips among TAZ =	2,428

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	50,000	s.f.
External Trips from Matrix =	3,673	trips
Pass-By Percent =	34%	
Pass-By Reduction =	937	trips

NET NEW EXTERNAL DAILY TRIPS =	**16,880**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,272	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	1,036	653	383
Multi-Family Residential	594	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	259	174	85
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	50,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	400	196	204
Service & Office[(2)]	62,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	92	16	76
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	50	acres	[412]	T = 0.06*(X); (41% in)	3	1	2
Elementary School	820	students	[520]	T = 0.15*(X); (49% in)	123	60	63
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,913	1,100	813
				Total Gross Residential Trips =	1,295	827	468
				Total Gross Non-Residential Trips =	618	273	345
				Internal Capture % among TAZ =	11.40%	-	-
				Internal Capture trips among TAZ =	218	109	109

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	50,000	s.f.
External Trips from Matrix =	344	trips
Pass-By Percent =	34%	
Pass-By Reduction =	88	trips

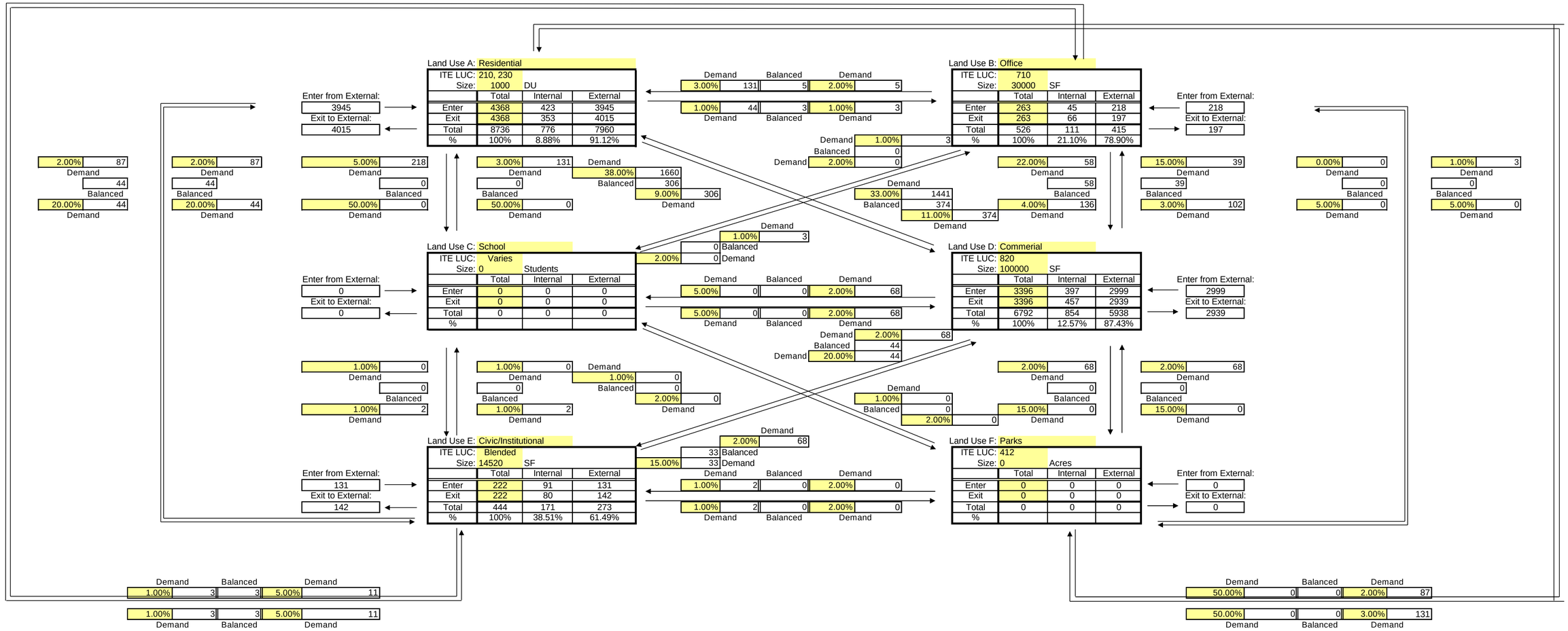
	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,607**	**947**	**660**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 670



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT							
Category	Land Use						
	A	B	C	D	E	F	Total
	Residentia	Office	School	Commerial	Civic/Institu	Parks	
Enter	3945	218	0	2999	131	0	7293
Exit	4015	197	0	2939	142	0	7293
Total	7960	415	0	5938	273	0	**14586**
Single Use Trip Gen Estimate	8736	526	0	6792	444	0	**16498**
	8.88%	21.10%	0.00%	12.57%	38.51%	0.00%	

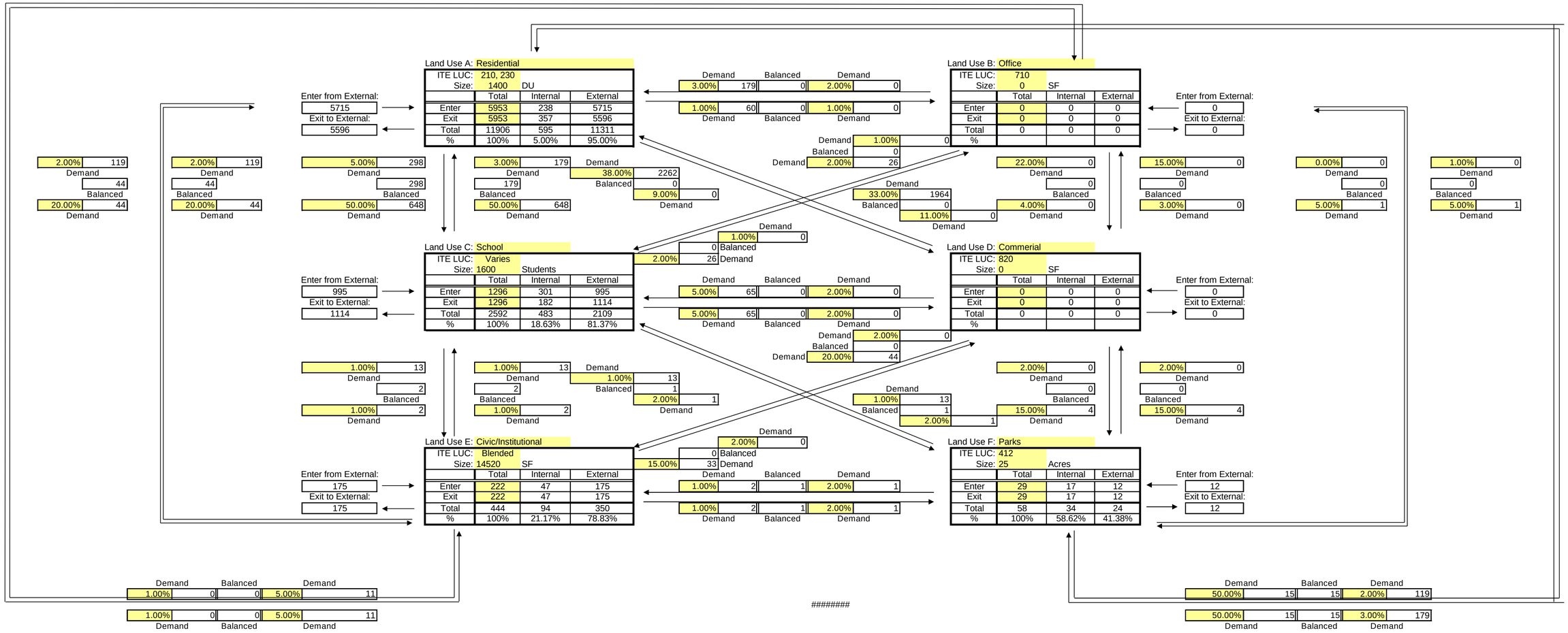
Internal Capture = 11.59%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 673



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5715	0	995	0	175	12	6897
Exit	5596	0	1114	0	175	12	6897
Total	11311	0	2109	0	350	24	**13794**
Single Use Trip Gen Estimate	11906	0	2592	0	444	58	**15000**
	5.00%	0.00%	18.63%	0.00%	21.17%	58.62%	

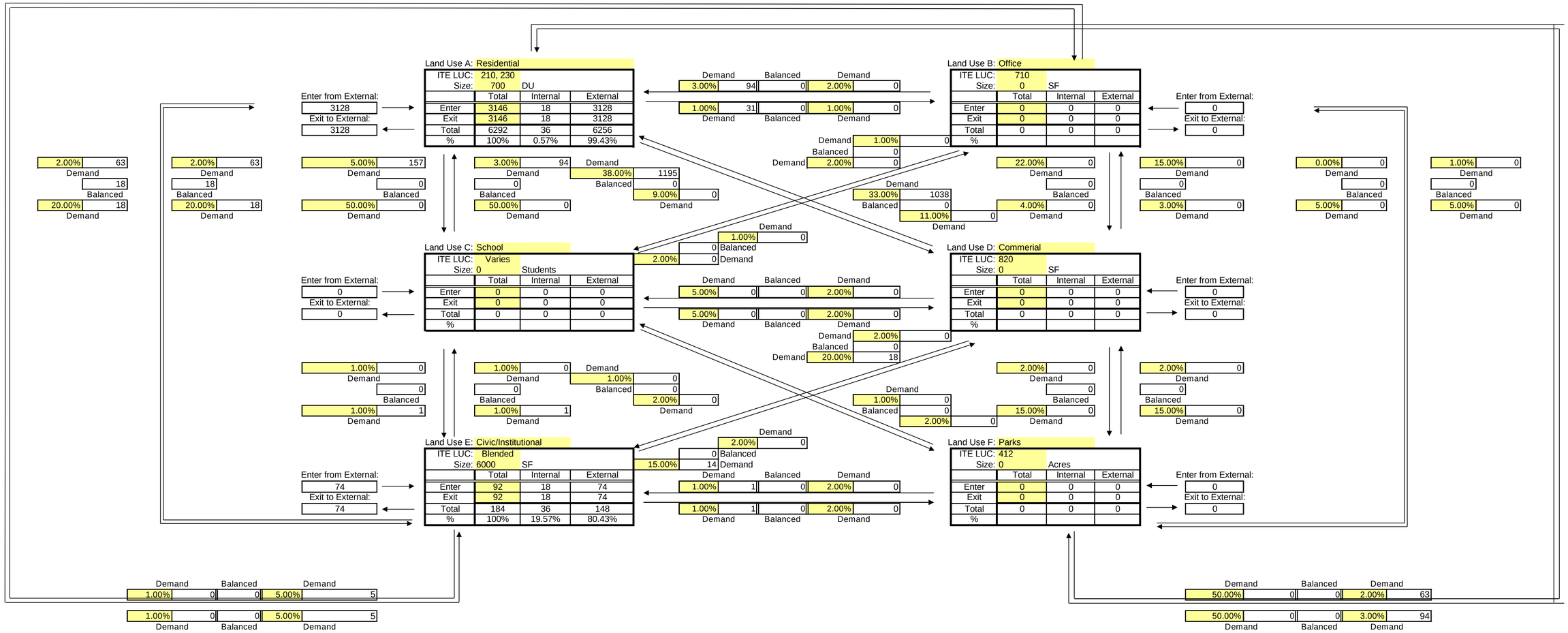
Internal Capture = 8.04%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 668



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3128	0	0	0	74	0	3202
Exit	3128	0	0	0	74	0	3202
Total	6256	0	0	0	148	0	**6404**
Single Use Trip Gen Estimate	6292	0	0	0	184	0	**6476**
	0.57%	0.00%	0.00%	0.00%	19.57%	0.00%	

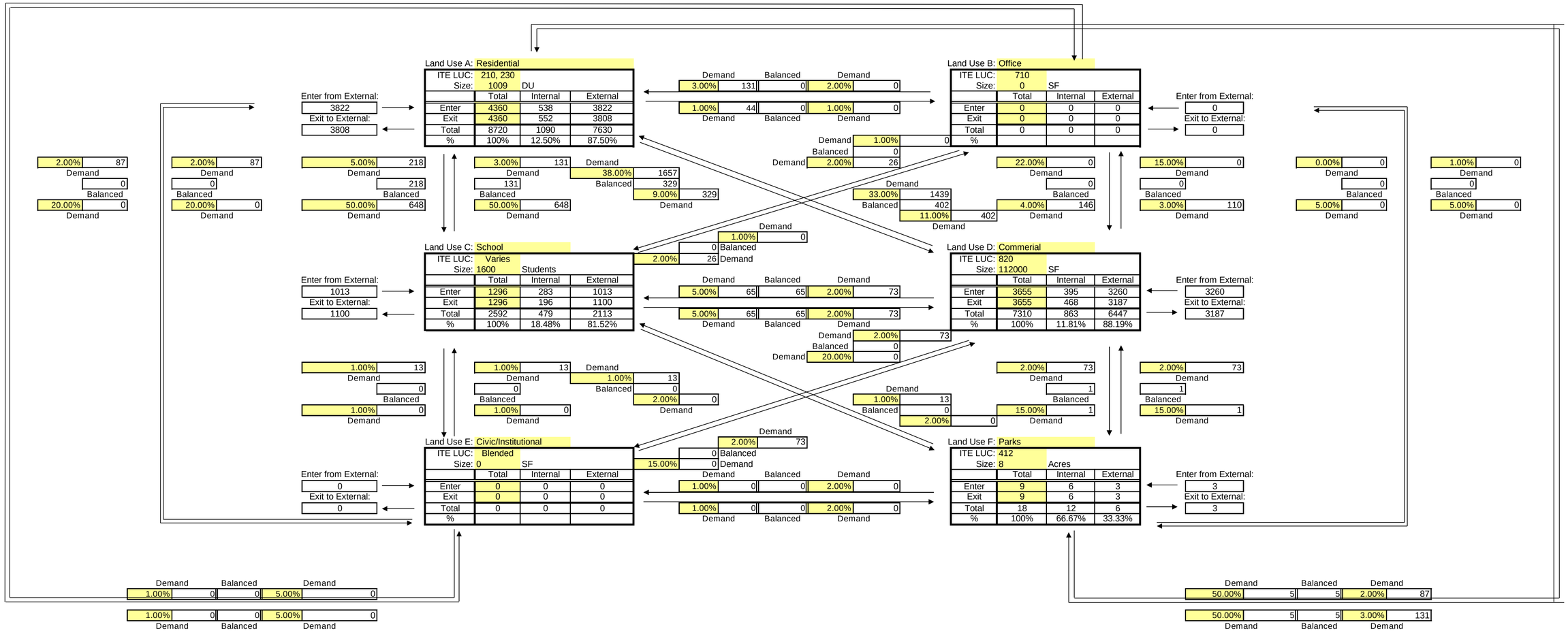
Internal Capture = 1.11%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 858



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3822	0	1013	3260	0	3	8098
Exit	3808	0	1100	3187	0	3	8098
Total	7630	0	2113	6447	0	6	**16196**
Single Use Trip Gen Estimate	8720	0	2592	7310	0	18	**18640**
	12.50%	0.00%	18.48%	11.81%	0.00%	66.67%	

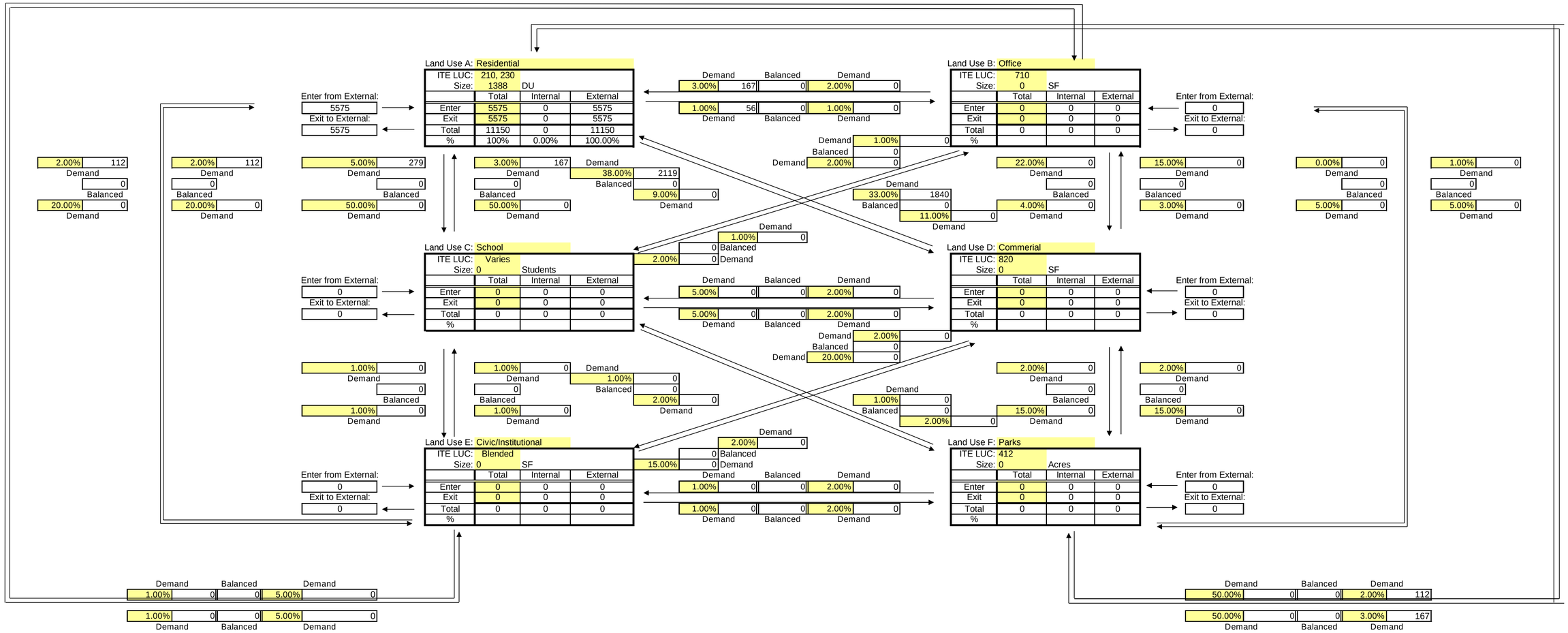
Internal Capture = 13.11%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 645



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5575	0	0	0	0	0	5575
Exit	5575	0	0	0	0	0	5575
Total	11150	0	0	0	0	0	**11150**
Single Use Trip Gen Estimate	11150	0	0	0	0	0	**11150**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

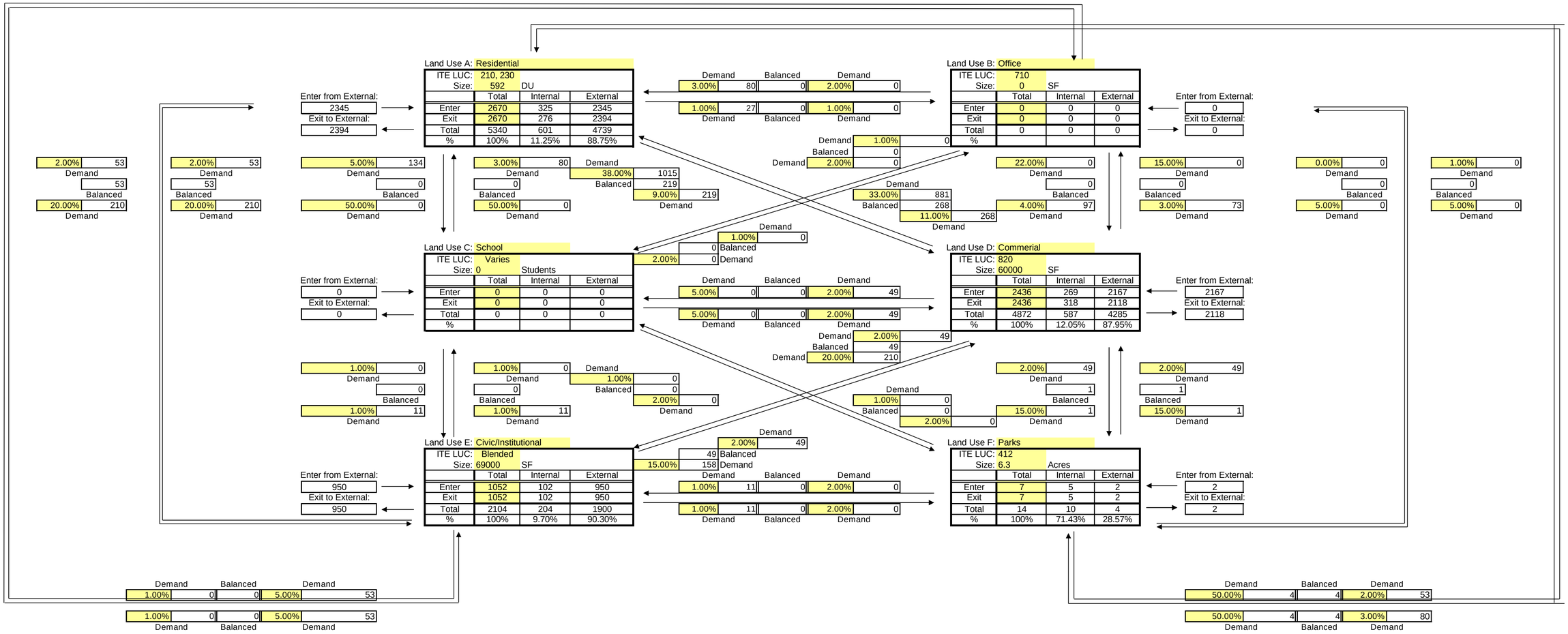
Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 857



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2345	0	0	2167	950	2	5464
Exit	2394	0	0	2118	950	2	5464
Total	4739	0	0	4285	1900	4	**10928**
Single Use Trip Gen Estimate	5340	0	0	4872	2104	14	**12330**
	11.25%	0.00%	0.00%	12.05%	9.70%	71.43%	

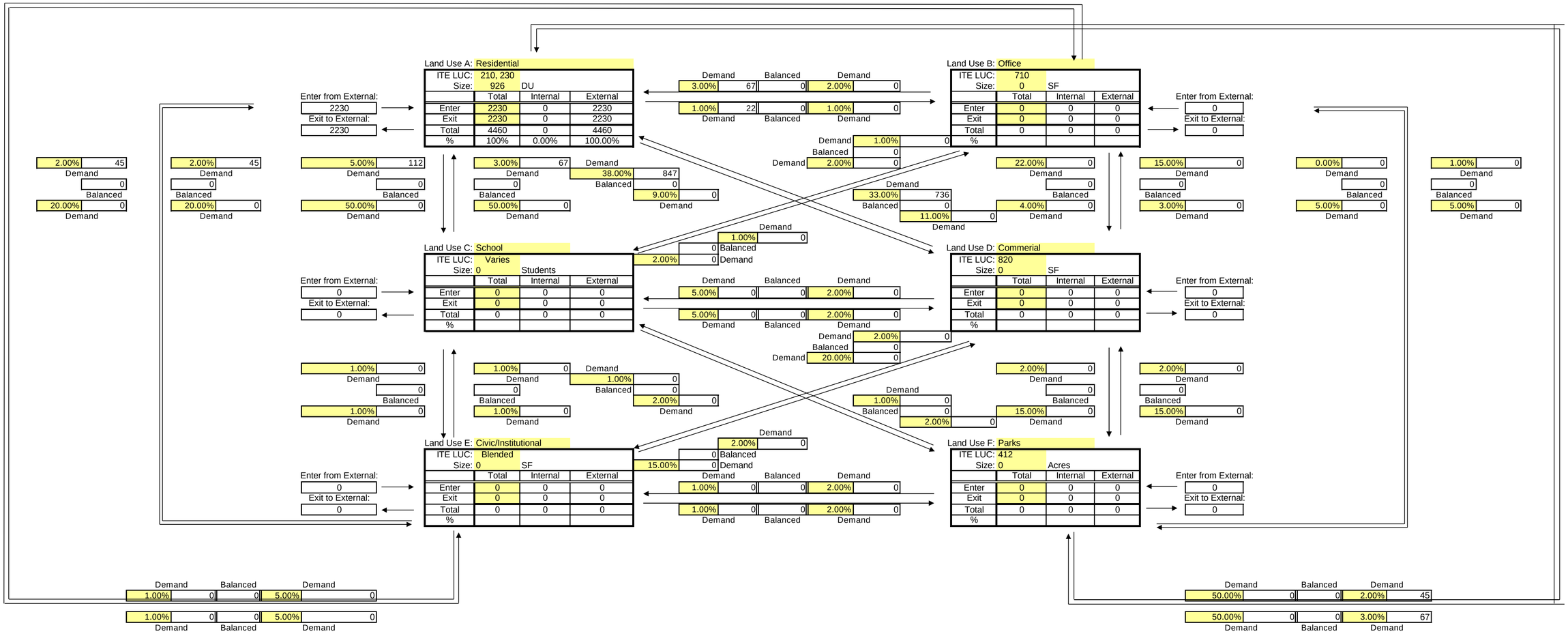
Internal Capture = 11.37%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 859



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2230	0	0	0	0	0	2230
Exit	2230	0	0	0	0	0	2230
Total	4460	0	0	0	0	0	**4460**
Single Use Trip Gen Estimate	4460	0	0	0	0	0	**4460**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

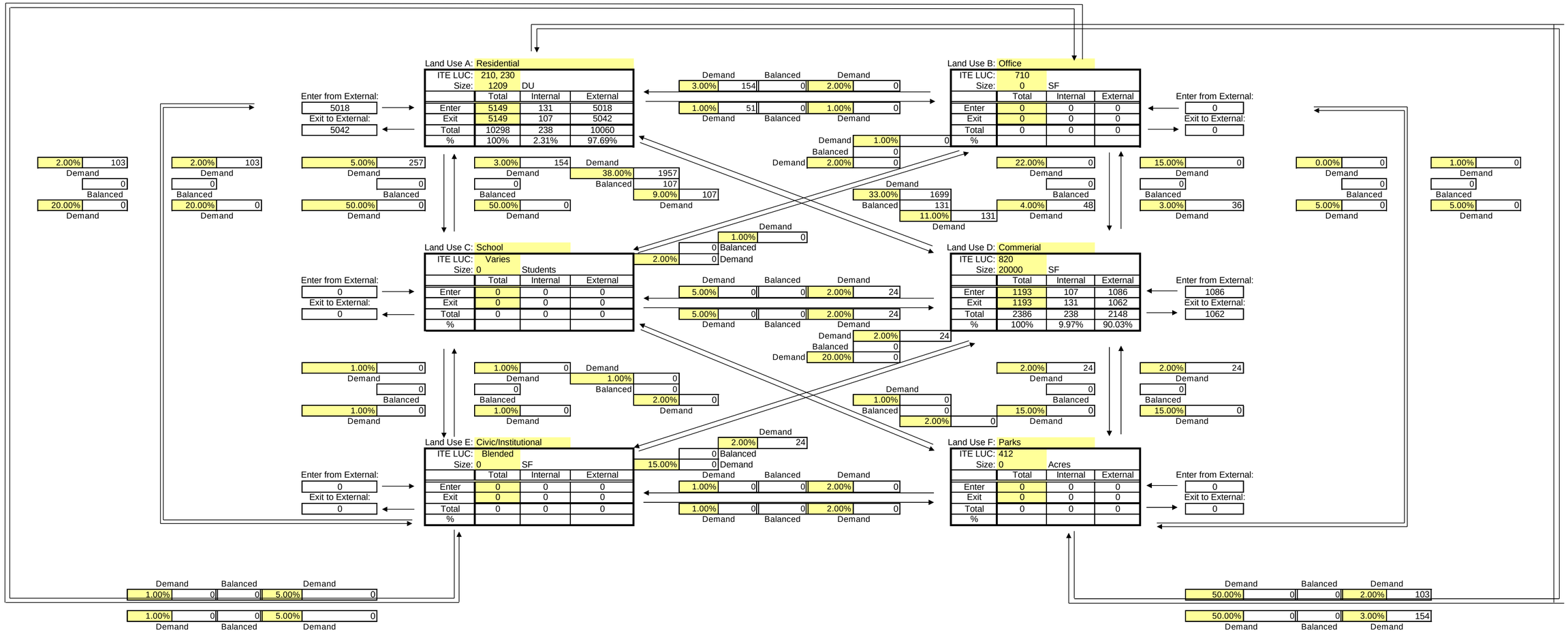
Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 658



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5018	0	0	1086	0	0	6104
Exit	5042	0	0	1062	0	0	6104
Total	10060	0	0	2148	0	0	**12208**
Single Use Trip Gen Estimate	10298	0	0	2386	0	0	**12684**
	2.31%	0.00%	0.00%	9.97%	0.00%	0.00%	

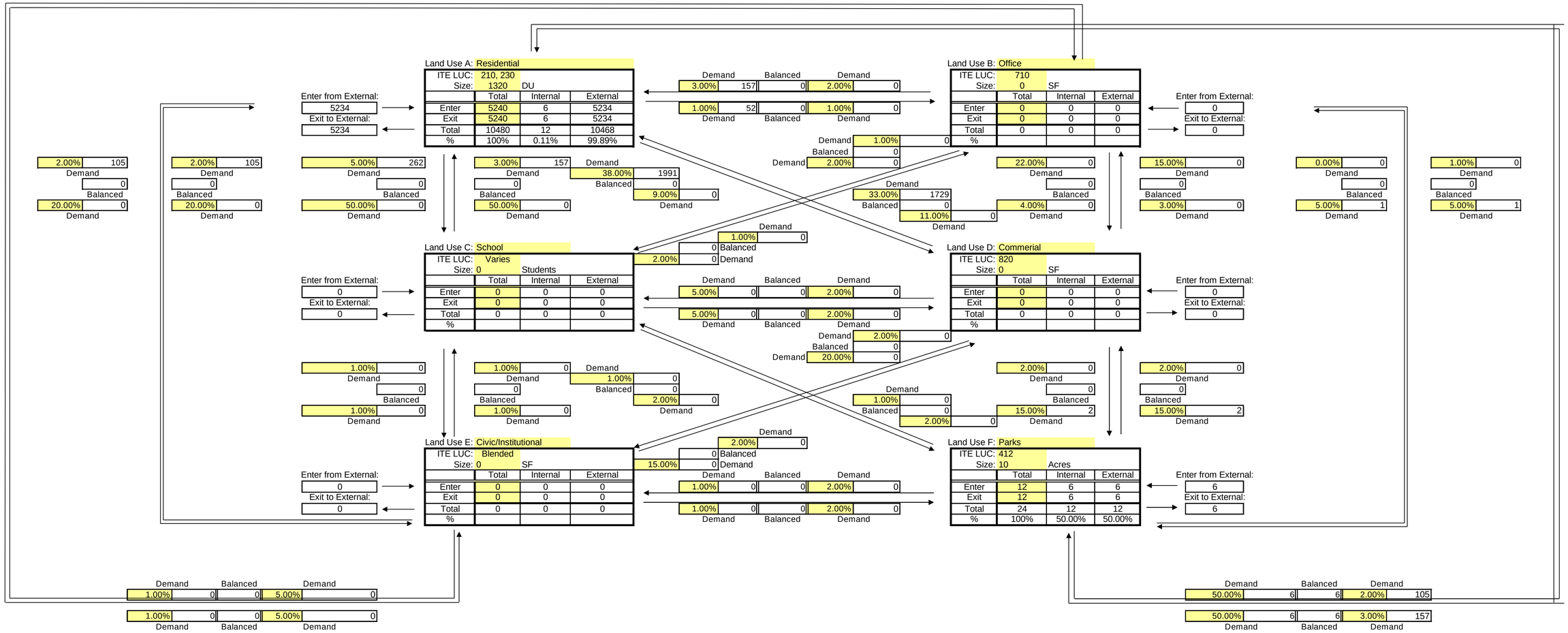
Internal Capture = 3.75%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 855



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5234	0	0	0	0	6	5240
Exit	5234	0	0	0	0	6	5240
Total	10468	0	0	0	0	12	**10480**
Single Use Trip Gen Estimate	10480	0	0	0	0	24	**10504**
	0.11%	0.00%	0.00%	0.00%	0.00%	50.00%	

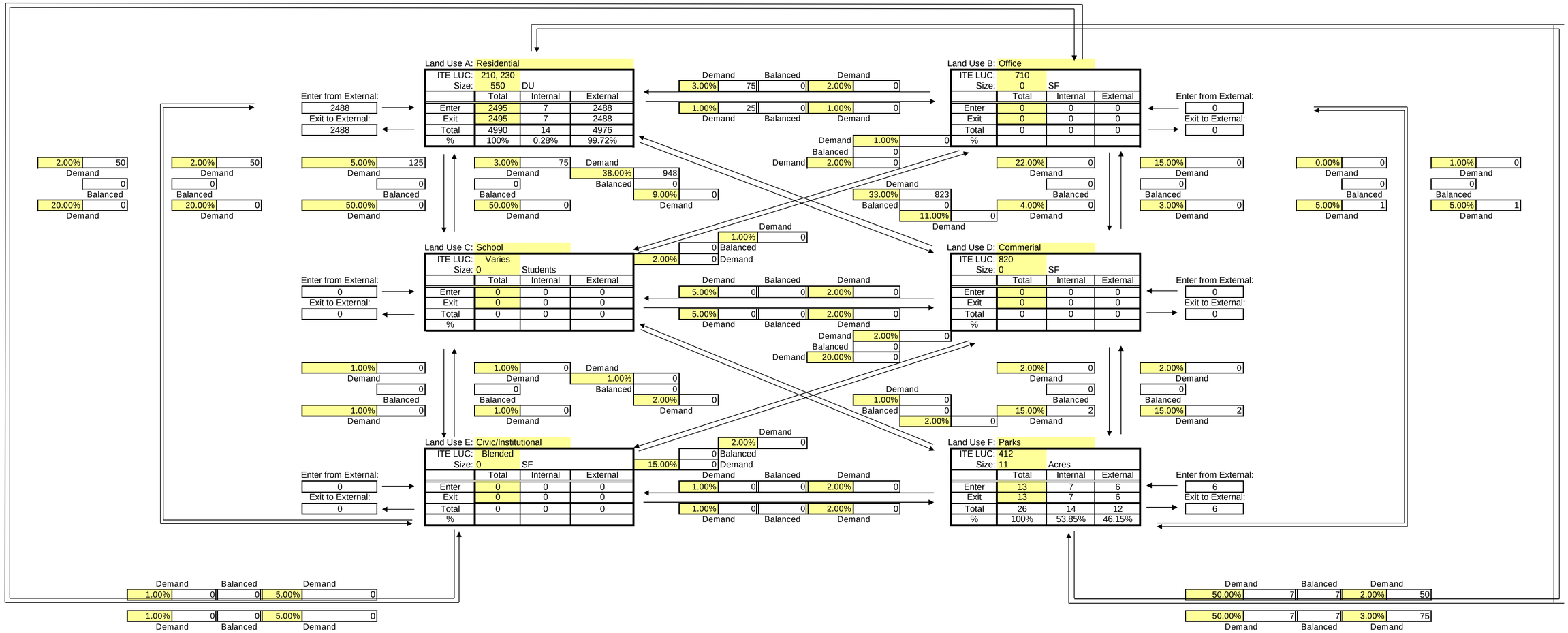
Internal Capture = 0.23%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 655



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2488	0	0	0	0	6	2494
Exit	2488	0	0	0	0	6	2494
Total	4976	0	0	0	0	12	**4988**
Single Use Trip Gen Estimate	4990	0	0	0	0	26	**5016**
	0.28%	0.00%	0.00%	0.00%	0.00%	53.85%	

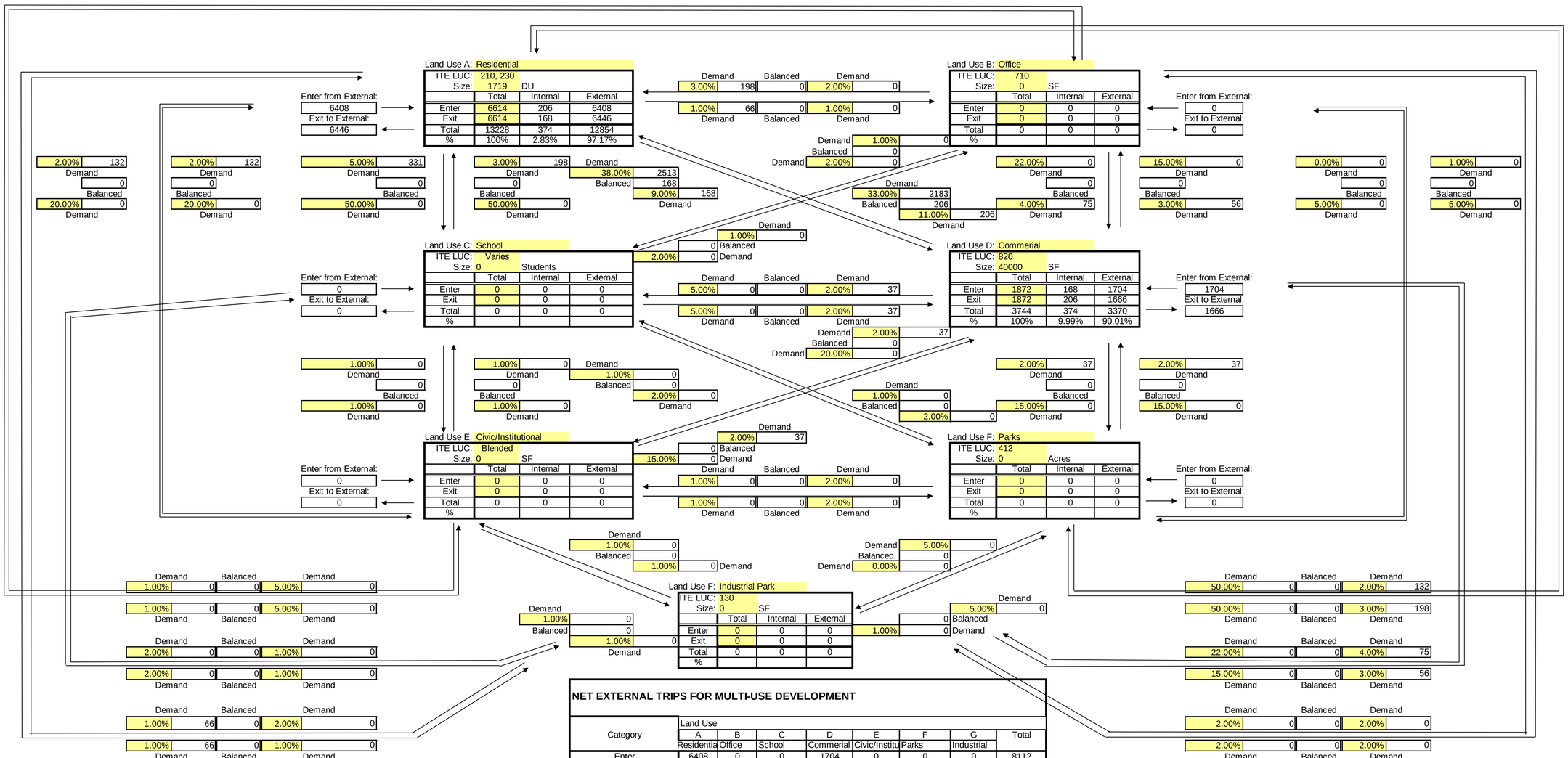
Internal Capture = 0.56%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, *Trip Generation Handbook*)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 647 POD C



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	6408	0	0	1704	0	0	0	8112
Exit	6446	0	0	1666	0	0	0	8112
Total	12854	0	0	3370	0	0	0	**16224**
Single Use Trip Gen Estimate	13228	0	0	3744	0	0	0	**16972**
	2.83%	0.00%	0.00%	9.99%	0.00%	0.00%	0.00%	

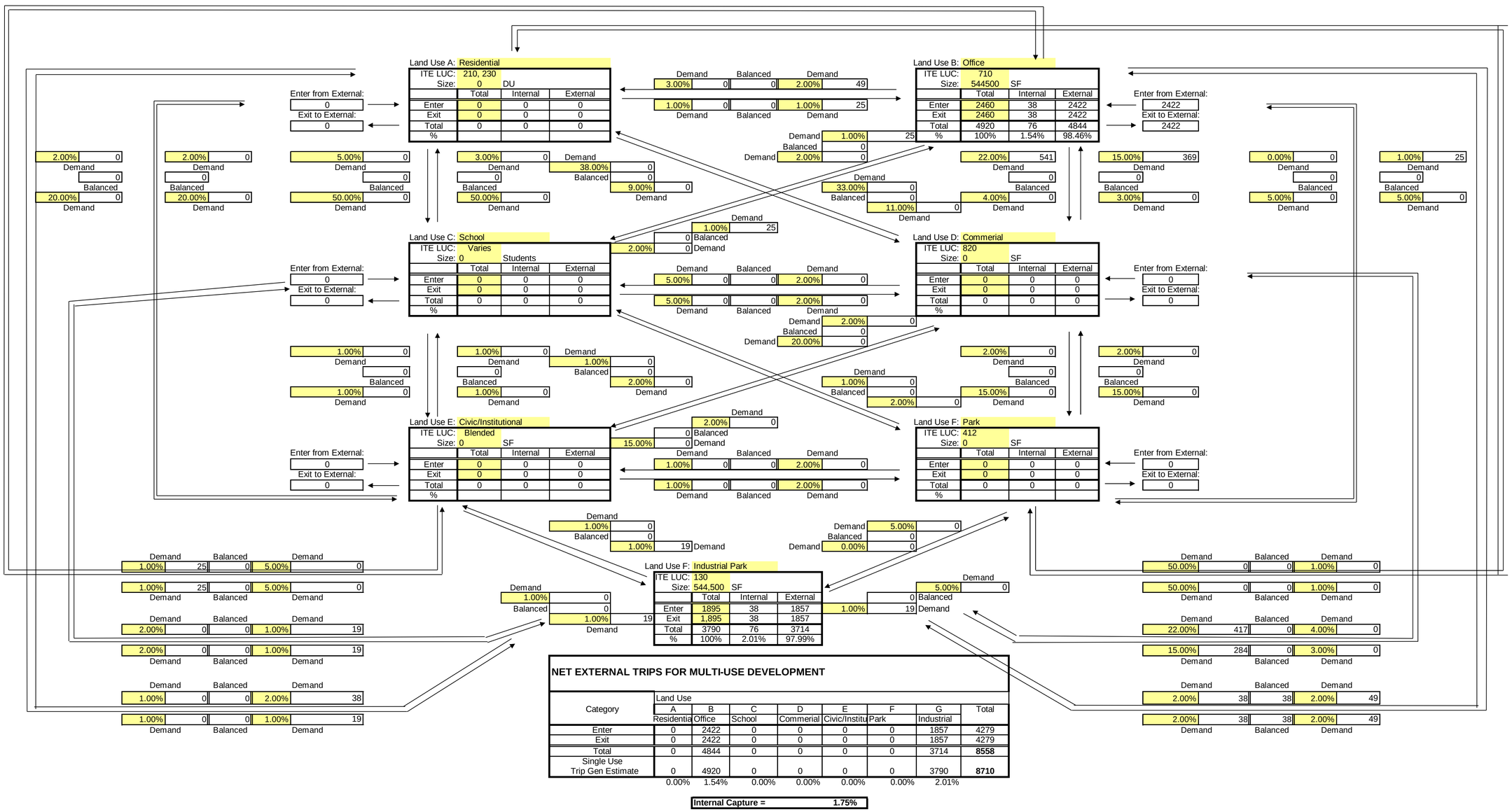
Internal Capture = 4.41%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, *Trip Generation Handbook*)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 648 POD A



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	2422	0	0	0	0	1857	4279
Exit	0	2422	0	0	0	0	1857	4279
Total	0	4844	0	0	0	0	3714	**8558**
Single Use Trip Gen Estimate	0	4920	0	0	0	0	3790	**8710**
	0.00%	1.54%	0.00%	0.00%	0.00%	0.00%	2.01%	

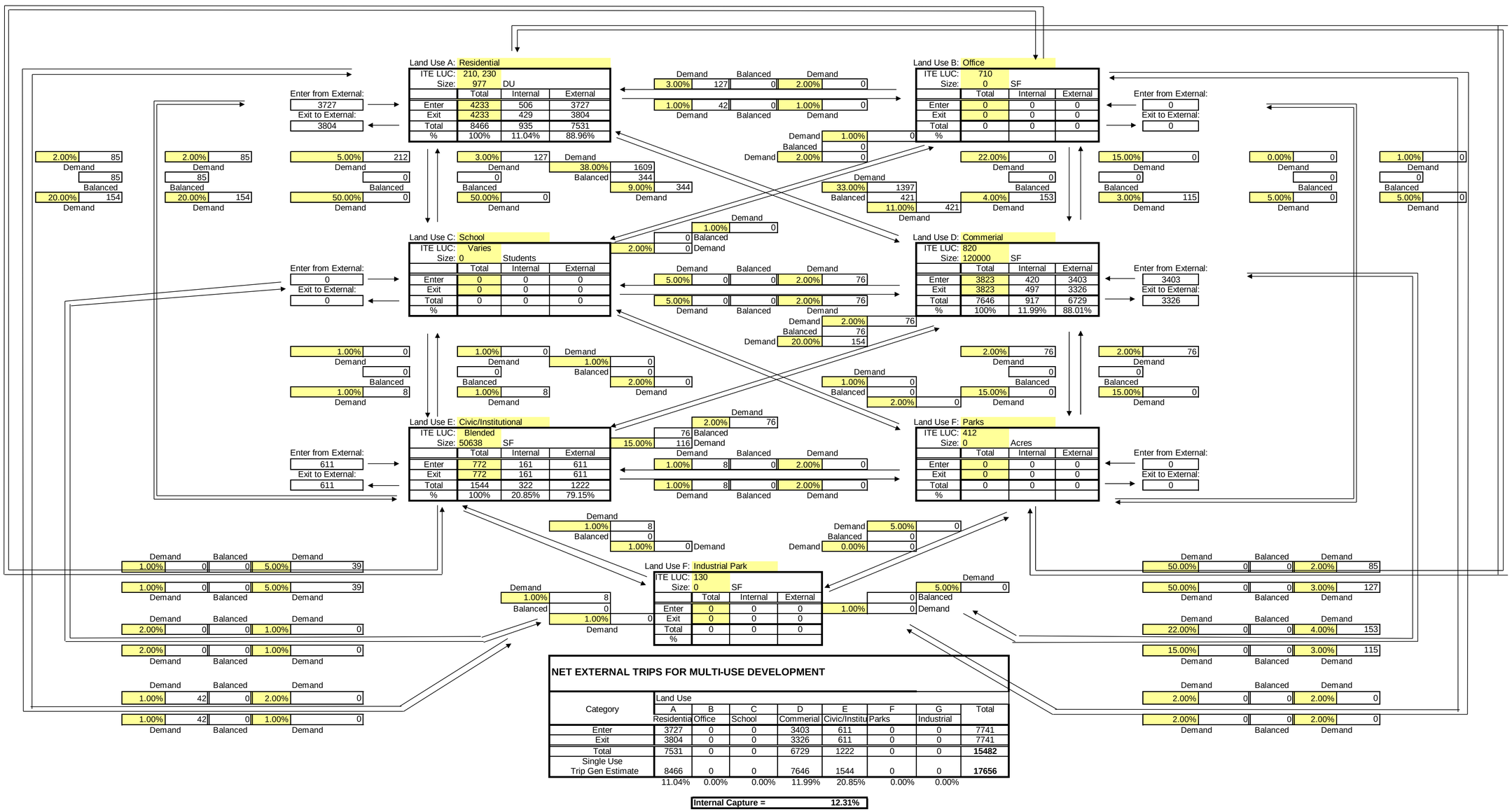
Internal Capture = 1.75%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, *Trip Generation Handbook*)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 654 POD D



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	3727	0	0	3403	611	0	0	7741
Exit	3804	0	0	3326	611	0	0	7741
Total	7531	0	0	6729	1222	0	0	**15482**
Single Use Trip Gen Estimate	8466	0	0	7646	1544	0	0	**17656**
	11.04%	0.00%	0.00%	11.99%	20.85%	0.00%	0.00%	

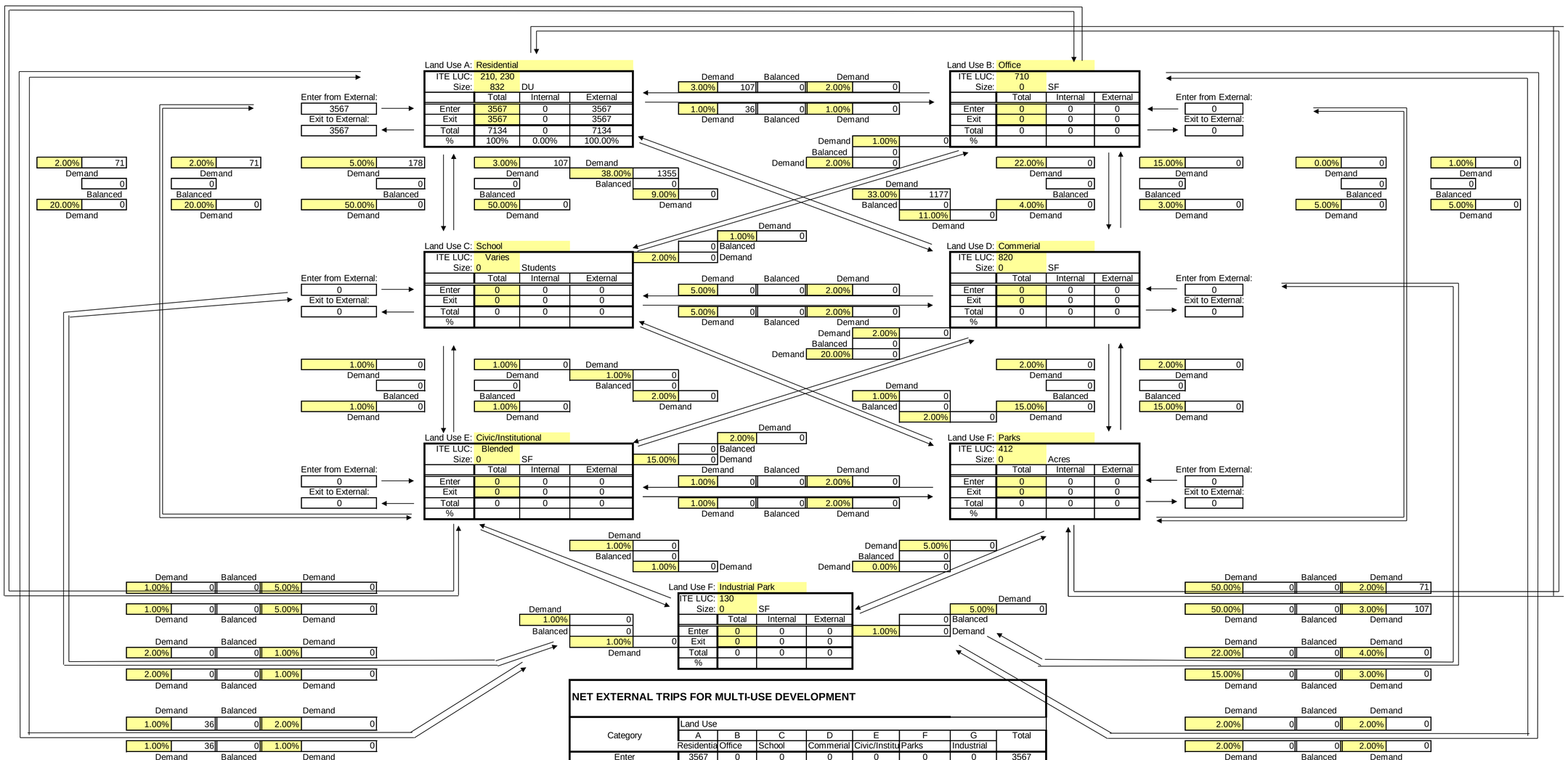
Internal Capture = 12.31%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, *Trip Generation Handbook*)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 861 POD F



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	3567	0	0	0	0	0	0	3567
Exit	3567	0	0	0	0	0	0	3567
Total	7134	0	0	0	0	0	0	**7134**
Single Use Trip Gen Estimate	7134	0	0	0	0	0	0	**7134**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

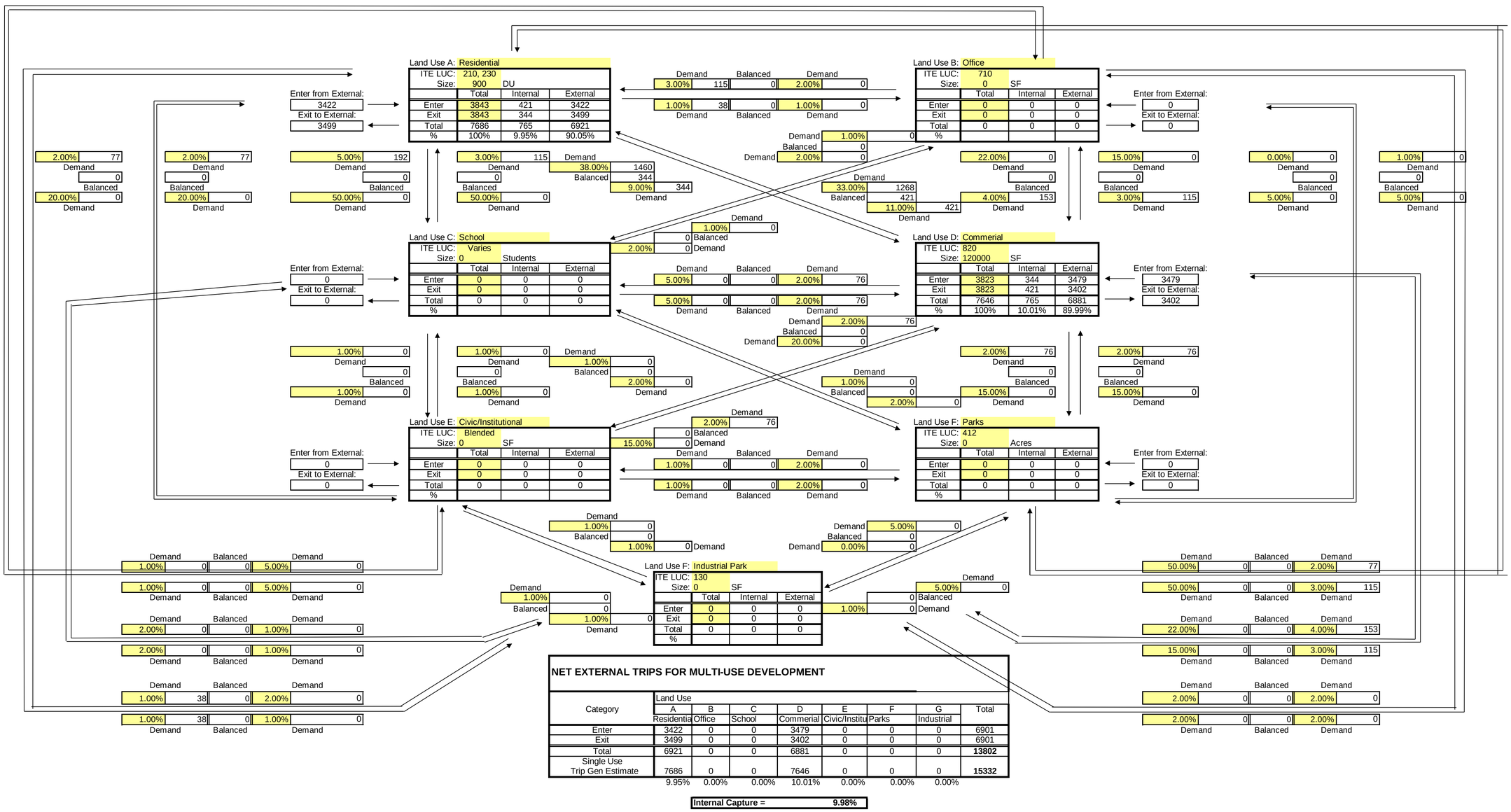
Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, *Trip Generation Handbook*)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 653 POD E



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	3422	0	0	3479	0	0	0	6901
Exit	3499	0	0	3402	0	0	0	6901
Total	6921	0	0	6881	0	0	0	**13802**
Single Use Trip Gen Estimate	7686	0	0	7646	0	0	0	**15332**
	9.95%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

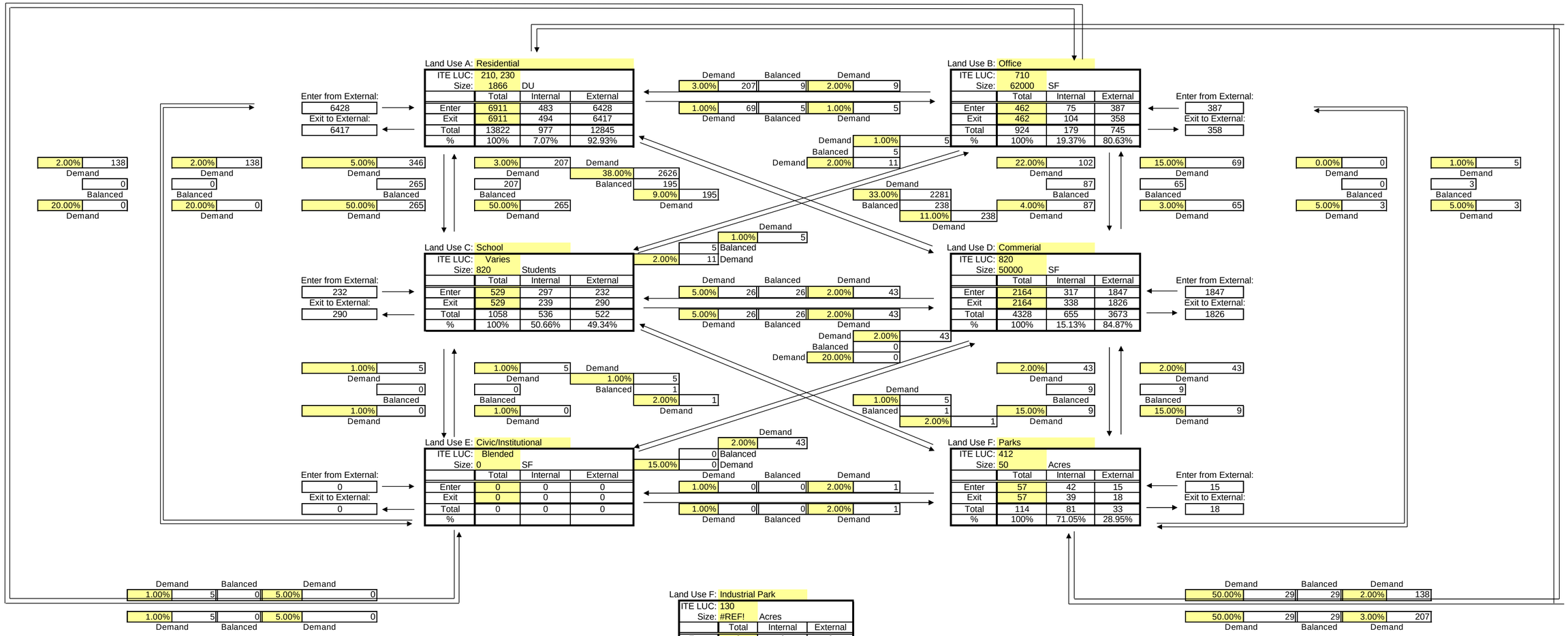
Internal Capture = 9.98%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, *Trip Generation Handboo* k)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 652



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	6428	387	232	1847	0	15	8909
Exit	6417	358	290	1826	0	18	8909
Total	12845	745	522	3673	0	33	**17818**
Single Use Trip Gen Estimate	13822	924	1058	4328	0	114	**20246**
	7.07%	19.37%	50.66%	15.13%	0.00%	71.05%	

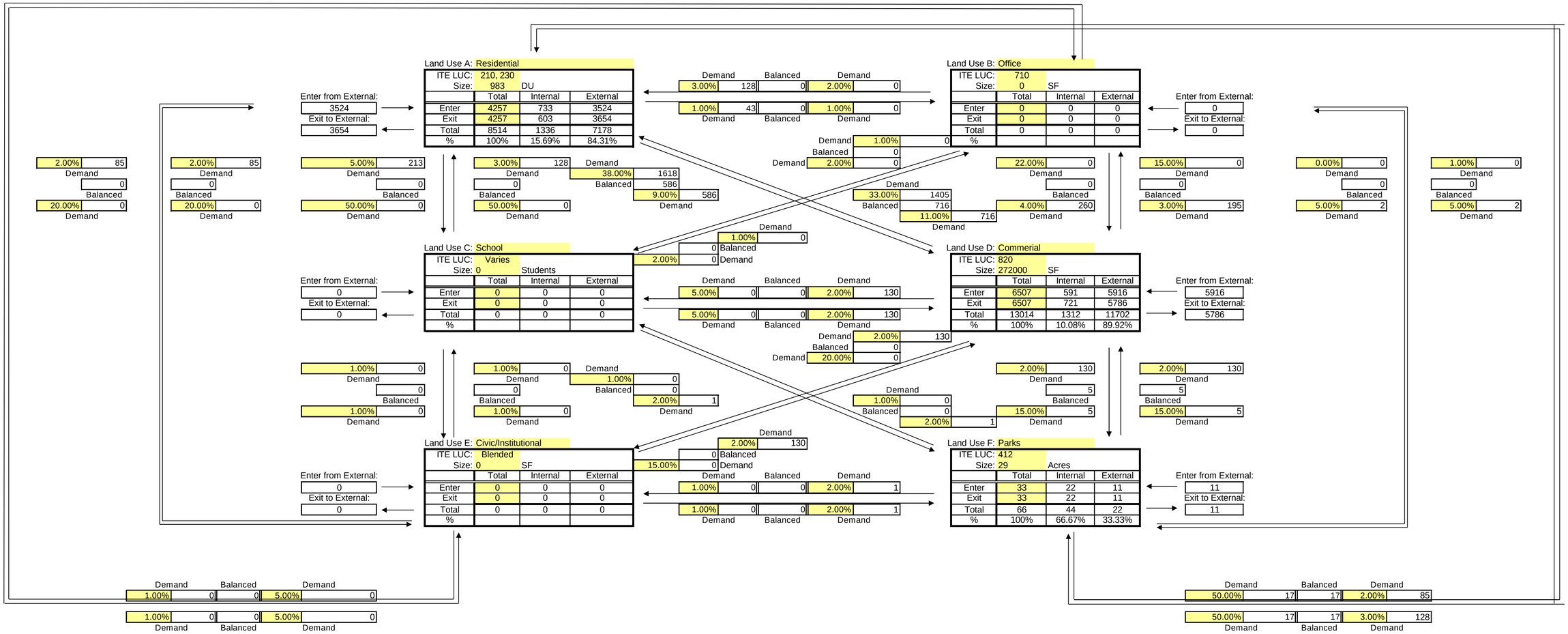
Internal Capture = 11.99%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, *Trip Generation Handbook*)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 856



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3524	0	0	5916	0	11	9451
Exit	3654	0	0	5786	0	11	9451
Total	7178	0	0	11702	0	22	**18902**
Single Use Trip Gen Estimate	8514	0	0	13014	0	66	**21594**
	15.69%	0.00%	0.00%	10.08%	0.00%	66.67%	

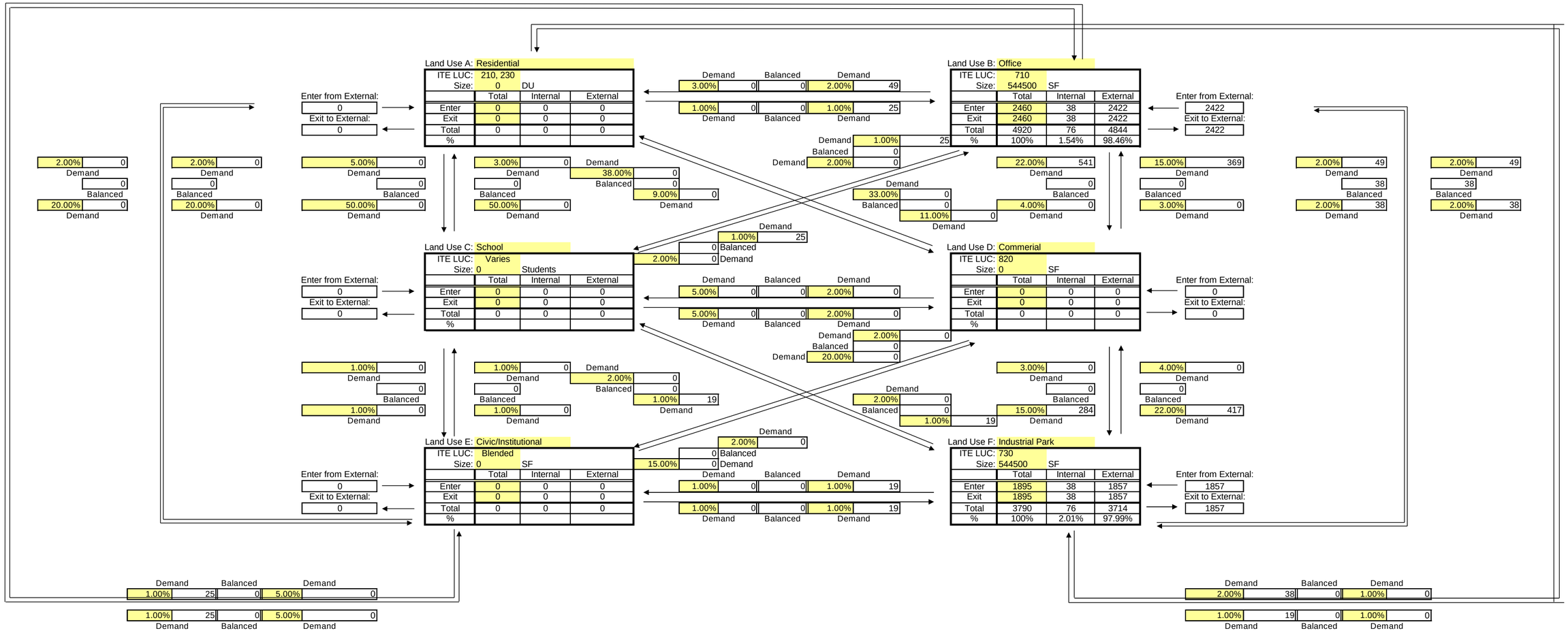
Internal Capture = 12.47%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, *Trip Generation Handbook* k)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 860



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	2422	0	0	0	1857	4279
Exit	0	2422	0	0	0	1857	4279
Total	0	4844	0	0	0	3714	**8558**
Single Use Trip Gen Estimate	0	4920	0	0	0	3790	**8710**
	0.00%	1.54%	0.00%	0.00%	0.00%	2.01%	

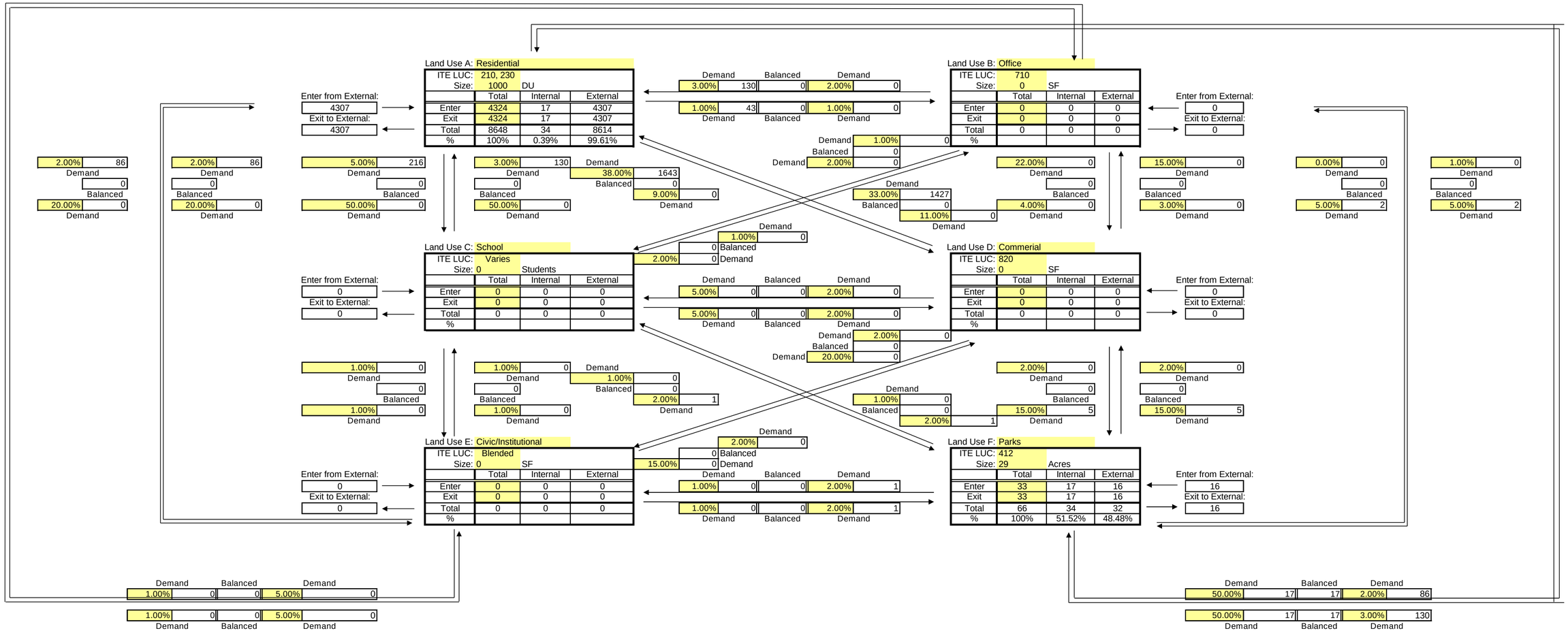
Internal Capture = 1.75%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, *Trip Generation Handbook* k)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 649



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	4307	0	0	0	0	16	4323
Exit	4307	0	0	0	0	16	4323
Total	8614	0	0	0	0	32	**8646**
Single Use Trip Gen Estimate	8648	0	0	0	0	66	**8714**
	0.39%	0.00%	0.00%	0.00%	0.00%	51.52%	

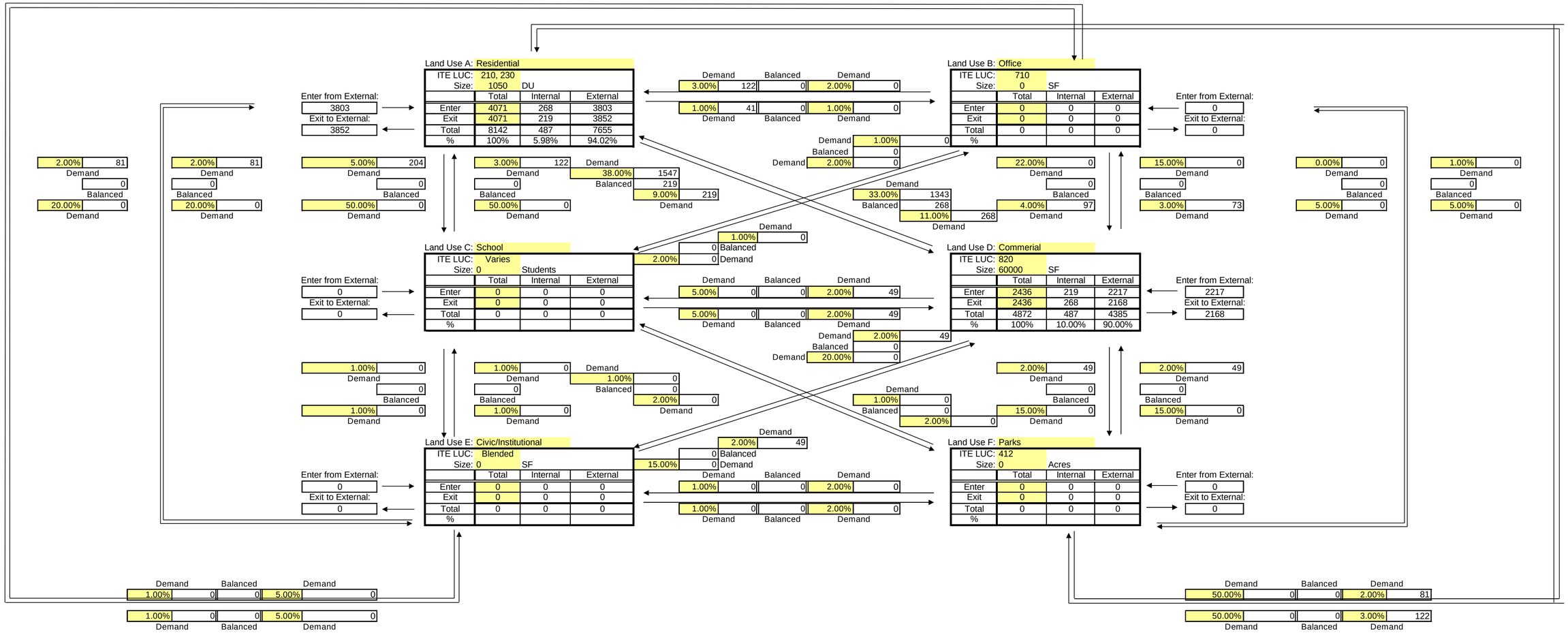
Internal Capture = 0.78%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, *Trip Generation Handboo* k)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 657



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3803	0	0	2217	0	0	6020
Exit	3852	0	0	2168	0	0	6020
Total	7655	0	0	4385	0	0	**12040**
Single Use Trip Gen Estimate	8142	0	0	4872	0	0	**13014**
	5.98%	0.00%	0.00%	10.00%	0.00%	0.00%	

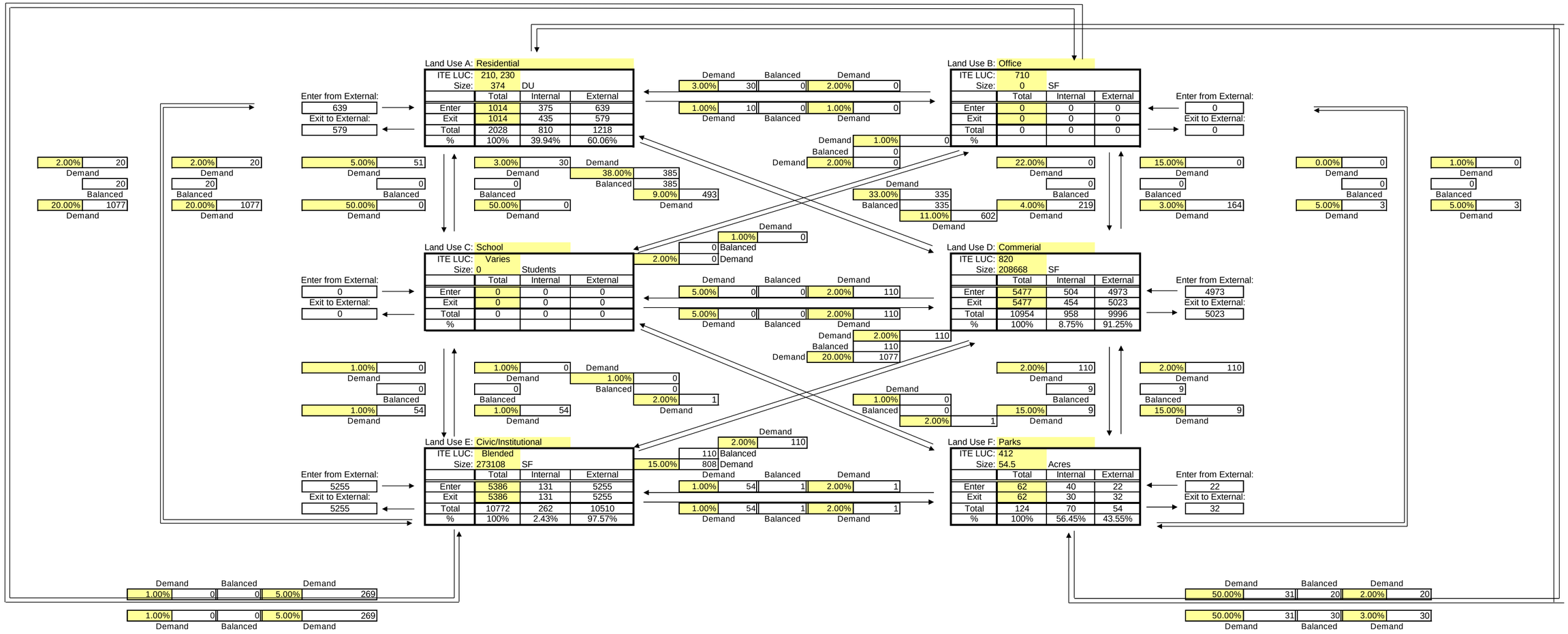
Internal Capture = 7.48%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

(ITE, Chapter 7, *Trip Generation Handbook* k, October 1998)

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 656



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

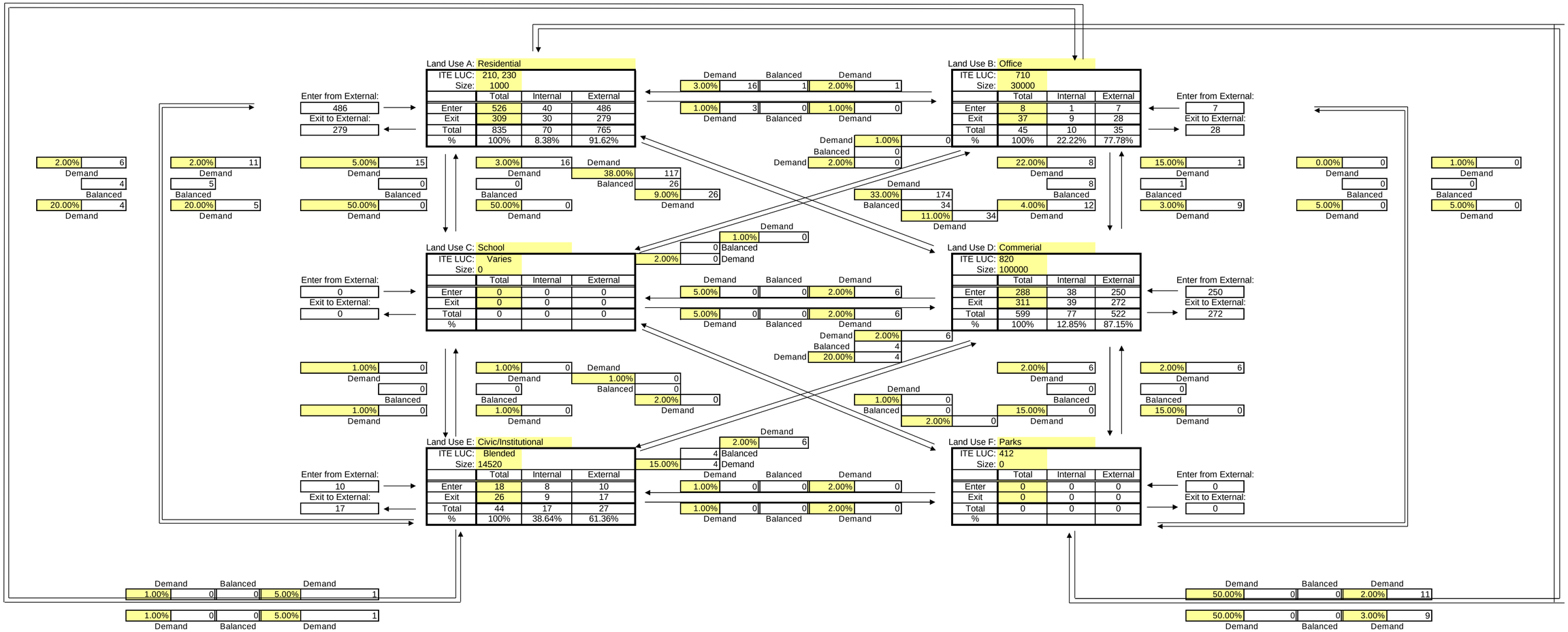
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	639	0	0	4973	5255	22	10889
Exit	579	0	0	5023	5255	32	10889
Total	1218	0	0	9996	10510	54	**21778**
Single Use Trip Gen Estimate	2028	0	0	10954	10772	124	**23878**
	39.94%	0.00%	0.00%	8.75%	2.43%	56.45%	

Internal Capture = 8.79%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 670



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

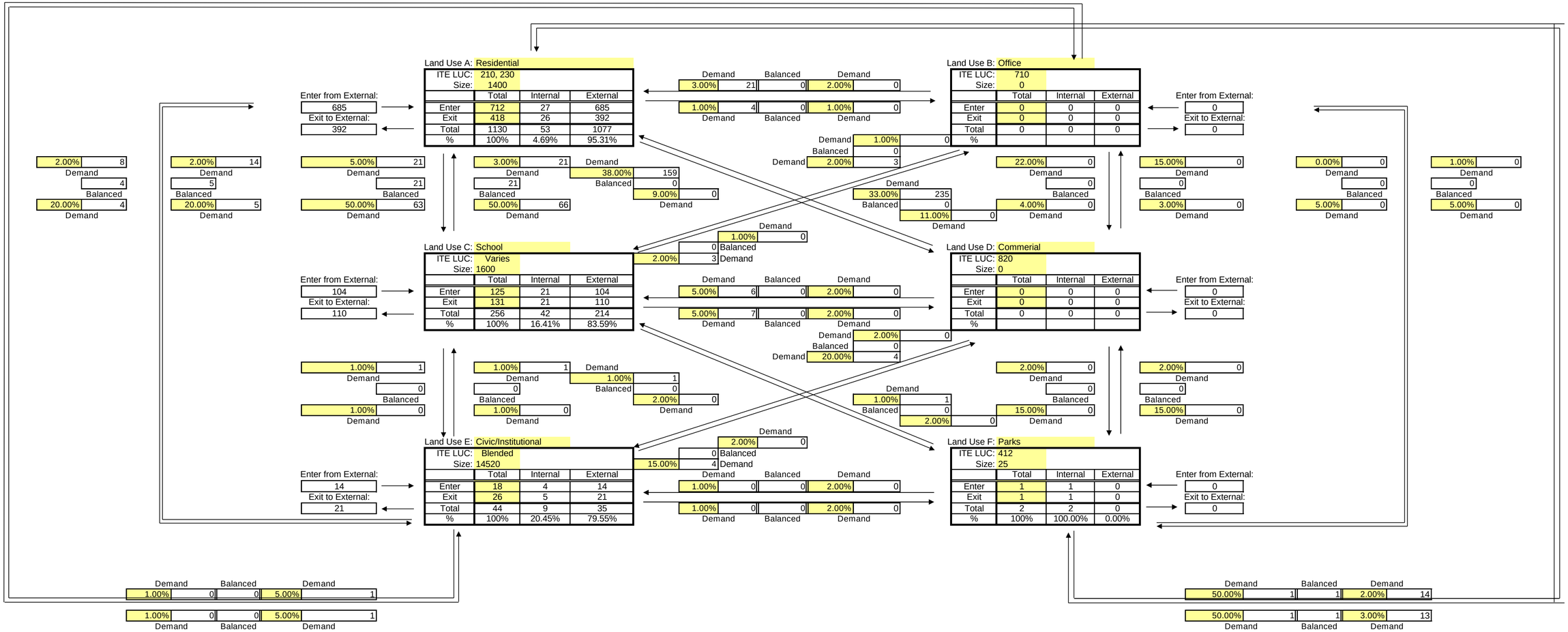
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	486	7	0	250	10	0	753
Exit	279	28	0	272	17	0	596
Total	765	35	0	522	27	0	**1349**
Single Use Trip Gen Estimate	835	45	0	599	44	0	**1523**
	8.38%	22.22%	0.00%	12.85%	38.64%	0.00%	

Internal Capture = 11.42%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 673



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

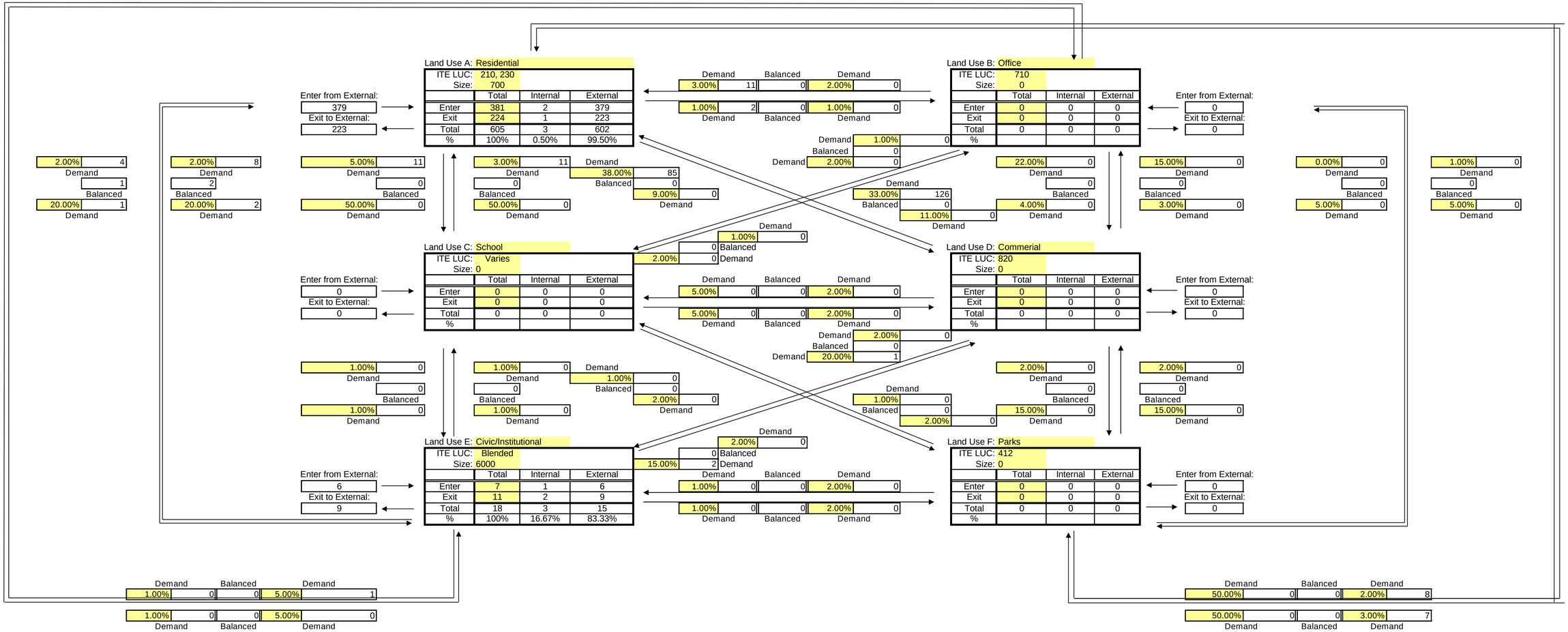
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	685	0	104	0	14	0	803
Exit	392	0	110	0	21	0	523
Total	1077	0	214	0	35	0	**1326**
Single Use Trip Gen Estimate	1130	0	256	0	44	2	**1432**
	4.69%	0.00%	16.41%	0.00%	20.45%	0.00%	

Internal Capture = 7.40%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 668



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

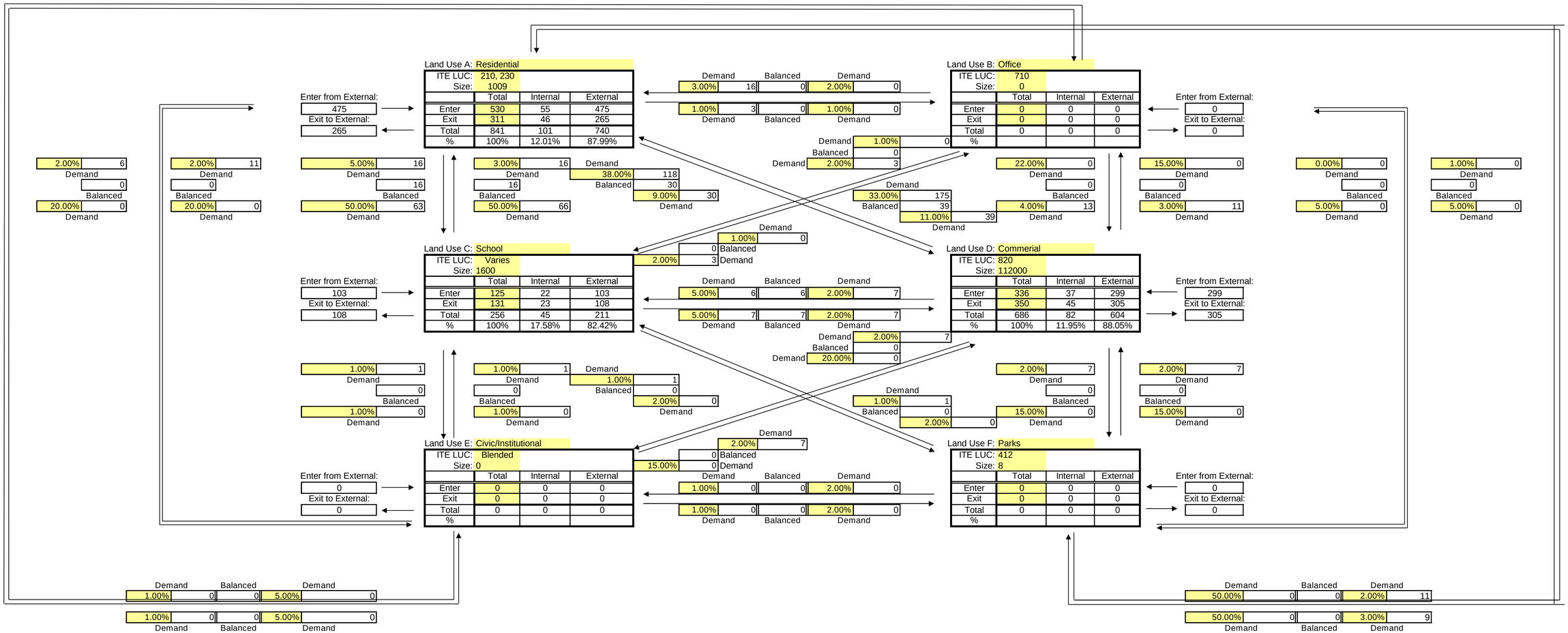
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	379	0	0	0	6	0	385
Exit	223	0	0	0	9	0	232
Total	602	0	0	0	15	0	**617**
Single Use Trip Gen Estimate	605	0	0	0	18	0	**623**
	0.50%	0.00%	0.00%	0.00%	16.67%	0.00%	

Internal Capture = 0.96%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 858



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

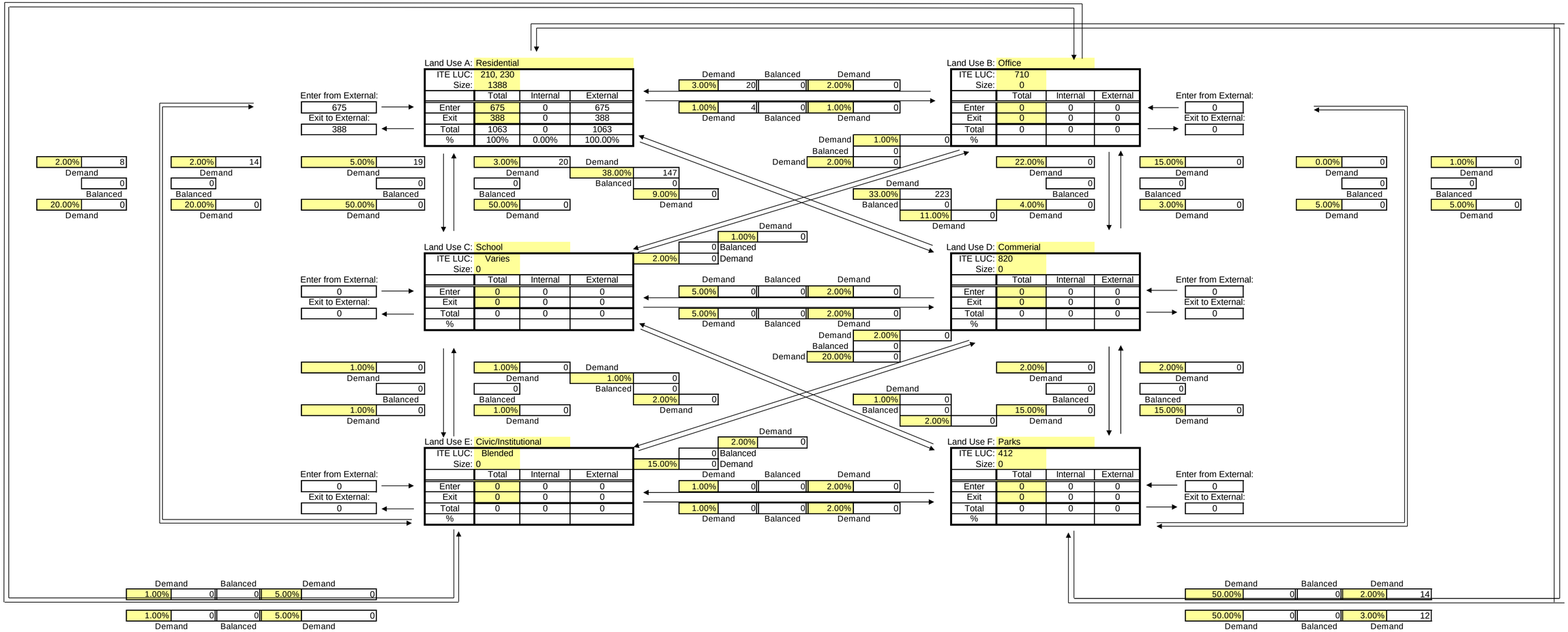
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	475	0	103	299	0	0	877
Exit	265	0	108	305	0	0	678
Total	740	0	211	604	0	0	**1555**
Single Use Trip Gen Estimate	841	0	256	686	0	0	**1783**
	12.01%	0.00%	17.58%	11.95%	0.00%	0.00%	

Internal Capture = 12.79%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 645



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

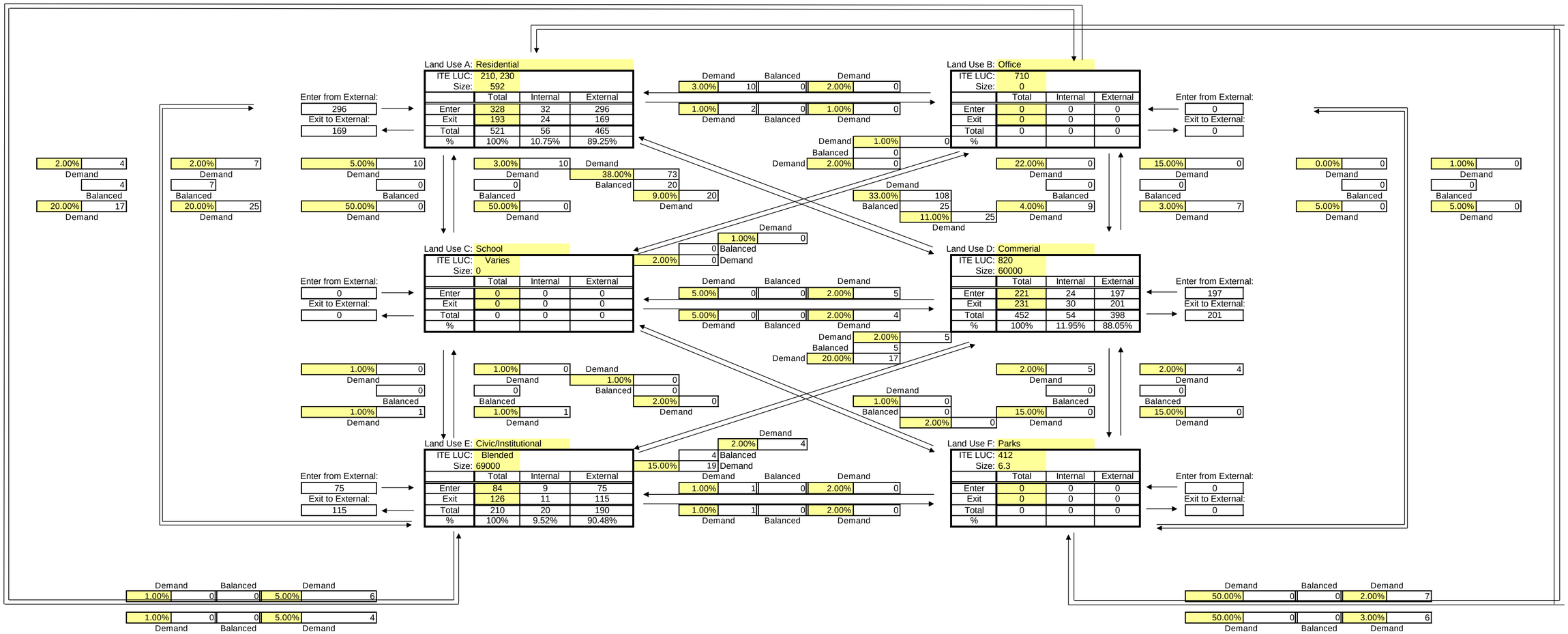
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	675	0	0	0	0	0	675
Exit	388	0	0	0	0	0	388
Total	1063	0	0	0	0	0	**1063**
Single Use Trip Gen Estimate	1063	0	0	0	0	0	**1063**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 857



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

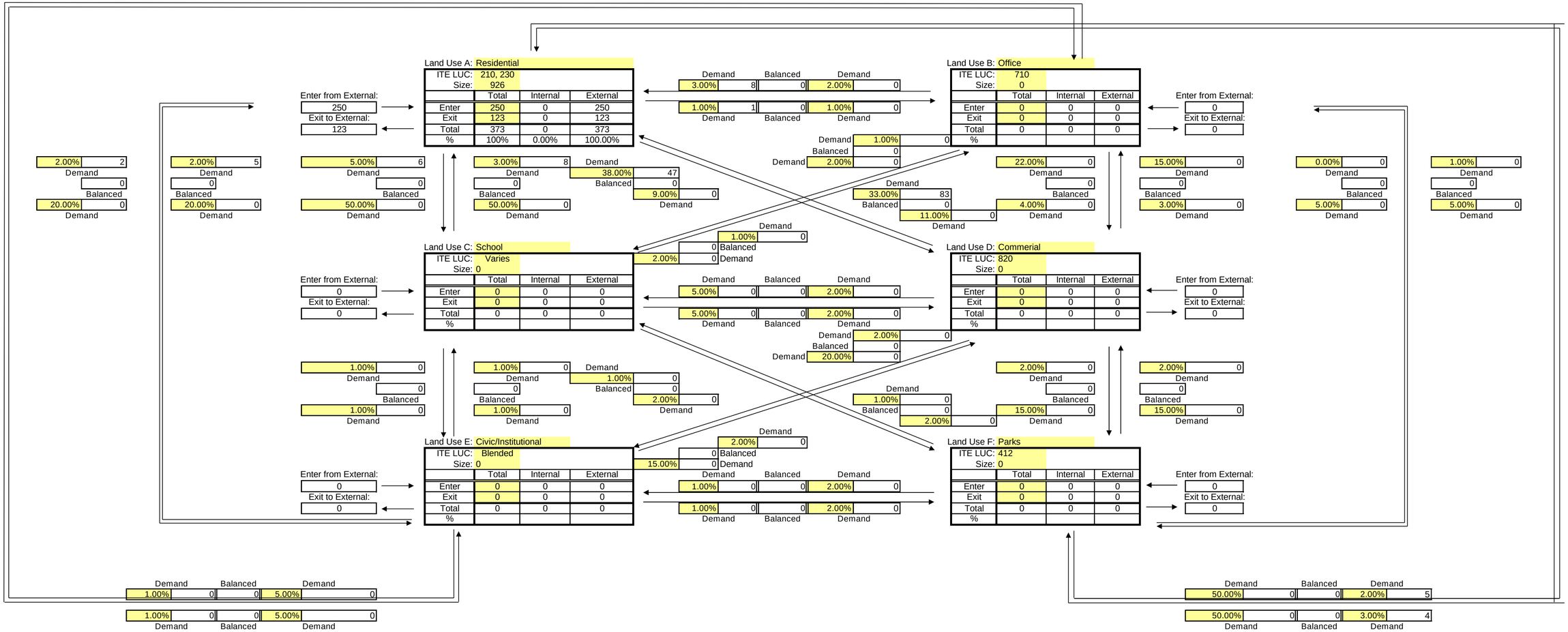
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	296	0	0	197	75	0	568
Exit	169	0	0	201	115	0	485
Total	465	0	0	398	190	0	**1053**
Single Use Trip Gen Estimate	521	0	0	452	210	0	**1183**
	10.75%	0.00%	0.00%	11.95%	9.52%	0.00%	

Internal Capture = 10.99%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 859



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

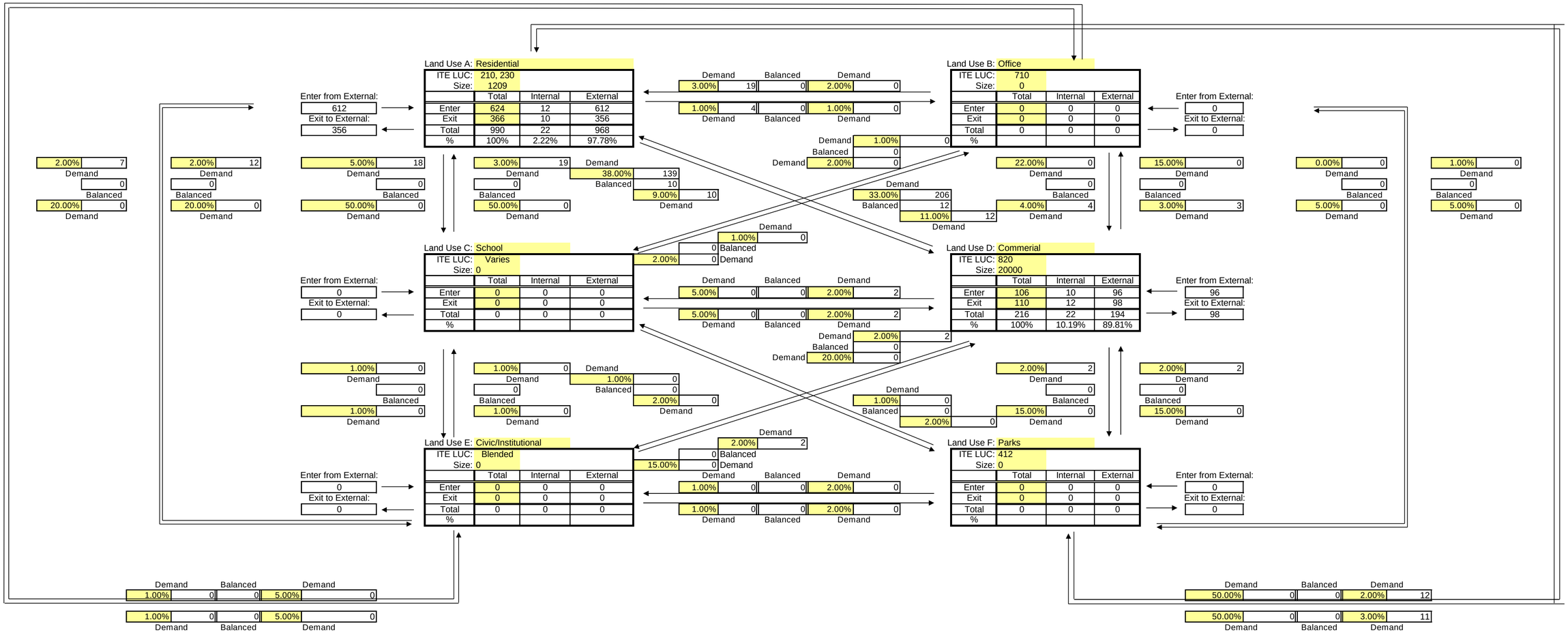
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	250	0	0	0	0	0	250
Exit	123	0	0	0	0	0	123
Total	373	0	0	0	0	0	**373**
Single Use Trip Gen Estimate	373	0	0	0	0	0	**373**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 658



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

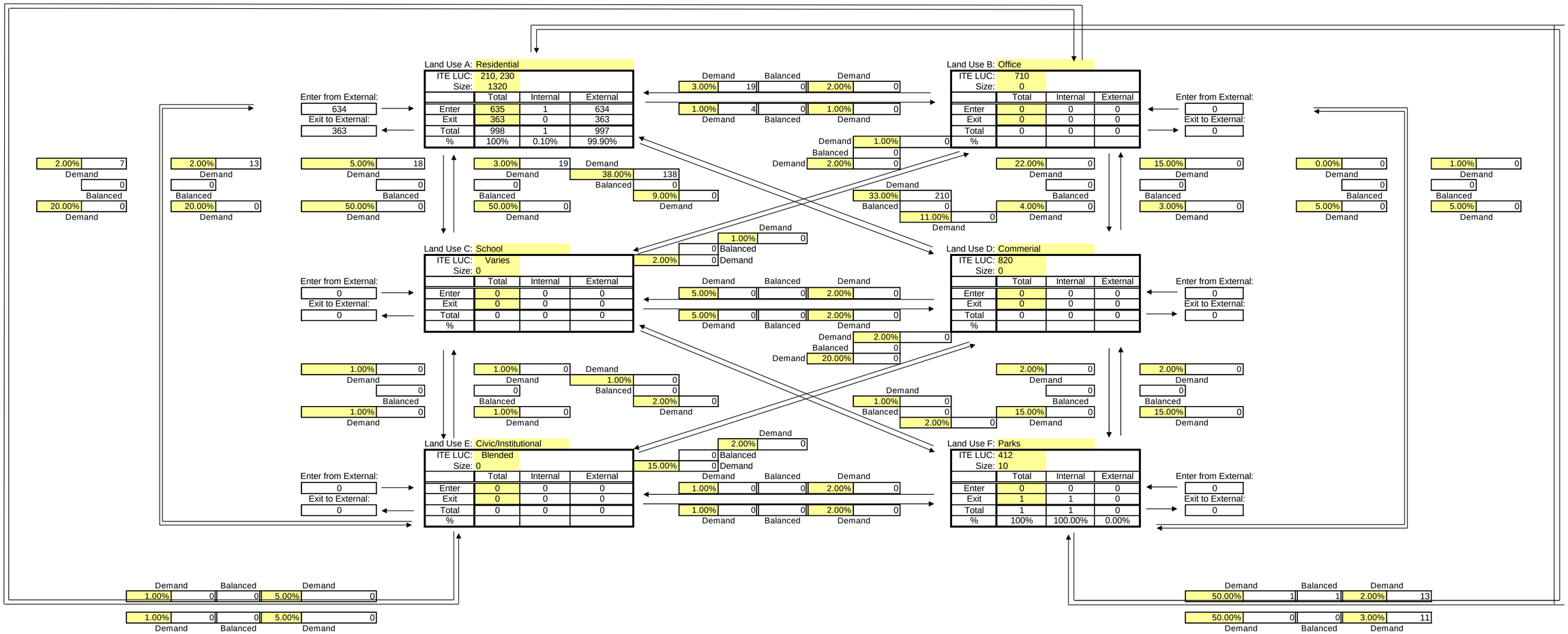
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	612	0	0	96	0	0	708
Exit	356	0	0	98	0	0	454
Total	968	0	0	194	0	0	**1162**
Single Use Trip Gen Estimate	990	0	0	216	0	0	**1206**
	2.22%	0.00%	0.00%	10.19%	0.00%	0.00%	

Internal Capture = 3.65%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 855



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

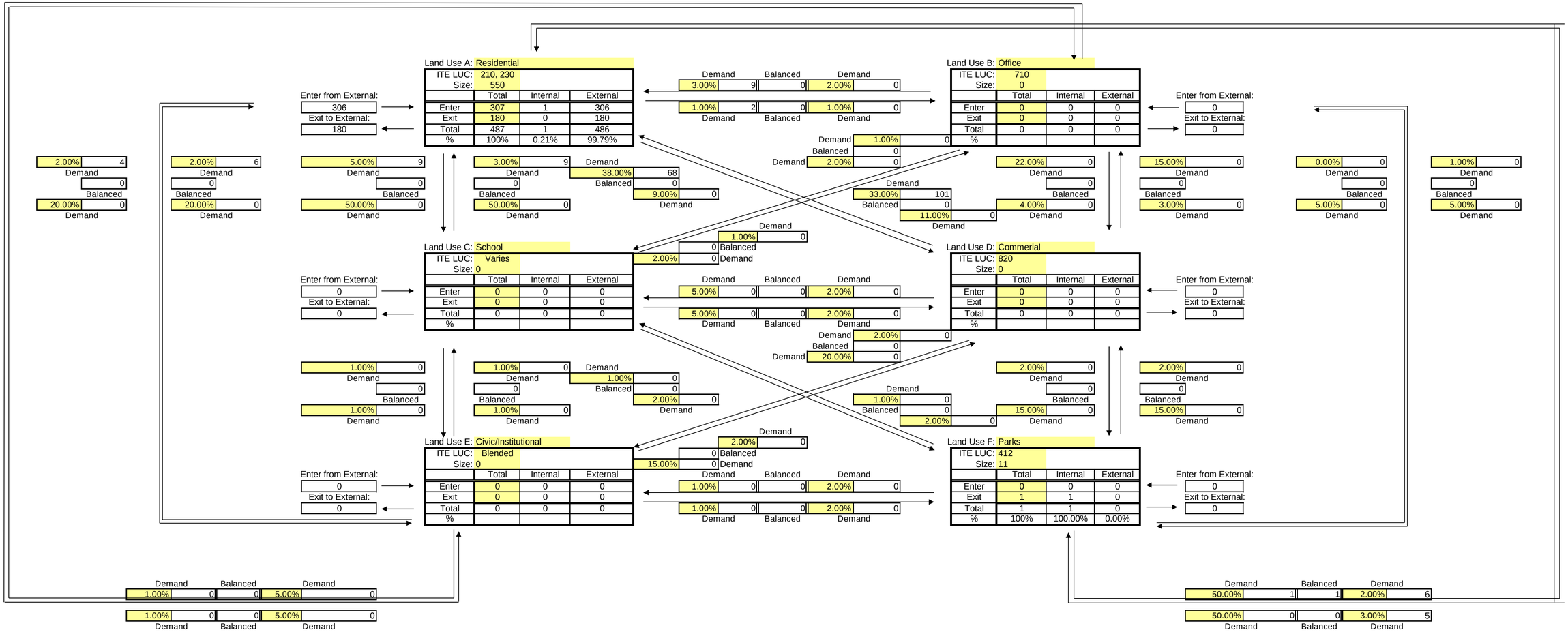
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	634	0	0	0	0	0	634
Exit	363	0	0	0	0	0	363
Total	997	0	0	0	0	0	**997**
Single Use Trip Gen Estimate	998	0	0	0	0	1	**999**
	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.20%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 655



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

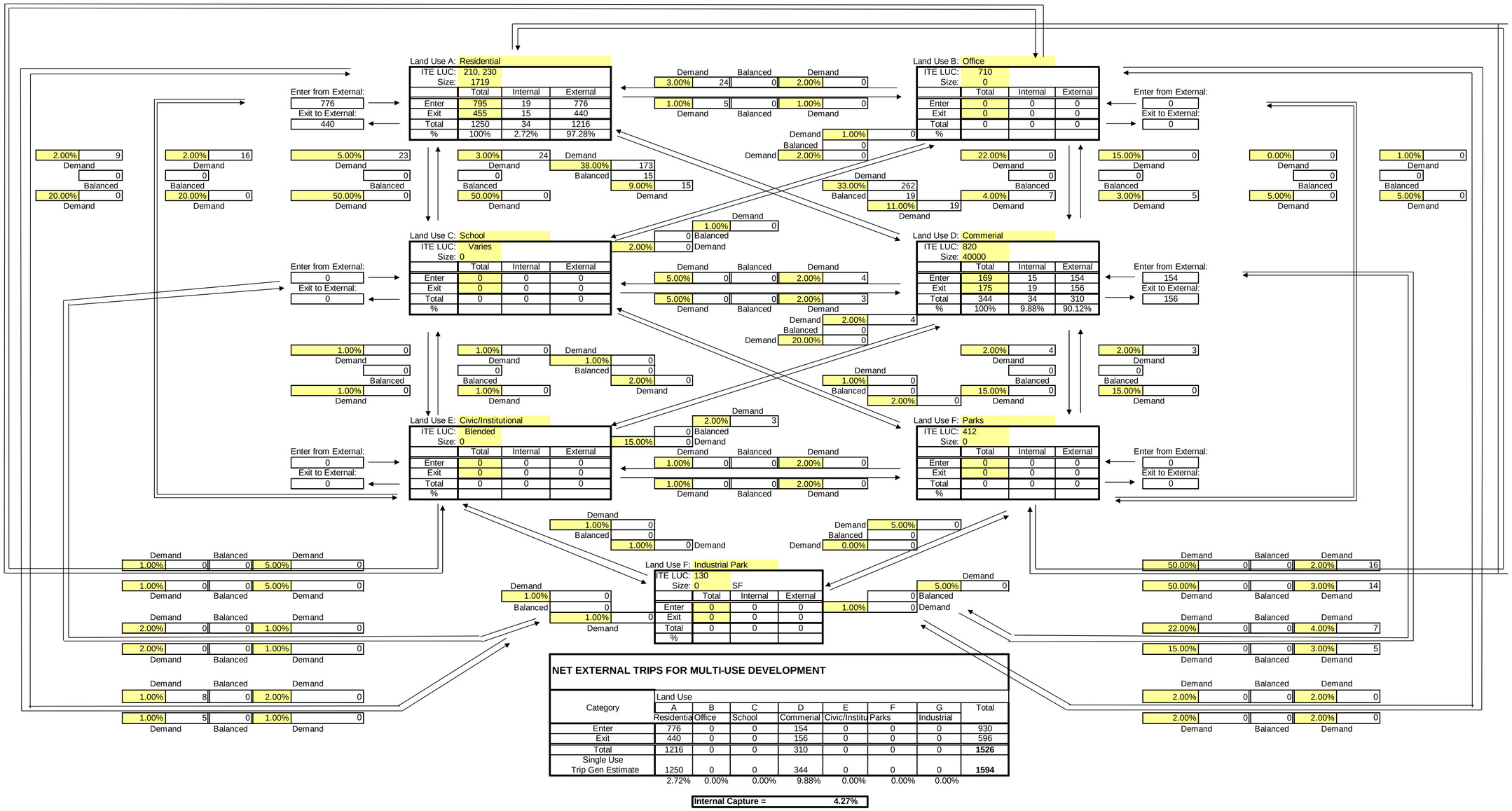
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	306	0	0	0	0	0	306
Exit	180	0	0	0	0	0	180
Total	486	0	0	0	0	0	**486**
Single Use Trip Gen Estimate	487	0	0	0	0	1	**488**
	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.41%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 647 POD C



	Total	Internal	External
Enter	776	19	776
Exit	455	15	440
Total	1250	34	1216
%	100%	2.72%	97.28%

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	169	15	154
Exit	175	19	156
Total	344	34	310
%	100%	9.88%	90.12%

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

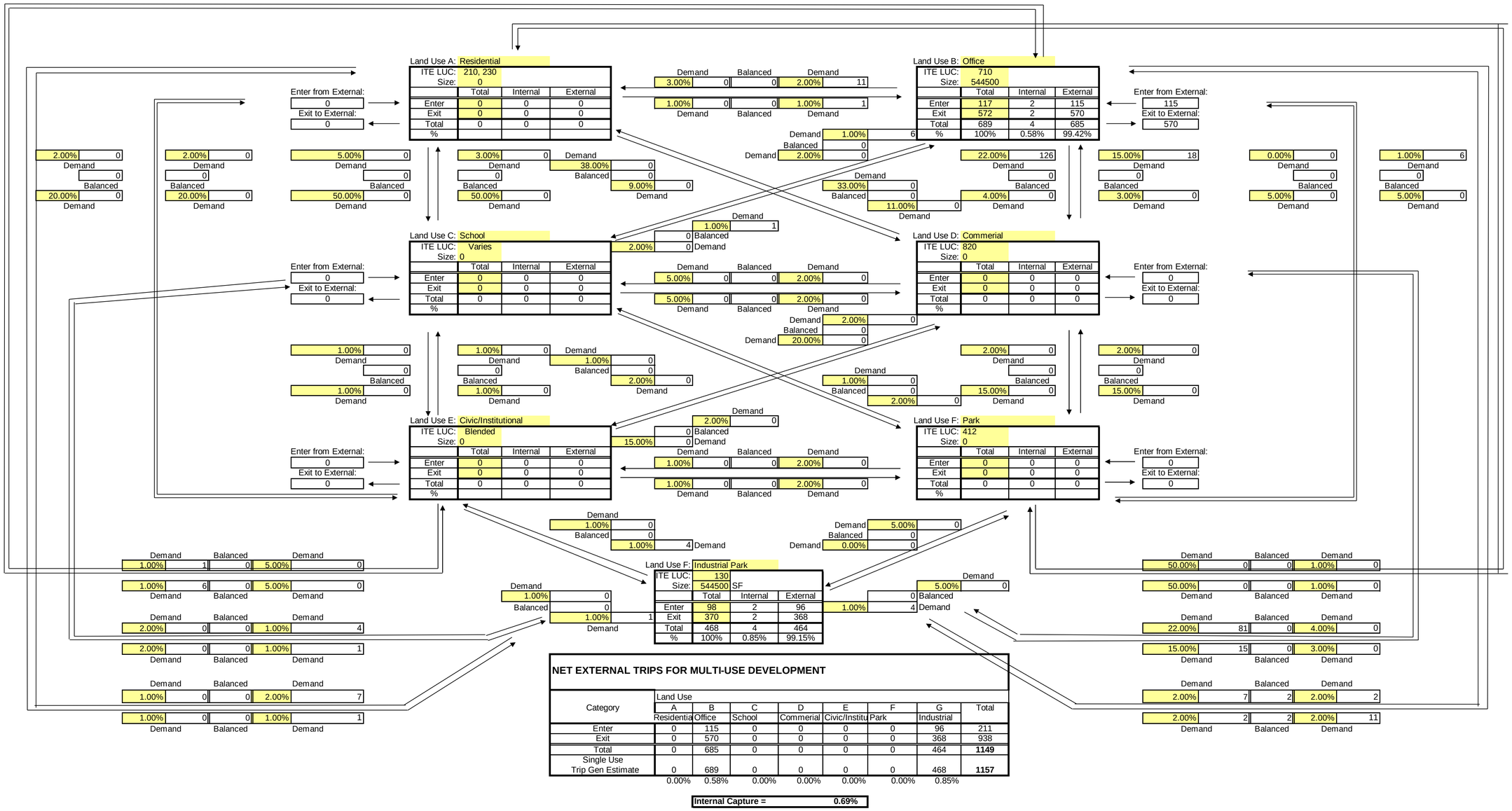
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	776	0	0	154	0	0	0	930
Exit	440	0	0	156	0	0	0	596
Total	1216	0	0	310	0	0	0	**1526**
Single Use Trip Gen Estimate	1250	0	0	344	0	0	0	**1594**
	2.72%	0.00%	0.00%	9.88%	0.00%	0.00%	0.00%	

Internal Capture = 4.27%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: _____

Project Number: _____ **Task Number:** _____
Project Name: Southern Grove
Scenario: TAZ 648 POD A



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

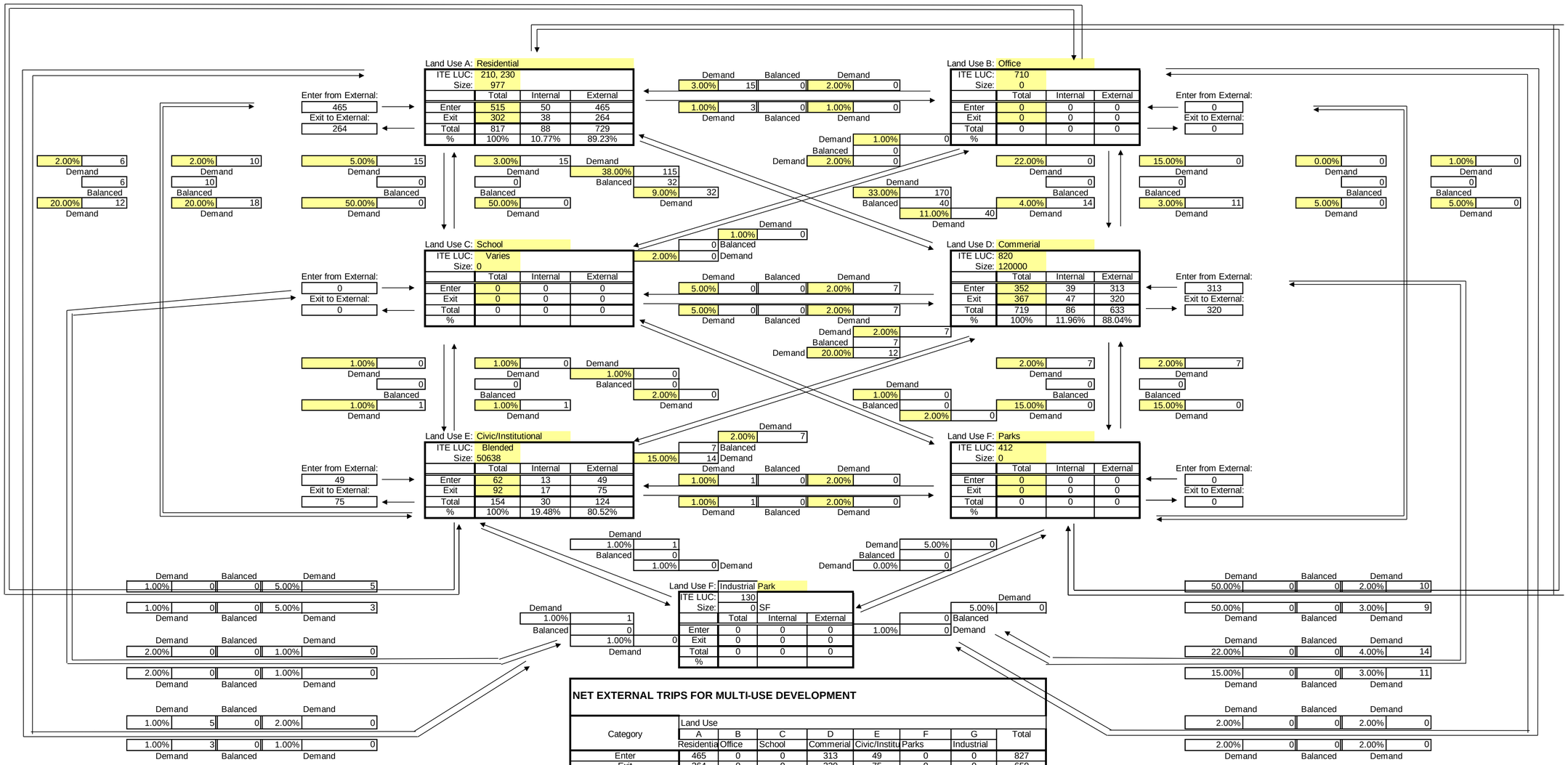
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	115	0	0	0	0	96	211
Exit	0	570	0	0	0	0	368	938
Total	0	685	0	0	0	0	464	**1149**
Single Use Trip Gen Estimate	0	689	0	0	0	0	468	**1157**
	0.00%	0.58%	0.00%	0.00%	0.00%	0.00%	0.85%	

Internal Capture = 0.69%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 654 POD D



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

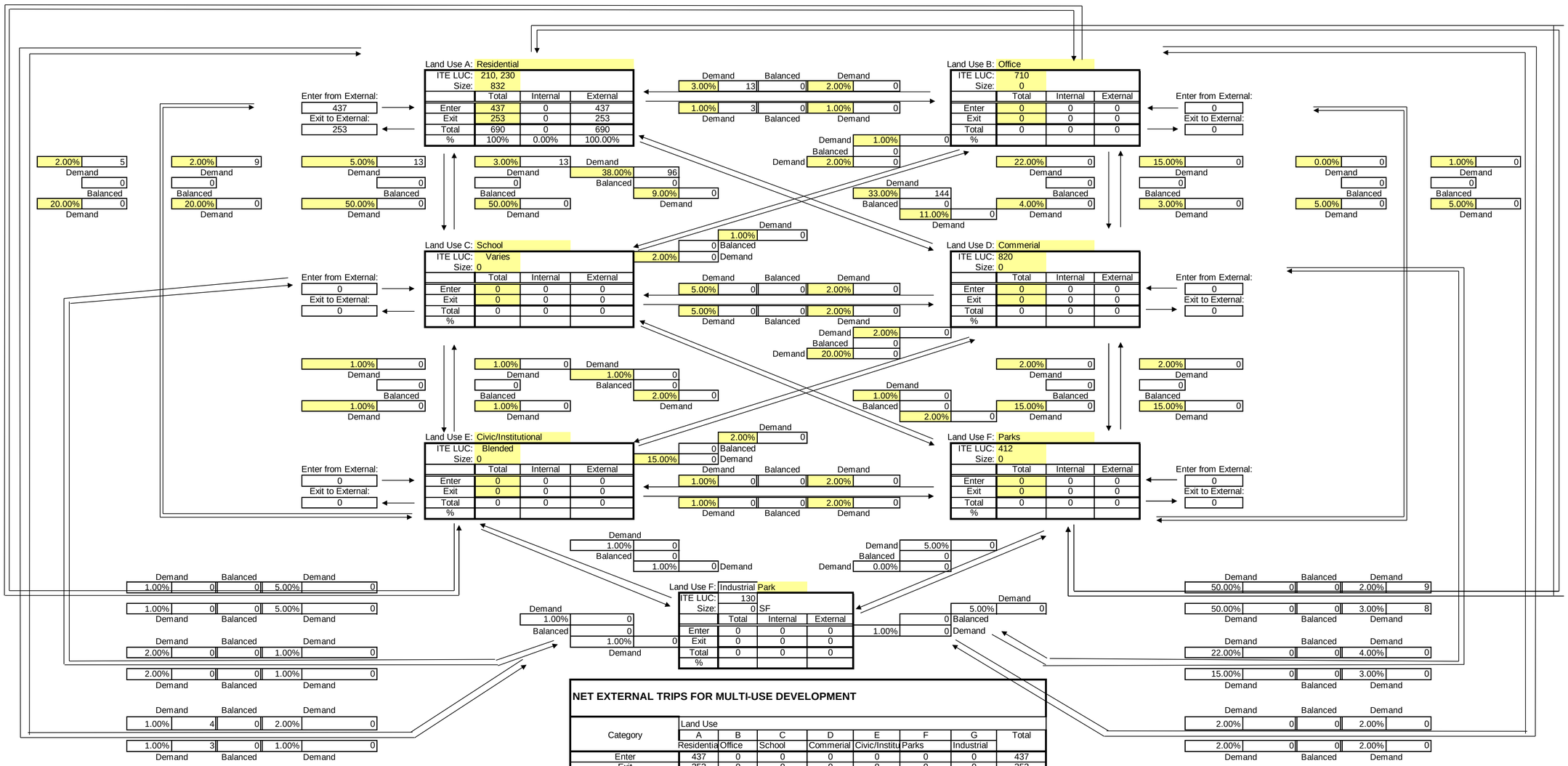
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	465	0	0	313	49	0	0	827
Exit	264	0	0	320	75	0	0	659
Total	729	0	0	633	124	0	0	**1486**
Single Use Trip Gen Estimate	817	0	0	719	154	0	0	**1690**
	10.77%	0.00%	0.00%	11.96%	19.48%	0.00%	0.00%	

Internal Capture = 12.07%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 861 POD F



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

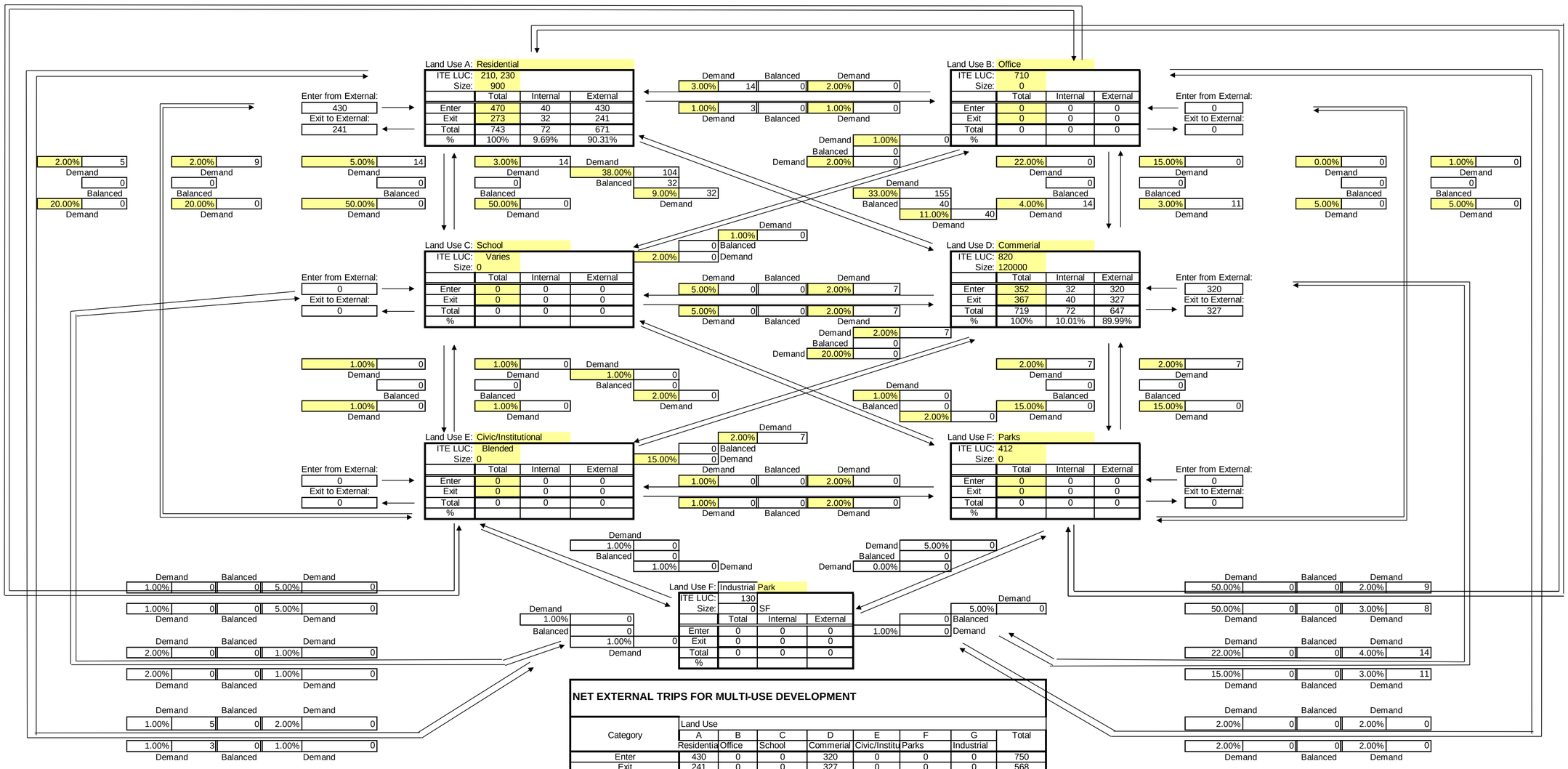
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	437	0	0	0	0	0	0	437
Exit	253	0	0	0	0	0	0	253
Total	690	0	0	0	0	0	0	**690**
Single Use Trip Gen Estimate	690	0	0	0	0	0	0	**690**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 653 POD E



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

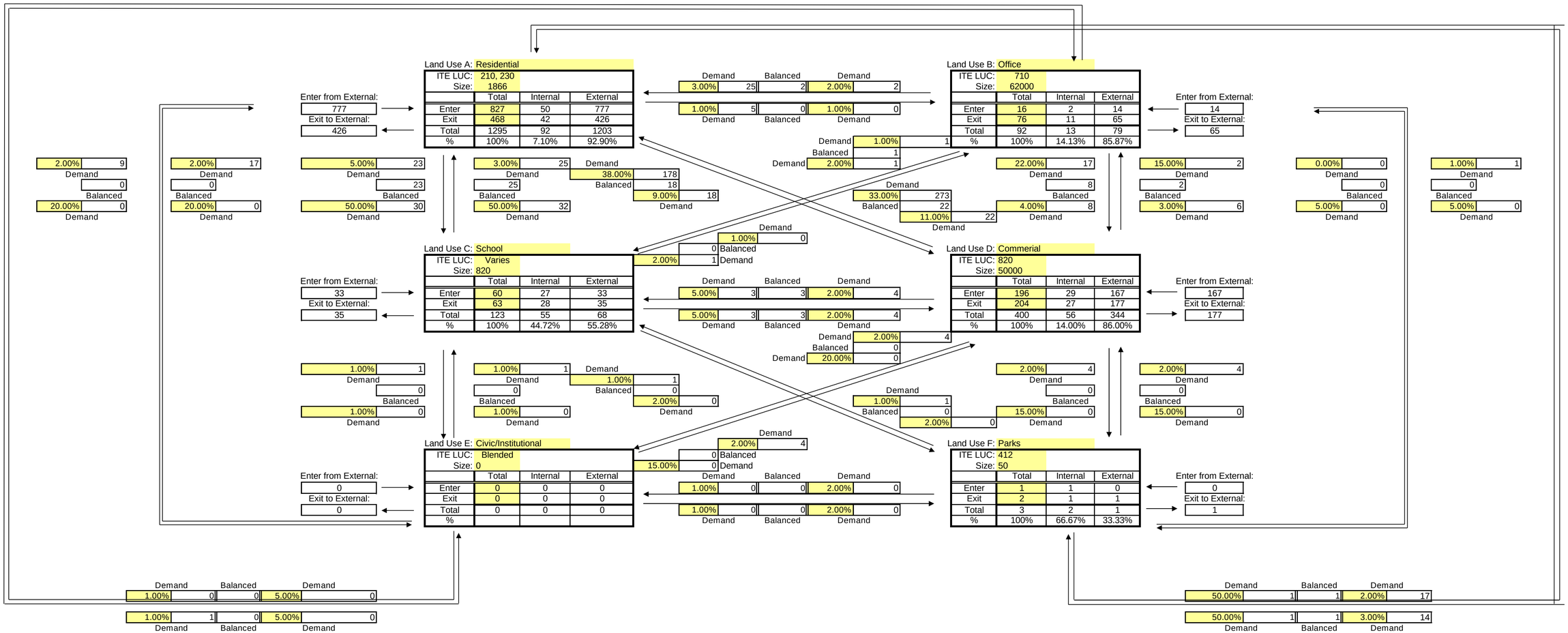
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	430	0	0	320	0	0	0	750
Exit	241	0	0	327	0	0	0	568
Total	671	0	0	647	0	0	0	**1318**
Single Use Trip Gen Estimate	743	0	0	719	0	0	0	**1462**
	9.69%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

Internal Capture = 9.85%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 652 POD C



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

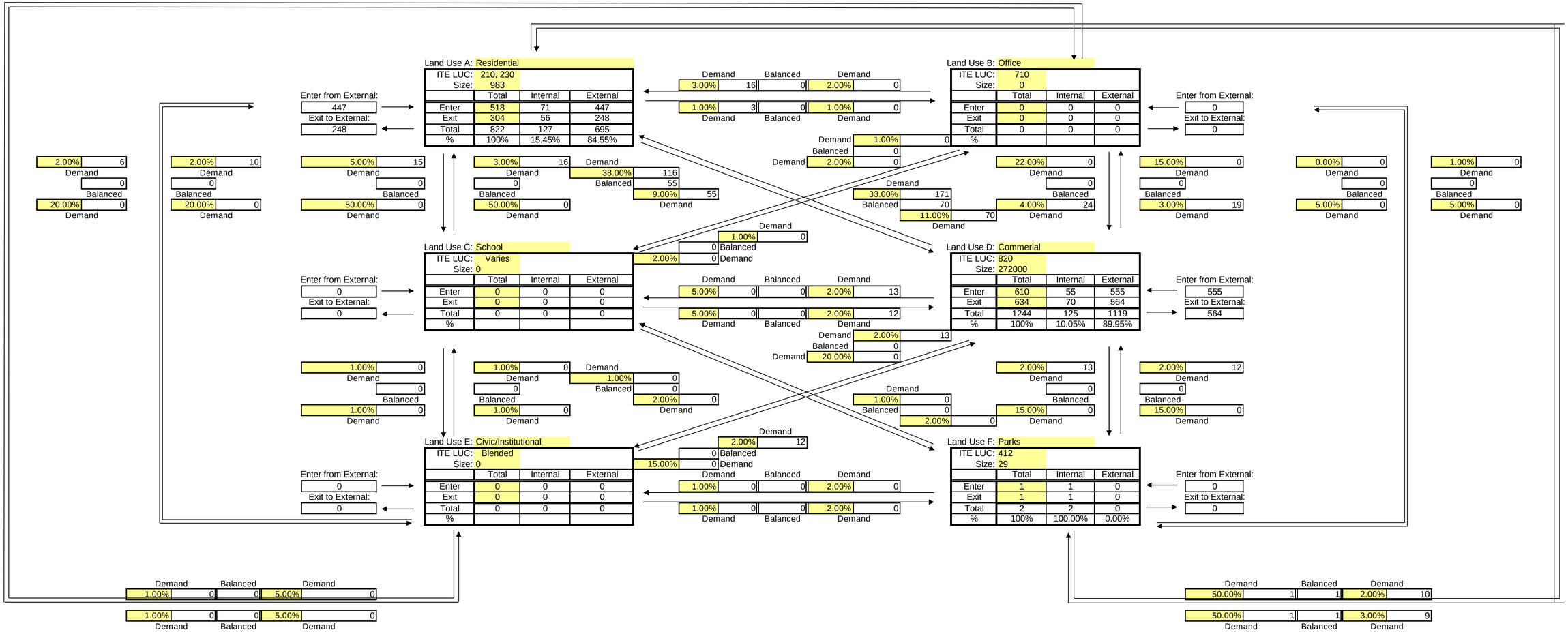
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	777	14	33	167	0	0	991
Exit	426	65	35	177	0	1	704
Total	1203	79	68	344	0	1	**1695**
Single Use Trip Gen Estimate	1295	92	123	400	0	3	**1913**
	7.10%	14.13%	44.72%	14.00%	0.00%	66.67%	

Internal Capture = 11.40%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 856



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

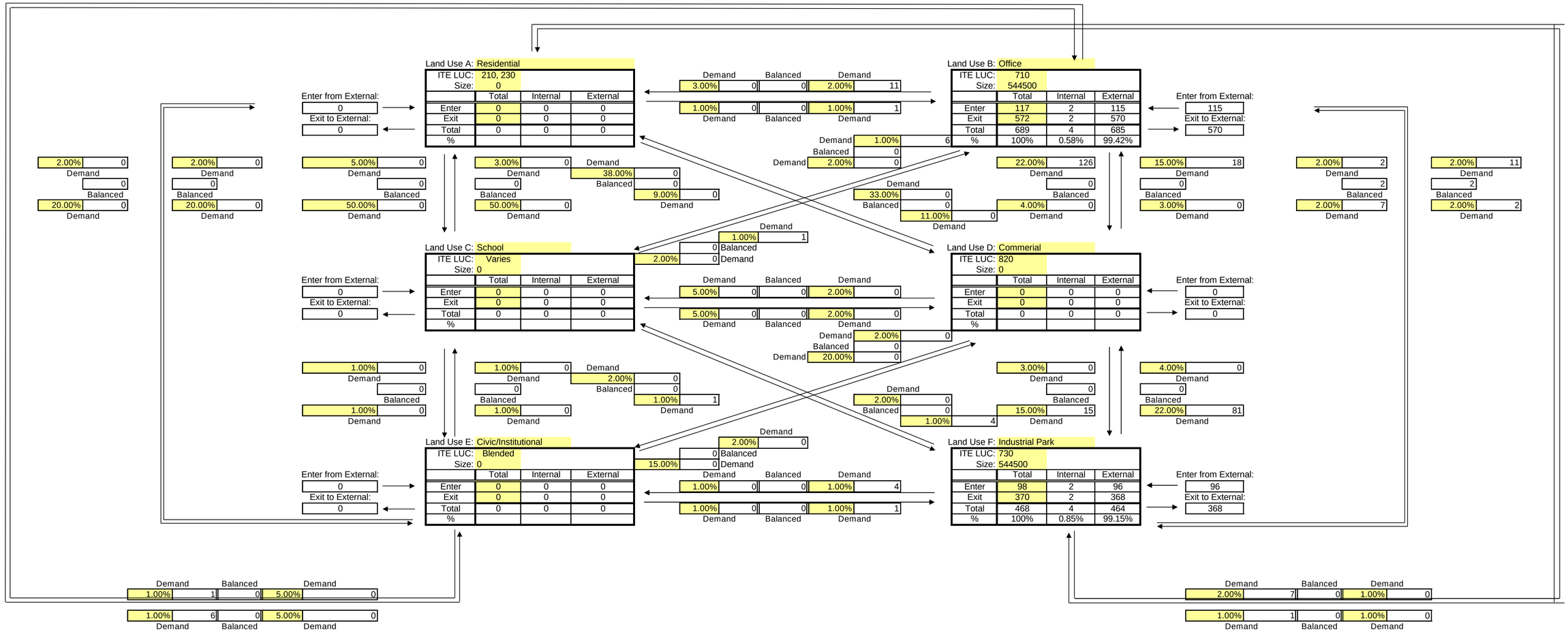
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	447	0	0	555	0	0	1002
Exit	248	0	0	564	0	0	812
Total	695	0	0	1119	0	0	**1814**
Single Use Trip Gen Estimate	822	0	0	1244	0	2	**2068**
	15.45%	0.00%	0.00%	10.05%	0.00%	0.00%	

Internal Capture = 12.28%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 860



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

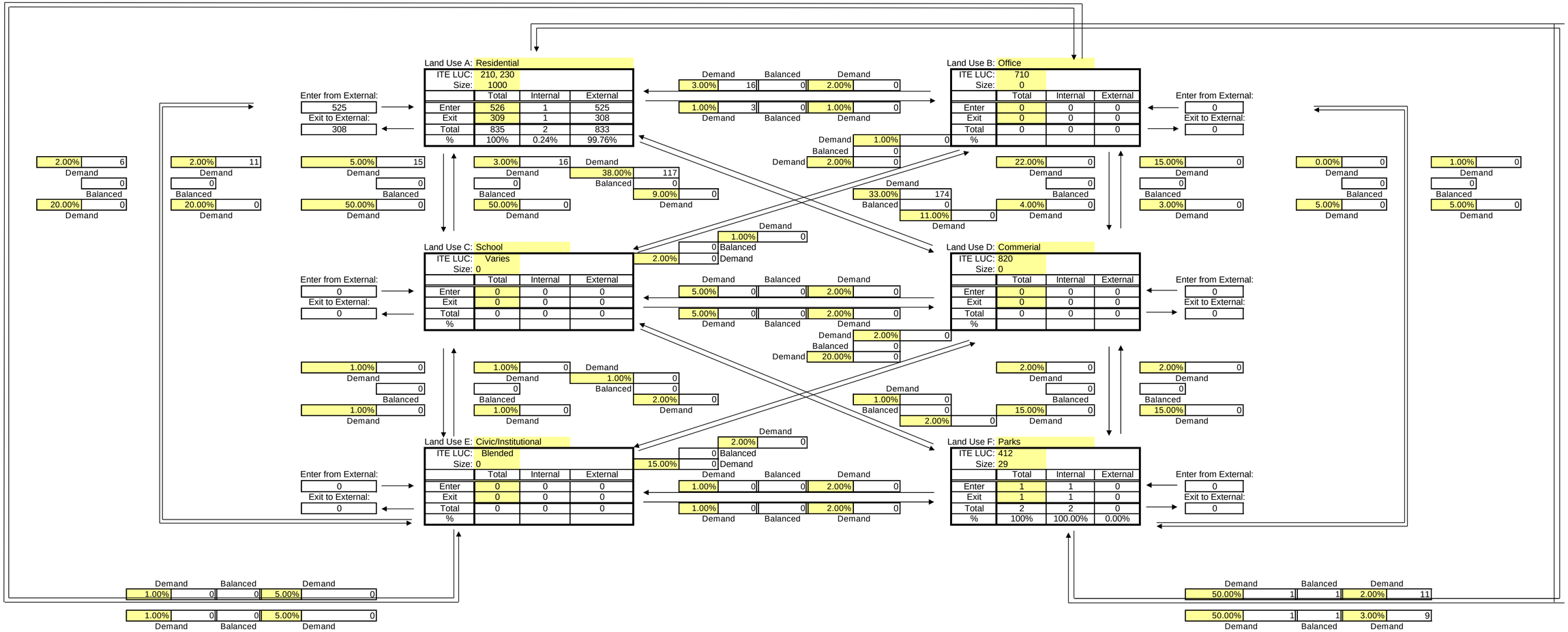
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	115	0	0	0	96	211
Exit	0	570	0	0	0	368	938
Total	0	685	0	0	0	464	**1149**
Single Use Trip Gen Estimate	0	689	0	0	0	468	**1157**
	0.00%	0.58%	0.00%	0.00%	0.00%	0.85%	

Internal Capture = 0.69%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 649



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

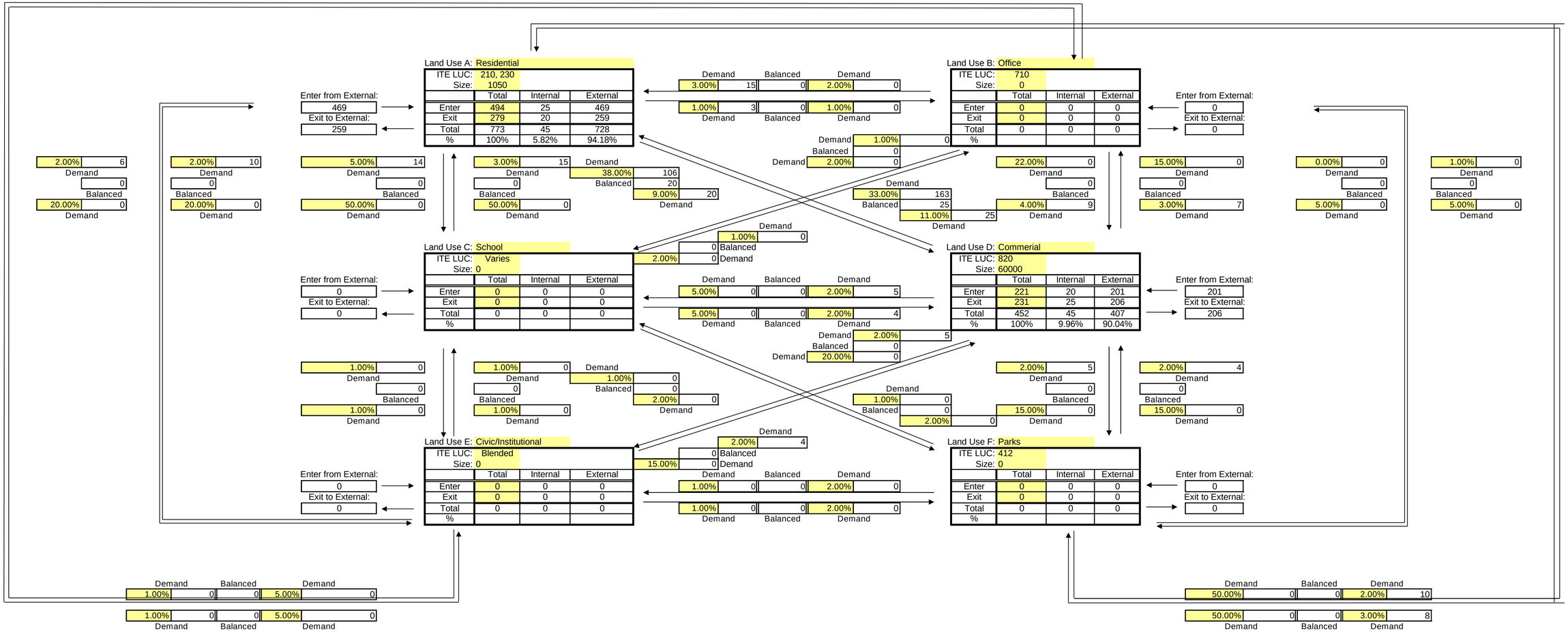
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	525	0	0	0	0	0	525
Exit	308	0	0	0	0	0	308
Total	833	0	0	0	0	0	**833**
Single Use Trip Gen Estimate	835	0	0	0	0	2	**837**
	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.48%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 657



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

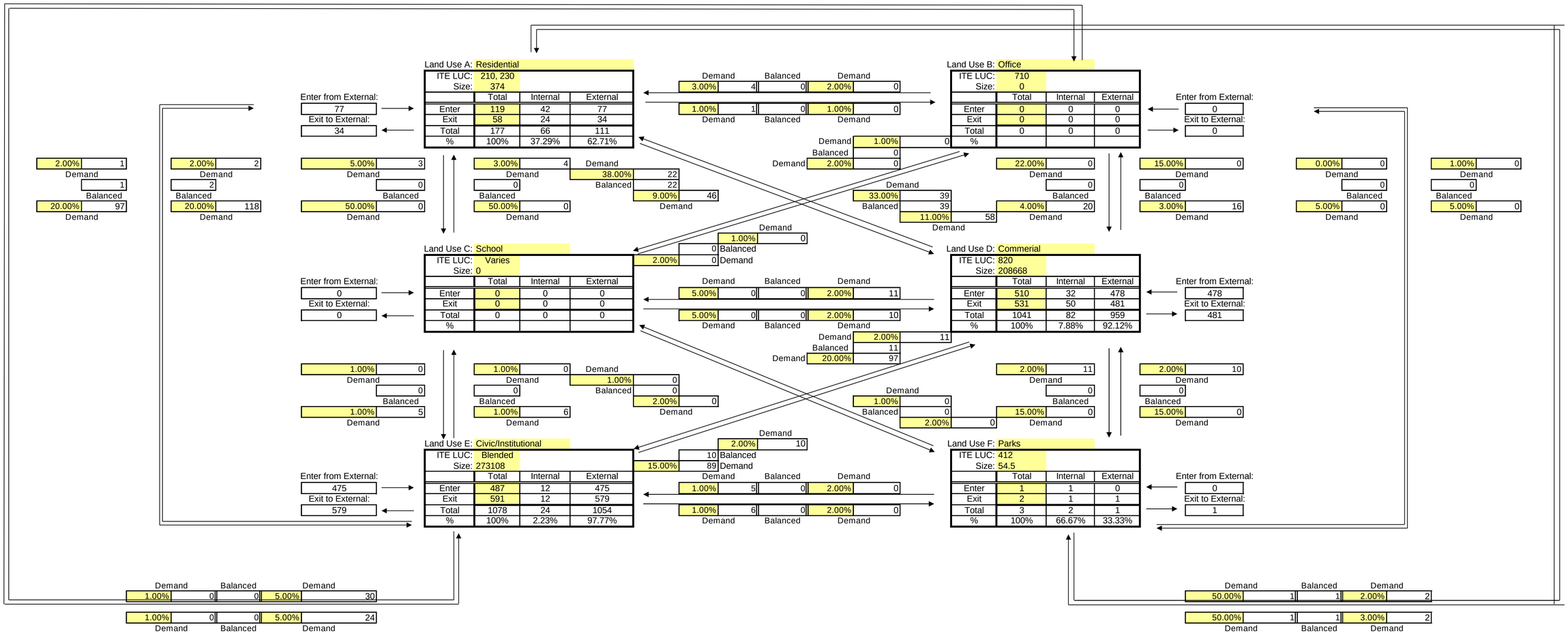
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	469	0	0	201	0	0	670
Exit	259	0	0	206	0	0	465
Total	728	0	0	407	0	0	**1135**
Single Use Trip Gen Estimate	773	0	0	452	0	0	**1225**
	5.82%	0.00%	0.00%	9.96%	0.00%	0.00%	

Internal Capture = 7.35%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 656



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	77	0	0	478	475	0	1030
Exit	34	0	0	481	579	1	1095
Total	111	0	0	959	1054	1	**2125**
Single Use Trip Gen Estimate	177	0	0	1041	1078	3	**2299**
	37.29%	0.00%	0.00%	7.88%	2.23%	66.67%	

Internal Capture = 7.57%

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Appendix G

Western Annexation DRI Trip Generation and Internal Capture

PHASE 3

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Appendix G

Western Annexation DRI Trip Generation and Internal Capture

PHASE 4

WATS TAZ	TCRPM TAZ
-	**862**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	750	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	6,704
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.44*(X)	
Hotel		rooms	[310]	T = 8.92*(X)	
Industrial Park		s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail		s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office		s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	
Research & Development(1)		s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital		beds	[610]	T = 12.94*(X)	
Civic Use		s.f.	-	T = 54.51*(X/1000)	
Institutional Use		s.f.	-	T = 30.49*(X/1000)	
Park		acres	[412]	T = 2.28*(X)	
Elementary School		students	[520]	T = 1.29*(X)	
K-8 School		students	[522]	T = 1.62*(X)	
High School		students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	6,704
				Total Gross Residential Trips =	6,704
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	
				Internal Capture trips among TAZ =	

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =		trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**6,704**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	750	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	644	406	238
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel		rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park		s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail		s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)			
Service & Office(2)		s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development(1)		s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital		beds	[610]	T = 1.42*(X); (33% in)			
Civic Use		s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use		s.f.	-	T = 3.05*(X/1000); (40% in)			
Park		acres	[412]	T = 0.09*(X); (61% in)			
Elementary School		students	[520]	T = 0.15*(X); (49% in)			
K-8 School		students	[522]	T = 0.16*(X); (49% in)			
High School		students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	644	406	238
				Total Gross Residential Trips =	644	406	238
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**644**	**406**	**238**

WATS TAZ	TCRPM TAZ
-	**862**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	150	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	1,525
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family		d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family		d.u.	[252]	T = 3.44*(X)	
Hotel		rooms	[310]	T = 8.92*(X)	
Industrial Park		s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail		s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office		s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	
Research & Development(1)		s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital		beds	[610]	T = 12.94*(X)	
Civic Use		s.f.	-	T = 54.51*(X/1000)	
Institutional Use		s.f.	-	T = 30.49*(X/1000)	
Park		acres	[412]	T = 2.28*(X)	
Elementary School		students	[520]	T = 1.29*(X)	
K-8 School		students	[522]	T = 1.62*(X)	
High School		students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	1,525
				Total Gross Residential Trips =	1,525
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	
				Internal Capture trips among TAZ =	

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =		trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**1,525**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	150	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	151	95	56
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family		d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family		d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel		rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park		s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail		s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)			
Service & Office[2]		s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[1]		s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital		beds	[610]	T = 1.42*(X); (33% in)			
Civic Use		s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use		s.f.	-	T = 3.05*(X/1000); (40% in)			
Park		acres	[412]	T = 0.09*(X); (61% in)			
Elementary School		students	[520]	T = 0.15*(X); (49% in)			
K-8 School		students	[522]	T = 0.16*(X); (49% in)			
High School		students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	151	95	56
				Total Gross Residential Trips =	151	95	56
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**151**	**95**	**56**

WATS TAZ	TCRPM TAZ
371	**670**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	1,000	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	8,735
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.44*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail	200,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	10,656
Service & Office	50,000	s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	775
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital	0	beds	[610]	T = 12.94*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	18,150	s.f.	-	T = 30.49*(X/1000)	553
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	20,719
				Total Gross Residential Trips =	8,735
				Total Gross Non-Residential Trips =	11,984
				Internal Capture % among TAZ =	13.86%
				Internal Capture trips among TAZ =	2,872

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	200,000	s.f.
External Trips from Matrix =	9,350	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,384	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,463**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,000	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	835	526	309
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail	200,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)	953	457	496
Service & Office[2]	50,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	75	13	62
Research & Development[1]	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital	0	beds	[610]	T = 1.42*(X); (33% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	18150	s.f.	-	T = 3.05*(X/1000); (40% in)	55	22	33
Park	0	acres	[412]	T = 0.09*(X); (61% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,918	1,018	900
				Total Gross Residential Trips =	835	526	309
				Total Gross Non-Residential Trips =	1,083	492	591
				Internal Capture % among TAZ =	13.97%	-	-
				Internal Capture trips among TAZ =	268	134	134

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	200,000	s.f.
External Trips from Matrix =	832	trips
Pass-By Percent =	34%	
Pass-By Reduction =	212	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,438**	**778**	**660**

WATS TAZ	TCRPM TAZ
372	**673**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	1,400	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	11,905
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.44*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	0
Service & Office	0	s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	0
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital	0	beds	[610]	T = 12.94*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	36,300	s.f.	-	T = 30.49*(X/1000)	1,107
Park	25	acres	[412]	T = 2.28*(X)	57
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	1,600	students	[522]	T = 1.62*(X)	2,592
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	15,661
				Total Gross Residential Trips =	11,905
				Total Gross Non-Residential Trips =	3,756
				Internal Capture % among TAZ =	9.51%
				Internal Capture trips among TAZ =	1,490

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**14,171**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,400	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	1,130	712	418
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)			
Service & Office[2]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[1]	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital	0	beds	[610]	T = 1.42*(X); (33% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	36300	s.f.	-	T = 3.05*(X/1000); (40% in)	111	44	67
Park	25	acres	[412]	T = 0.09*(X); (61% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	1600	students	[522]	T = 0.16*(X); (49% in)	256	125	131
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,499	882	617
				Total Gross Residential Trips =	1,130	712	418
				Total Gross Non-Residential Trips =	369	170	199
				Internal Capture % among TAZ =	8.81%	-	-
				Internal Capture trips among TAZ =	132	66	66

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,367**	**816**	**551**

WATS TAZ	TCRPM TAZ
373	**668**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (9th Ed)	Daily Trips
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.72	6,292
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.89*Ln(X) + 2.06	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.44*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.83*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	0
Service & Office	0	s.f.	[710]	Ln(T) = 0.76*Ln(X/1000) + 3.68	0
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 3.09	
Hospital	0	beds	[610]	T = 12.94*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	6,292
				Total Gross Residential Trips =	6,292
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	0.00%
				Internal Capture trips among TAZ =	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**6,292**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	605	381	224
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.75*Ln(X) + 0.35; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.25*(X); (54% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.85*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.31; (48% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.83*Ln(X/1000) + 1.06; (15% in)			
Hospital	0	beds	[610]	T = 1.42*(X); (33% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.09*(X); (61% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	605	381	224
				Total Gross Residential Trips =	605	381	224
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**605**	**381**	**224**

WATS TAZ	TCRPM TAZ
374	**858**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,009	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,720
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	112,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,310
Service & Office	112,000	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	1,456
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	112,000	s.f.	-	T = 54.51*(X/1000)	6,105
Institutional Use	112,000	s.f.	-	T = 30.49*(X/1000)	3,415
Park	8	acres	[412]	T = 2.28*(X)	18
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	1,600	students	[522]	T = 1.62*(X)	2,592
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	29,616
				Total Gross Residential Trips =	8,720
				Total Gross Non-Residential Trips =	20,896
				Internal Capture % among TAZ =	12.65%
				Internal Capture trips among TAZ =	3,746

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	112,000	s.f.
External Trips from Matrix =	6,046	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,542	trips

NET NEW EXTERNAL DAILY TRIPS =	**24,328**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,009	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	841	530	311
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	112,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	686	336	350
Service & Office(2)	112,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	167	28	139
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	112,000	s.f.	-	T = 5.45*(X/1000); (50% in)	610	305	305
Institutional Use	112000	s.f.	-	T = 3.05*(X/1000); (40% in)	342	137	205
Park	8	acres	[412]	T = 0.06*(X); (41% in)	0	0	0
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	1600	students	[522]	T = 0.16*(X); (49% in)	256	125	131
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,902	1,461	1,441
				Total Gross Residential Trips =	841	530	311
				Total Gross Non-Residential Trips =	2,061	931	1,130
				Internal Capture % among TAZ =	11.65%	-	-
				Internal Capture trips among TAZ =	338	169	169

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	112,000	s.f.
External Trips from Matrix =	573	trips
Pass-By Percent =	34%	
Pass-By Reduction =	146	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,418**	**1,219**	**1,199**

WATS TAZ	TCRPM TAZ
400	**656**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	500	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	2,609
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	208,668	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	10,954
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	101,781	s.f.	-	T = 54.51*(X/1000)	5,548
Institutional Use	171,327	s.f.	-	T = 30.49*(X/1000)	5,224
Park	55	acres	[412]	T = 2.28*(X)	124
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	24,459
				Total Gross Residential Trips =	2,609
				Total Gross Non-Residential Trips =	21,850
				Internal Capture % among TAZ =	10.41%
				Internal Capture trips among TAZ =	2,546

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	208,668	s.f.
External Trips from Matrix =	9,792	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,497	trips

NET NEW EXTERNAL DAILY TRIPS =	**19,416**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	500	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	225	151	74
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	208,668	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,041	510	531
Service & Office[2]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[1]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	101,781	s.f.	-	T = 5.45*(X/1000); (50% in)	555	278	277
Institutional Use	171,327	s.f.	-	T = 3.05*(X/1000); (40% in)	523	209	314
Park	55	acres	[412]	T = 0.06*(X); (41% in)	3	1	2
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,347	1,149	1,198
				Total Gross Residential Trips =	225	151	74
				Total Gross Non-Residential Trips =	2,122	998	1,124
				Internal Capture % among TAZ =	8.95%	-	-
				Internal Capture trips among TAZ =	210	105	105

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	208,668	s.f.
External Trips from Matrix =	942	trips
Pass-By Percent =	34%	
Pass-By Reduction =	240	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,897**	**924**	**973**

WATS TAZ	TCRPM TAZ
375	**645**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,132	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	9,693
Multi-Family Residential	256	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,457
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	11,150
				Total Gross Residential Trips =	11,150
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	0.00%
				Internal Capture trips among TAZ =	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**11,150**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,132	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	933	588	345
Multi-Family Residential	256	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	130	87	43
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,063	675	388
				Total Gross Residential Trips =	1,063	675	388
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,063**	**675**	**388**

WATS TAZ	TCRPM TAZ
379	**855**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,020	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,807
Multi-Family Residential	300	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,673
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	10	acres	[412]	T = 2.28*(X)	23
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	10,503
				Total Gross Residential Trips =	10,480
				Total Gross Non-Residential Trips =	23
				Internal Capture % among TAZ =	0.23%
				Internal Capture trips among TAZ =	24

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**10,479**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,020	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	850	536	314
Multi-Family Residential	300	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	148	99	49
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	10	acres	[412]	T = 0.06*(X); (41% in)	1	0	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	999	635	364
				Total Gross Residential Trips =	998	635	363
				Total Gross Non-Residential Trips =	1	0	1
				Internal Capture % among TAZ =	0.20%	-	-
				Internal Capture trips among TAZ =	2	1	1

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**997**	**634**	**363**

WATS TAZ	TCRPM TAZ
376	**857**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	992	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,585
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	4,872
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	69,000	s.f.	-	T = 30.49*(X/1000)	2,104
Park	6.3	acres	[412]	T = 2.28*(X)	14
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	15,575
				Total Gross Residential Trips =	8,585
				Total Gross Non-Residential Trips =	6,990
				Internal Capture % among TAZ =	9.85%
				Internal Capture trips among TAZ =	1,534

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	4,285	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,093	trips

NET NEW EXTERNAL DAILY TRIPS =	**12,948**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	992	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	829	522	307
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	452	221	231
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	69000	s.f.	-	T = 3.05*(X/1000); (40% in)	210	84	126
Park	6	acres	[412]	T = 0.06*(X); (41% in)	0	0	0
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,491	827	664
				Total Gross Residential Trips =	829	522	307
				Total Gross Non-Residential Trips =	662	305	357
				Internal Capture % among TAZ =	9.39%	-	-
				Internal Capture trips among TAZ =	140	70	70

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	398	trips
Pass-By Percent =	34%	
Pass-By Reduction =	102	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,249**	**706**	**543**

WATS TAZ	TCRPM TAZ
399	**657**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	6,229
Multi-Family Residential	350	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,913
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	4,872
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	13,014
				Total Gross Residential Trips =	8,142
				Total Gross Non-Residential Trips =	4,872
				Internal Capture % among TAZ =	7.48%
				Internal Capture trips among TAZ =	974

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	4,385	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,118	trips

NET NEW EXTERNAL DAILY TRIPS =	**10,922**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	700	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	605	381	224
Multi-Family Residential	350	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	168	113	55
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	60,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	452	221	231
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,225	715	510
				Total Gross Residential Trips =	773	494	279
				Total Gross Non-Residential Trips =	452	221	231
				Internal Capture % among TAZ =	7.35%	-	-
				Internal Capture trips among TAZ =	90	45	45

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	60,000	s.f.
External Trips from Matrix =	407	trips
Pass-By Percent =	34%	
Pass-By Reduction =	104	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,031**	**618**	**413**

WATS TAZ	TCRPM TAZ
377	**859**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	1,870	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	8,220
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	8,220
				Total Gross Residential Trips =	8,220
				Total Gross Non-Residential Trips =	0
				Internal Capture % among TAZ =	0.00%
				Internal Capture trips among TAZ =	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**8,220**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	1,870	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	664	445	219
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	664	445	219
				Total Gross Residential Trips =	664	445	219
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	0.00%	-	-
				Internal Capture trips among TAZ =	0	0	0

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**664**	**445**	**219**

WATS TAZ	TCRPM TAZ
378	**658**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,209	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,298
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	20,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	2,386
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	12,684
				Total Gross Residential Trips =	10,298
				Total Gross Non-Residential Trips =	2,386
				Internal Capture % among TAZ =	3.75%
				Internal Capture trips among TAZ =	476

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	20,000	s.f.
External Trips from Matrix =	2,148	trips
Pass-By Percent =	34%	
Pass-By Reduction =	548	trips

NET NEW EXTERNAL DAILY TRIPS =	**11,660**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,209	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	990	624	366
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	20,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	216	106	110
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,206	730	476
				Total Gross Residential Trips =	990	624	366
				Total Gross Non-Residential Trips =	216	106	110
				Internal Capture % among TAZ =	3.65%	-	-
				Internal Capture trips among TAZ =	44	22	22

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	20,000	s.f.
External Trips from Matrix =	194	trips
Pass-By Percent =	34%	
Pass-By Reduction =	50	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,112**	**683**	**429**

WATS TAZ	TCRPM TAZ
396	**856**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	983	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,513
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	272,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	13,014
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	29	acres	[412]	T = 2.28*(X)	66
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	21,593
				Total Gross Residential Trips =	8,513
				Total Gross Non-Residential Trips =	13,080
				Internal Capture % among TAZ =	12.47%
				Internal Capture trips among TAZ =	2,692

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	272,000	s.f.
External Trips from Matrix =	11,702	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,984	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,917**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	983	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	822	518	304
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	272,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,244	610	634
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	29	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,068	1,129	939
				Total Gross Residential Trips =	822	518	304
				Total Gross Non-Residential Trips =	1,246	611	635
				Internal Capture % among TAZ =	12.28%	-	-
				Internal Capture trips among TAZ =	254	127	127

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	272,000	s.f.
External Trips from Matrix =	1,119	trips
Pass-By Percent =	34%	
Pass-By Reduction =	285	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,529**	**860**	**669**

WATS TAZ	TCRPM TAZ
380	**655**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	550	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	4,990
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	160,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	9,218
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	87,000	s.f.	-	T = 30.49*(X/1000)	2,653
Park	35.3	acres	[412]	T = 2.28*(X)	80
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	16,941
				Total Gross Residential Trips =	4,990
				Total Gross Non-Residential Trips =	11,951
				Internal Capture % among TAZ =	14.87%
				Internal Capture trips among TAZ =	2,520

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	160,000	s.f.
External Trips from Matrix =	8,100	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,066	trips

NET NEW EXTERNAL DAILY TRIPS =	**12,355**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	550	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	487	307	180
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	160,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	872	427	445
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	87000	s.f.	-	T = 3.05*(X/1000); (40% in)	265	106	159
Park	35	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,626	841	785
				Total Gross Residential Trips =	487	307	180
				Total Gross Non-Residential Trips =	1,139	534	605
				Internal Capture % among TAZ =	14.39%	-	-
				Internal Capture trips among TAZ =	234	117	117

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	160,000	s.f.
External Trips from Matrix =	767	trips
Pass-By Percent =	34%	
Pass-By Reduction =	196	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,196**	**626**	**570**

WATS TAZ	TCRPM TAZ
397	**860**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	1,361,250	s.f.	[130]	T = 6.96*(X/1000)	9,474
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	1,361,250	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	9,961
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	19,435
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	19,435
				Internal Capture % among TAZ =	1.96%
				Internal Capture trips among TAZ =	380

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**19,055**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	1,361,250	s.f.	[130]	T = 0.86*(X/1000); (21% in)	1,171	246	925
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	1,361,250	s.f.	[710]	T = 1.12*(X/1000)+78.81; (17% in)	1,603	273	1,330
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,774	519	2,255
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	2,774	519	2,255
				Internal Capture % among TAZ =	0.72%	-	-
				Internal Capture trips among TAZ =	20	10	10

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,754**	**509**	**2,245**

WATS TAZ	TCRPM TAZ
398	**649**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	829	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	7,278
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	29	acres	[412]	T = 2.28*(X)	66
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	7,344
				Total Gross Residential Trips =	7,278
				Total Gross Non-Residential Trips =	66
				Internal Capture % among TAZ =	0.93%
				Internal Capture trips among TAZ =	68

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**7,276**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	829	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	705	444	261
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	29	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	707	445	262
				Total Gross Residential Trips =	705	444	261
				Total Gross Non-Residential Trips =	2	1	1
				Internal Capture % among TAZ =	0.57%	-	-
				Internal Capture trips among TAZ =	4	2	2

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**703**	**443**	**260**

WATS TAZ	TCRPM TAZ
389	**647**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,294	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,963
Multi-Family Residential	550	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	2,835
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	80,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	5,874
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	35	acres	[412]	T = 2.28*(X)	80
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	19,752
				Total Gross Residential Trips =	13,798
				Total Gross Non-Residential Trips =	5,954
				Internal Capture % among TAZ =	6.47%
				Internal Capture trips among TAZ =	1,278

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	80,000	s.f.
External Trips from Matrix =	5,275	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,345	trips

NET NEW EXTERNAL DAILY TRIPS =	**17,129**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,294	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	1,053	663	390
Multi-Family Residential	550	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	243	163	80
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	80,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	548	269	279
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	35	acres	[412]	T = 0.06*(X); (41% in)	2	1	1
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,846	1,096	750
				Total Gross Residential Trips =	1,296	826	470
				Total Gross Non-Residential Trips =	550	270	280
				Internal Capture % among TAZ =	6.18%	-	-
				Internal Capture trips among TAZ =	114	57	57

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	80,000	s.f.
External Trips from Matrix =	493	trips
Pass-By Percent =	34%	
Pass-By Reduction =	126	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,606**	**976**	**630**

WATS TAZ	TCRPM TAZ
390	**648**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	1,361,250	s.f.	[130]	T = 6.96*(X/1000)	9,474
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	
Service & Office	1,361,250	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	9,961
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	50	acres	[412]	T = 2.28*(X)	114
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	19,549
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	19,549
				Internal Capture % among TAZ =	2.01%
				Internal Capture trips among TAZ =	392

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

NET NEW EXTERNAL DAILY TRIPS =	**19,157**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	0	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	1,361,250	s.f.	[130]	T = 0.86*(X/1000); (21% in)	1,171	246	925
Commercial Retail	0	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)			
Service & Office[(2)]	1,361,250	s.f.	[710]	T = 1.12*(X/1000)+78.81; (17% in)	1,603	273	1,330
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	50	acres	[412]	T = 0.06*(X); (41% in)	3	1	2
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	2,777	520	2,257
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	2,777	520	2,257
				Internal Capture % among TAZ =	0.72%	-	-
				Internal Capture trips among TAZ =	20	10	10

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,757**	**510**	**2,247**

WATS TAZ	TCRPM TAZ
392	**654**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	977	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,465
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,645
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	101,277	s.f.	-	T = 30.49*(X/1000)	3,088
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	19,198
				Total Gross Residential Trips =	8,465
				Total Gross Non-Residential Trips =	10,733
				Internal Capture % among TAZ =	11.32%
				Internal Capture trips among TAZ =	2,174

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	6,729	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,716	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,308**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	977	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	817	515	302
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	719	352	367
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	101277	s.f.	-	T = 3.05*(X/1000); (40% in)	309	124	185
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,845	991	854
				Total Gross Residential Trips =	817	515	302
				Total Gross Non-Residential Trips =	1,028	476	552
				Internal Capture % among TAZ =	11.06%	-	-
				Internal Capture trips among TAZ =	204	102	102

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	633	trips
Pass-By Percent =	34%	
Pass-By Reduction =	162	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,479**	**808**	**671**

WATS TAZ	TCRPM TAZ
393	**861**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,032	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	8,903
Multi-Family Residential	200	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,176
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,645
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	0	s.f.	-	T = 30.49*(X/1000)	
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	17,724
				Total Gross Residential Trips =	10,079
				Total Gross Non-Residential Trips =	7,645
				Internal Capture % among TAZ =	8.63%
				Internal Capture trips among TAZ =	1,530

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	6,881	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,755	trips

NET NEW EXTERNAL DAILY TRIPS =	**14,439**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,032	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	859	541	318
Multi-Family Residential	200	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	106	71	35
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	719	352	367
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	0	s.f.	-	T = 3.05*(X/1000); (40% in)			
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,684	964	720
				Total Gross Residential Trips =	965	612	353
				Total Gross Non-Residential Trips =	719	352	367
				Internal Capture % among TAZ =	8.55%	-	-
				Internal Capture trips among TAZ =	144	72	72

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	647	trips
Pass-By Percent =	34%	
Pass-By Reduction =	165	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,375**	**810**	**565**

WATS TAZ	TCRPM TAZ
394	**653**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,200	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,228
Multi-Family Residential	200	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,176
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	7,645
Service & Office	0	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	0	s.f.	-	T = 54.51*(X/1000)	
Institutional Use	54,450	s.f.	-	T = 30.49*(X/1000)	1,660
Park	0	acres	[412]	T = 2.28*(X)	
Elementary School	0	students	[520]	T = 1.29*(X)	
K-8 School	0	students	[522]	T = 1.62*(X)	
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	20,709
				Total Gross Residential Trips =	11,404
				Total Gross Non-Residential Trips =	9,305
				Internal Capture % among TAZ =	11.06%
				Internal Capture trips among TAZ =	2,290

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	6,729	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,716	trips

NET NEW EXTERNAL DAILY TRIPS =	**16,703**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,200	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	983	619	364
Multi-Family Residential	200	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	106	71	35
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	120,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	719	352	367
Service & Office[(2)]	0	s.f.	[710]	T = 1.49*(X/1000); (17% in)			
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	0	s.f.	-	T = 5.45*(X/1000); (50% in)			
Institutional Use	54450	s.f.	-	T = 3.05*(X/1000); (40% in)	166	66	100
Park	0	acres	[412]	T = 0.06*(X); (41% in)			
Elementary School	0	students	[520]	T = 0.15*(X); (49% in)			
K-8 School	0	students	[522]	T = 0.16*(X); (49% in)			
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	1,974	1,108	866
				Total Gross Residential Trips =	1,089	690	399
				Total Gross Non-Residential Trips =	885	418	467
				Internal Capture % among TAZ =	10.94%	-	-
				Internal Capture trips among TAZ =	216	108	108

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	120,000	s.f.
External Trips from Matrix =	633	trips
Pass-By Percent =	34%	
Pass-By Reduction =	162	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,596**	**919**	**677**

WATS TAZ	TCRPM TAZ
395	**652**

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,272	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	10,791
Multi-Family Residential	975	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	4,664
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	0	rooms	[310]	T = 8.92*(X)	
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	150,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	8,839
Service & Office	142,000	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	1,748
Research & Development(1)	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	
Hospital	0	beds	[610]	T = 11.81*(X)	
Civic Use	40,347	s.f.	-	T = 54.51*(X/1000)	2,199
Institutional Use	30,000	s.f.	-	T = 30.49*(X/1000)	915
Park	50	acres	[412]	T = 2.28*(X)	114
Elementary School	820	students	[520]	T = 1.29*(X)	1,058
K-8 School	1,600	students	[522]	T = 1.62*(X)	2,592
High School	0	students	[530]	Ln(T) = 0.81*Ln(X) + 1.86	
Congregate Care Facility	0	d.u.	[253]	T = 2.02*(X)	
Assisted Living Facility	0	beds	[254]	T = 2.60*(X)	
				Total Gross Trips =	32,920
				Total Gross Residential Trips =	15,455
				Total Gross Non-Residential Trips =	17,465
				Internal Capture % among TAZ =	16.09%
				Internal Capture trips among TAZ =	5,298

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF

Commercial Retail Pass-By Calculation:		
Intensity =	150,000	s.f.
External Trips from Matrix =	7,278	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,856	trips

NET NEW EXTERNAL DAILY TRIPS =	**25,766**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,272	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	1,036	653	383
Multi-Family Residential	975	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	389	261	128
Age-Restricted Single-Family	0	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)			
Age-Restricted Multi-Family	0	d.u.	[252]	T = 0.11*(X); (61% in)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	150,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	835	409	426
Service & Office[(2)]	142,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	212	36	176
Research & Development[(1)]	0	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)			
Hospital	0	beds	[610]	T = 1.31*(X); (36% in)			
Civic Use	40347	s.f.	-	T = 5.45*(X/1000); (50% in)	220	110	110
Institutional Use	30000	s.f.	-	T = 3.05*(X/1000); (40% in)	92	37	55
Park	50	acres	[412]	T = 0.06*(X); (41% in)	3	1	2
Elementary School	820	students	[520]	T = 0.15*(X); (49% in)	123	60	63
K-8 School	1600	students	[522]	T = 0.16*(X); (49% in)	256	125	131
High School	0	students	[530]	T = 0.13*(X); (47% in)			
Congregate Care Facility	0	d.u.	[253]	T = 0.05*(X) + 2.13; (60% in)			
Assisted Living Facility	0	beds	[254]	T = 0.19*(X); (63% in)			
				Total Gross Trips =	3,166	1,692	1,474
				Total Gross Residential Trips =	1,425	914	511
				Total Gross Non-Residential Trips =	1,741	778	963
				Internal Capture % among TAZ =	14.72%	-	-
				Internal Capture trips among TAZ =	466	233	233

(1) Equation is used for Research and Development up to 1,800,000 SF
Linear rate is used for Research and Development beyond 1,800,000 SF
(2) Equation is used for Service & Office greater than 500,000 SF

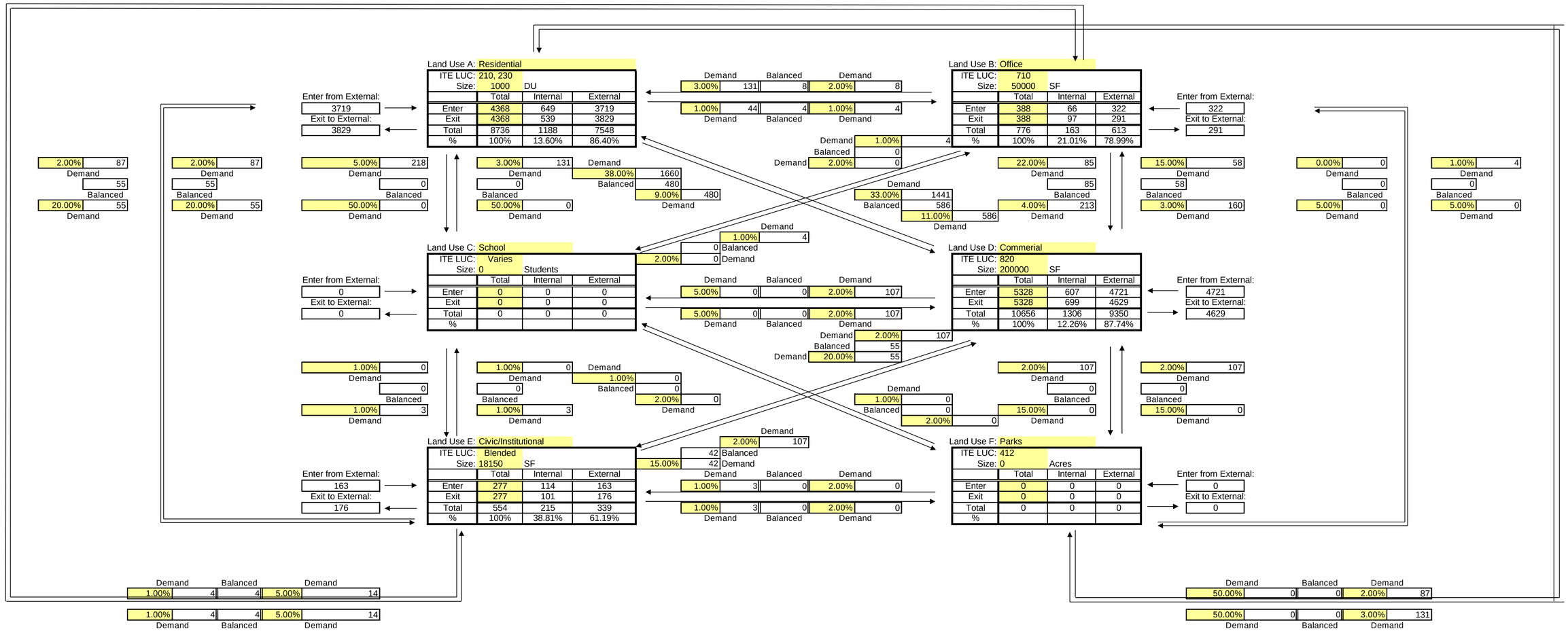
Commercial Retail Pass-By Calculation:		
Intensity =	150,000	s.f.
External Trips from Matrix =	696	trips
Pass-By Percent =	34%	
Pass-By Reduction =	177	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,523**	**1,371**	**1,152**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 670



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

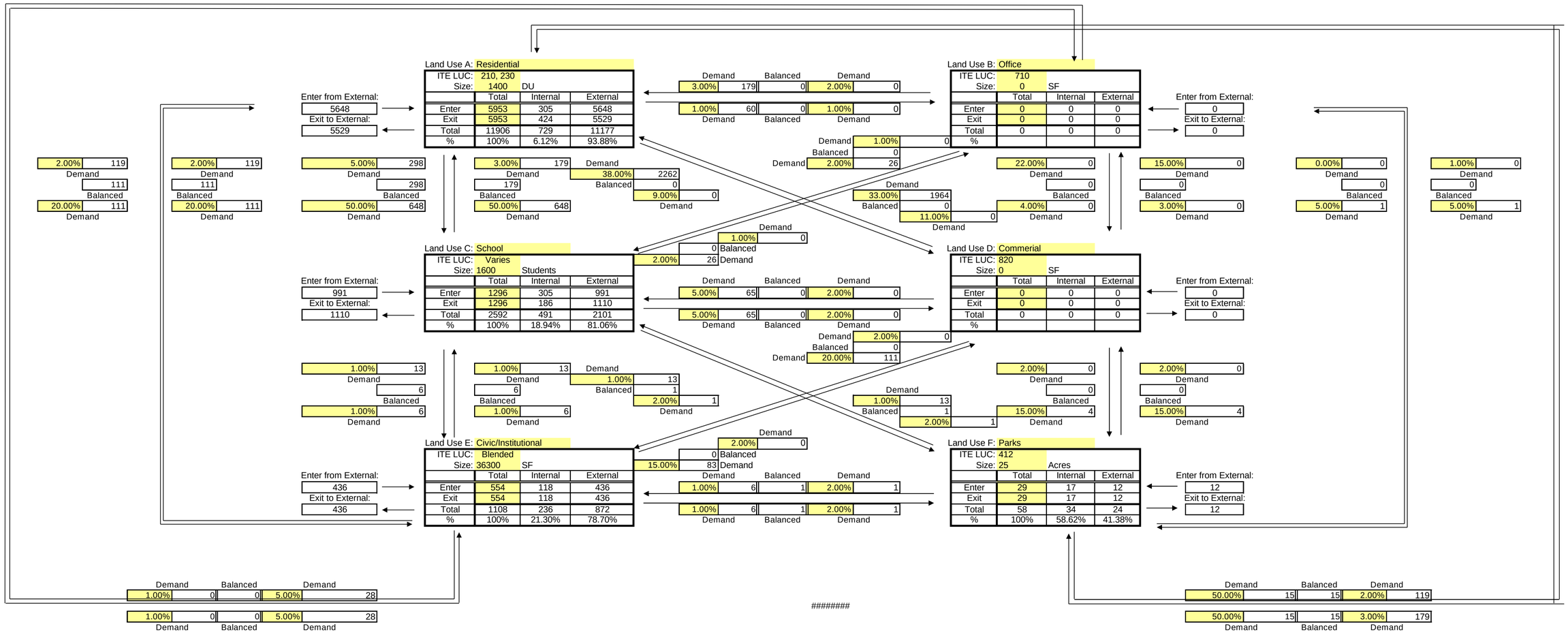
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3719	322	0	4721	163	0	8925
Exit	3829	291	0	4629	176	0	8925
Total	7548	613	0	9350	339	0	**17850**
Single Use Trip Gen Estimate	8736	776	0	10656	554	0	**20722**
	13.60%	21.01%	0.00%	12.26%	38.81%	0.00%	

Internal Capture = 13.86%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 673



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

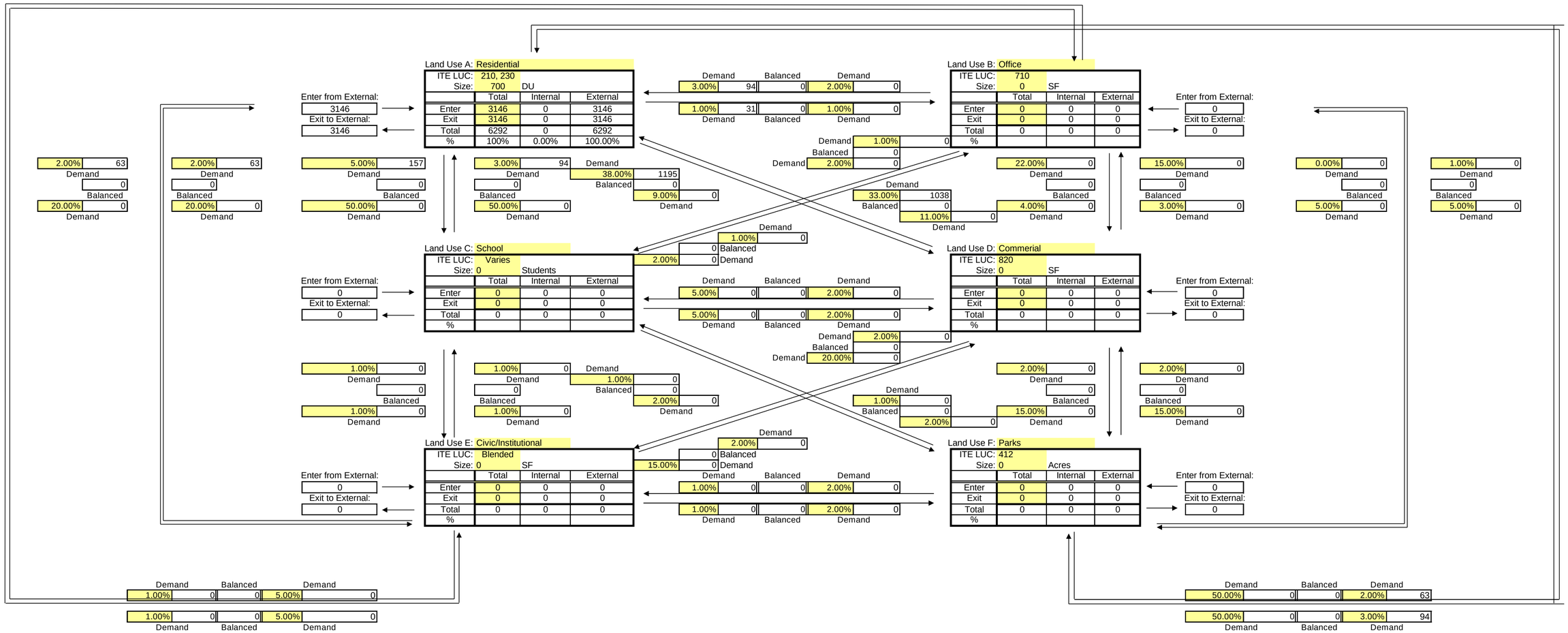
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5648	0	991	0	436	12	7087
Exit	5529	0	1110	0	436	12	7087
Total	11177	0	2101	0	872	24	**14174**
Single Use Trip Gen Estimate	11906	0	2592	0	1108	58	**15664**
	6.12%	0.00%	18.94%	0.00%	21.30%	58.62%	

Internal Capture = 9.51%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 668



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

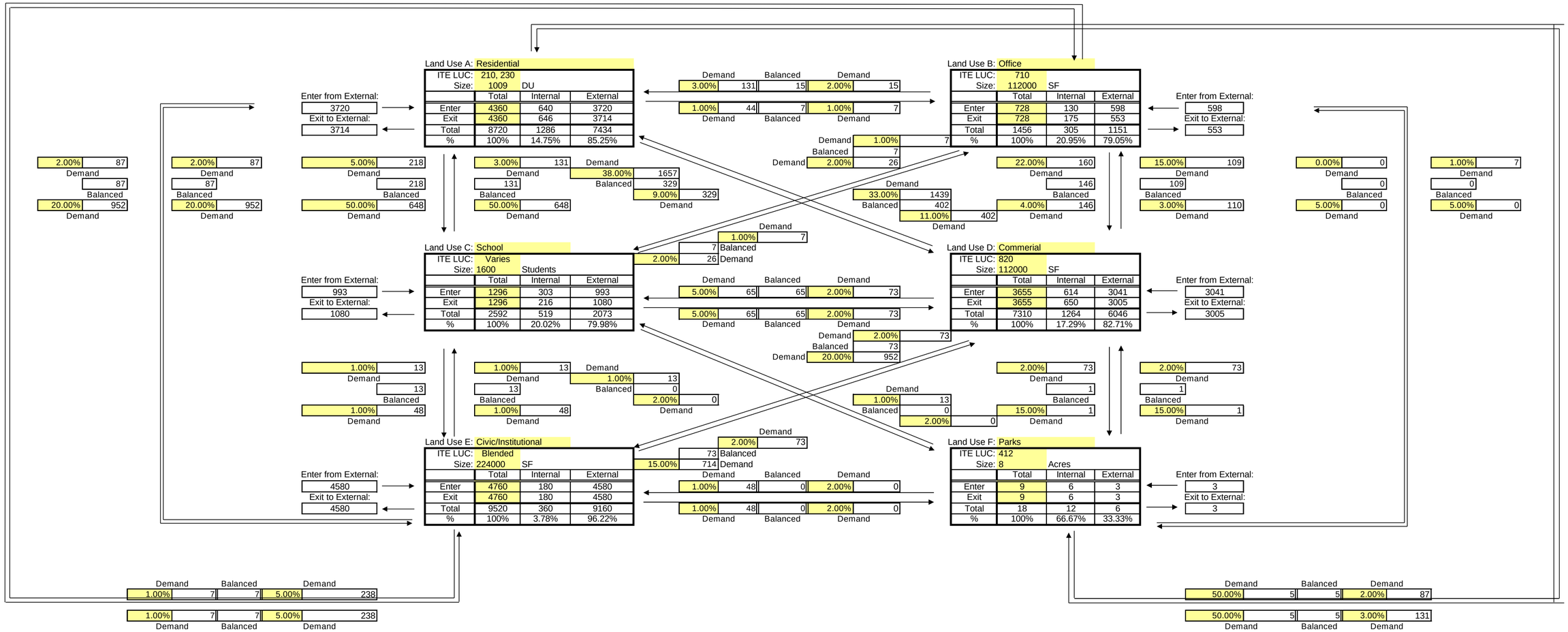
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3146	0	0	0	0	0	3146
Exit	3146	0	0	0	0	0	3146
Total	6292	0	0	0	0	0	**6292**
Single Use Trip Gen Estimate	6292	0	0	0	0	0	**6292**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 858



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

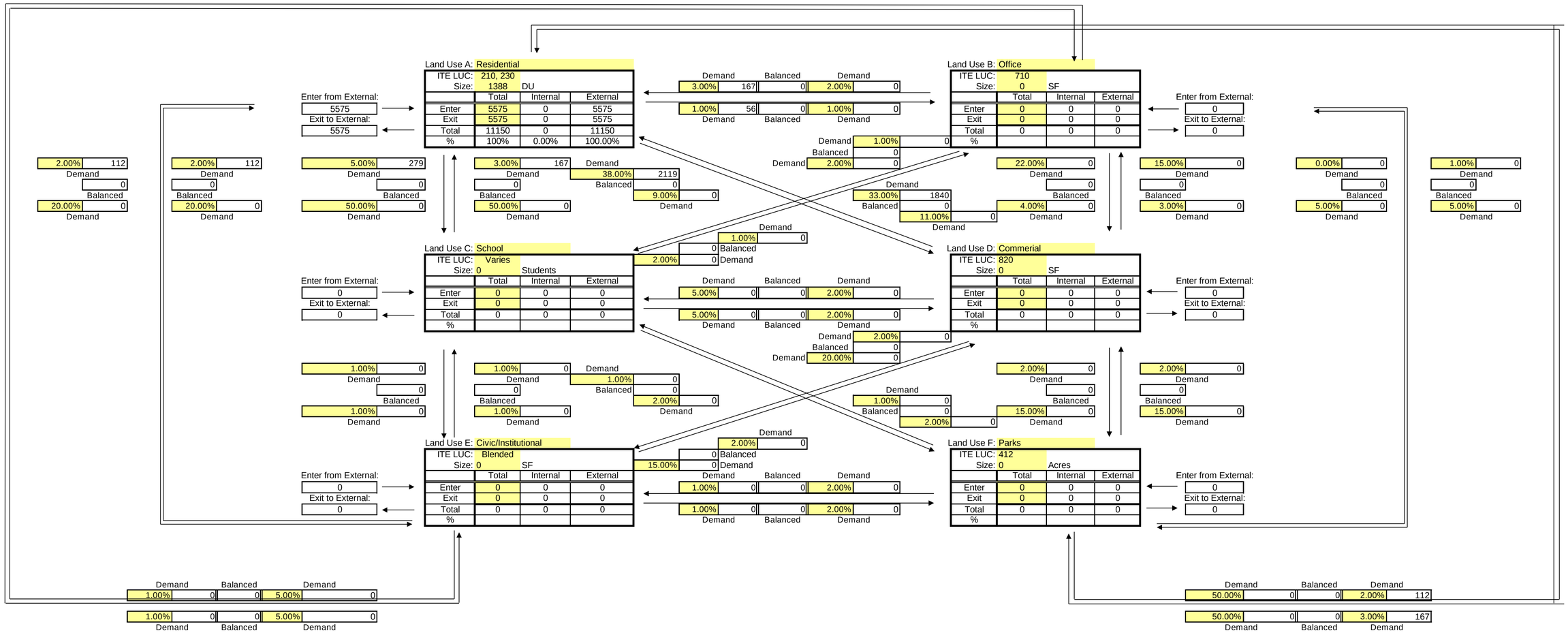
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3720	598	993	3041	4580	3	12935
Exit	3714	553	1080	3005	4580	3	12935
Total	7434	1151	2073	6046	9160	6	**25870**
Single Use Trip Gen Estimate	8720	1456	2592	7310	9520	18	**29616**
	14.75%	20.95%	20.02%	17.29%	3.78%	66.67%	

Internal Capture = 12.65%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 645



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

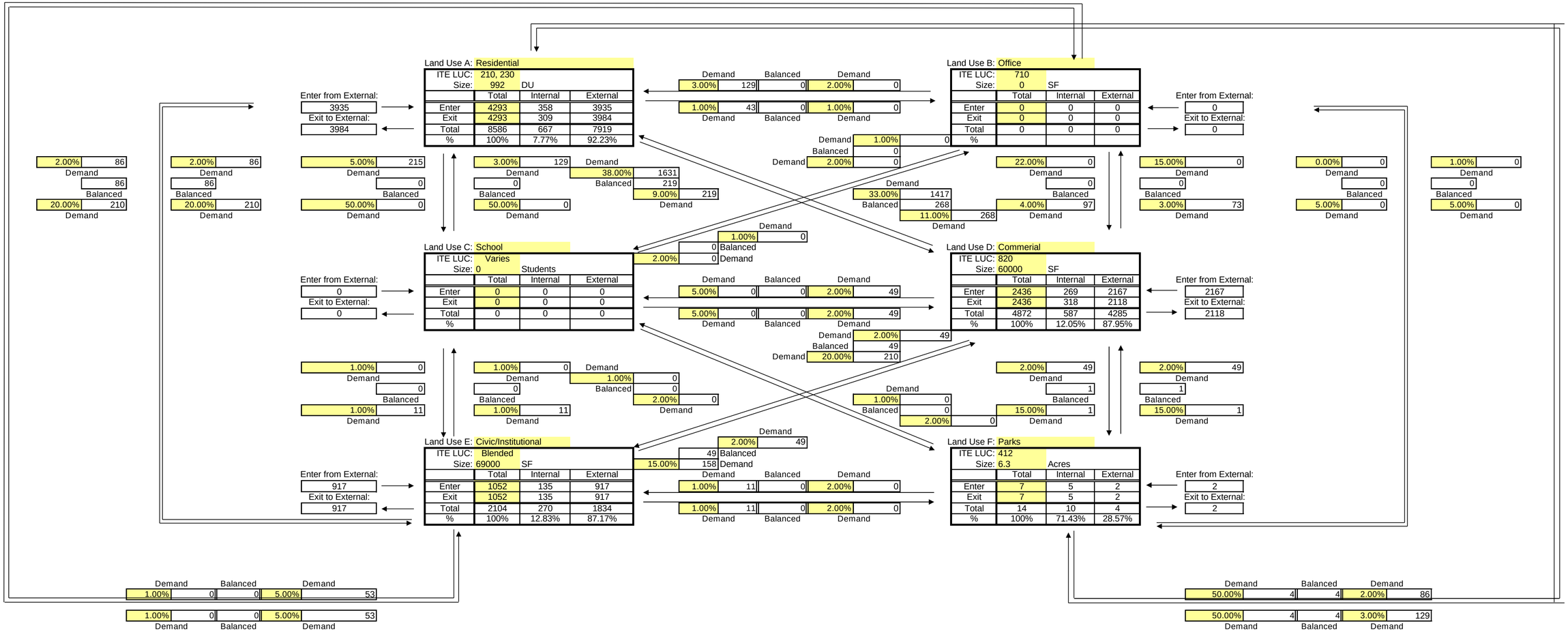
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5575	0	0	0	0	0	5575
Exit	5575	0	0	0	0	0	5575
Total	11150	0	0	0	0	0	**11150**
Single Use Trip Gen Estimate	11150	0	0	0	0	0	**11150**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 857



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

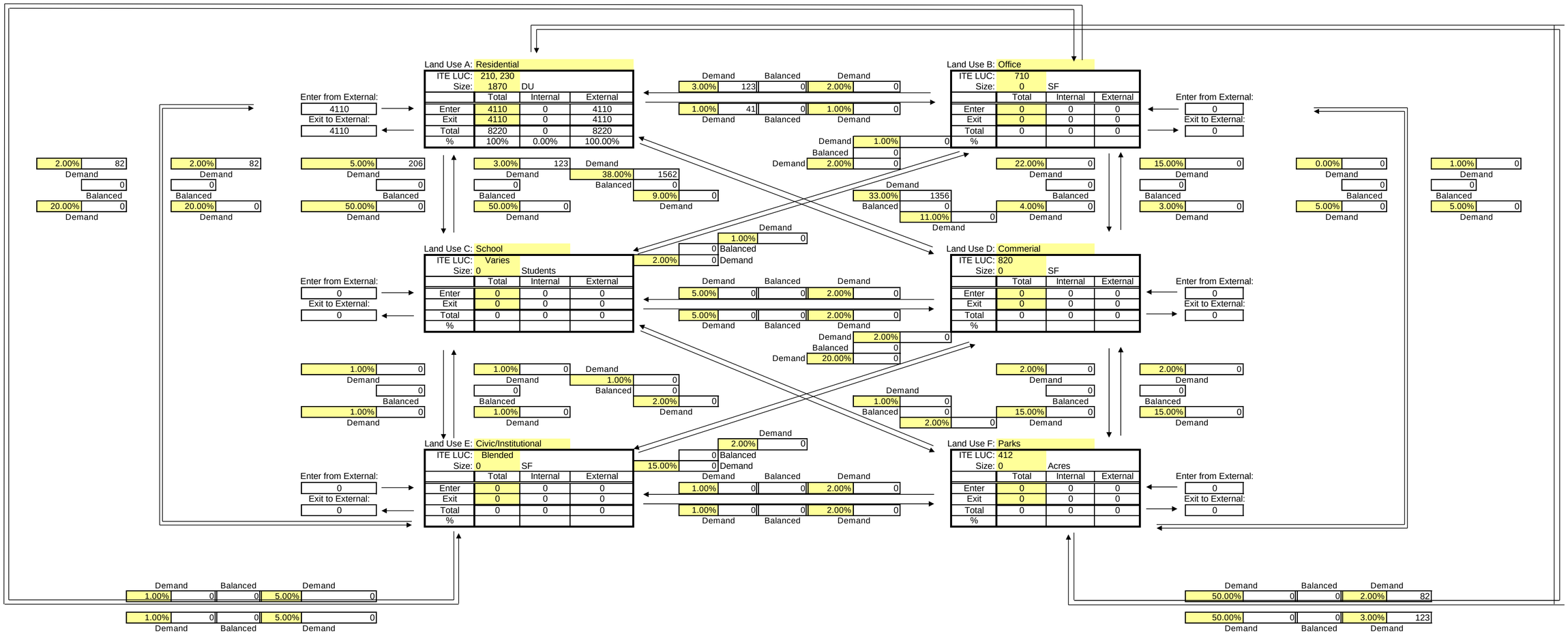
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3935	0	0	2167	917	2	7021
Exit	3984	0	0	2118	917	2	7021
Total	7919	0	0	4285	1834	4	**14042**
Single Use Trip Gen Estimate	8586	0	0	4872	2104	14	**15576**
	7.77%	0.00%	0.00%	12.05%	12.83%	71.43%	

Internal Capture = 9.85%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 859



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

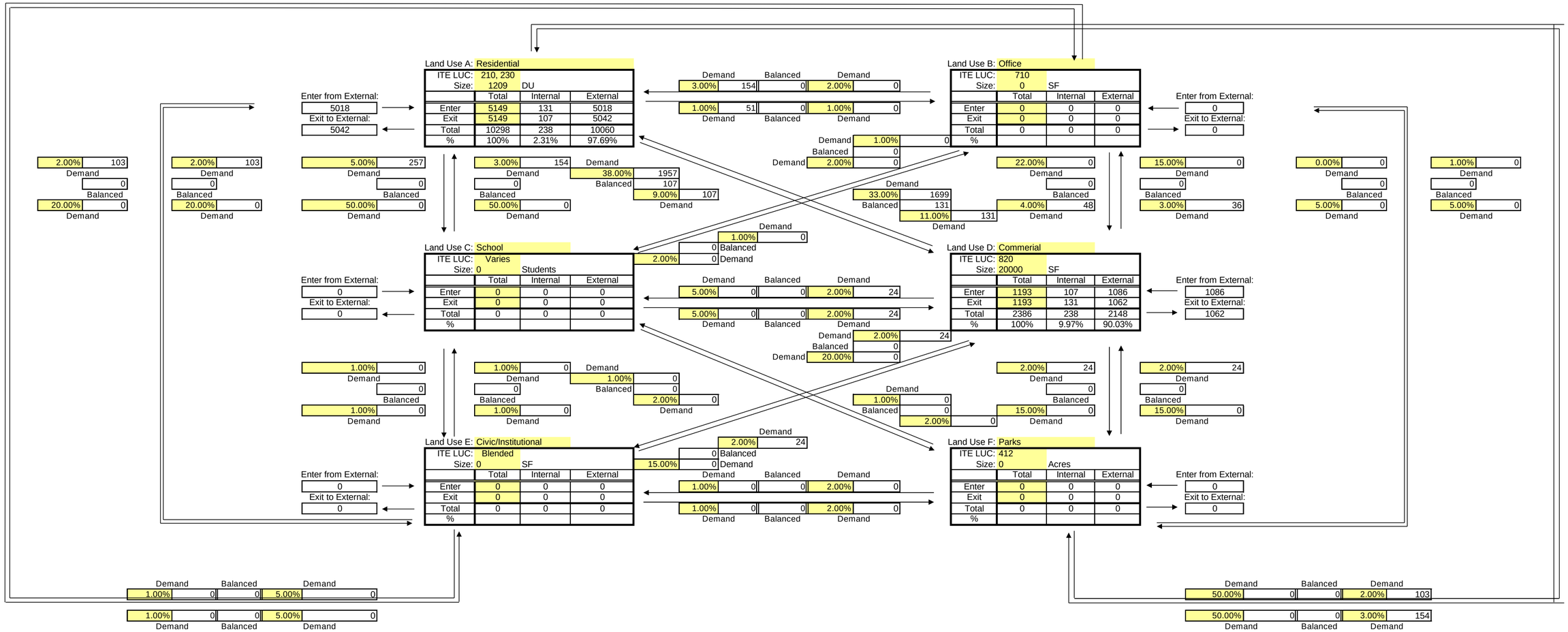
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	4110	0	0	0	0	0	4110
Exit	4110	0	0	0	0	0	4110
Total	8220	0	0	0	0	0	**8220**
Single Use Trip Gen Estimate	8220	0	0	0	0	0	**8220**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 658



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

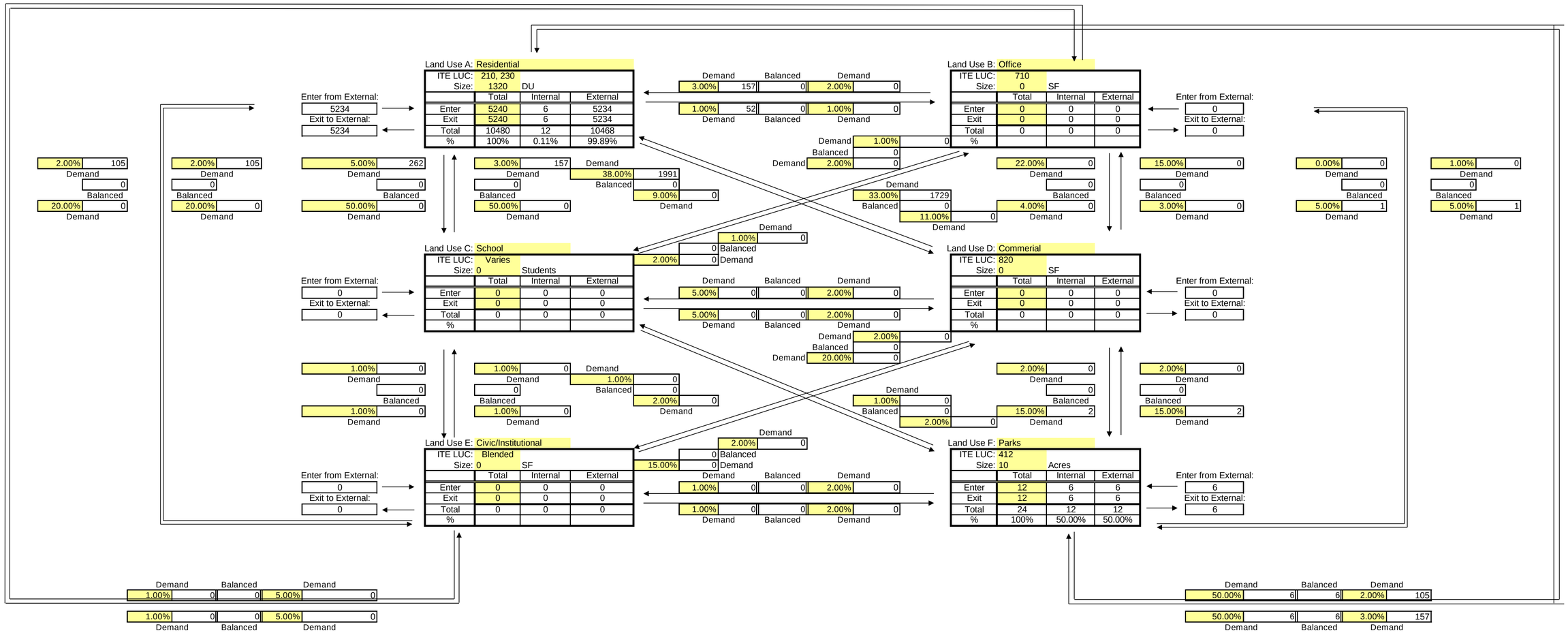
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5018	0	0	1086	0	0	6104
Exit	5042	0	0	1062	0	0	6104
Total	10060	0	0	2148	0	0	**12208**
Single Use Trip Gen Estimate	10298	0	0	2386	0	0	**12684**
	2.31%	0.00%	0.00%	9.97%	0.00%	0.00%	

Internal Capture = 3.75%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 855



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

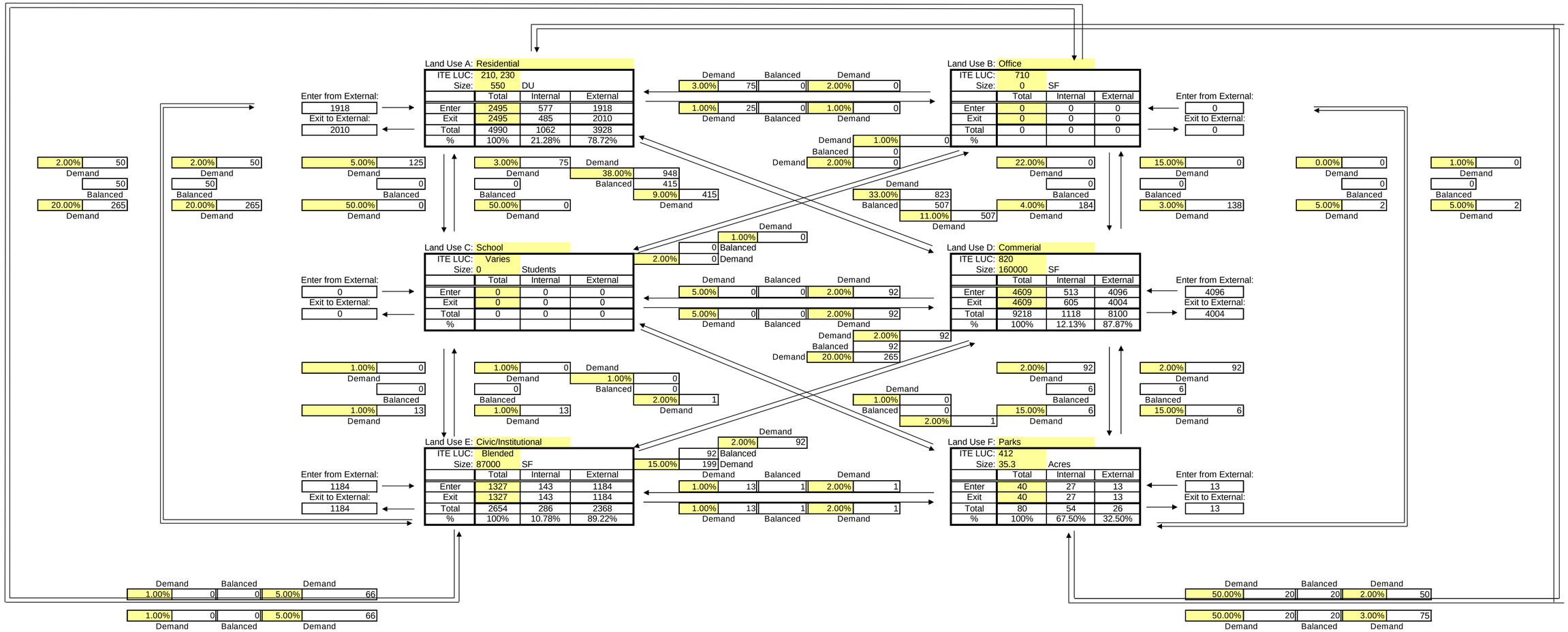
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5234	0	0	0	0	6	5240
Exit	5234	0	0	0	0	6	5240
Total	10468	0	0	0	0	12	**10480**
Single Use Trip Gen Estimate	10480	0	0	0	0	24	**10504**
	0.11%	0.00%	0.00%	0.00%	0.00%	50.00%	

Internal Capture = 0.23%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 655



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

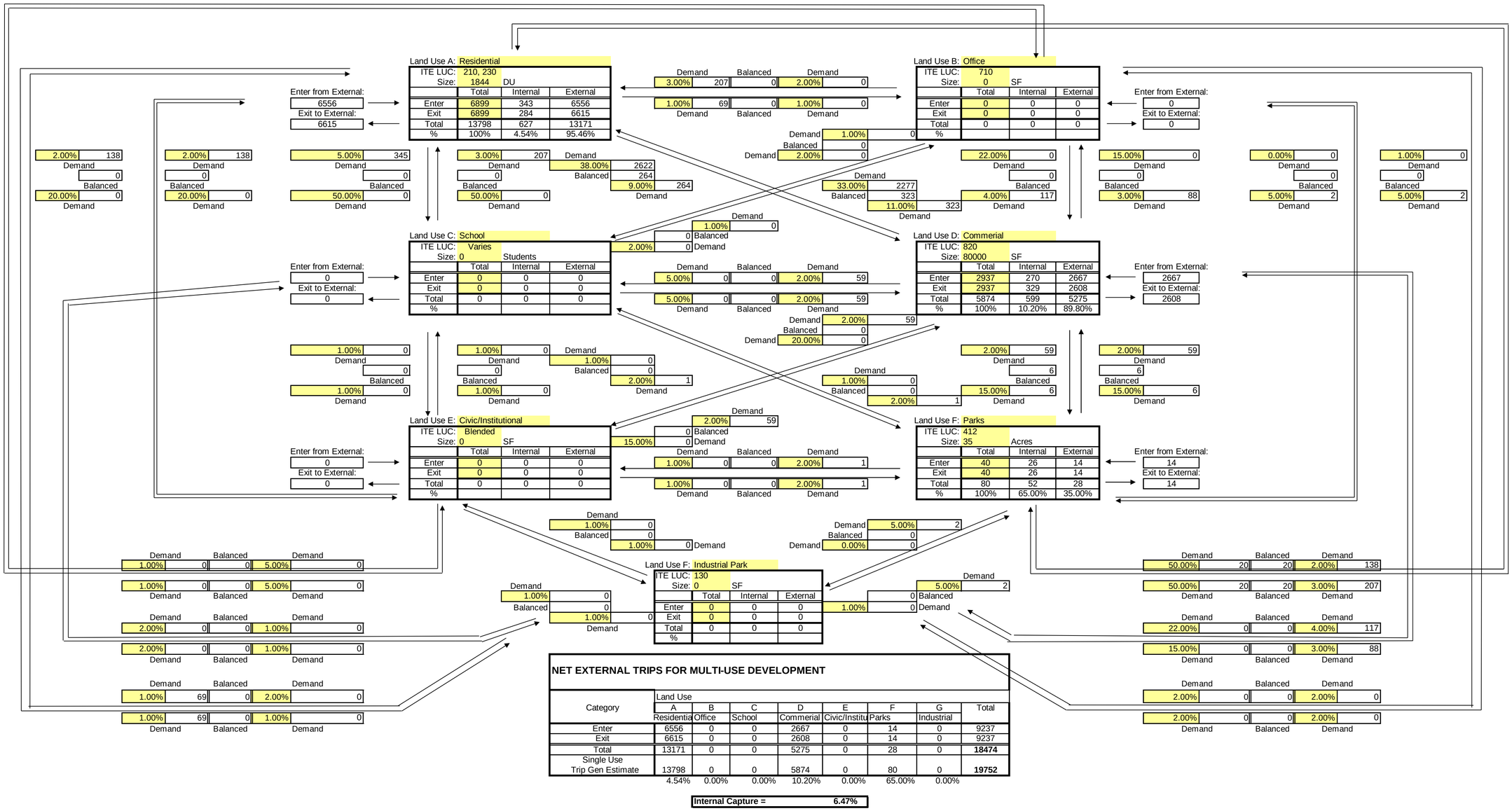
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1918	0	0	4096	1184	13	7211
Exit	2010	0	0	4004	1184	13	7211
Total	3928	0	0	8100	2368	26	**14422**
Single Use Trip Gen Estimate	4990	0	0	9218	2654	80	**16942**
	21.28%	0.00%	0.00%	12.13%	10.78%	67.50%	

Internal Capture = 14.87%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 647 POD C



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

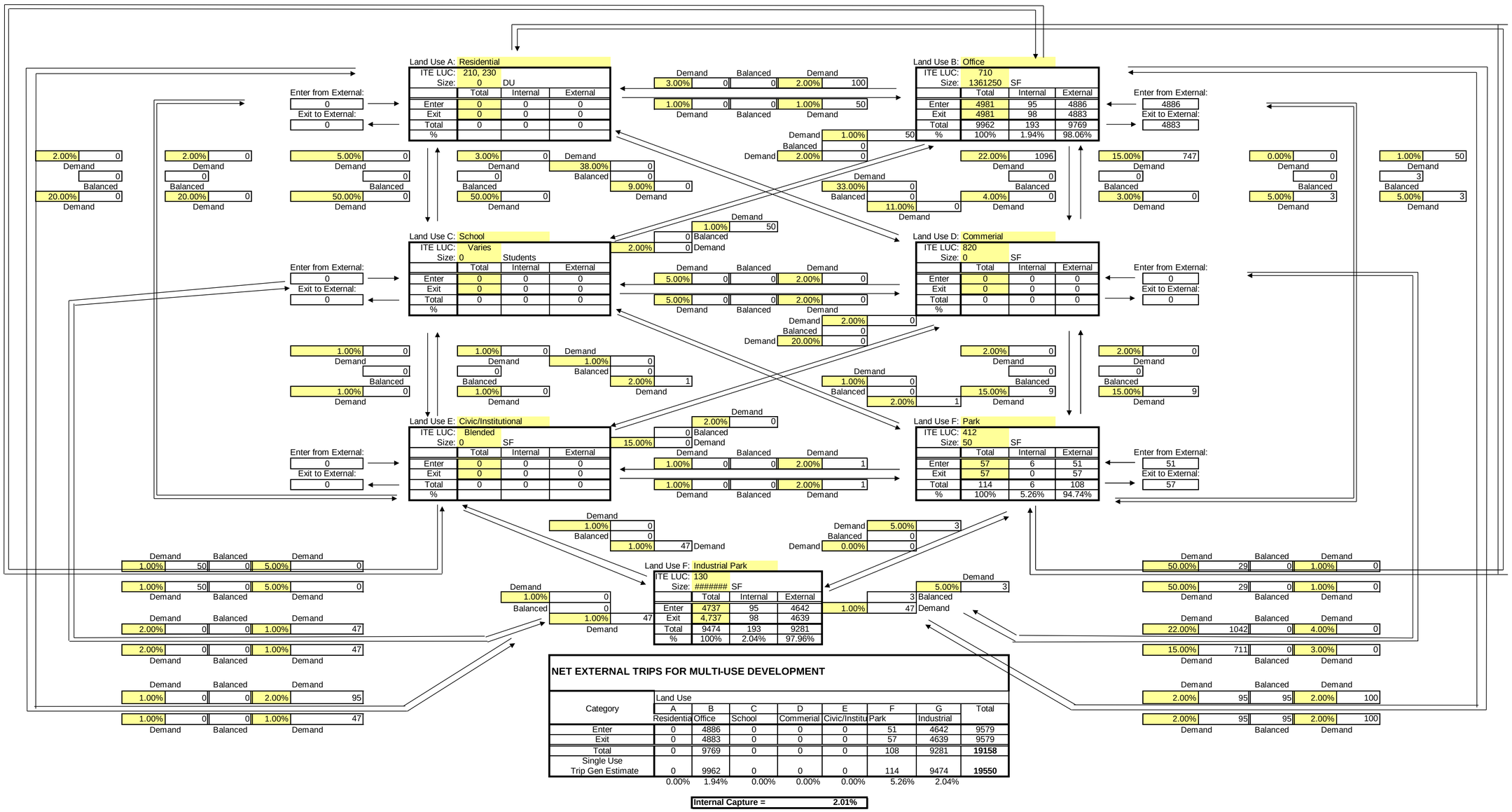
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	6556	0	0	2667	0	14	0	9237
Exit	6615	0	0	2608	0	14	0	9237
Total	13171	0	0	5275	0	28	0	**18474**
Single Use Trip Gen Estimate	13798	0	0	5874	0	80	0	**19752**
	4.54%	0.00%	0.00%	10.20%	0.00%	65.00%	0.00%	

Internal Capture = 6.47%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 648 POD A



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

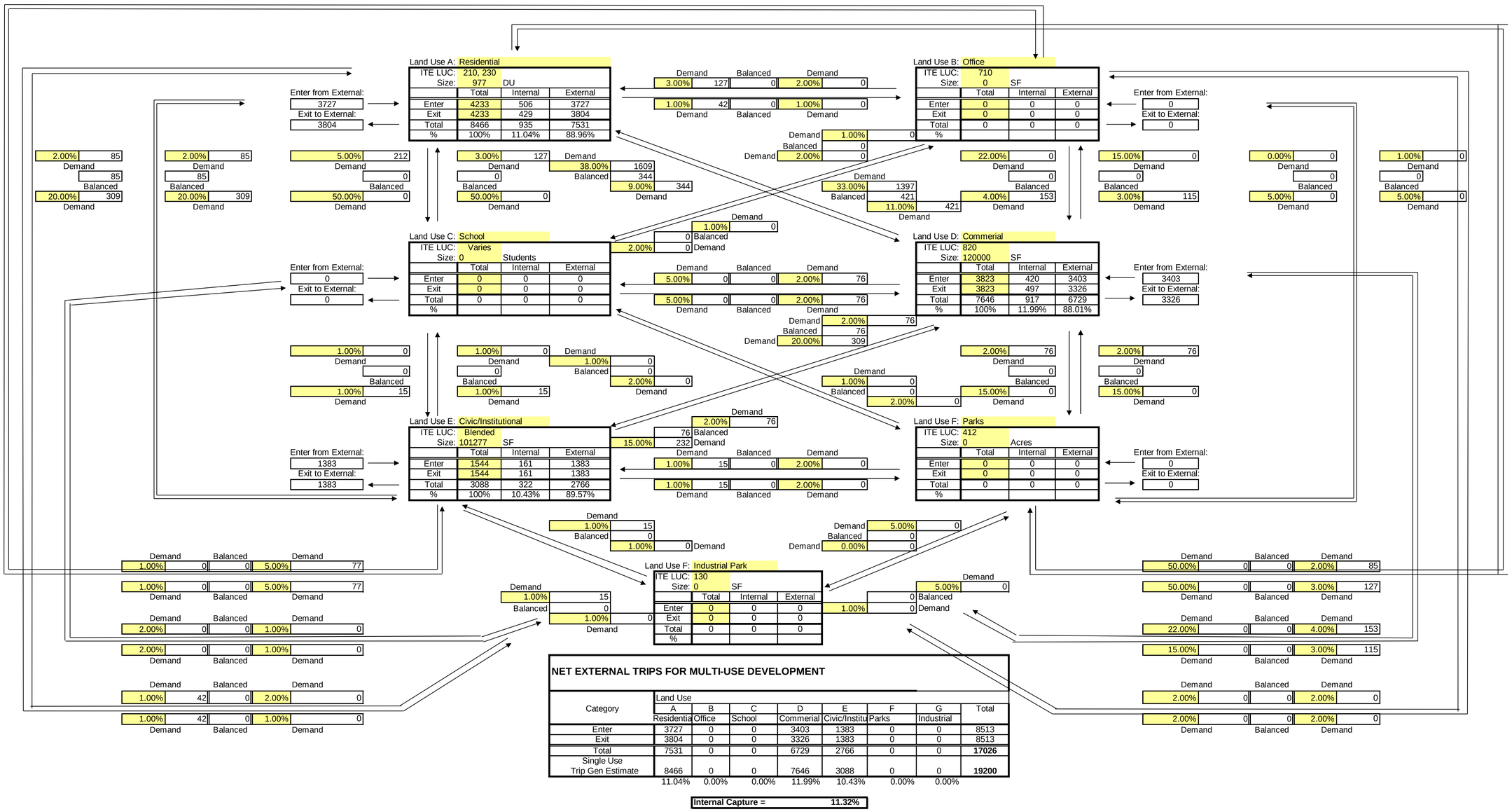
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	4886	0	0	0	51	4642	9579
Exit	0	4883	0	0	0	57	4639	9579
Total	0	9769	0	0	0	108	9281	**19158**
Single Use Trip Gen Estimate	0	9962	0	0	0	114	9474	**19550**
	0.00%	1.94%	0.00%	0.00%	0.00%	5.26%	2.04%	

Internal Capture = 2.01%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 654 POD D



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

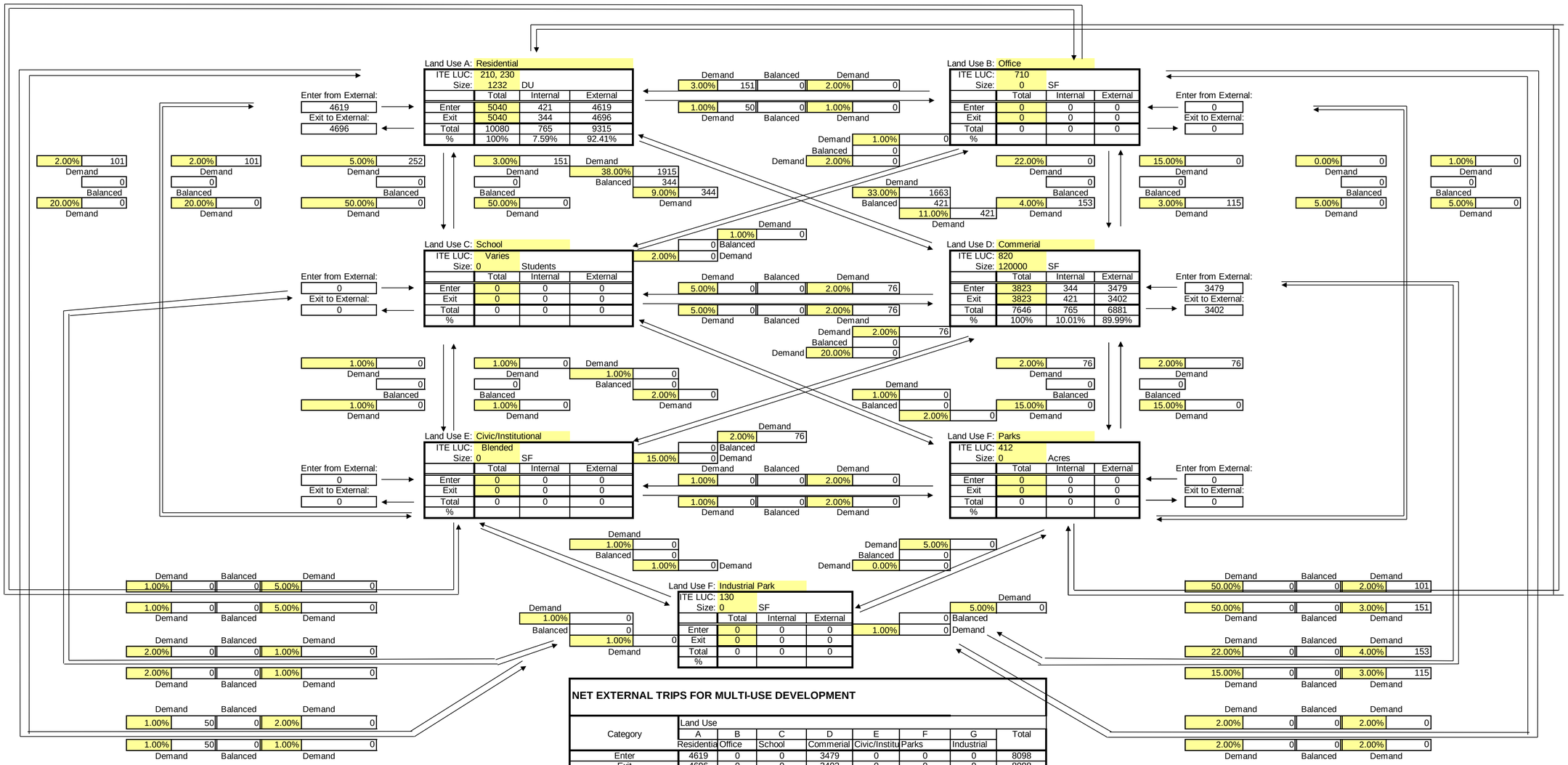
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	3727	0	0	3403	1383	0	0	8513
Exit	3804	0	0	3326	1383	0	0	8513
Total	7531	0	0	6729	2766	0	0	**17026**
Single Use Trip Gen Estimate	8466	0	0	7646	3088	0	0	**19200**
	11.04%	0.00%	0.00%	11.99%	10.43%	0.00%	0.00%	

Internal Capture = 11.32%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: TAZ 861 POD F



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

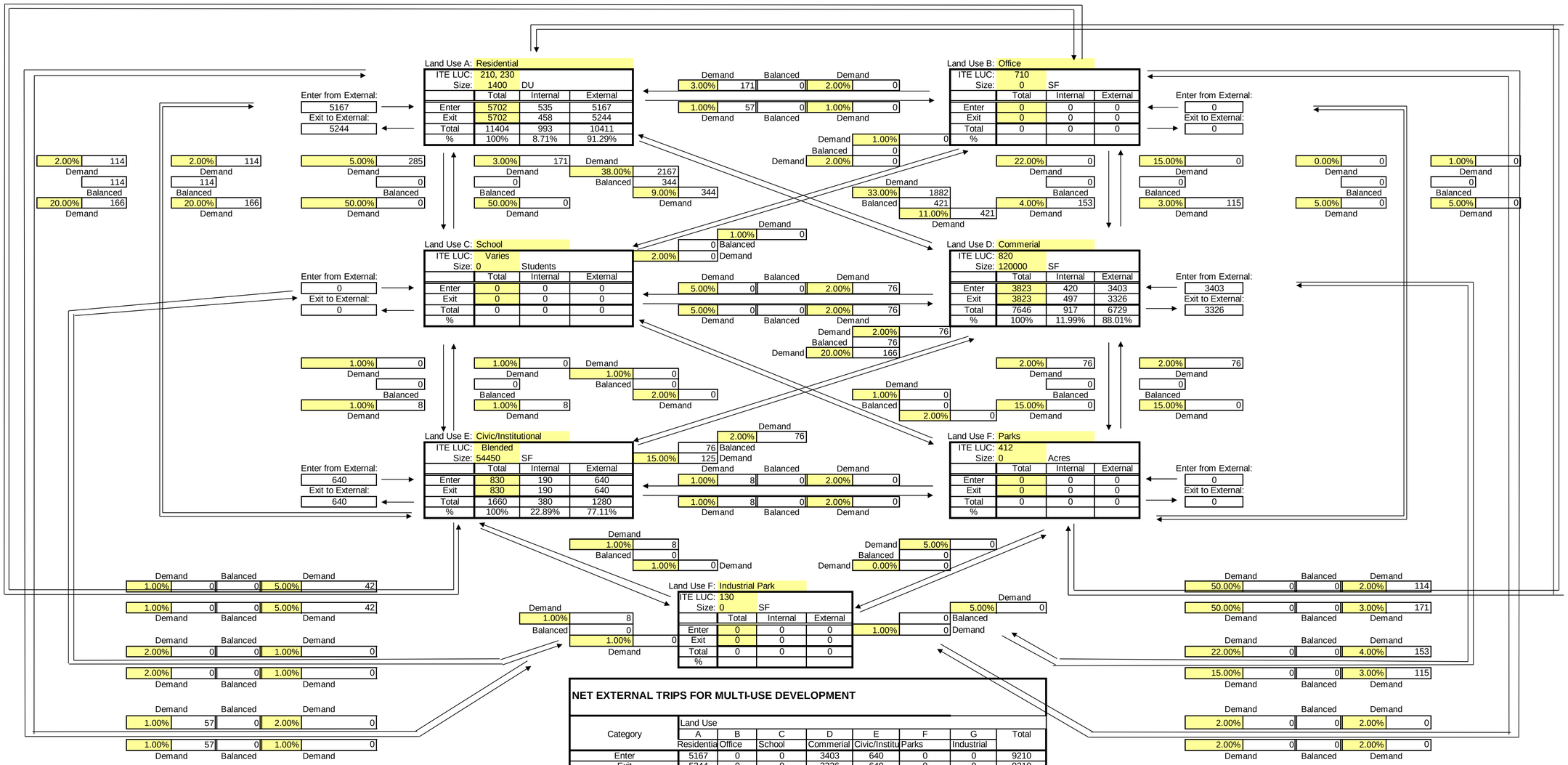
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	4619	0	0	3479	0	0	0	8098
Exit	4696	0	0	3402	0	0	0	8098
Total	9315	0	0	6881	0	0	0	**16196**
Single Use Trip Gen Estimate	10080	0	0	7646	0	0	0	**17726**
	7.59%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

Internal Capture = 8.63%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

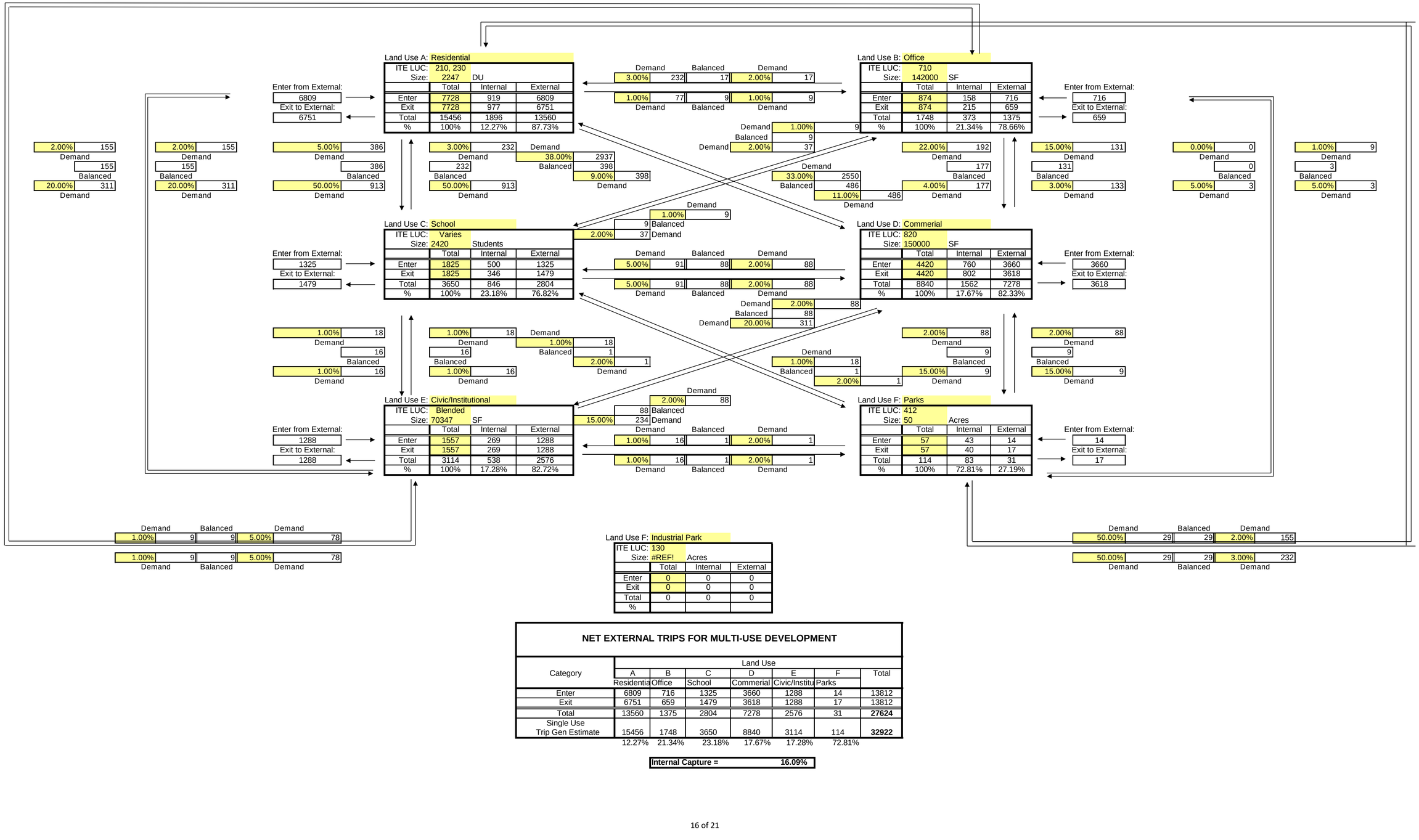
Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 653 POD E



ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 652



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

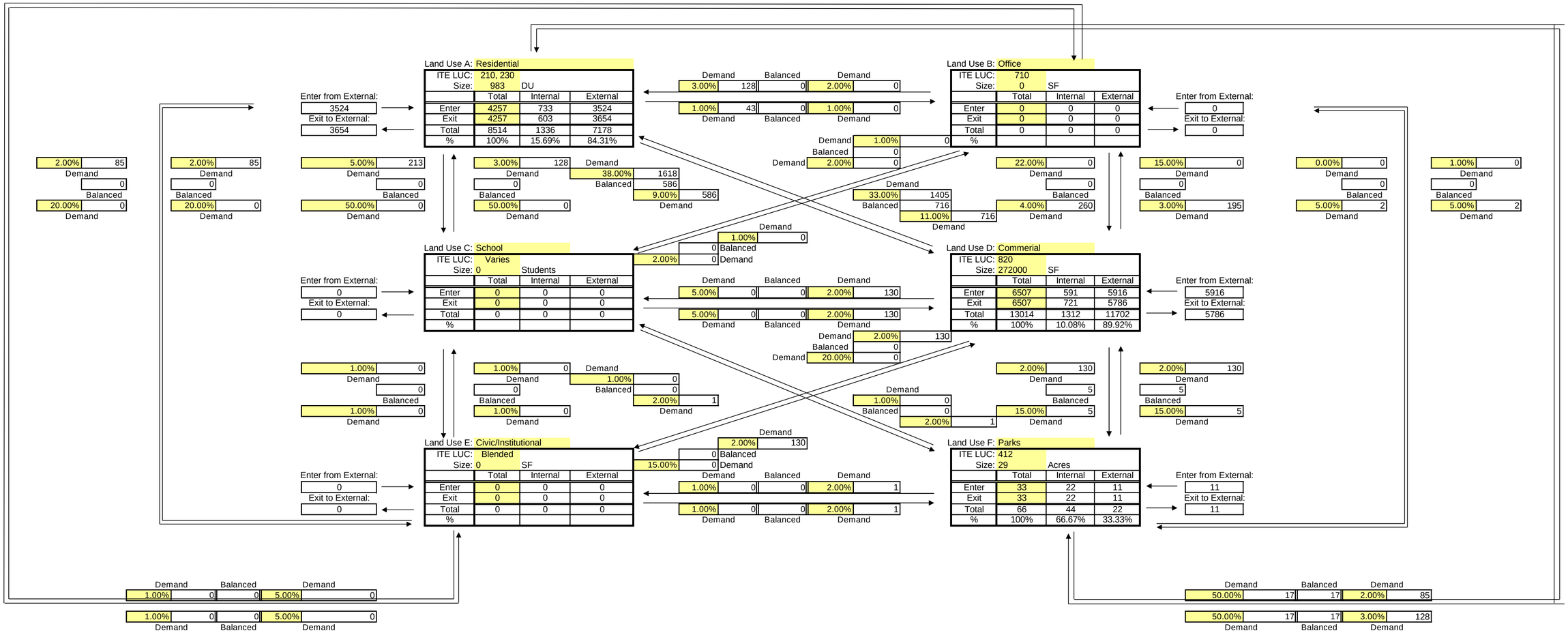
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	6809	716	1325	3660	1288	14	13812
Exit	6751	659	1479	3618	1288	17	13812
Total	13560	1375	2804	7278	2576	31	**27624**
Single Use Trip Gen Estimate	15456	1748	3650	8840	3114	114	**32922**
	12.27%	21.34%	23.18%	17.67%	17.28%	72.81%	

Internal Capture = 16.09%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 856



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

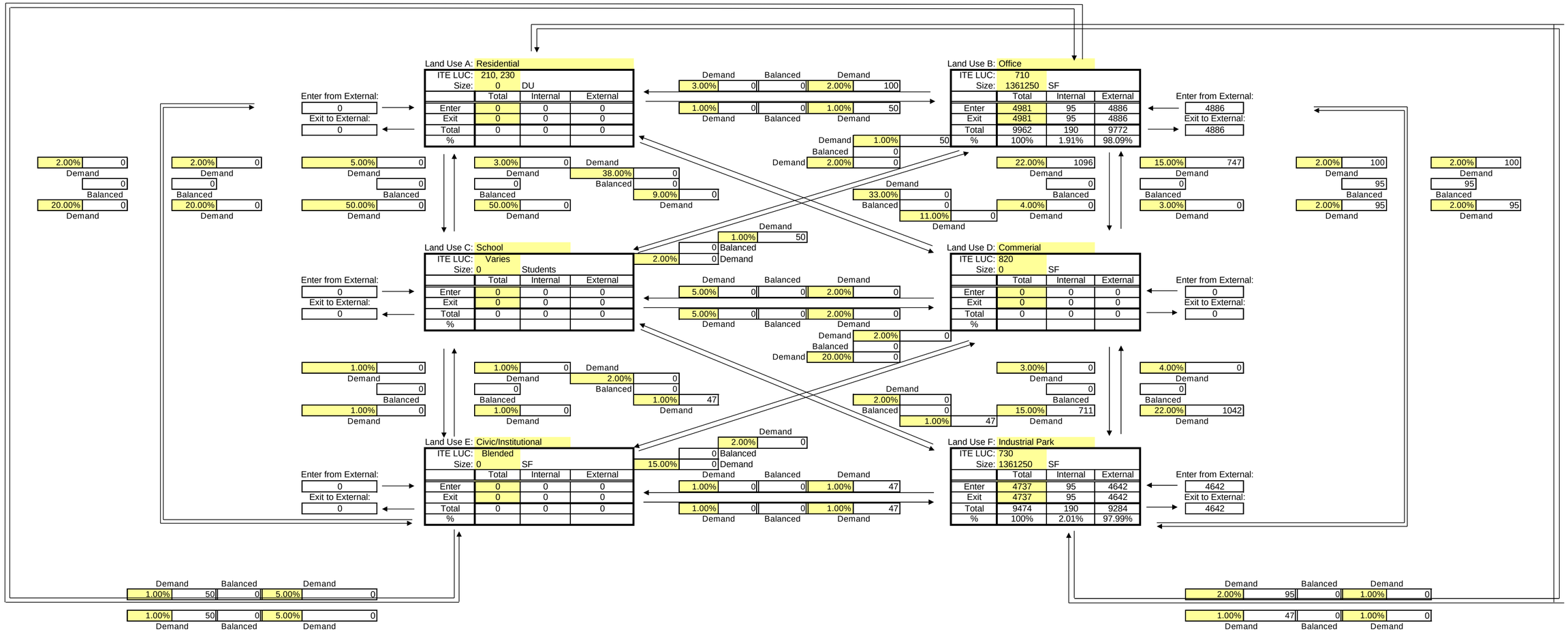
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3524	0	0	5916	0	11	9451
Exit	3654	0	0	5786	0	11	9451
Total	7178	0	0	11702	0	22	**18902**
Single Use Trip Gen Estimate	8514	0	0	13014	0	66	**21594**
	15.69%	0.00%	0.00%	10.08%	0.00%	66.67%	

Internal Capture = 12.47%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 860



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

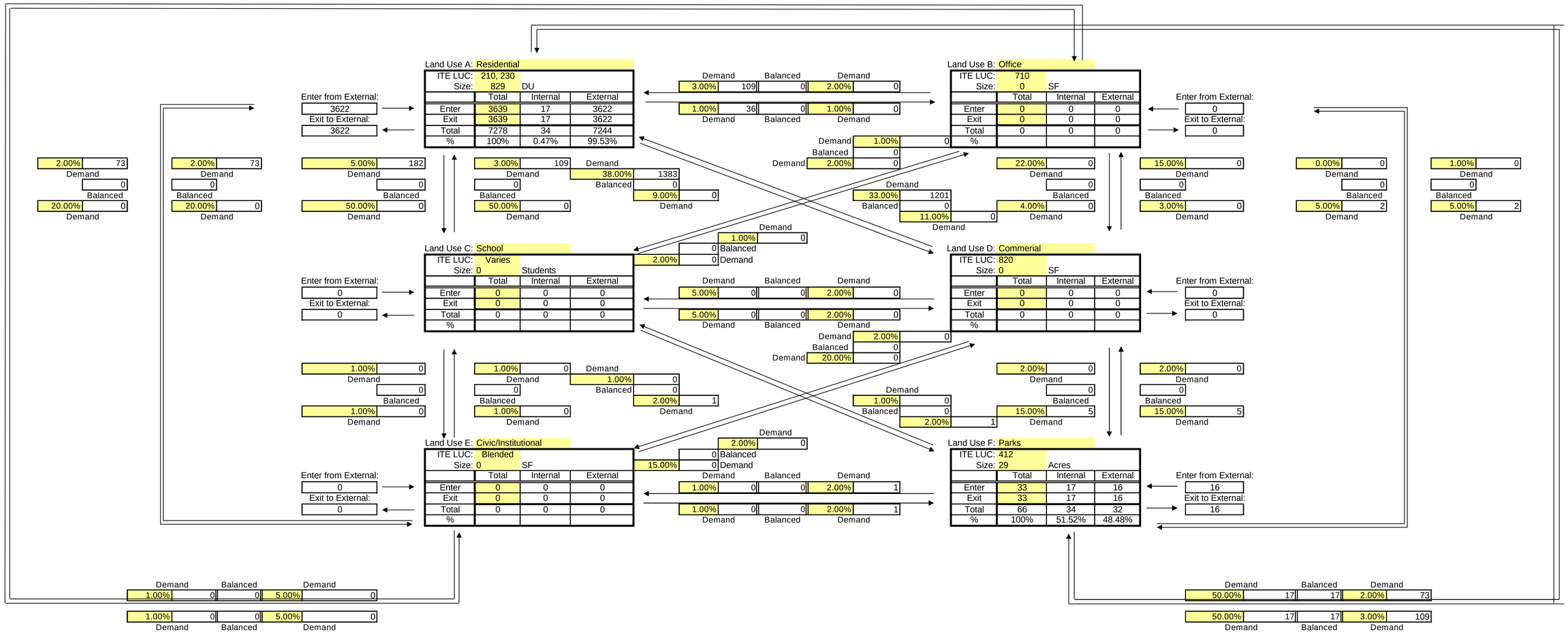
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	4886	0	0	0	4642	9528
Exit	0	4886	0	0	0	4642	9528
Total	0	9772	0	0	0	9284	**19056**
Single Use Trip Gen Estimate	0	9962	0	0	0	9474	**19436**
	0.00%	1.91%	0.00%	0.00%	0.00%	2.01%	

Internal Capture = 1.96%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 649



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

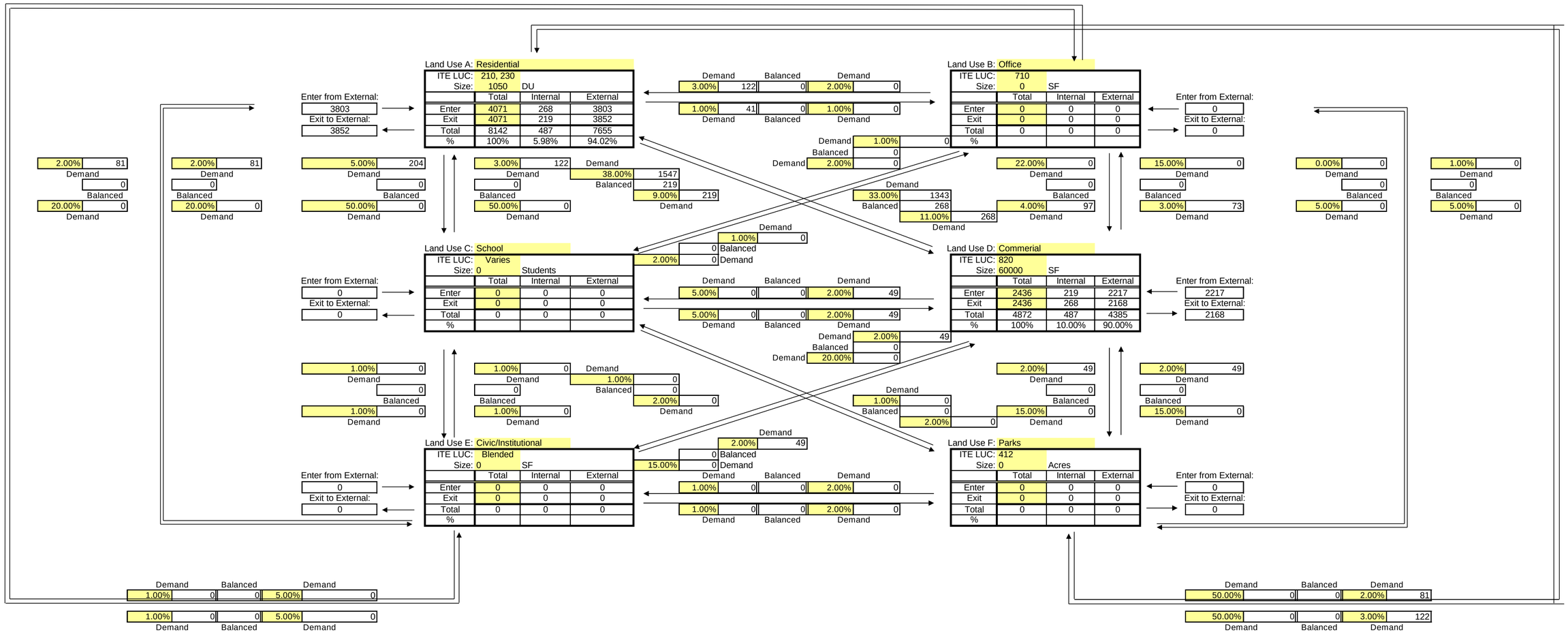
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3622	0	0	0	0	16	3638
Exit	3622	0	0	0	0	16	3638
Total	7244	0	0	0	0	32	**7276**
Single Use Trip Gen Estimate	7278	0	0	0	0	66	**7344**
	0.47%	0.00%	0.00%	0.00%	0.00%	51.52%	

Internal Capture = 0.93%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 657



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

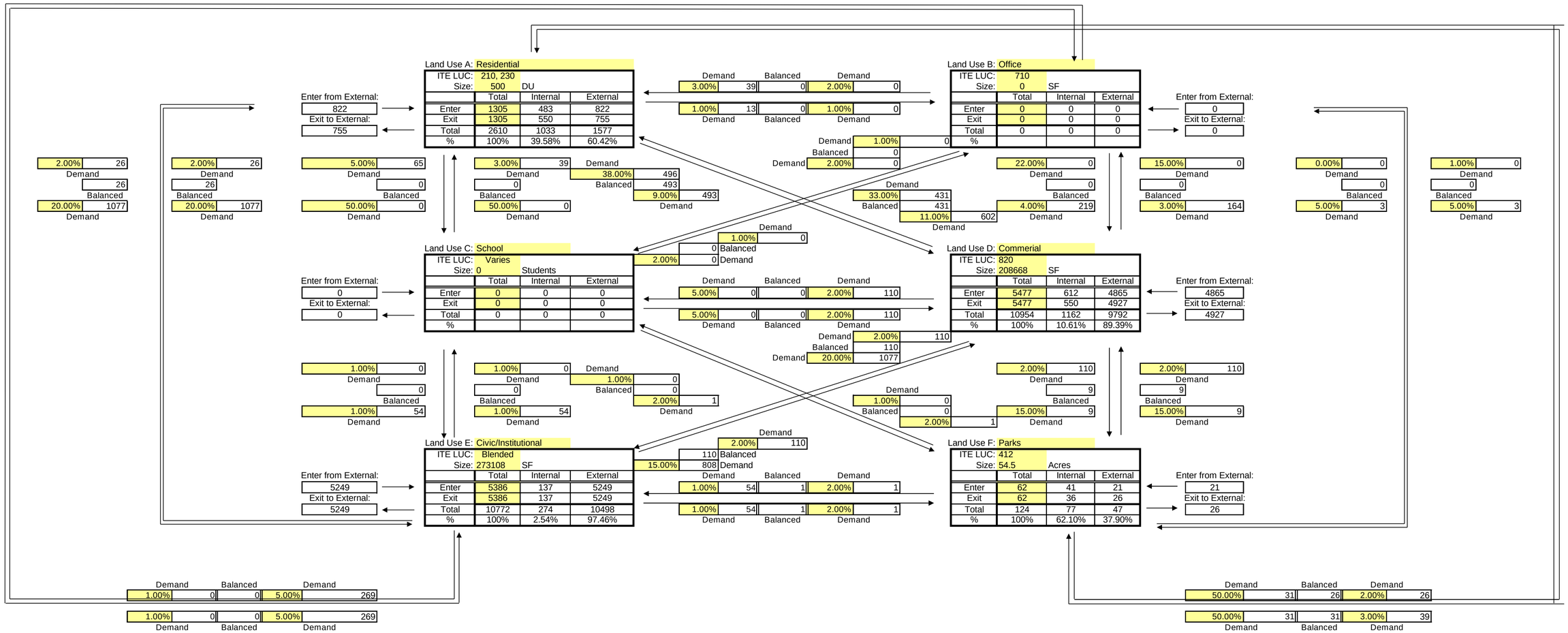
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3803	0	0	2217	0	0	6020
Exit	3852	0	0	2168	0	0	6020
Total	7655	0	0	4385	0	0	**12040**
Single Use Trip Gen Estimate	8142	0	0	4872	0	0	**13014**
	5.98%	0.00%	0.00%	10.00%	0.00%	0.00%	

Internal Capture = 7.48%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 656



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

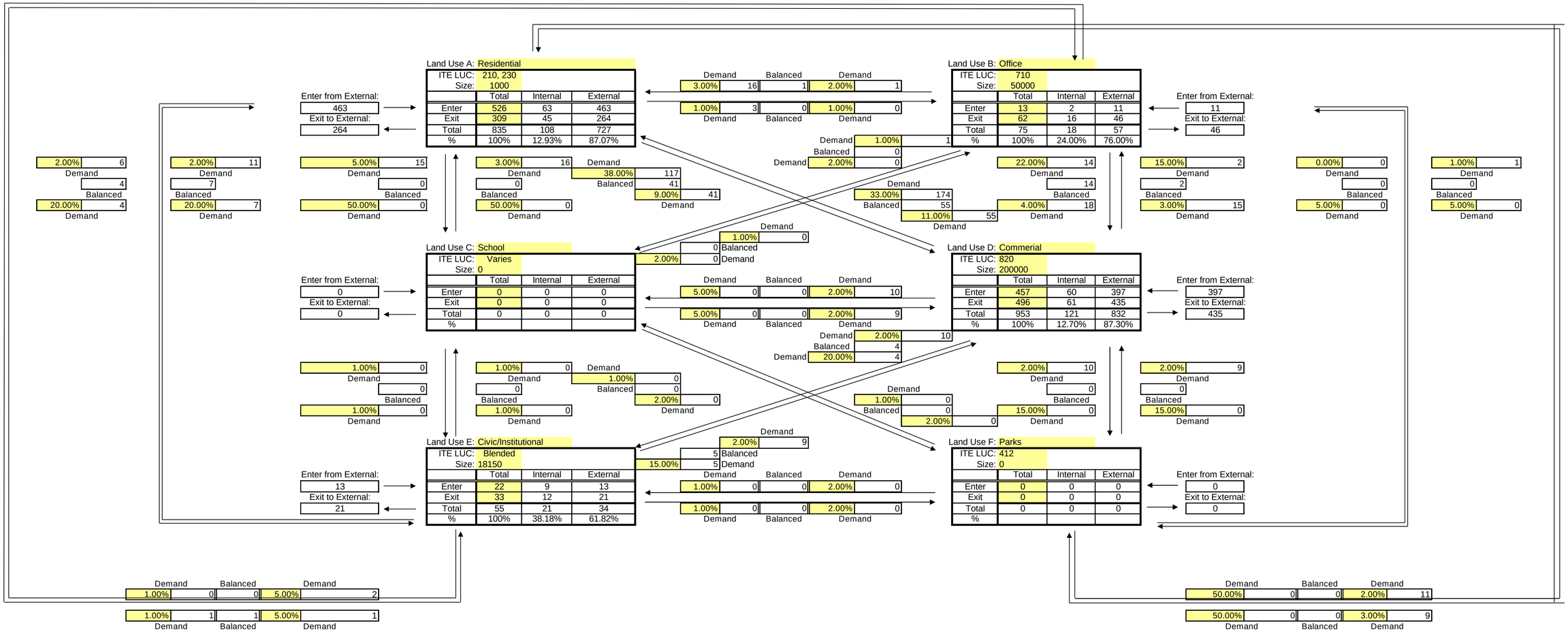
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	822	0	0	4865	5249	21	10957
Exit	755	0	0	4927	5249	26	10957
Total	1577	0	0	9792	10498	47	**21914**
Single Use Trip Gen Estimate	2610	0	0	10954	10772	124	**24460**
	39.58%	0.00%	0.00%	10.61%	2.54%	62.10%	

Internal Capture = 10.41%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 670



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

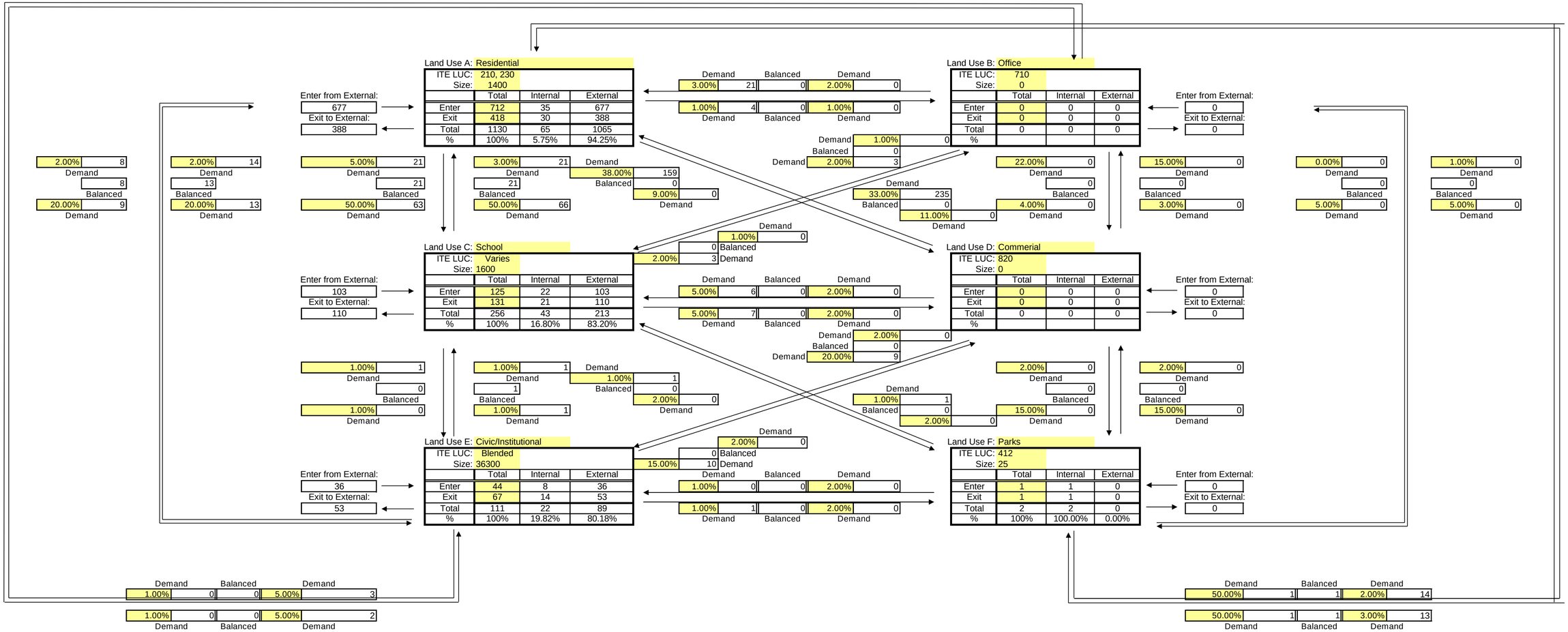
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	463	11	0	397	13	0	884
Exit	264	46	0	435	21	0	766
Total	727	57	0	832	34	0	**1650**
Single Use Trip Gen Estimate	835	75	0	953	55	0	**1918**
	12.93%	24.00%	0.00%	12.70%	38.18%	0.00%	

Internal Capture = 13.97%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 673



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

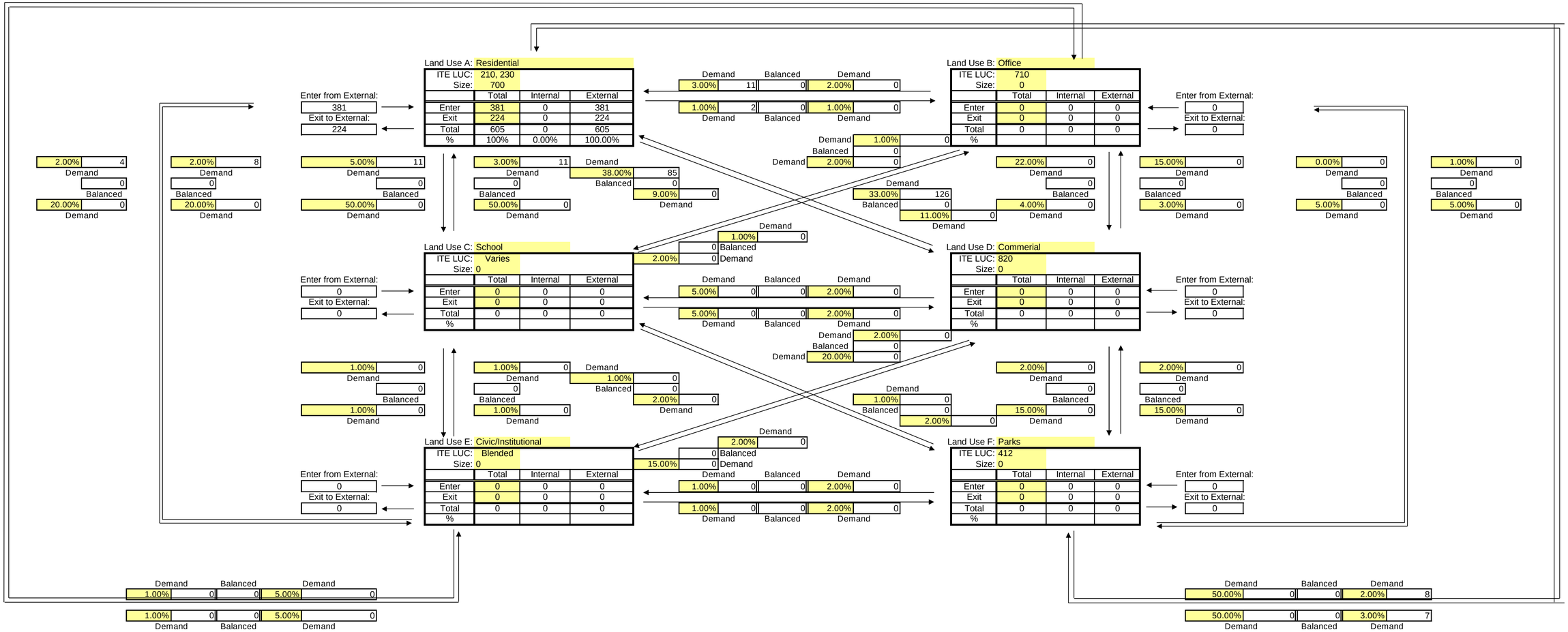
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	677	0	103	0	36	0	816
Exit	388	0	110	0	53	0	551
Total	1065	0	213	0	89	0	**1367**
Single Use Trip Gen Estimate	1130	0	256	0	111	2	**1499**
	5.75%	0.00%	16.80%	0.00%	19.82%	0.00%	

Internal Capture = 8.81%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 668



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

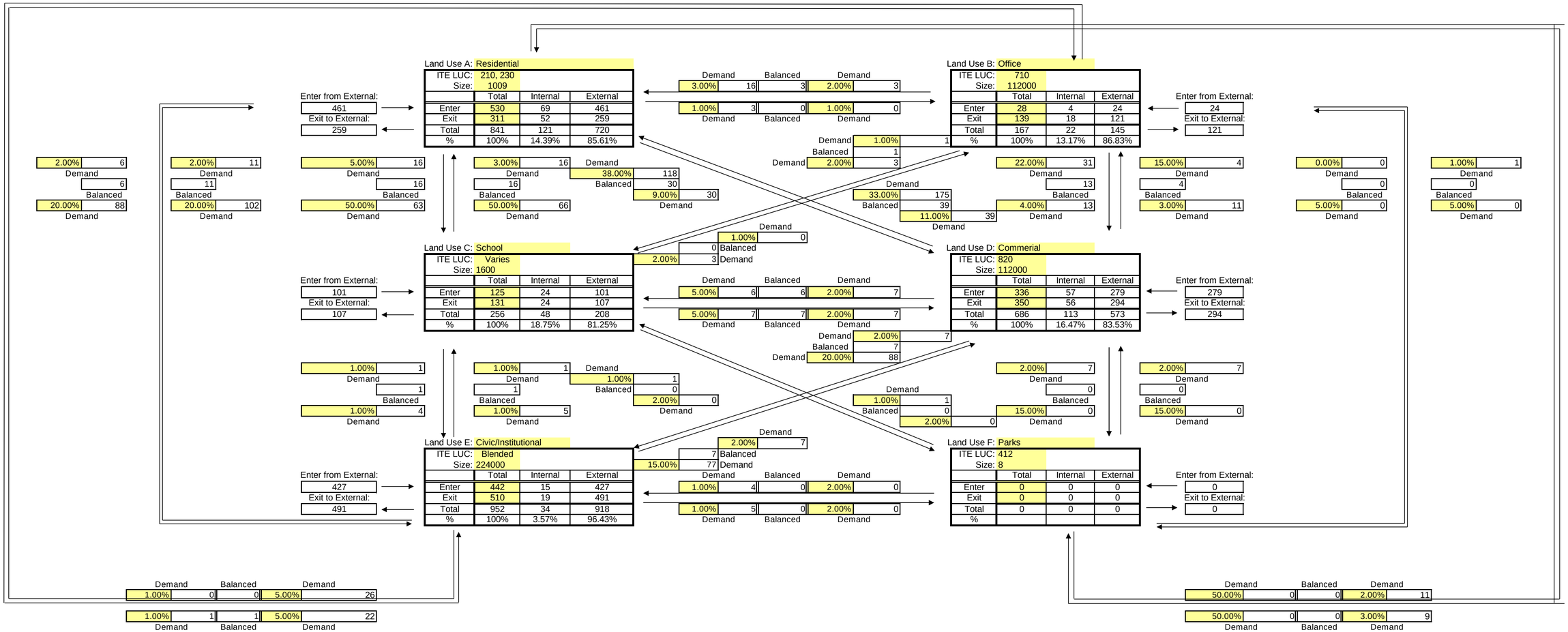
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	381	0	0	0	0	0	381
Exit	224	0	0	0	0	0	224
Total	605	0	0	0	0	0	**605**
Single Use Trip Gen Estimate	605	0	0	0	0	0	**605**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 858



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

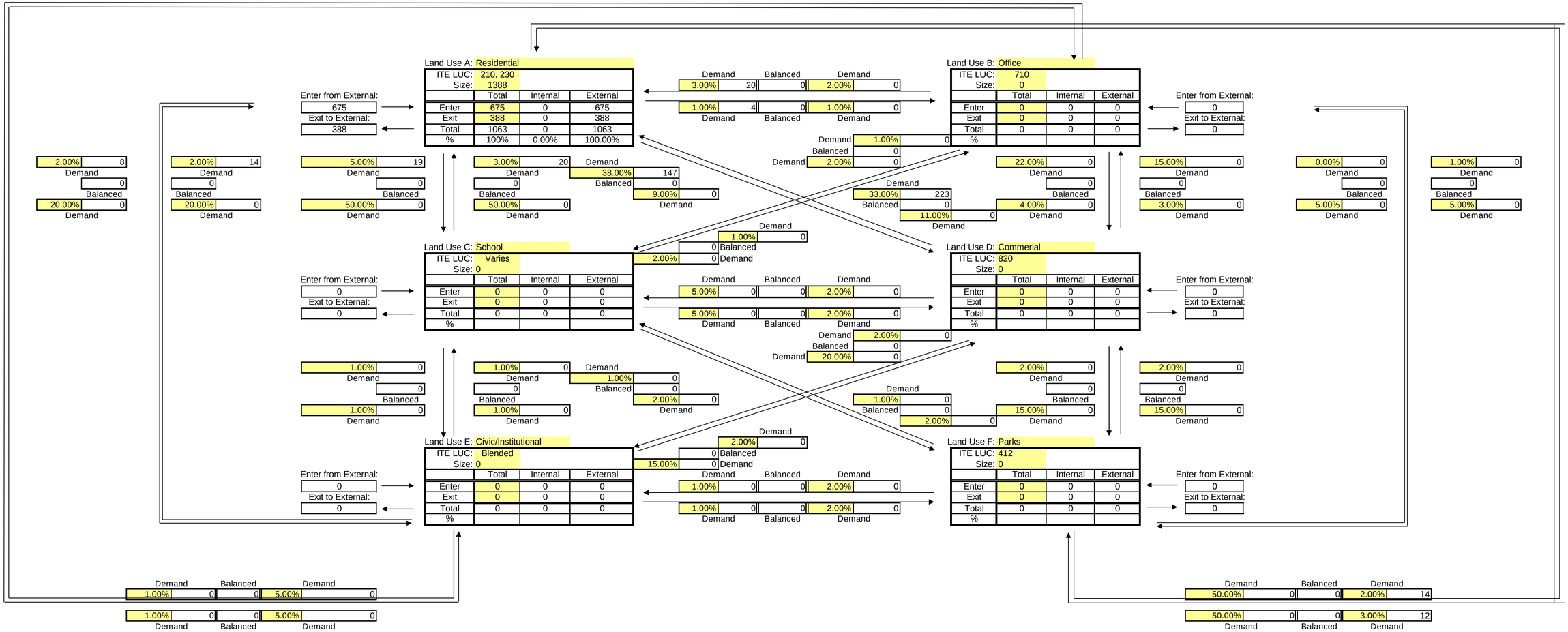
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	461	24	101	279	427	0	1292
Exit	259	121	107	294	491	0	1272
Total	720	145	208	573	918	0	**2564**
Single Use Trip Gen Estimate	841	167	256	686	952	0	**2902**
	14.39%	13.17%	18.75%	16.47%	3.57%	0.00%	

Internal Capture = 11.65%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 645



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

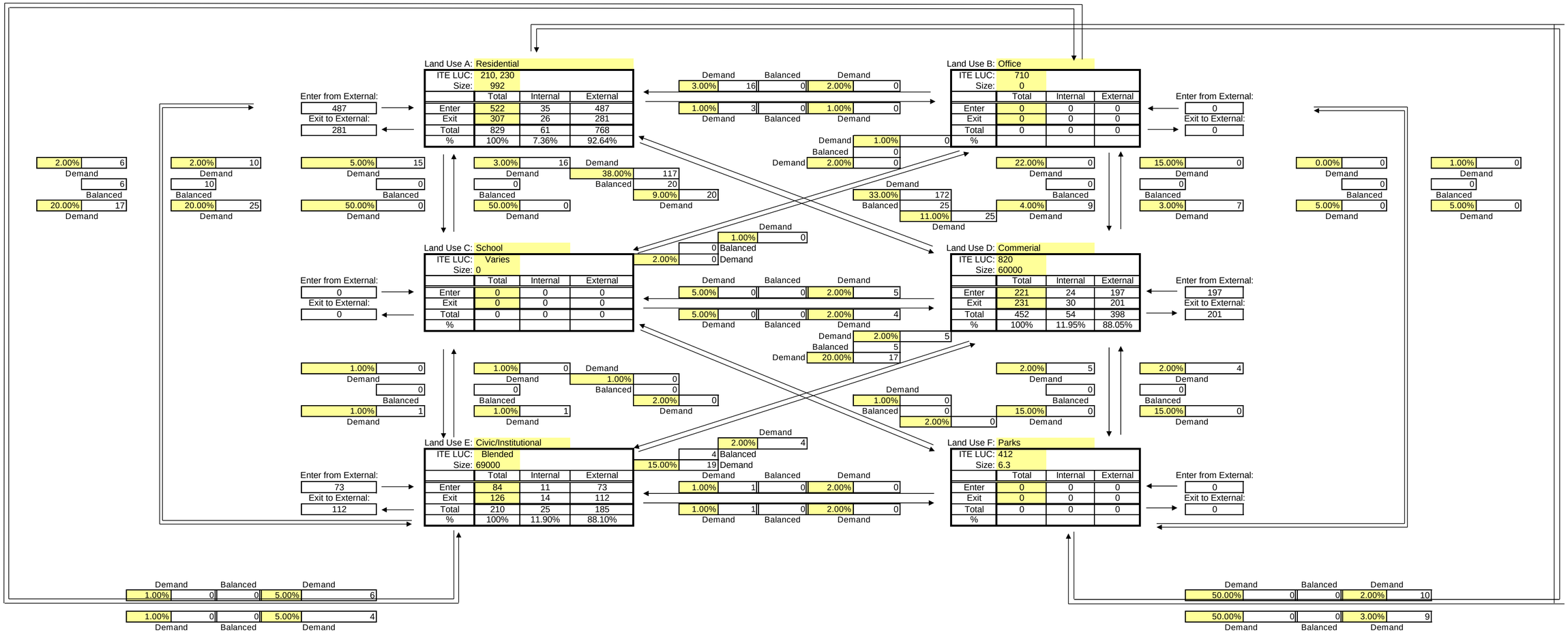
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	675	0	0	0	0	0	675
Exit	388	0	0	0	0	0	388
Total	1063	0	0	0	0	0	**1063**
Single Use Trip Gen Estimate	1063	0	0	0	0	0	**1063**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 857



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

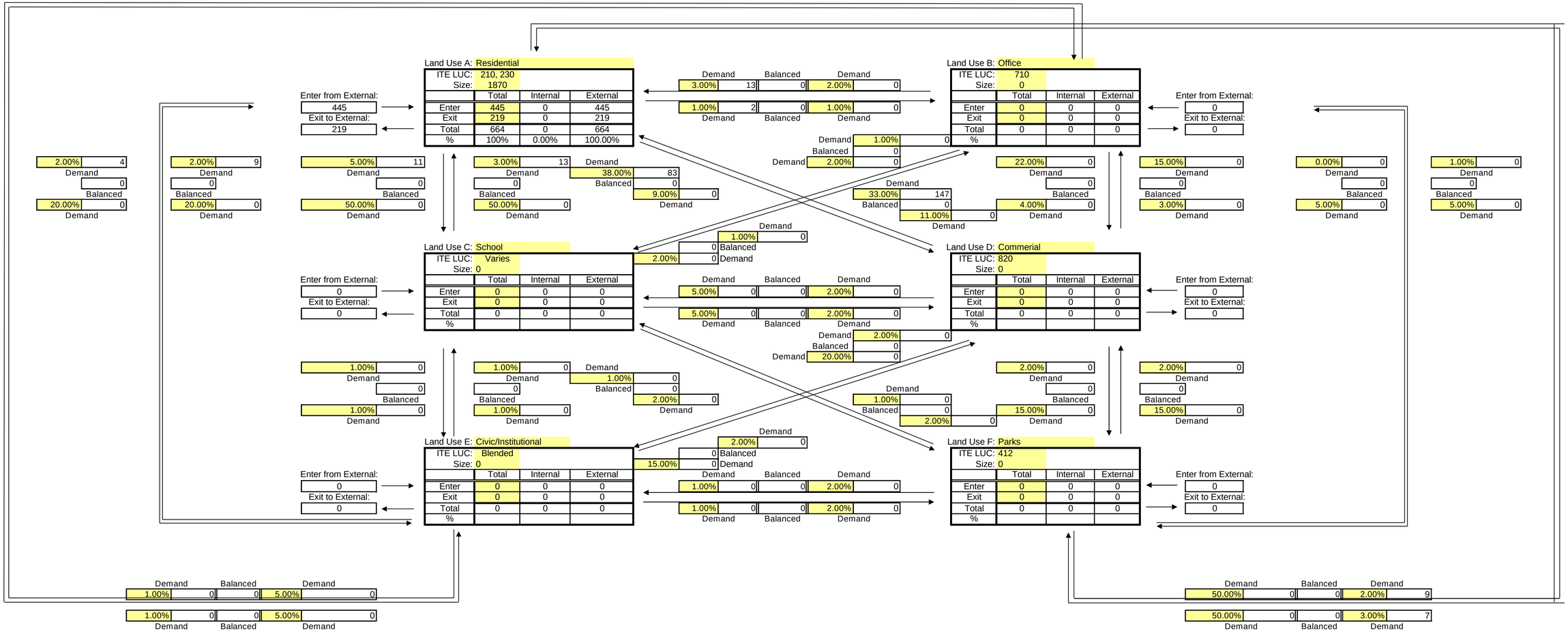
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	487	0	0	197	73	0	757
Exit	281	0	0	201	112	0	594
Total	768	0	0	398	185	0	**1351**
Single Use Trip Gen Estimate	829	0	0	452	210	0	**1491**
	7.36%	0.00%	0.00%	11.95%	11.90%	0.00%	

Internal Capture = 9.39%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 859



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

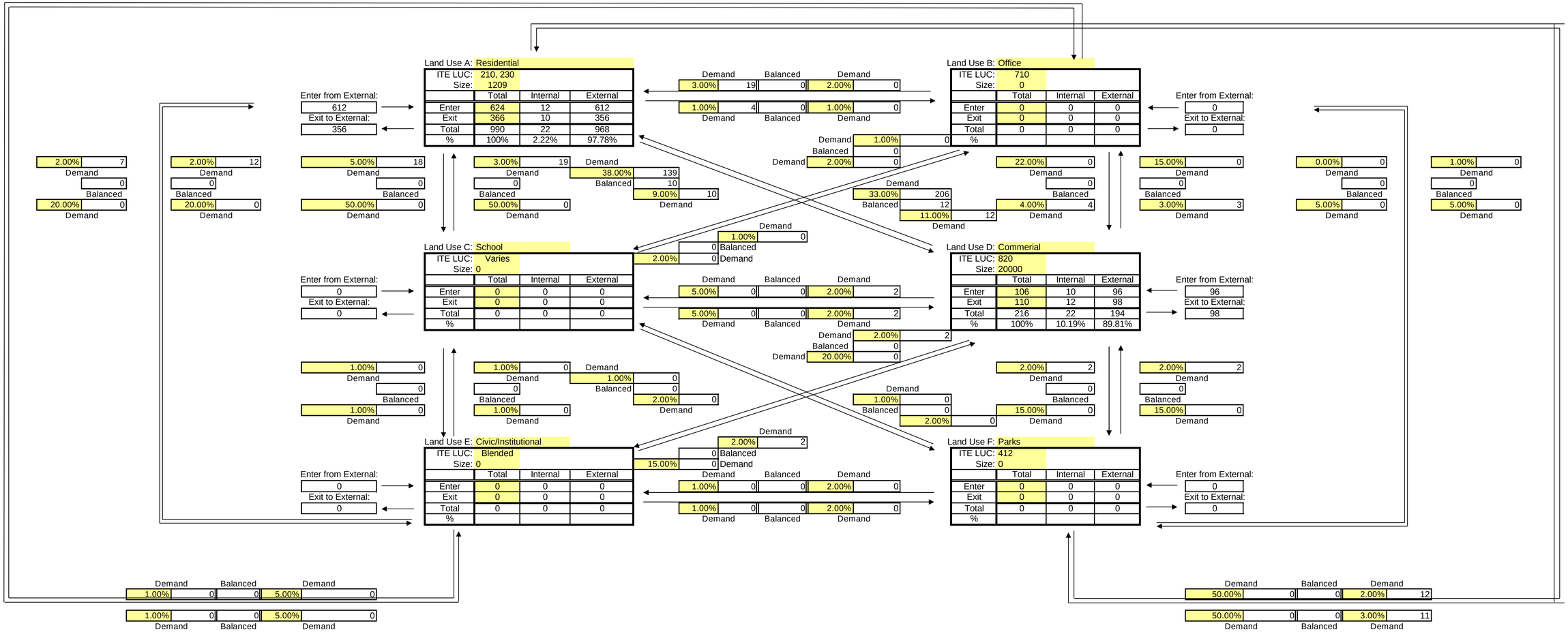
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	445	0	0	0	0	0	445
Exit	219	0	0	0	0	0	219
Total	664	0	0	0	0	0	**664**
Single Use Trip Gen Estimate	664	0	0	0	0	0	**664**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 658



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

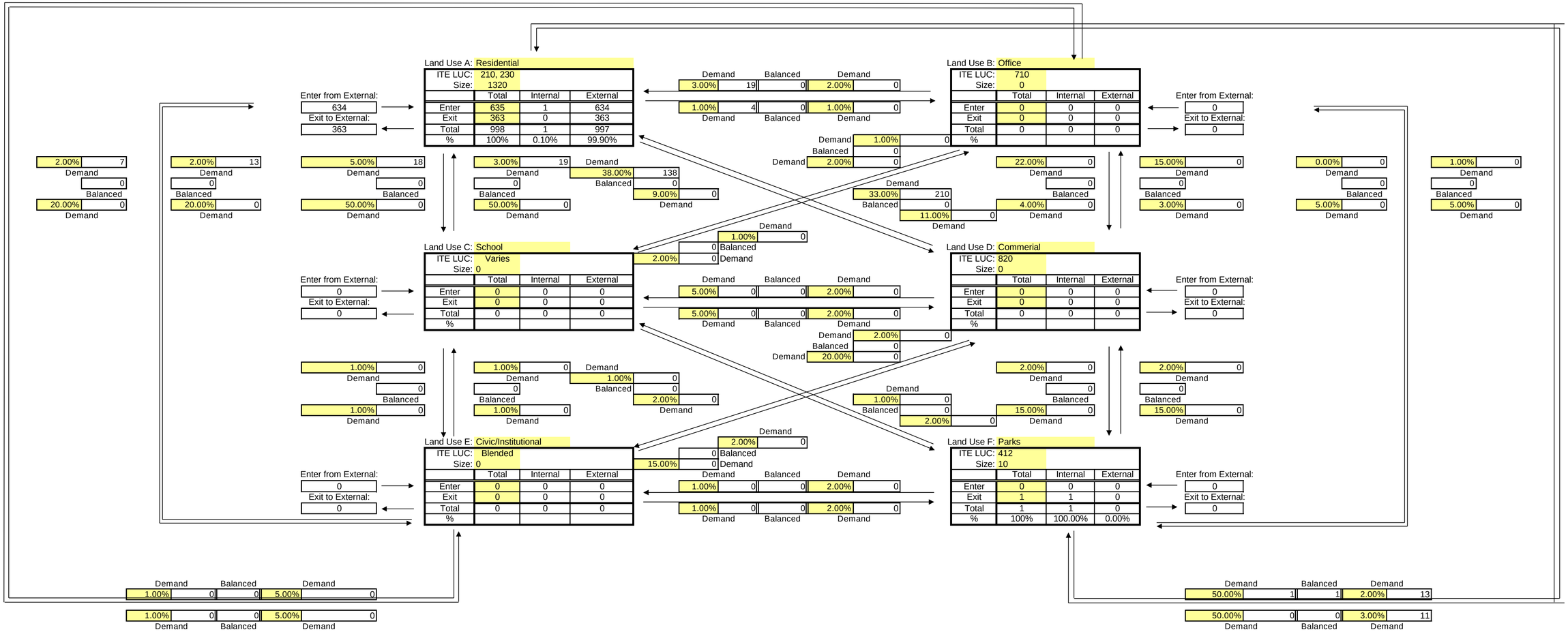
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	612	0	0	96	0	0	708
Exit	356	0	0	98	0	0	454
Total	968	0	0	194	0	0	**1162**
Single Use Trip Gen Estimate	990	0	0	216	0	0	**1206**
	2.22%	0.00%	0.00%	10.19%	0.00%	0.00%	

Internal Capture = 3.65%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 855



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

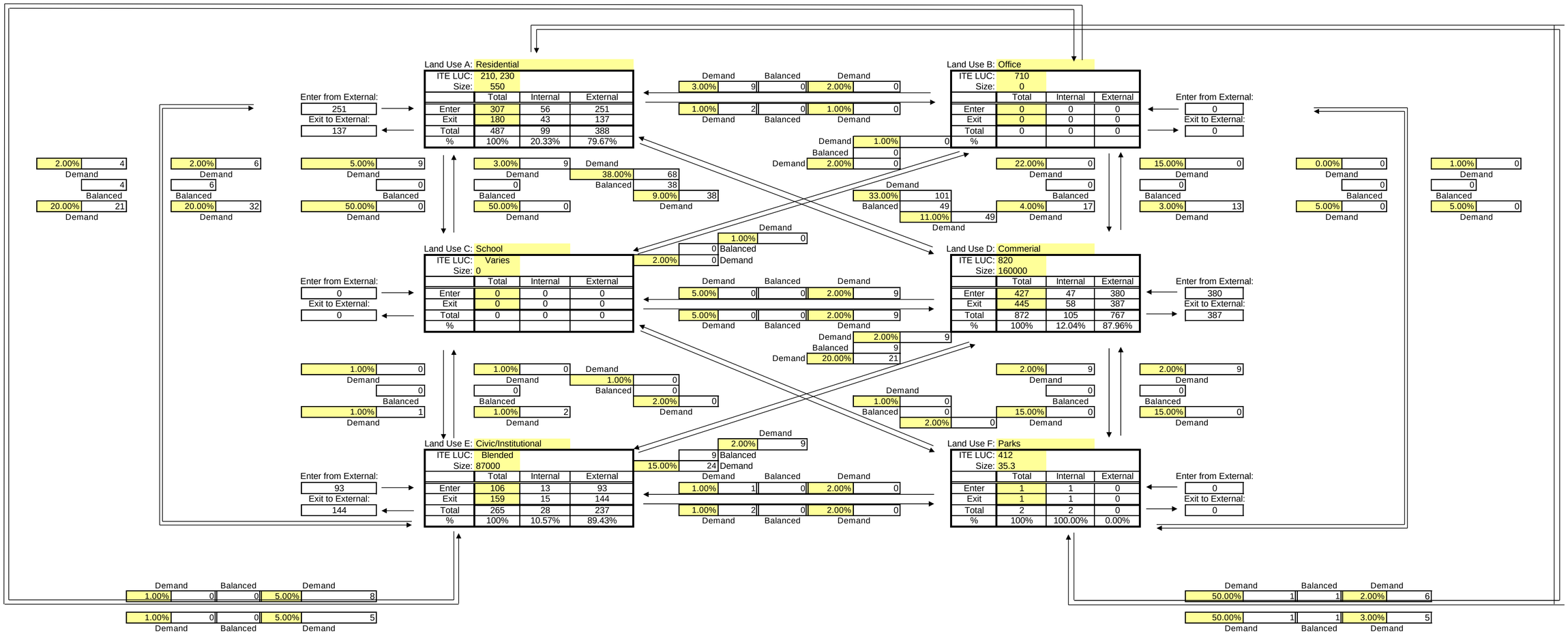
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	634	0	0	0	0	0	634
Exit	363	0	0	0	0	0	363
Total	997	0	0	0	0	0	**997**
Single Use Trip Gen Estimate	998	0	0	0	0	1	**999**
	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.20%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 655



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

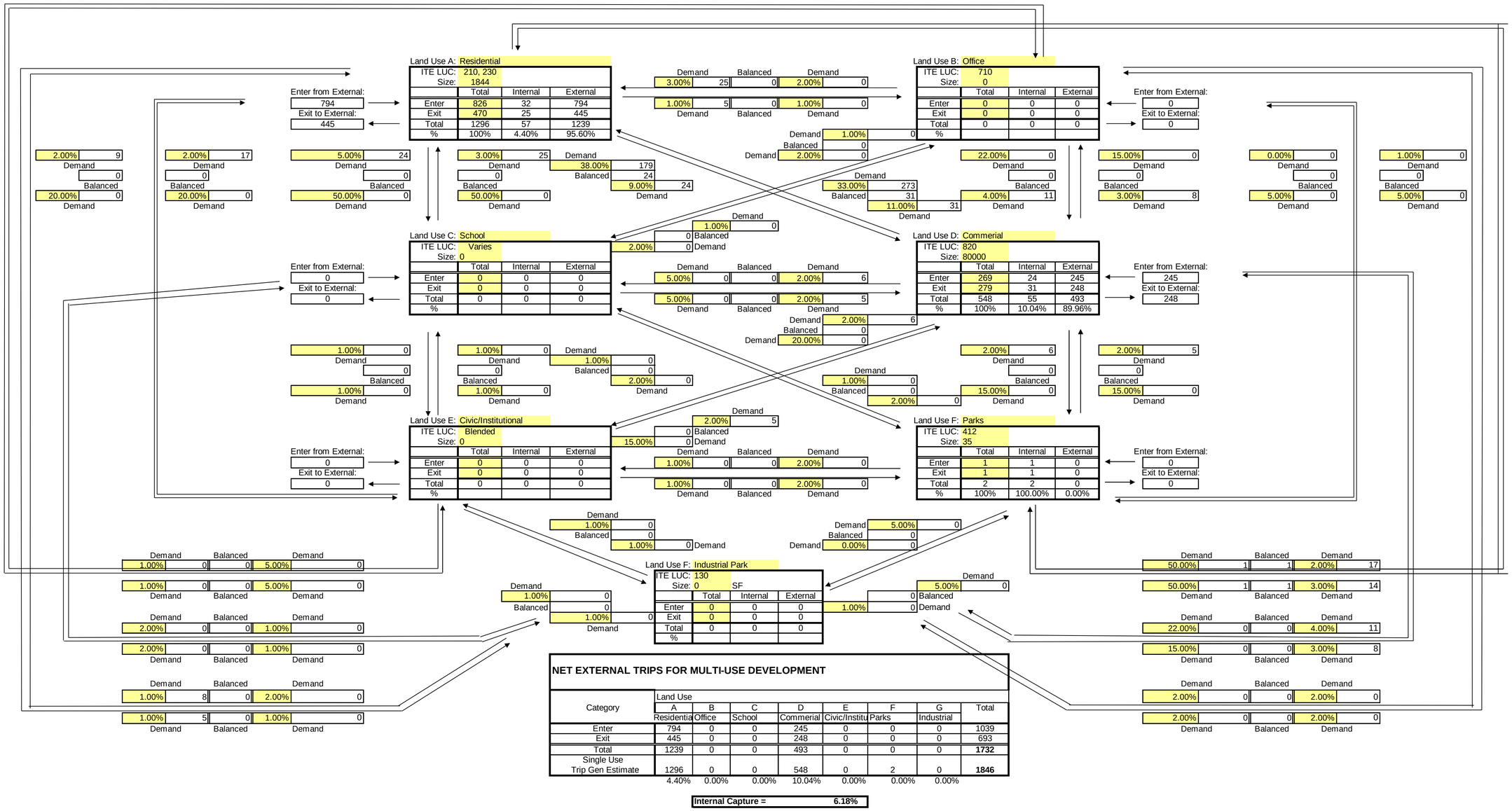
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	251	0	0	380	93	0	724
Exit	137	0	0	387	144	0	668
Total	388	0	0	767	237	0	**1392**
Single Use Trip Gen Estimate	487	0	0	872	265	2	**1626**
	20.33%	0.00%	0.00%	12.04%	10.57%	0.00%	

Internal Capture = 14.39%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 647 POD C



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

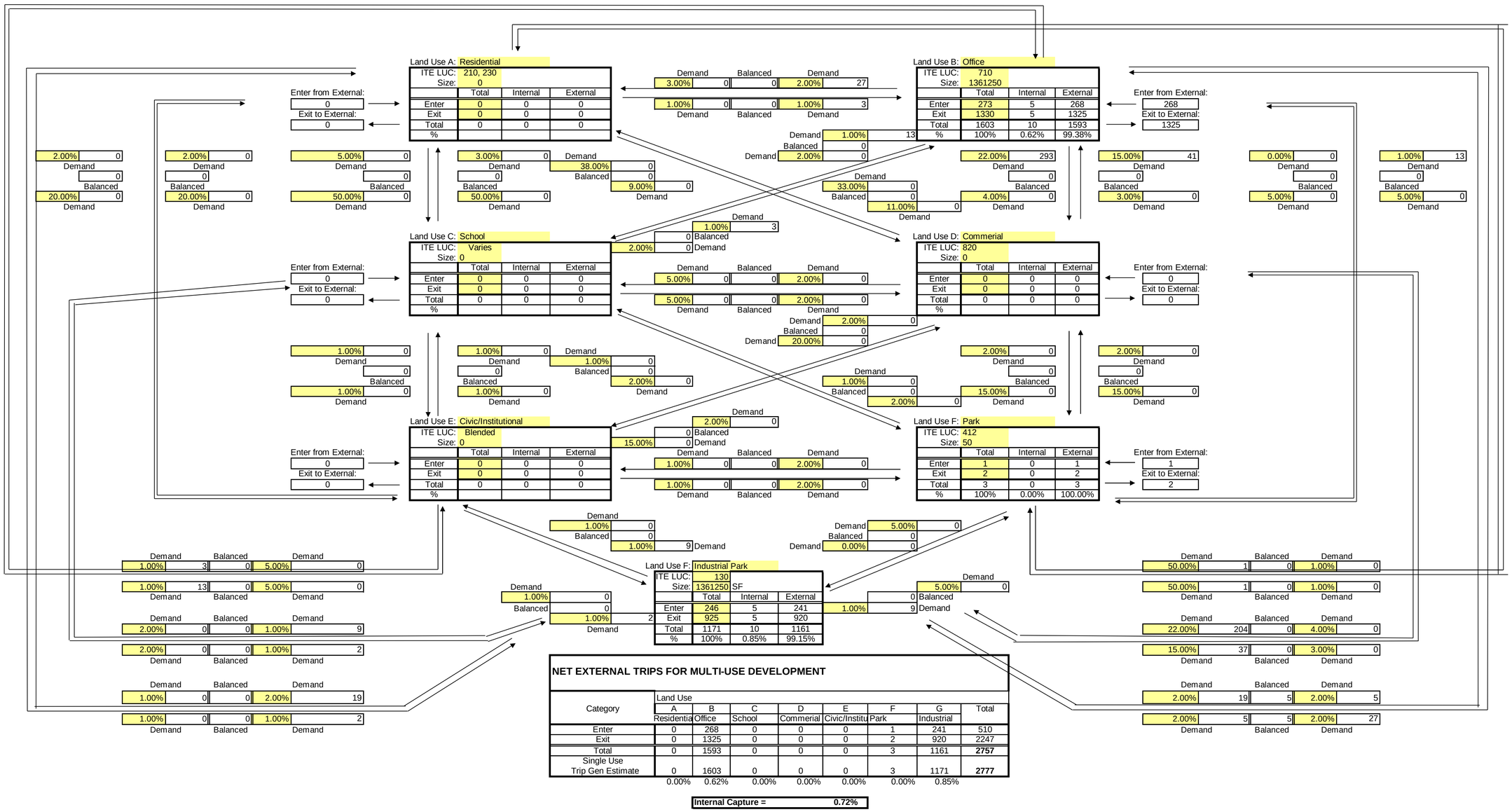
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	794	0	0	245	0	0	0	1039
Exit	445	0	0	248	0	0	0	693
Total	1239	0	0	493	0	0	0	**1732**
Single Use Trip Gen Estimate	1296	0	0	548	0	2	0	**1846**
	4.40%	0.00%	0.00%	10.04%	0.00%	0.00%	0.00%	

Internal Capture = 6.18%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: _____

Project Number: _____ **Task Number:** _____
Project Name: Southern Grove
Scenario: TAZ 648 POD A



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

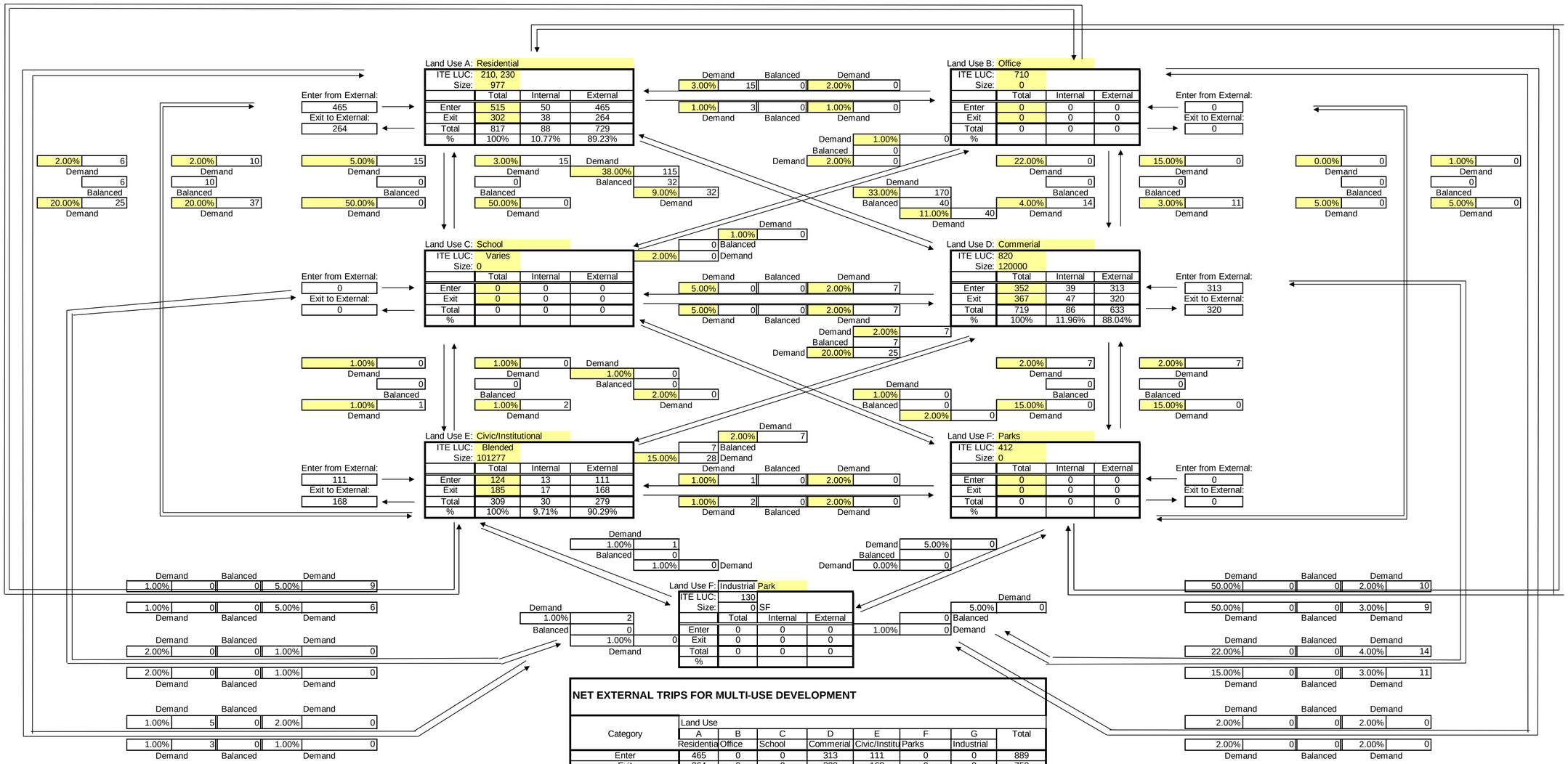
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	268	0	0	0	1	241	510
Exit	0	1325	0	0	0	2	920	2247
Total	0	1593	0	0	0	3	1161	**2757**
Single Use Trip Gen Estimate	0	1603	0	0	0	3	1171	**2777**
	0.00%	0.62%	0.00%	0.00%	0.00%	0.00%	0.85%	

Internal Capture = 0.72%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 654 POD D



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

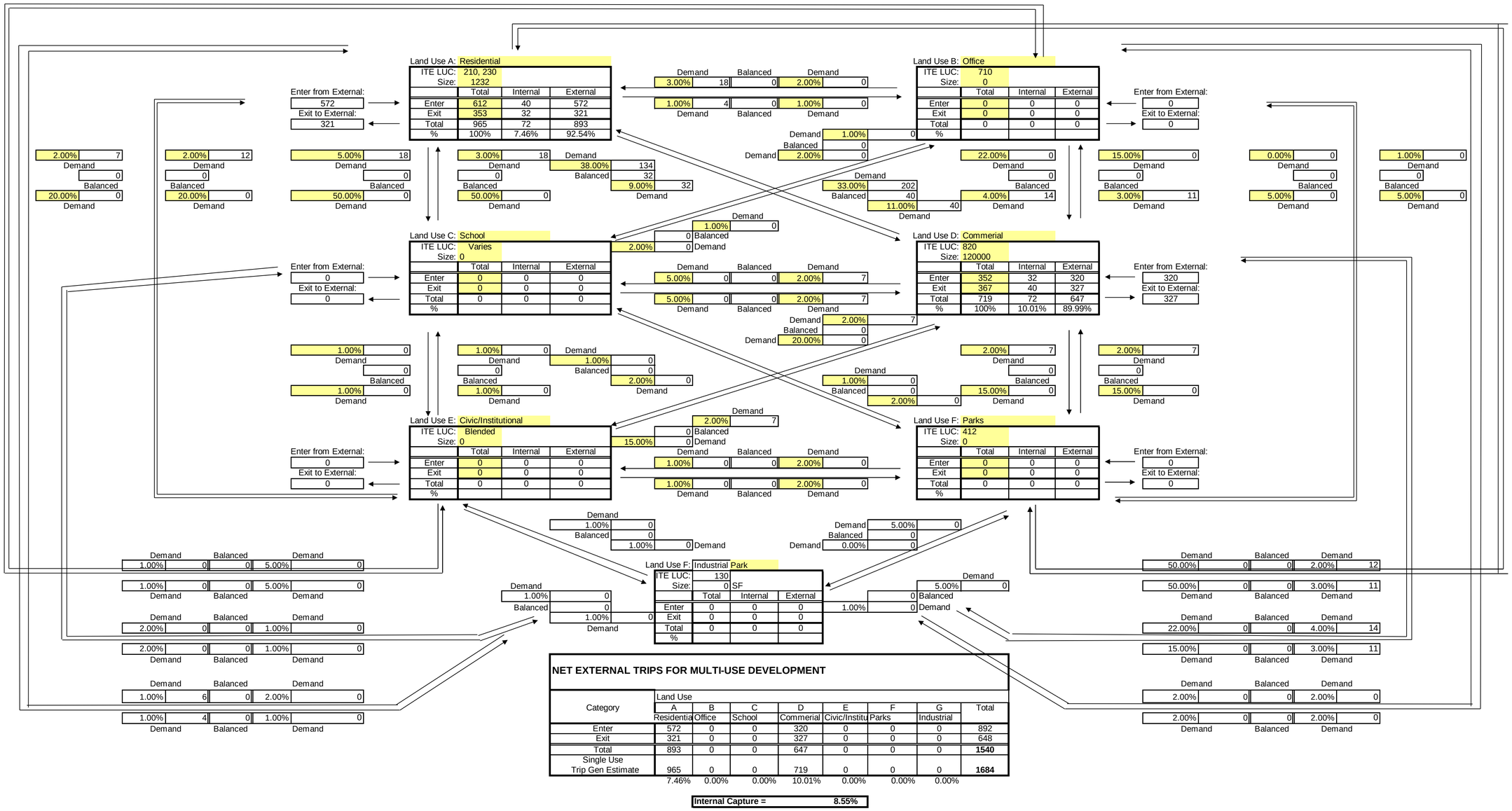
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	465	0	0	313	111	0	0	889
Exit	264	0	0	320	168	0	0	752
Total	729	0	0	633	279	0	0	**1641**
Single Use Trip Gen Estimate	817	0	0	719	309	0	0	**1845**
	10.77%	0.00%	0.00%	11.96%	9.71%	0.00%	0.00%	

Internal Capture = 11.06%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 861 POD F



	Total	Internal	External
Enter	612	40	572
Exit	353	32	321
Total	965	72	893
%	100%	7.46%	92.54%

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	352	32	320
Exit	367	40	327
Total	719	72	647
%	100%	10.01%	89.99%

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%			

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

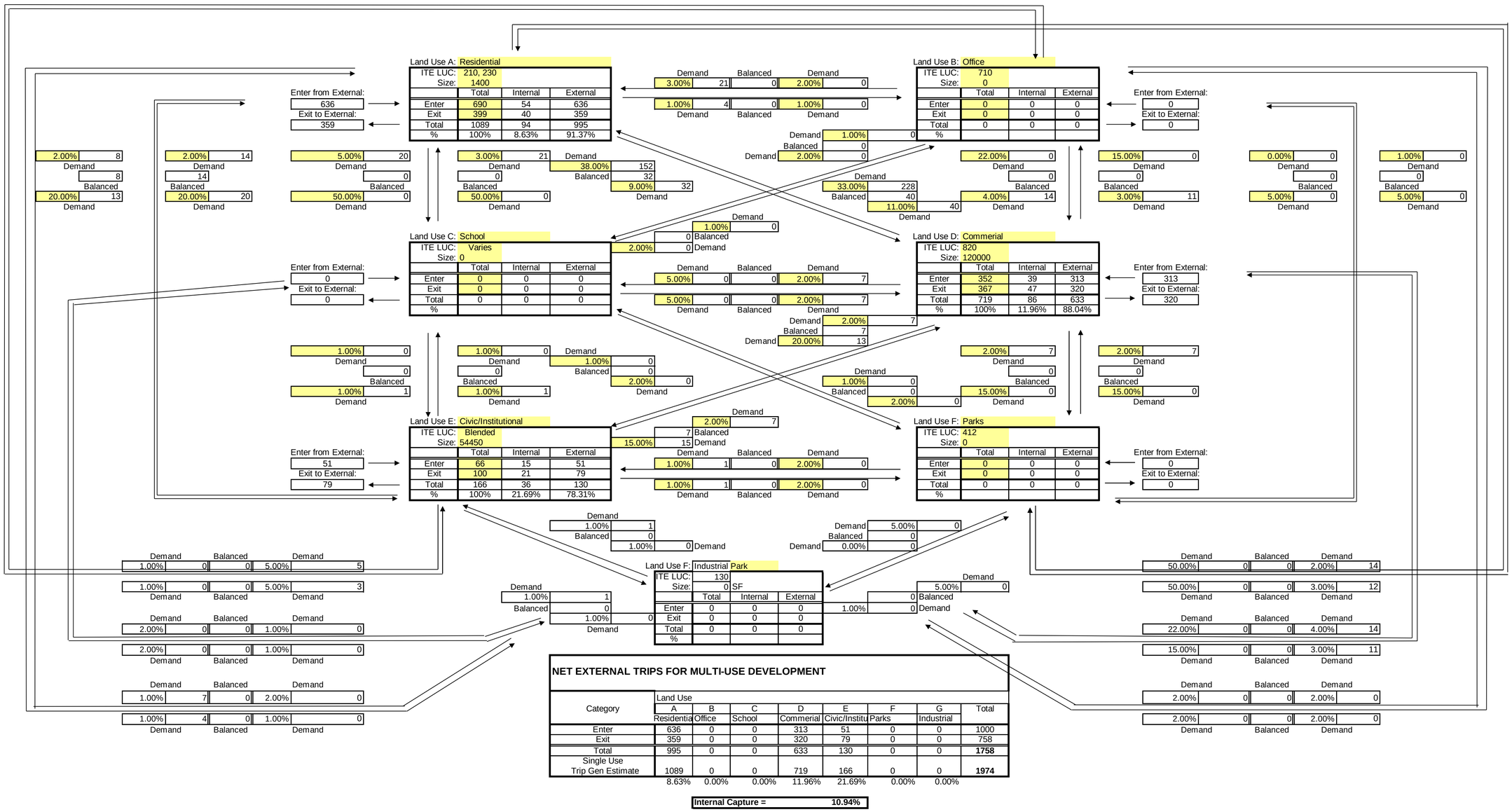
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	572	0	0	320	0	0	0	892
Exit	321	0	0	327	0	0	0	648
Total	893	0	0	647	0	0	0	**1540**
Single Use Trip Gen Estimate	965	0	0	719	0	0	0	**1684**
	7.46%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

Internal Capture = 8.55%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 653 POD E



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

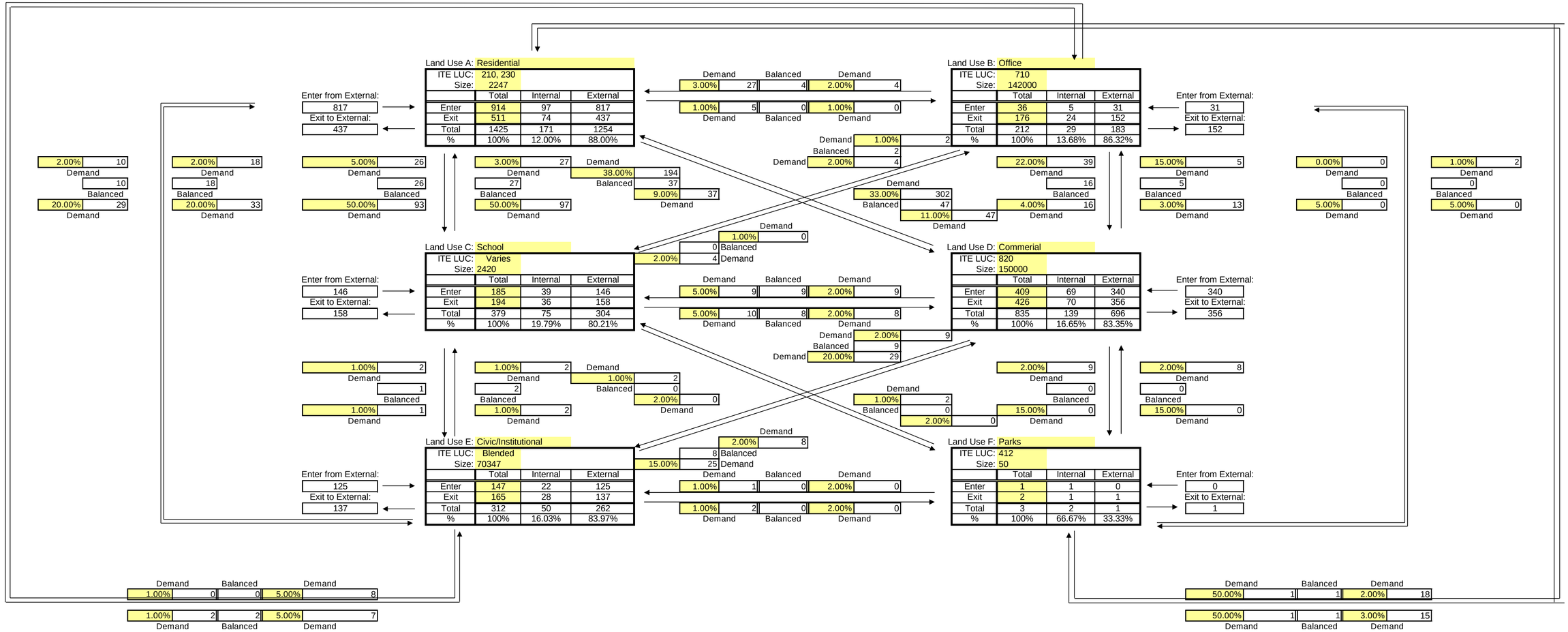
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	636	0	0	313	51	0	0	1000
Exit	359	0	0	320	79	0	0	758
Total	995	0	0	633	130	0	0	**1758**
Single Use Trip Gen Estimate	1089	0	0	719	166	0	0	**1974**
	8.63%	0.00%	0.00%	11.96%	21.69%	0.00%	0.00%	

Internal Capture = 10.94%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 652 POD C



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

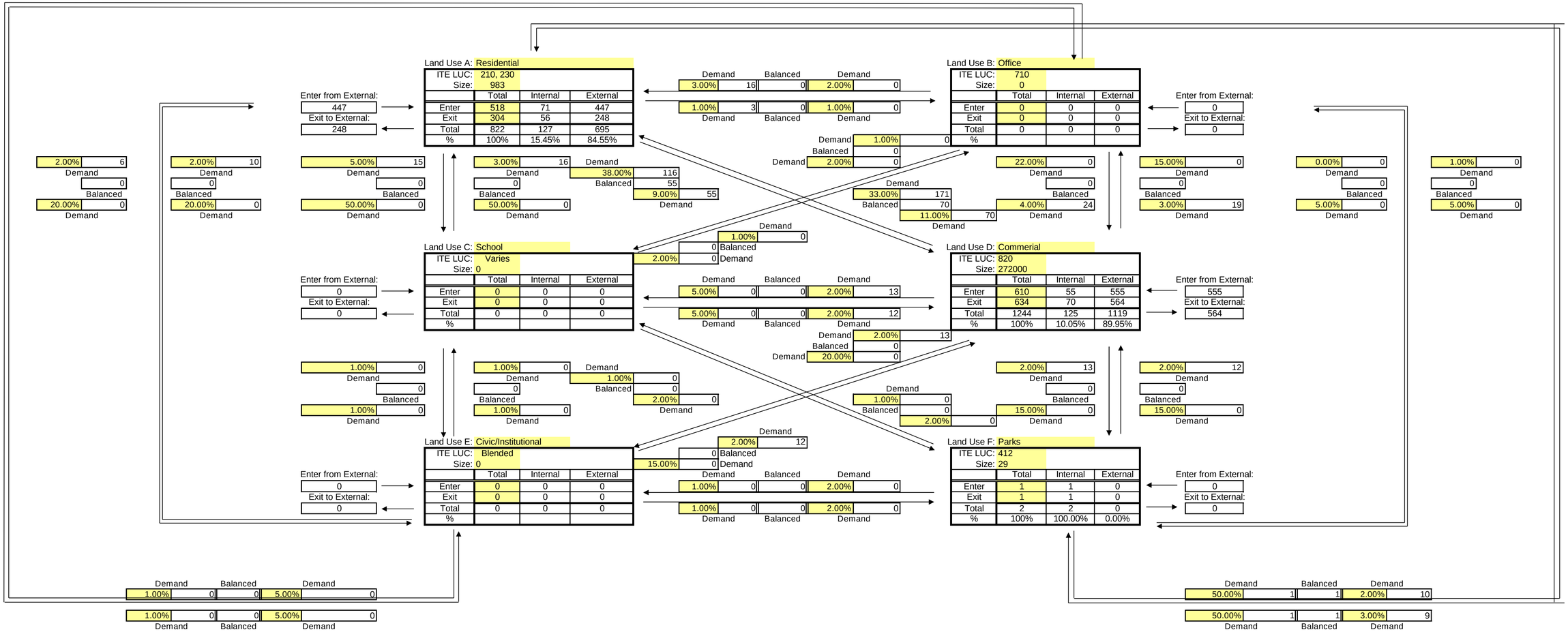
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	817	31	146	340	125	0	1459
Exit	437	152	158	356	137	1	1241
Total	1254	183	304	696	262	1	**2700**
Single Use Trip Gen Estimate	1425	212	379	835	312	3	**3166**
	12.00%	13.68%	19.79%	16.65%	16.03%	66.67%	

Internal Capture = 14.72%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 856



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

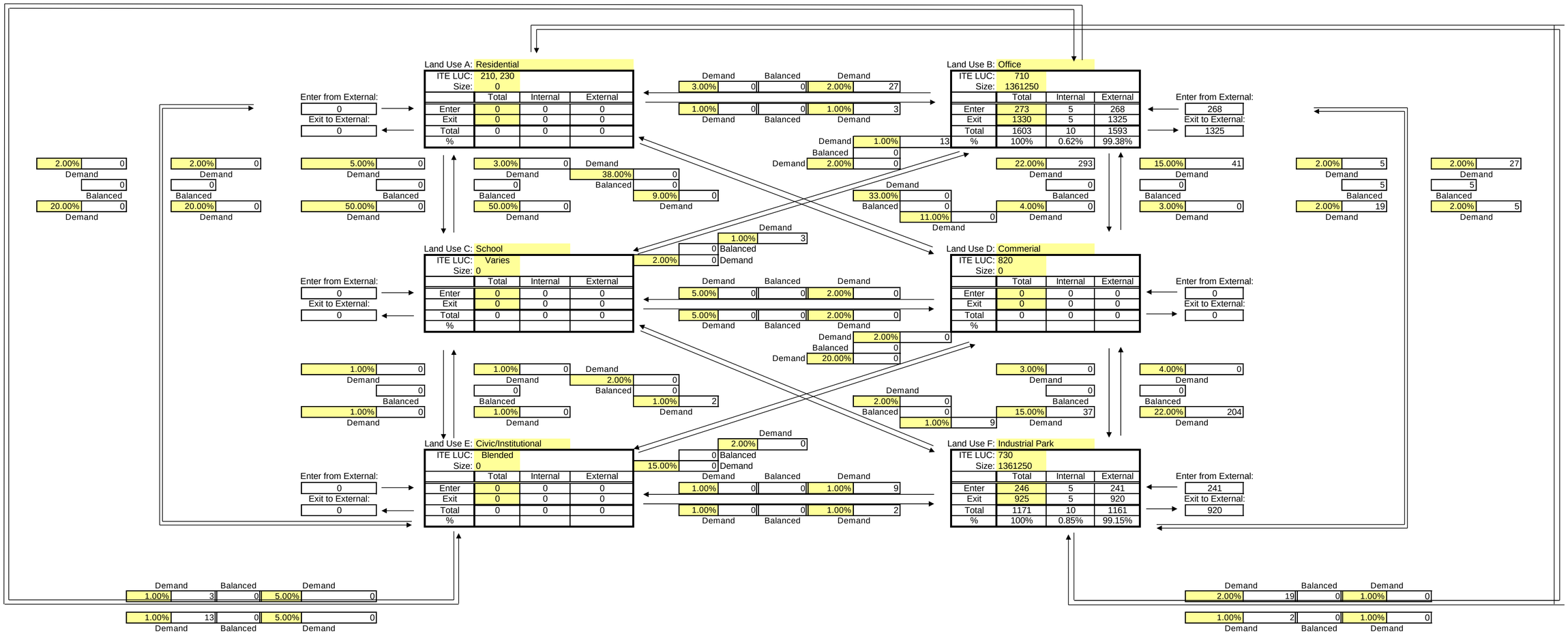
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	447	0	0	555	0	0	1002
Exit	248	0	0	564	0	0	812
Total	695	0	0	1119	0	0	**1814**
Single Use Trip Gen Estimate	822	0	0	1244	0	2	**2068**
	15.45%	0.00%	0.00%	10.05%	0.00%	0.00%	

Internal Capture = 12.28%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 860



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

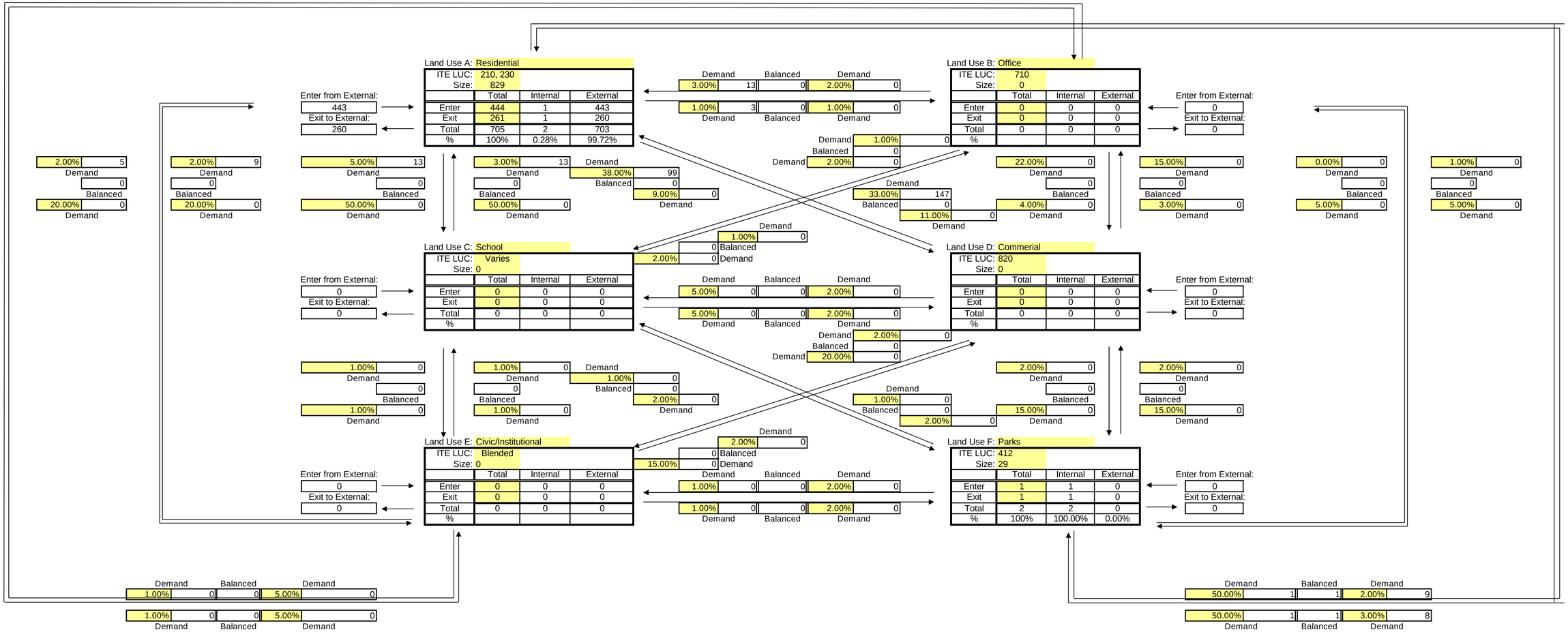
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	268	0	0	0	241	509
Exit	0	1325	0	0	0	920	2245
Total	0	1593	0	0	0	1161	**2754**
Single Use Trip Gen Estimate	0	1603	0	0	0	1171	**2774**
	0.00%	0.62%	0.00%	0.00%	0.00%	0.85%	

Internal Capture = 0.72%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 649



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

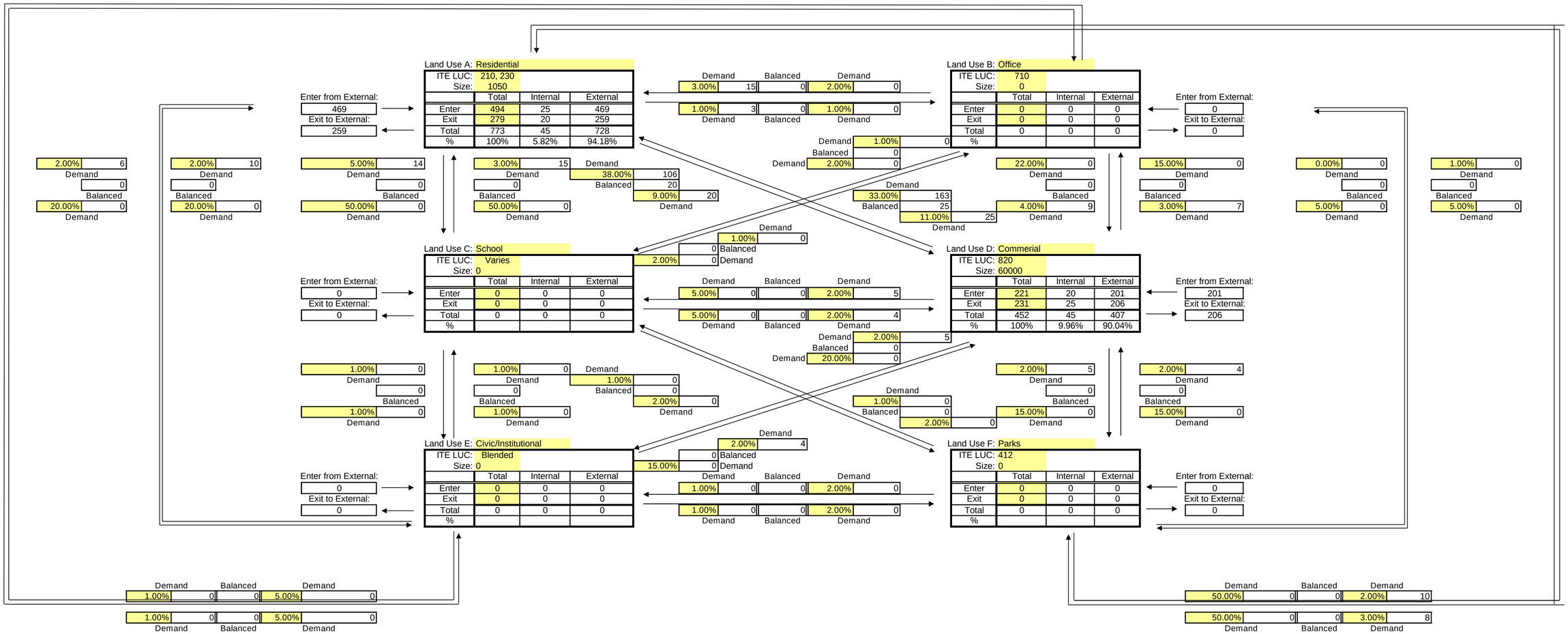
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	443	0	0	0	0	0	443
Exit	260	0	0	0	0	0	260
Total	703	0	0	0	0	0	**703**
Single Use Trip Gen Estimate	705	0	0	0	0	2	**707**
	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.57%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 657



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

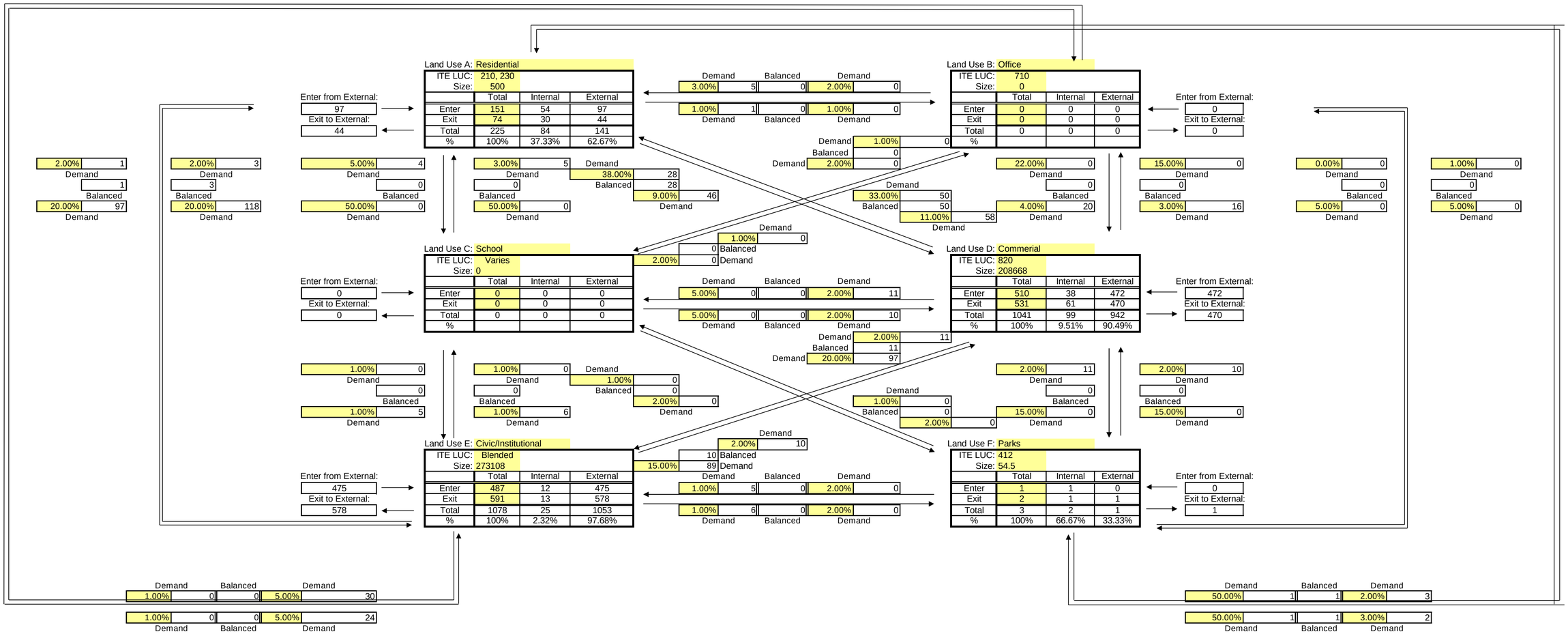
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	469	0	0	201	0	0	670
Exit	259	0	0	206	0	0	465
Total	728	0	0	407	0	0	**1135**
Single Use Trip Gen Estimate	773	0	0	452	0	0	**1225**
	5.82%	0.00%	0.00%	9.96%	0.00%	0.00%	

Internal Capture = 7.35%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 656



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	97	0	0	472	475	0	1044
Exit	44	0	0	470	578	1	1093
Total	141	0	0	942	1053	1	**2137**
Single Use Trip Gen Estimate	225	0	0	1041	1078	3	**2347**
	37.33%	0.00%	0.00%	9.51%	2.32%	66.67%	

Internal Capture = 8.95%

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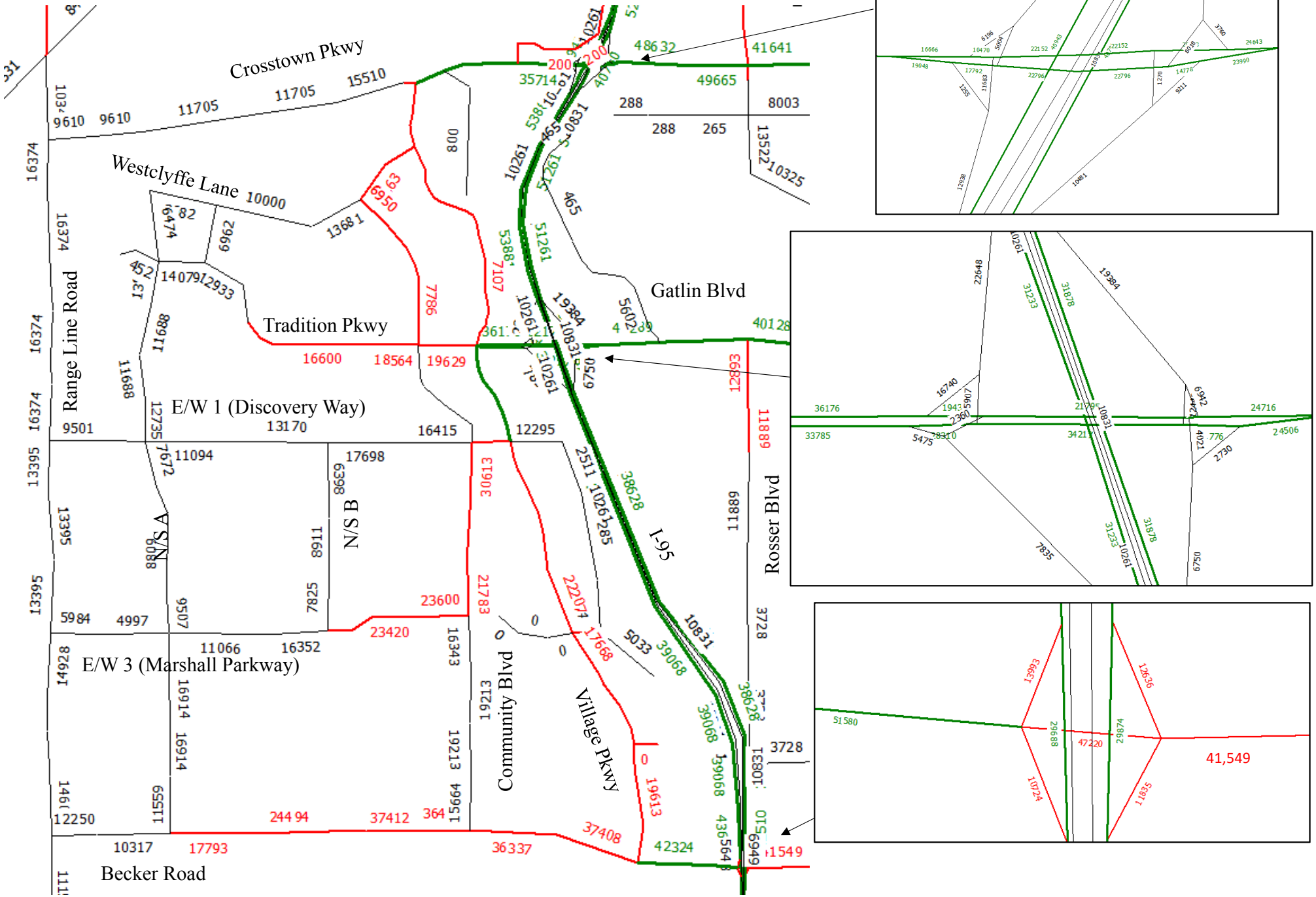
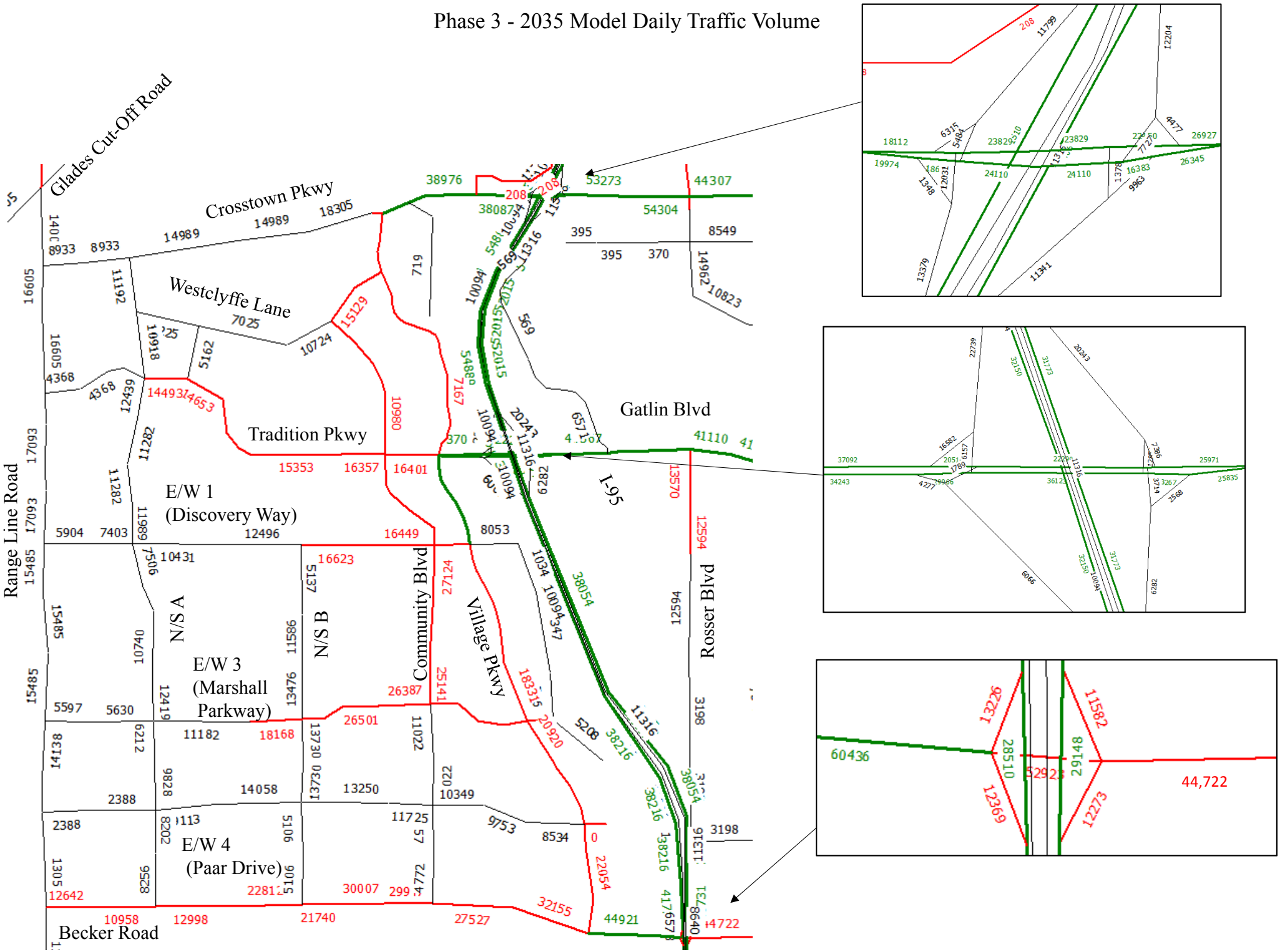
Appendix H

Model Daily Traffic Volume

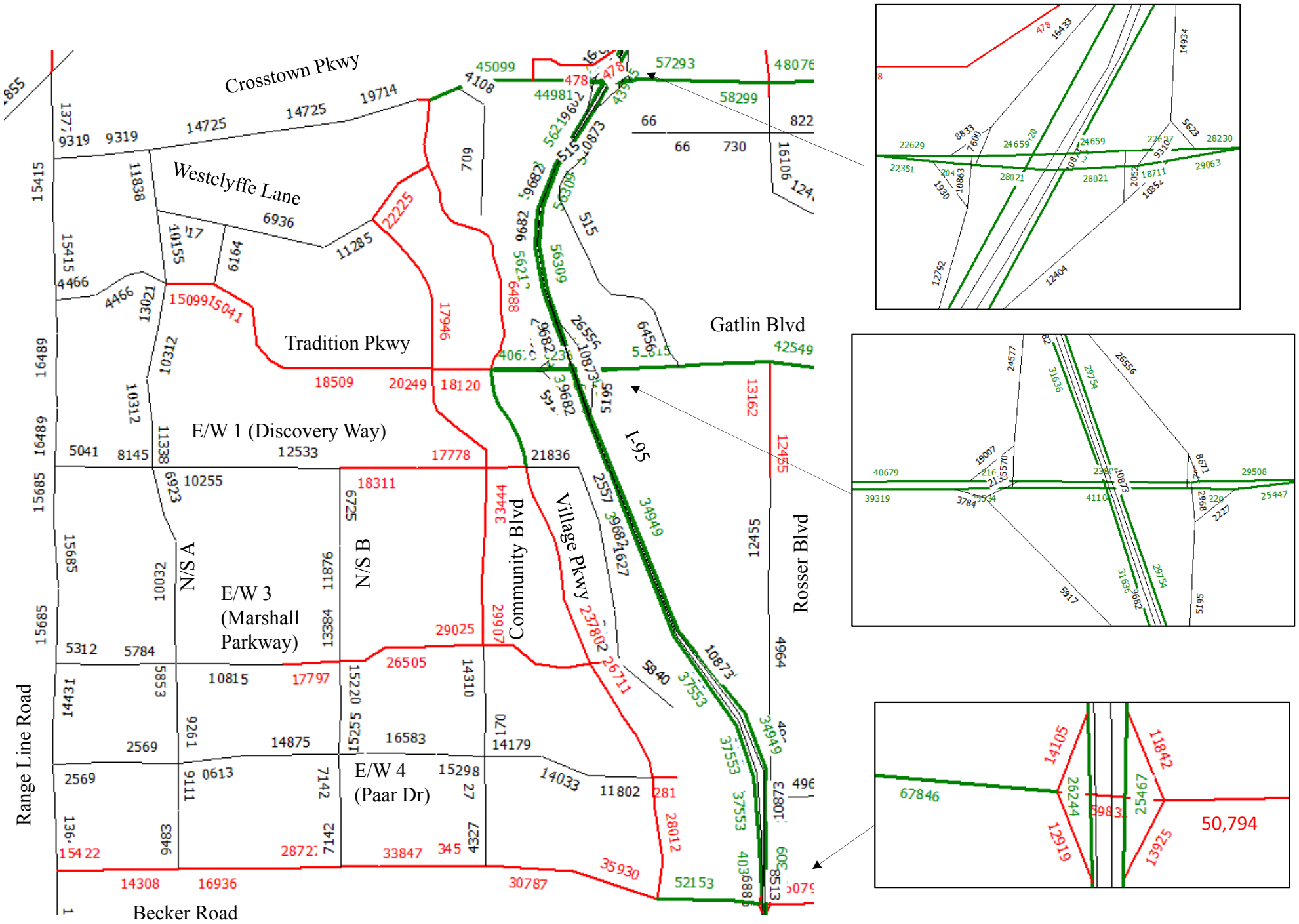
2030 Model Daily Traffic Volume – Phase 2



Phase 3 - 2035 Model Daily Traffic Volume



Phase 4 - 2040 Model Daily Traffic Volume



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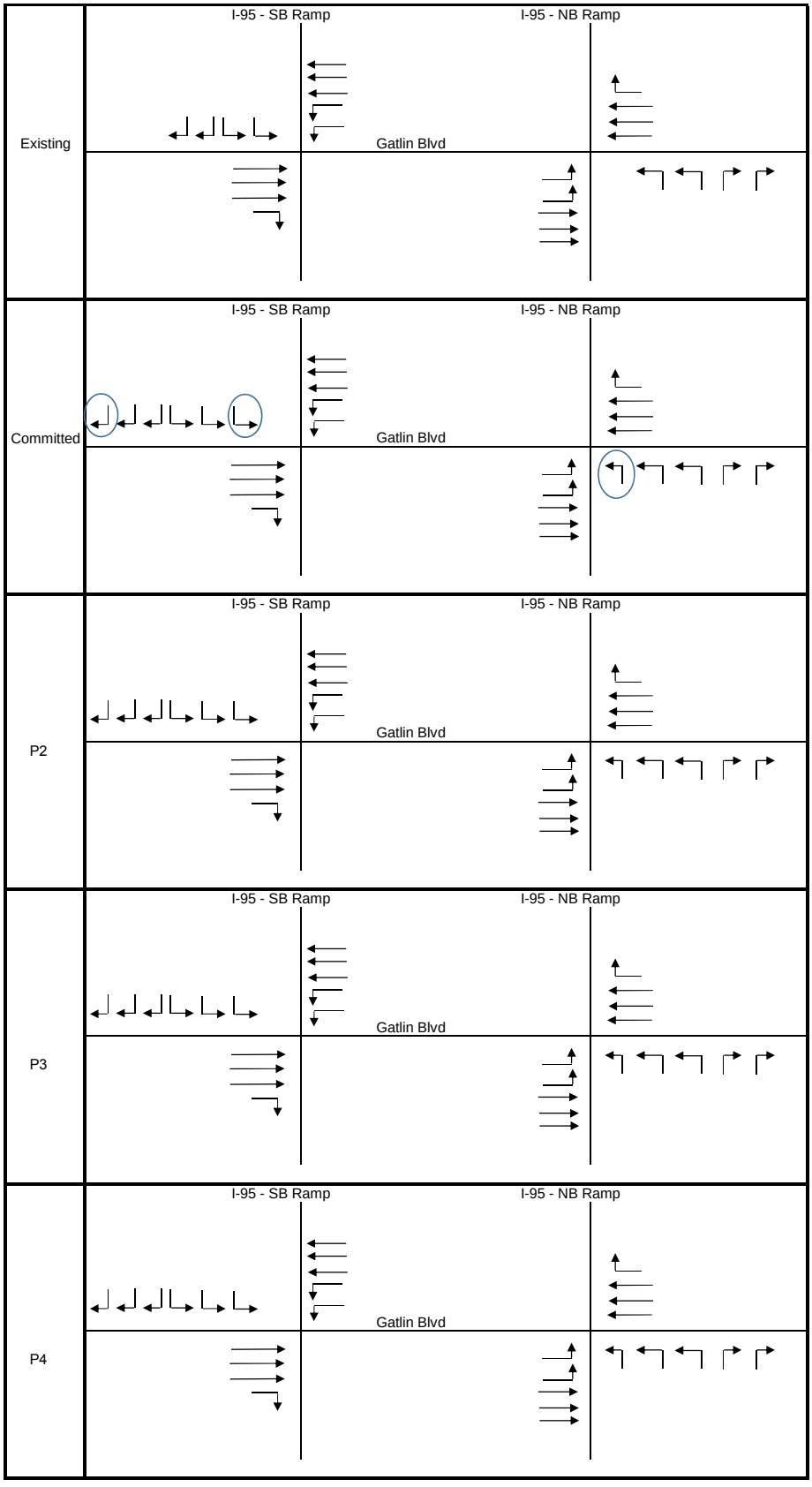
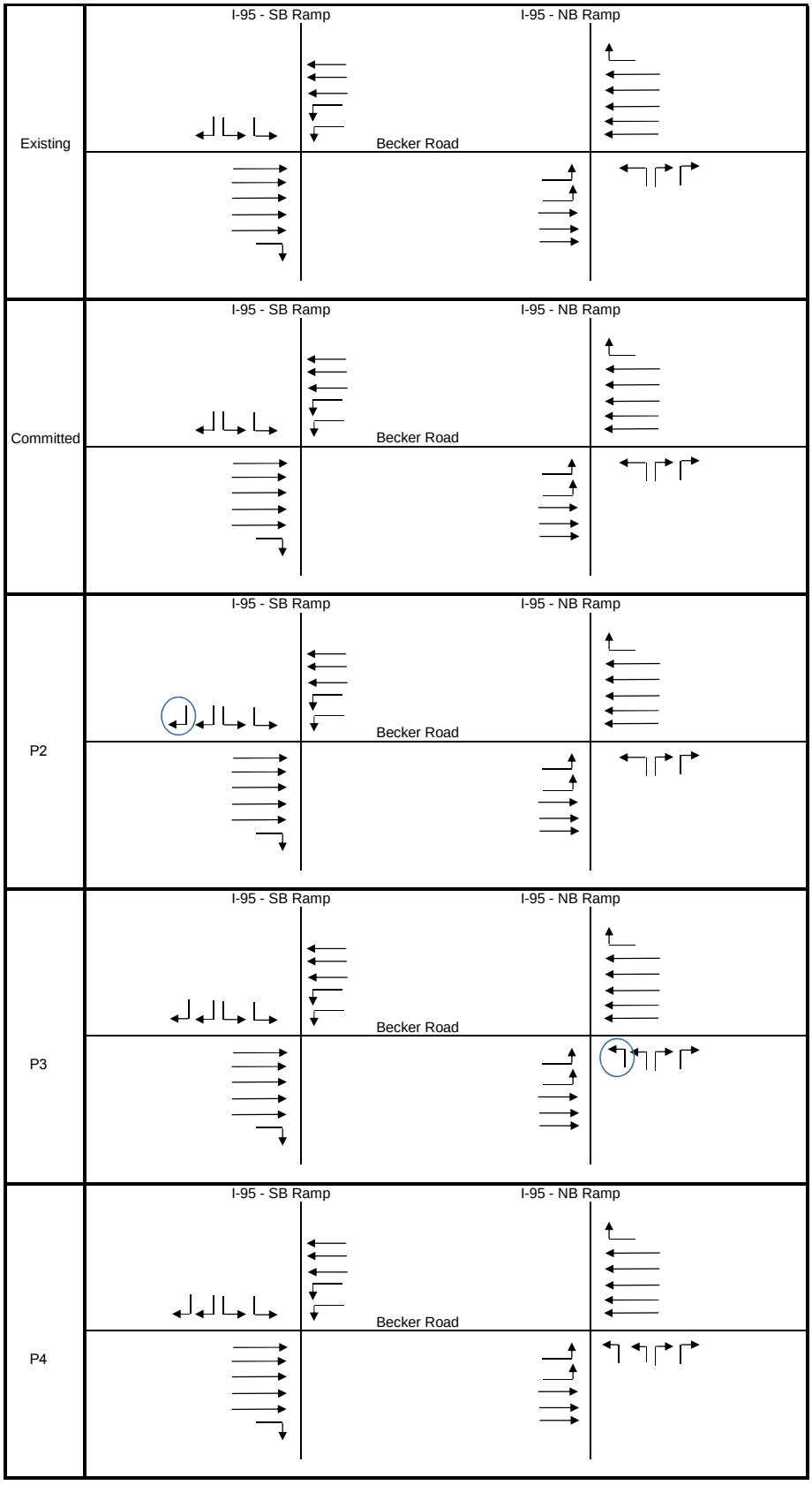
Appendix I

Interchange Intersection Analysis


Existing
I-95 - SB Ramp
I-95 - NB Ramp
Gatlin Blvd
Committed
I-95 - SB Ramp
I-95 - NB Ramp
Gatlin Blvd
P2
I-95 - SB Ramp
I-95 - NB Ramp
Gatlin Blvd
P3
I-95 - SB Ramp
I-95 - NB Ramp
Gatlin Blvd
P4
I-95 - SB Ramp
I-95 - NB Ramp
Gatlin Blvd
LEGEND
Lane Change



LEGEND
Lane Change

Southern Groves DRI
PEAK HOUR TURNING MOVEMENTS
EXHIBIT 1
I-95 & Gatlin Blvd

2031 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
	1143	1835	485		277	1062	654		427	0	164		576	0	1505	8128

2036 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
	1155	1970	406		241	1169	688		359	0	141		600	0	1528	8257

2041 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
0	1457	2115	388		196	1294	737		341	0	109		615	0	1916	9168

2031	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			1835	485		277	1062							576		1505
from nbl/ebl			1143				427									
SB Ramp	0	**0**	**2978**	**485**	**0**	**277**	**1489**	**0**	**0**	**0**	**0**	**0**	**0**	**576**	**0**	**1505**
NB Ramp	0	1143	1835		0		1062	654	0	427	0	164				
from sbl/wbl			576				277									
NB Ramp	0	**1143**	**2411**	**0**	**0**	**0**	**1339**	**654**	**0**	**427**	**0**	**164**	**0**	**0**	**0**	**0**

2036	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			1970	406		241	1169							600		1528
from nbl/ebl			1155				359									
SB Ramp	0	**0**	**3125**	**406**	**0**	**241**	**1528**	**0**	**0**	**0**	**0**	**0**	**0**	**600**	**0**	**1528**
NB Ramp	0	1155	1970		0		1169	688	0	359	0	141				
from sbl/wbl			600				241									
NB Ramp	0	**1155**	**2570**	**0**	**0**	**0**	**1410**	**688**	**0**	**359**	**0**	**141**	**0**	**0**	**0**	**0**

2041	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			2115	388		196	1294							615		1916
from nbl/ebl			1457				341									
SB Ramp	0	**0**	**3572**	**388**	**0**	**196**	**1635**	**0**	**0**	**0**	**0**	**0**	**0**	**615**	**0**	**1916**
NB Ramp	0	1457	2115		0		1294	737	0	341	0	109				
from sbl/wbl			615				196									
NB Ramp	0	**1457**	**2730**	**0**	**0**	**0**	**1490**	**737**	**0**	**341**	**0**	**109**	**0**	**0**	**0**	**0**

Southern Groves DRI
PEAK HOUR TURNING MOVEMENTS
EXHIBIT 2
I-95 & Becker Road

2031 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
	625	1280	648		491	717	475		579	0	335		484	0	834	6468

2036 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
	637	1583	772		473	949	389		695	0	303		373	0	855	7029

2041 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
0	688	1800	870		440	1267	350		830	0	257		303	0	981	7786

2031	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			1280	648		491	717							484		834
from nbl/ebl			625				579									
SB Ramp	0	**0**	**1905**	**648**	**0**	**491**	**1296**	**0**	**0**	**0**	**0**	**0**	**0**	**484**	**0**	**834**
NB Ramp	0	625	1280		0		717	475	0	579	0	335				
from sbl/wbl			484				491									
NB Ramp	0	**625**	**1764**	**0**	**0**	**0**	**1208**	**475**	**0**	**579**	**0**	**335**	**0**	**0**	**0**	**0**

2036	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			1583	772		473	949							373		855
from nbl/ebl			637				695									
SB Ramp	0	**0**	**2220**	**772**	**0**	**473**	**1644**	**0**	**0**	**0**	**0**	**0**	**0**	**373**	**0**	**855**
NB Ramp	0	637	1583		0		949	389	0	695	0	303				
from sbl/wbl			373				473									
NB Ramp	0	**637**	**1956**	**0**	**0**	**0**	**1422**	**389**	**0**	**695**	**0**	**303**	**0**	**0**	**0**	**0**

2041	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			1800	870		440	1267							303		981
from nbl/ebl			688				830									
SB Ramp	0	**0**	**2488**	**870**	**0**	**440**	**2097**	**0**	**0**	**0**	**0**	**0**	**0**	**303**	**0**	**981**
NB Ramp	0	688	1800		0		1267	350	0	830	0	257				
from sbl/wbl			303				440									
NB Ramp	0	**688**	**2103**	**0**	**0**	**0**	**1707**	**350**	**0**	**830**	**0**	**257**	**0**	**0**	**0**	**0**

MacKenzie
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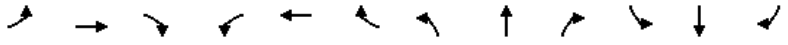
Gatlin Boulevard/Tradition Parkway & I-95

SB Ramp

Phase 2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1
Lane Configurations													
Traffic Volume (vph)	0	2978	485	277	1489	0	0	0	0	576	0	1505	
Future Volume (vph)	0	2978	485	277	1489	0	0	0	0	576	0	1505	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0		1000	575		0	0		0	0		0	
Storage Lanes	0		1	2		0	0		0	3		3	
Taper Length (ft)	25			25			25			25			
Lane Util. Factor	1.00	*1.00	1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	*1.00	1.00	*1.00	
Frt													
Flt Protected				0.950						0.950			
Satd. Flow (prot)	0	5588	1863	3539	5588	0	0	0	0	5309	0	5588	
Flt Permitted				0.950						0.950			
Satd. Flow (perm)	0	5588	1863	3539	5588	0	0	0	0	5309	0	5588	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			451									93	
Link Speed (mph)		45			45			45			35		
Link Distance (ft)		2015			1660			1325			2158		
Travel Time (s)		30.5			25.2			20.1			42.0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	0	3135	511	292	1567	0	0	0	0	606	0	1584	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	3135	511	292	1567	0	0	0	0	606	0	1584	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right	
Median Width(ft)		24			24			36			36		
Link Offset(ft)		0			0			0			0		
Crosswalk Width(ft)		16			16			16			16		
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors		2	1	1	2					1		1	
Detector Template		Thru	Right	Left	Thru					Left		Right	
Leading Detector (ft)		100	20	20	100					20		20	
Trailing Detector (ft)		0	0	0	0					0		0	
Detector 1 Position(ft)		0	0	0	0					0		0	
Detector 1 Size(ft)		6	20	20	6					20		20	
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	
Detector 1 Channel													
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0		0.0	
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0		0.0	
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0		0.0	
Detector 2 Position(ft)		94			94								
Detector 2 Size(ft)		6			6								
Detector 2 Type		Cl+Ex			Cl+Ex								
Detector 2 Channel													
Detector 2 Extend (s)		0.0			0.0								
Turn Type		NA	Free	Prot	NA					Prot		custom	
Protected Phases		6		5	2					8		8 1	1
Permitted Phases			Free									6	
Detector Phase		6		5	2					8		8 1	
Switch Phase													
Minimum Initial (s)		10.0		7.0	10.0					7.0			5.0
Minimum Split (s)		38.8		13.8	38.8					24.8			11.5
Total Split (s)		101.0		21.0	102.0					38.0			20.0
Total Split (%)		63.1%		13.1%	63.8%					23.8%			13%
Maximum Green (s)		94.2		14.2	95.2					31.2			13.5
Yellow Time (s)		4.8		4.8	4.8					4.8			4.5
All-Red Time (s)		2.0		2.0	2.0					2.0			2.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0			
Total Lost Time (s)		6.8		6.8	6.8					6.8			
Lead/Lag		Lag		Lead	Lead								Lag
Lead-Lag Optimize?		Yes		Yes	Yes								Yes
Vehicle Extension (s)		3.0		3.0	3.0					3.0			3.0
Recall Mode		C-Max		None	C-Max					None			None
Walk Time (s)		7.0			7.0								
Flash Dont Walk (s)		25.0			25.0								
Pedestrian Calls (#/hr)		0			0								
Act Effct Green (s)		95.3	160.0	15.0	97.0					29.4		131.4	
Actuated g/C Ratio		0.60	1.00	0.09	0.61					0.18		0.82	
v/c Ratio		0.94	0.27	0.88	0.46					0.62		0.34	
Control Delay		37.2	0.4	96.1	25.4					63.0		3.5	
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0	
Total Delay		37.2	0.4	96.1	25.4					63.0		3.5	
LOS		D	A	F	C					E		A	
Approach Delay		32.1			36.5						20.0		
Approach LOS		C			D						B		

Intersection Summary

Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 29.7		Intersection LOS: C	
Intersection Capacity Utilization 93.4%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Tradition Prkway & I-95 SB Ramp

MacKenzie
Engineering & Planning, Inc.

Gatlin Boulevard/Tradition Parkway & I-95

NB Ramp

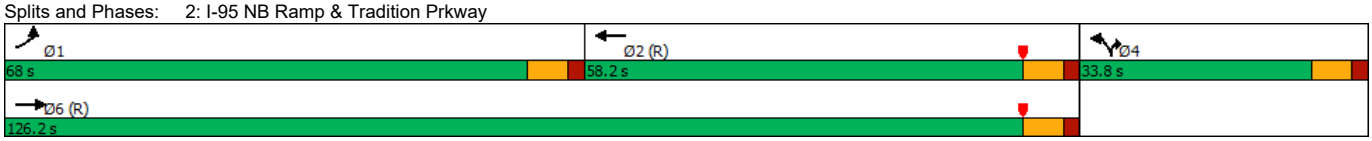
Phase 2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1143	2411	0	0	1339	654	427	0	164	0	0	0
Future Volume (vph)	1143	2411	0	0	1339	654	427	0	164	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	575		0	0		750	0		0	0		0
Storage Lanes	2		0	0		1	3		2	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	0.94	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3433	5085	0	0	5085	1583	4990	0	2787	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3433	5085	0	0	5085	1583	4990	0	2787	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)						619						
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1660			3637			2050			588	
Travel Time (s)		25.2			55.1			39.9			11.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1203	2538	0	0	1409	688	449	0	173	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1203	2538	0	0	1409	688	449	0	173	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			36			36	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1		1			
Detector Template	Left	Thru			Thru	Right	Left		Right			
Leading Detector (ft)	20	100			100	20	20		20			
Trailing Detector (ft)	0	0			0	0	0		0			
Detector 1 Position(ft)	0	0			0	0	0		0			
Detector 1 Size(ft)	20	6			6	20	20		20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		4		4			
Permitted Phases						Free						
Detector Phase	1	6			2		4		4			
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		7.0		7.0			
Minimum Split (s)	13.8	33.8			33.8		33.8		33.8			
Total Split (s)	68.0	126.2			58.2		33.8		33.8			
Total Split (%)	42.5%	78.9%			36.4%		21.1%		21.1%			
Maximum Green (s)	61.2	119.4			51.4		27.0		27.0			
Yellow Time (s)	4.8	4.8			4.8		4.8		4.8			
All-Red Time (s)	2.0	2.0			2.0		2.0		2.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0			
Total Lost Time (s)	6.8	6.8			6.8		6.8		6.8			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Recall Mode	None	C-Max			C-Max		None		None			
Walk Time (s)		7.0			7.0		7.0		7.0			
Flash Dont Walk (s)		20.0			20.0		20.0		20.0			
Pedestrian Calls (#/hr)		0			0		0		0			
Act Effct Green (s)	61.2	126.6			58.5	160.0	19.8		19.8			
Actuated g/C Ratio	0.38	0.79			0.37	1.00	0.12		0.12			
v/c Ratio	0.92	0.63			0.76	0.43	0.73		0.50			
Control Delay	71.1	11.5			48.8	0.9	74.4		70.1			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	71.1	11.5			48.8	0.9	74.4		70.1			
LOS	E	B			D	A	E		E			
Approach Delay		30.7			33.1			73.2				
Approach LOS		C			C			E				

Intersection Summary

Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 35.5		Intersection LOS: D	
Intersection Capacity Utilization 93.4%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 2: I-95 NB Ramp & Tradition Prkway



MacKenzie
Engineering & Planning, Inc.

Becker Road & I-95 SB Ramp

Phase 2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1905	648	491	1296	0	0	0	0	484	0	834
Future Volume (vph)	0	1905	648	491	1296	0	0	0	0	484	0	834
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	685		600	575		0	0		0	0		0
Storage Lanes	2		1	0		0	0		0	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	*1.00	1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	*1.00	1.00	0.88
Frt												
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	9314	1863	3539	5588	0	0	0	0	3539	0	3278
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	9314	1863	3539	5588	0	0	0	0	3539	0	3278
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			682									77
Link Speed (mph)		45			45			45			35	
Link Distance (ft)		902			400			1284			1315	
Travel Time (s)		13.7			6.1			19.5			25.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2005	682	517	1364	0	0	0	0	509	0	878
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2005	682	517	1364	0	0	0	0	509	0	878
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1		1
Detector Template		Thru	Right	Left	Thru					Left		Right
Leading Detector (ft)		100	20	20	100					20		20
Trailing Detector (ft)		0	0	0	0					0		0
Detector 1 Position(ft)		0	0	0	0					0		0
Detector 1 Size(ft)		6	20	20	6					20		20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0		0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0		0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0		0.0
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type		NA	Free	Prot	NA					Prot		Prot
Protected Phases		6		5	2					3		8
Permitted Phases			Free									
Detector Phase		6		5	2					3		8
Switch Phase												
Minimum Initial (s)		10.0		7.0	10.0					7.0		7.0
Minimum Split (s)		24.8		13.8	24.8					13.8		13.8
Total Split (s)		59.0		39.0	98.0					62.0		62.0
Total Split (%)		36.9%		24.4%	61.3%					38.8%		38.8%
Maximum Green (s)		52.2		32.2	91.2					55.2		55.2
Yellow Time (s)		4.8		4.8	4.8					4.8		4.8
All-Red Time (s)		2.0		2.0	2.0					2.0		2.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0		0.0
Total Lost Time (s)		6.8		6.8	6.8					6.8		6.8
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Recall Mode		C-Max		None	C-Max					None		None
Walk Time (s)		7.0			7.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		0			0							
Act Effct Green (s)		61.1	160.0	32.2	100.1					46.3		46.3
Actuated g/C Ratio		0.38	1.00	0.20	0.63					0.29		0.29
v/c Ratio		0.56	0.37	0.73	0.39					0.50		0.88
Control Delay		40.4	0.6	51.6	11.2					48.2		59.3
Queue Delay		0.0	0.0	6.6	0.2					0.0		0.0
Total Delay		40.4	0.6	58.2	11.4					48.2		59.3
LOS		D	A	E	B					D		E
Approach Delay		30.3			24.3						55.2	
Approach LOS		C			C						E	

Intersection Summary

Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 146 (91%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 34.2		Intersection LOS: C	
Intersection Capacity Utilization 80.9%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Becker Road & I-95 SB Ramp

MacKenzie
Engineering & Planning, Inc.

Becker Road & I-95 NB Ramp

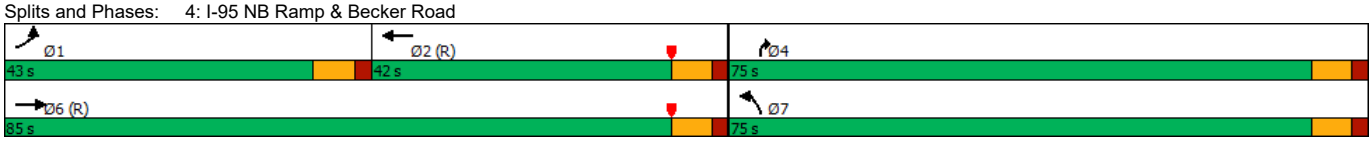
Phase 2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	625	1764	0	0	1208	475	579	0	335	0	0	0
Future Volume (vph)	625	1764	0	0	1208	475	579	0	335	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	575		0	500		350	0		0	0		0
Storage Lanes	0		0	2		1	1		2	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.81	1.00	1.00	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3433	5085	0	0	7544	1583	1770	0	2787	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3433	5085	0	0	7544	1583	1770	0	2787	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)						500						
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		400			4392			1352			1316	
Travel Time (s)		6.1			66.5			26.3			25.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	658	1857	0	0	1272	500	609	0	353	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	658	1857	0	0	1272	500	609	0	353	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1		1			
Detector Template	Left	Thru			Thru	Right	Left		Right			
Leading Detector (ft)	20	100			100	20	20		20			
Trailing Detector (ft)	0	0			0	0	0		0			
Detector 1 Position(ft)	0	0			0	0	0		0			
Detector 1 Size(ft)	20	6			6	20	20		20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		4			
Permitted Phases						Free						
Detector Phase	1	6			2		7		4			
Switch Phase												
Minimum Initial (s)	7.0	7.0			7.0		7.0		7.0			
Minimum Split (s)	13.8	28.8			28.8		13.8		33.8			
Total Split (s)	43.0	85.0			42.0		75.0		75.0			
Total Split (%)	26.9%	53.1%			26.3%		46.9%		46.9%			
Maximum Green (s)	36.2	78.2			35.2		68.2		68.2			
Yellow Time (s)	4.8	4.8			4.8		4.8		4.8			
All-Red Time (s)	2.0	2.0			2.0		2.0		2.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0			
Total Lost Time (s)	6.8	6.8			6.8		6.8		6.8			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Recall Mode	None	C-Max			C-Max		None		None			
Walk Time (s)		7.0			7.0				7.0			
Flash Dont Walk (s)		15.0			15.0				20.0			
Pedestrian Calls (#/hr)		0			0				0			
Act Effct Green (s)	34.5	85.9			44.6	160.0	60.5		60.5			
Actuated g/C Ratio	0.22	0.54			0.28	1.00	0.38		0.38			
v/c Ratio	0.89	0.68			0.61	0.32	0.91		0.34			
Control Delay	66.4	10.6			53.0	0.5	65.6		35.5			
Queue Delay	3.1	0.2			0.0	0.0	0.1		0.0			
Total Delay	69.5	10.9			53.0	0.5	65.7		35.5			
LOS	E	B			D	A	E		D			
Approach Delay		26.2			38.2			54.6				
Approach LOS		C			D			D				

Intersection Summary

Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 35.5		Intersection LOS: D	
Intersection Capacity Utilization 80.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: I-95 NB Ramp & Becker Road



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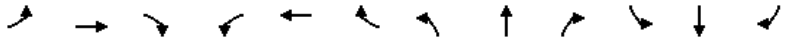
SB Ramp

Phase 3



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1
Lane Configurations													
Traffic Volume (vph)	0	3125	406	241	1528	0	0	0	0	600	0	1528	
Future Volume (vph)	0	3125	406	241	1528	0	0	0	0	600	0	1528	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0		1000	575		0	0		0	0		0	
Storage Lanes	0		1	2		0	0		0	3		3	
Taper Length (ft)	25			25			25			25			
Lane Util. Factor	1.00	*1.00	1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	*1.00	1.00	*1.00	
Frt													
Flt Protected				0.950						0.950			
Satd. Flow (prot)	0	5588	1863	3539	5588	0	0	0	0	5309	0	5588	
Flt Permitted				0.950						0.950			
Satd. Flow (perm)	0	5588	1863	3539	5588	0	0	0	0	5309	0	5588	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			359									84	
Link Speed (mph)		45			45			45			35		
Link Distance (ft)		2015			1660			1325			2158		
Travel Time (s)		30.5			25.2			20.1			42.0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	0	3289	427	254	1608	0	0	0	0	632	0	1608	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	3289	427	254	1608	0	0	0	0	632	0	1608	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right	
Median Width(ft)		24			24			36			36		
Link Offset(ft)		0			0			0			0		
Crosswalk Width(ft)		16			16			16			16		
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors		2	1	1	2					1		1	
Detector Template		Thru	Right	Left	Thru					Left		Right	
Leading Detector (ft)		100	20	20	100					20		20	
Trailing Detector (ft)		0	0	0	0					0		0	
Detector 1 Position(ft)		0	0	0	0					0		0	
Detector 1 Size(ft)		6	20	20	6					20		20	
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	
Detector 1 Channel													
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0		0.0	
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0		0.0	
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0		0.0	
Detector 2 Position(ft)		94			94								
Detector 2 Size(ft)		6			6								
Detector 2 Type		Cl+Ex			Cl+Ex								
Detector 2 Channel													
Detector 2 Extend (s)		0.0			0.0								
Turn Type		NA	Free	Prot	NA					Prot		custom	
Protected Phases		6		5	2					8		8 1	1
Permitted Phases			Free									6	
Detector Phase		6		5	2					8		8 1	
Switch Phase													
Minimum Initial (s)		10.0		7.0	10.0					7.0			5.0
Minimum Split (s)		38.8		13.8	38.8					24.8			11.5
Total Split (s)		101.0		21.0	102.0					38.0			20.0
Total Split (%)		63.1%		13.1%	63.8%					23.8%			13%
Maximum Green (s)		94.2		14.2	95.2					31.2			13.5
Yellow Time (s)		4.8		4.8	4.8					4.8			4.5
All-Red Time (s)		2.0		2.0	2.0					2.0			2.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0			
Total Lost Time (s)		6.8		6.8	6.8					6.8			
Lead/Lag		Lag		Lead	Lead								Lag
Lead-Lag Optimize?		Yes		Yes	Yes								Yes
Vehicle Extension (s)		3.0		3.0	3.0					3.0			3.0
Recall Mode		C-Max		None	C-Max					None			None
Walk Time (s)		7.0			7.0								
Flash Dont Walk (s)		25.0			25.0								
Pedestrian Calls (#/hr)		0			0								
Act Effct Green (s)		95.8	160.0	14.2	96.8					29.6		132.2	
Actuated g/C Ratio		0.60	1.00	0.09	0.60					0.18		0.83	
v/c Ratio		0.98	0.23	0.81	0.48					0.64		0.35	
Control Delay		43.5	0.3	90.3	24.7					63.4		3.4	
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0	
Total Delay		43.5	0.3	90.3	24.7					63.4		3.4	
LOS		D	A	F	C					E		A	
Approach Delay		38.5			33.7						20.3		
Approach LOS		D			C						C		

Intersection Summary

Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 32.1		Intersection LOS: C	
Intersection Capacity Utilization 95.7%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Tradition Prkway & I-95 SB Ramp

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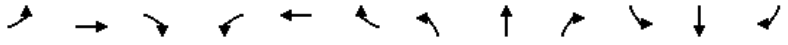
NB Ramp

Phase 3

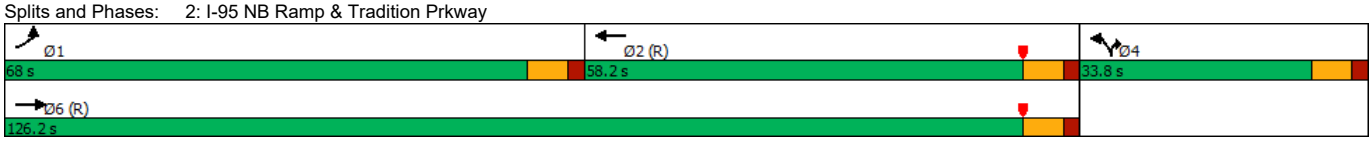


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1155	2570	0	0	1410	688	359	0	141	0	0	0
Future Volume (vph)	1155	2570	0	0	1410	688	359	0	141	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	575		0	0		750	0		0	0		0
Storage Lanes	2		0	0		1	3		2	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	0.94	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3433	5085	0	0	5085	1583	4990	0	2787	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3433	5085	0	0	5085	1583	4990	0	2787	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)						619						
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1660			3637			2050			588	
Travel Time (s)		25.2			55.1			39.9			11.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1216	2705	0	0	1484	724	378	0	148	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1216	2705	0	0	1484	724	378	0	148	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			36			36	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1		1			
Detector Template	Left	Thru			Thru	Right	Left		Right			
Leading Detector (ft)	20	100			100	20	20		20			
Trailing Detector (ft)	0	0			0	0	0		0			
Detector 1 Position(ft)	0	0			0	0	0		0			
Detector 1 Size(ft)	20	6			6	20	20		20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		4		4			
Permitted Phases						Free						
Detector Phase	1	6			2		4		4			
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		7.0		7.0			
Minimum Split (s)	13.8	33.8			33.8		33.8		33.8			
Total Split (s)	68.0	126.2			58.2		33.8		33.8			
Total Split (%)	42.5%	78.9%			36.4%		21.1%		21.1%			
Maximum Green (s)	61.2	119.4			51.4		27.0		27.0			
Yellow Time (s)	4.8	4.8			4.8		4.8		4.8			
All-Red Time (s)	2.0	2.0			2.0		2.0		2.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0			
Total Lost Time (s)	6.8	6.8			6.8		6.8		6.8			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Recall Mode	None	C-Max			C-Max		None		None			
Walk Time (s)		7.0			7.0		7.0		7.0			
Flash Dont Walk (s)		20.0			20.0		20.0		20.0			
Pedestrian Calls (#/hr)		0			0		0		0			
Act Effct Green (s)	62.6	129.0			59.6	160.0	17.4		17.4			
Actuated g/C Ratio	0.39	0.81			0.37	1.00	0.11		0.11			
v/c Ratio	0.91	0.66			0.78	0.46	0.70		0.49			
Control Delay	67.2	11.1			48.9	1.0	75.7		72.3			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	67.2	11.1			48.9	1.0	75.7		72.3			
LOS	E	B			D	A	E		E			
Approach Delay		28.5			33.2			74.8				
Approach LOS		C			C			E				

Intersection Summary

Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 33.7		Intersection LOS: C	
Intersection Capacity Utilization 95.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 2: I-95 NB Ramp & Tradition Prkway



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Becker Road & I-95 SB Ramp

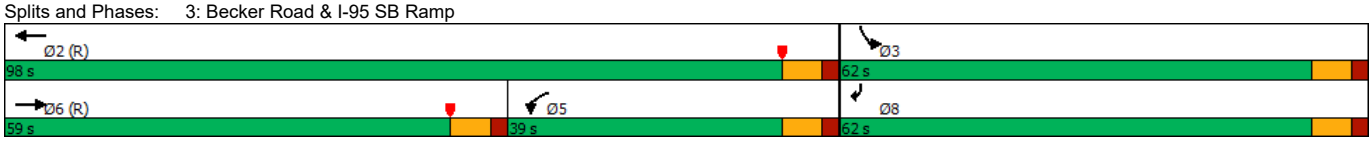
Phase 3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2220	772	473	1644	0	0	0	0	373	0	855
Future Volume (vph)	0	2220	772	473	1644	0	0	0	0	373	0	855
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	685		600	575		0	0		0	0		0
Storage Lanes	2		1	0		0	0		0	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.81	1.00	0.97	0.91	1.00	1.00	1.00	1.00	0.97	1.00	0.88
Frt												
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	7544	1863	3433	5085	0	0	0	0	3433	0	3278
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	7544	1863	3433	5085	0	0	0	0	3433	0	3278
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			793									72
Link Speed (mph)		45			45			45			35	
Link Distance (ft)		902			400			1284			1315	
Travel Time (s)		13.7			6.1			19.5			25.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2337	813	498	1731	0	0	0	0	393	0	900
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2337	813	498	1731	0	0	0	0	393	0	900
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1		1
Detector Template		Thru	Right	Left	Thru					Left		Right
Leading Detector (ft)		100	20	20	100					20		20
Trailing Detector (ft)		0	0	0	0					0		0
Detector 1 Position(ft)		0	0	0	0					0		0
Detector 1 Size(ft)		6	20	20	6					20		20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0		0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0		0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0		0.0
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type		NA	Free	Prot	NA					Prot		Prot
Protected Phases		6		5	2					3		8
Permitted Phases			Free									
Detector Phase		6		5	2					3		8
Switch Phase												
Minimum Initial (s)		10.0		7.0	10.0					7.0		7.0
Minimum Split (s)		24.8		13.8	24.8					13.8		13.8
Total Split (s)		59.0		39.0	98.0					62.0		62.0
Total Split (%)		36.9%		24.4%	61.3%					38.8%		38.8%
Maximum Green (s)		52.2		32.2	91.2					55.2		55.2
Yellow Time (s)		4.8		4.8	4.8					4.8		4.8
All-Red Time (s)		2.0		2.0	2.0					2.0		2.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0		0.0
Total Lost Time (s)		6.8		6.8	6.8					6.8		6.8
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Recall Mode		C-Max		None	C-Max					None		None
Walk Time (s)		7.0			7.0							
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		0			0							
Act Effct Green (s)		60.1	160.0	32.2	99.1					47.3		47.3
Actuated g/C Ratio		0.38	1.00	0.20	0.62					0.30		0.30
v/c Ratio		0.83	0.44	0.72	0.55					0.39		0.88
Control Delay		48.8	0.7	58.3	11.2					45.2		59.8
Queue Delay		0.8	0.0	3.4	0.1					0.2		0.0
Total Delay		49.6	0.7	61.7	11.3					45.4		59.8
LOS		D	A	E	B					D		E
Approach Delay		37.0			22.5						55.4	
Approach LOS		D			C						E	

Intersection Summary

Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 146 (91%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 35.7		Intersection LOS: D	
Intersection Capacity Utilization 73.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Becker Road & I-95 SB Ramp



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Becker Road & I-95 NB Ramp

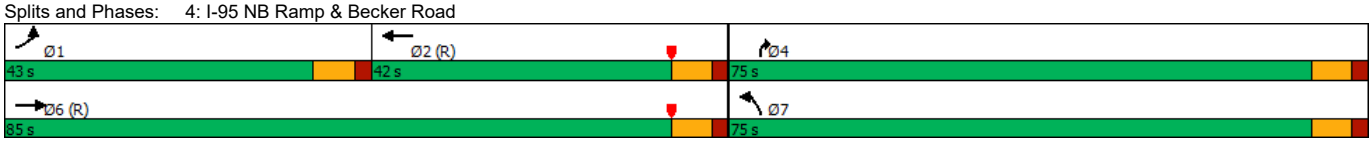
Phase 3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	637	1956	0	0	1422	389	395	0	303	0	0	0
Future Volume (vph)	637	1956	0	0	1422	389	395	0	303	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	575		0	500		350	0		0	0		0
Storage Lanes	0		0	2		1	2		2	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	*1.00	*1.00	1.00	1.00	*1.00	1.00	*1.00	1.00	*1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3539	5588	0	0	9314	1583	3539	0	3167	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3539	5588	0	0	9314	1583	3539	0	3167	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)						409						
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		400			4392			1352			1316	
Travel Time (s)		6.1			66.5			26.3			25.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	671	2059	0	0	1497	409	416	0	319	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	671	2059	0	0	1497	409	416	0	319	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1		1			
Detector Template	Left	Thru			Thru	Right	Left		Right			
Leading Detector (ft)	20	100			100	20	20		20			
Trailing Detector (ft)	0	0			0	0	0		0			
Detector 1 Position(ft)	0	0			0	0	0		0			
Detector 1 Size(ft)	20	6			6	20	20		20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		4			
Permitted Phases						Free						
Detector Phase	1	6			2		7		4			
Switch Phase												
Minimum Initial (s)	7.0	7.0			7.0		7.0		7.0			
Minimum Split (s)	13.8	28.8			28.8		13.8		33.8			
Total Split (s)	43.0	85.0			42.0		75.0		75.0			
Total Split (%)	26.9%	53.1%			26.3%		46.9%		46.9%			
Maximum Green (s)	36.2	78.2			35.2		68.2		68.2			
Yellow Time (s)	4.8	4.8			4.8		4.8		4.8			
All-Red Time (s)	2.0	2.0			2.0		2.0		2.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0			
Total Lost Time (s)	6.8	6.8			6.8		6.8		6.8			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Recall Mode	None	C-Max			C-Max		None		None			
Walk Time (s)		7.0			7.0				7.0			
Flash Dont Walk (s)		15.0			15.0				20.0			
Pedestrian Calls (#/hr)		0			0				0			
Act Effct Green (s)	35.6	121.7			79.3	160.0	24.7		24.7			
Actuated g/C Ratio	0.22	0.76			0.50	1.00	0.15		0.15			
v/c Ratio	0.85	0.48			0.32	0.26	0.76		0.65			
Control Delay	92.1	1.0			25.4	0.4	74.0		69.7			
Queue Delay	50.9	0.2			0.0	0.0	0.0		0.0			
Total Delay	143.0	1.2			25.5	0.4	74.0		69.7			
LOS	F	A			C	A	E		E			
Approach Delay		36.1			20.1			72.1				
Approach LOS		D			C			E				

Intersection Summary

Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 35.3		Intersection LOS: D	
Intersection Capacity Utilization 73.0%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 4: I-95 NB Ramp & Becker Road



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Gatlin Boulevard/Tradition Parkway & I-95

SB Ramp

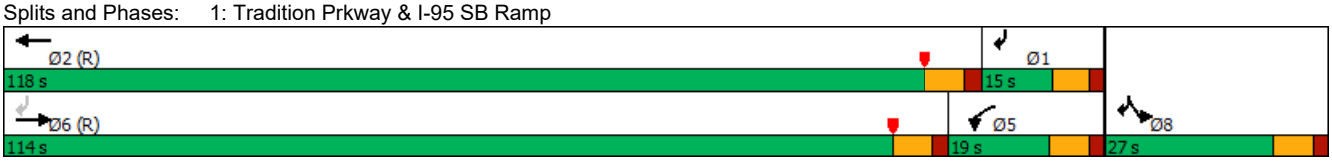
Phase 4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1
Lane Configurations													
Traffic Volume (vph)	0	3572	388	196	1635	0	0	0	0	615	0	1916	
Future Volume (vph)	0	3572	388	196	1635	0	0	0	0	615	0	1916	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	0		1000	575		0	0		0	0		0	
Storage Lanes	0		1	2		0	0		0	3		3	
Taper Length (ft)	25			25			25			25			
Lane Util. Factor	1.00	*1.00	1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	*1.00	1.00	*1.00	
Frt													
Flt Protected				0.950						0.950			
Satd. Flow (prot)	0	5588	1863	3539	5588	0	0	0	0	5309	0	5588	
Flt Permitted				0.950						0.950			
Satd. Flow (perm)	0	5588	1863	3539	5588	0	0	0	0	5309	0	5588	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			300										
Link Speed (mph)		45			45			45			35		
Link Distance (ft)		2015			1660			1325			2158		
Travel Time (s)		30.5			25.2			20.1			42.0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	0	3760	408	206	1721	0	0	0	0	647	0	2017	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	3760	408	206	1721	0	0	0	0	647	0	2017	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right	
Median Width(ft)		24			24			36			36		
Link Offset(ft)		0			0			0			0		
Crosswalk Width(ft)		16			16			16			16		
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors		2	1	1	2					1		1	
Detector Template		Thru	Right	Left	Thru					Left		Right	
Leading Detector (ft)		100	20	20	100					20		20	
Trailing Detector (ft)		0	0	0	0					0		0	
Detector 1 Position(ft)		0	0	0	0					0		0	
Detector 1 Size(ft)		6	20	20	6					20		20	
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex	
Detector 1 Channel													
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0		0.0	
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0		0.0	
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0		0.0	
Detector 2 Position(ft)		94			94								
Detector 2 Size(ft)		6			6								
Detector 2 Type		Cl+Ex			Cl+Ex								
Detector 2 Channel													
Detector 2 Extend (s)		0.0			0.0								
Turn Type		NA	Free	Prot	NA					Prot		custom	
Protected Phases		6		5	2					8		8 1	1
Permitted Phases			Free									6	
Detector Phase		6		5	2					8		8 1	
Switch Phase													
Minimum Initial (s)		10.0		7.0	10.0					7.0			5.0
Minimum Split (s)		38.8		13.8	38.8					24.8			11.5
Total Split (s)		114.0		19.0	118.0					27.0			15.0
Total Split (%)		71.3%		11.9%	73.8%					16.9%			9%
Maximum Green (s)		107.2		12.2	111.2					20.2			8.5
Yellow Time (s)		4.8		4.8	4.8					4.8			4.5
All-Red Time (s)		2.0		2.0	2.0					2.0			2.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0			
Total Lost Time (s)		6.8		6.8	6.8					6.8			
Lead/Lag		Lead		Lag	Lead								Lag
Lead-Lag Optimize?		Yes		Yes	Yes								Yes
Vehicle Extension (s)		3.0		3.0	3.0					3.0			3.0
Recall Mode		C-Max		None	C-Max					None			None
Walk Time (s)		7.0			7.0								

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1
Flash Dont Walk (s)		25.0			25.0								
Pedestrian Calls (#/hr)		0			0								
Act Effct Green (s)		107.2	160.0	12.2	111.2					20.2		149.2	
Actuated g/C Ratio		0.67	1.00	0.08	0.70					0.13		0.93	
v/c Ratio		1.00	0.22	0.77	0.44					0.97		0.39	
Control Delay		42.0	0.3	66.9	0.2					96.0		0.8	
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0	
Total Delay		42.0	0.3	66.9	0.2					96.0		0.8	
LOS		D	A	E	A					F		A	
Approach Delay		37.9			7.3						23.9		
Approach LOS		D			A						C		

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 26.9		Intersection LOS: C	
Intersection Capacity Utilization 103.5%		ICU Level of Service G	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Tradition Prkway & I-95 SB Ramp



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Gatlin Boulevard/Tradition Parkway & I-95

NB Ramp

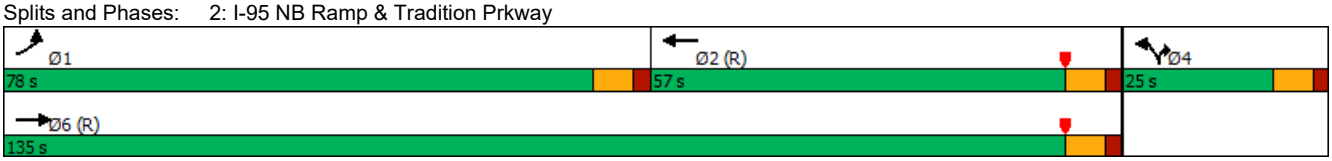
Phase 4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1457	2730	0	0	1490	737	341	0	109	0	0	0
Future Volume (vph)	1457	2730	0	0	1490	737	341	0	109	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	575		0	0		750	0		0	0		0
Storage Lanes	2		0	0		1	3		2	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	0.94	1.00	0.88	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3433	5085	0	0	5085	1583	4990	0	2787	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3433	5085	0	0	5085	1583	4990	0	2787	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)						539						
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1660			3637			2050			588	
Travel Time (s)		25.2			55.1			39.9			11.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1534	2874	0	0	1568	776	359	0	115	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1534	2874	0	0	1568	776	359	0	115	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			36			36	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1		1			
Detector Template	Left	Thru			Thru	Right	Left		Right			
Leading Detector (ft)	20	100			100	20	20		20			
Trailing Detector (ft)	0	0			0	0	0		0			
Detector 1 Position(ft)	0	0			0	0	0		0			
Detector 1 Size(ft)	20	6			6	20	20		20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		4		4			
Permitted Phases						Free						
Detector Phase	1	6			2		4		4			
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		7.0		7.0			
Minimum Split (s)	13.8	33.8			33.8		13.8		13.8			
Total Split (s)	78.0	135.0			57.0		25.0		25.0			
Total Split (%)	48.8%	84.4%			35.6%		15.6%		15.6%			
Maximum Green (s)	71.2	128.2			50.2		18.2		18.2			
Yellow Time (s)	4.8	4.8			4.8		4.8		4.8			
All-Red Time (s)	2.0	2.0			2.0		2.0		2.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0			
Total Lost Time (s)	6.8	6.8			6.8		6.8		6.8			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Recall Mode	None	C-Max			C-Max		None		None			
Walk Time (s)		7.0			7.0							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		20.0			20.0							
Pedestrian Calls (#/hr)		0			0							
Act Effct Green (s)	73.1	130.1			50.2	160.0	16.3		16.3			
Actuated g/C Ratio	0.46	0.81			0.31	1.00	0.10		0.10			
v/c Ratio	0.98	0.70			0.98	0.49	0.71		0.40			
Control Delay	49.0	10.1			72.8	1.1	77.4		71.3			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	49.0	10.1			72.8	1.1	77.4		71.3			
LOS	D	B			E	A	E		E			
Approach Delay		23.6			49.1			75.9				
Approach LOS		C			D			E				

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 111 (69%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 35.3		Intersection LOS: D	
Intersection Capacity Utilization 103.5%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 2: I-95 NB Ramp & Tradition Prkway



MacKenzie
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Becker Road & I-95 SB Ramp

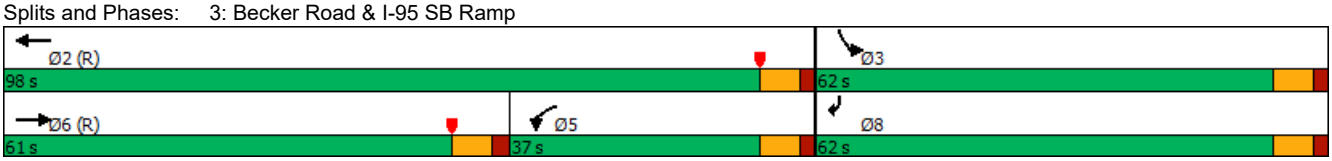
Phase 4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2488	870	440	2097	0	0	0	0	303	0	981
Future Volume (vph)	0	2488	870	440	2097	0	0	0	0	303	0	981
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	685		600	575		0	0		0	0		0
Storage Lanes	2		1	0		0	0		0	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	*1.00	1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	*1.00	1.00	*1.00
Frt												
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	9314	1863	3539	5588	0	0	0	0	3539	0	3725
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	9314	1863	3539	5588	0	0	0	0	3539	0	3725
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			864									72
Link Speed (mph)		45			45			45			35	
Link Distance (ft)		902			400			1284			1315	
Travel Time (s)		13.7			6.1			19.5			25.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2619	916	463	2207	0	0	0	0	319	0	1033
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2619	916	463	2207	0	0	0	0	319	0	1033
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1		1
Detector Template		Thru	Right	Left	Thru					Left		Right
Leading Detector (ft)		100	20	20	100					20		20
Trailing Detector (ft)		0	0	0	0					0		0
Detector 1 Position(ft)		0	0	0	0					0		0
Detector 1 Size(ft)		6	20	20	6					20		20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex		Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0		0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0		0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0		0.0
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type		NA	Free	Prot	NA					Prot		Prot
Protected Phases		6		5	2					3		8
Permitted Phases			Free									
Detector Phase		6		5	2					3		8
Switch Phase												
Minimum Initial (s)		10.0		7.0	10.0					7.0		7.0
Minimum Split (s)		24.8		13.8	24.8					13.8		13.8
Total Split (s)		61.0		37.0	98.0					62.0		62.0
Total Split (%)		38.1%		23.1%	61.3%					38.8%		38.8%
Maximum Green (s)		54.2		30.2	91.2					55.2		55.2
Yellow Time (s)		4.8		4.8	4.8					4.8		4.8
All-Red Time (s)		2.0		2.0	2.0					2.0		2.0
Lost Time Adjust (s)		0.0		0.0	0.0					0.0		0.0
Total Lost Time (s)		6.8		6.8	6.8					6.8		6.8
Lead/Lag		Lead		Lag								
Lead-Lag Optimize?		Yes		Yes								
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Recall Mode		C-Max		None	C-Max					None		None
Walk Time (s)		7.0			7.0							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0			11.0							
Pedestrian Calls (#/hr)		0			0							
Act Effct Green (s)		61.0	160.0	30.2	98.0					48.4		48.4
Actuated g/C Ratio		0.38	1.00	0.19	0.61					0.30		0.30
v/c Ratio		0.74	0.49	0.69	0.64					0.30		0.88
Control Delay		44.8	0.9	51.5	21.8					42.8		58.2
Queue Delay		0.0	0.0	1.1	1.0					0.0		0.0
Total Delay		44.8	0.9	52.6	22.8					42.8		58.2
LOS		D	A	D	C					D		E
Approach Delay		33.4			27.9						54.6	
Approach LOS		C			C						D	

Intersection Summary	
Area Type:	Other
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 128 (80%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 35.3	Intersection LOS: D
Intersection Capacity Utilization 86.2%	ICU Level of Service E
Analysis Period (min) 15	
* User Entered Value	

Splits and Phases: 3: Becker Road & I-95 SB Ramp



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Becker Road & I-95 NB Ramp

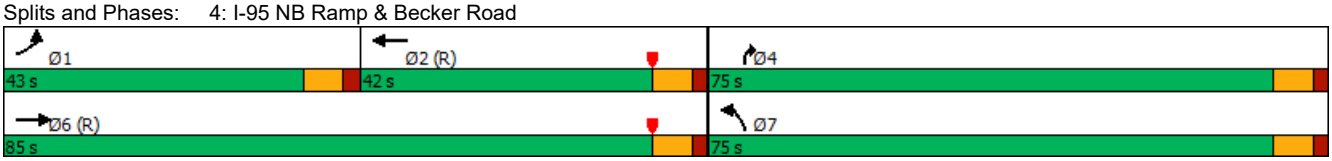
Phase 4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	688	2103	0	0	1707	350	830	0	257	0	0	0
Future Volume (vph)	688	2103	0	0	1707	350	830	0	257	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	575		0	500		350	0		0	0		0
Storage Lanes	0		0	2		1	2		2	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	*1.00	*1.00	1.00	1.00	*1.00	1.00	*1.00	1.00	*1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
Satd. Flow (prot)	3539	5588	0	0	9314	1583	3539	0	3167	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3539	5588	0	0	9314	1583	3539	0	3167	0	0	0
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)						346						
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		400			4392			1352			1316	
Travel Time (s)		6.1			66.5			26.3			25.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	724	2214	0	0	1797	368	874	0	271	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	724	2214	0	0	1797	368	874	0	271	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1		1			
Detector Template	Left	Thru			Thru	Right	Left		Right			
Leading Detector (ft)	20	100			100	20	20		20			
Trailing Detector (ft)	0	0			0	0	0		0			
Detector 1 Position(ft)	0	0			0	0	0		0			
Detector 1 Size(ft)	20	6			6	20	20		20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0		0.0			
Detector 2 Position(ft)		94			94							
Detector 2 Size(ft)		6			6							
Detector 2 Type		Cl+Ex			Cl+Ex							
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							
Turn Type	Prot	NA			NA	Free	Prot		Prot			
Protected Phases	1	6			2		7		4			
Permitted Phases						Free						
Detector Phase	1	6			2		7		4			
Switch Phase												
Minimum Initial (s)	7.0	7.0			7.0		7.0		7.0			
Minimum Split (s)	13.8	28.8			28.8		13.8		33.8			
Total Split (s)	43.0	85.0			42.0		75.0		75.0			
Total Split (%)	26.9%	53.1%			26.3%		46.9%		46.9%			
Maximum Green (s)	36.2	78.2			35.2		68.2		68.2			
Yellow Time (s)	4.8	4.8			4.8		4.8		4.8			
All-Red Time (s)	2.0	2.0			2.0		2.0		2.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0		0.0			
Total Lost Time (s)	6.8	6.8			6.8		6.8		6.8			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Recall Mode	None	C-Max			C-Max		None		None			
Walk Time (s)		7.0			7.0				7.0			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		15.0			15.0				20.0			
Pedestrian Calls (#/hr)		0			0				0			
Act Effct Green (s)	38.5	99.0			53.8	160.0	47.4		47.4			
Actuated g/C Ratio	0.24	0.62			0.34	1.00	0.30		0.30			
v/c Ratio	0.85	0.64			0.57	0.23	0.83		0.29			
Control Delay	55.2	9.0			46.1	0.3	60.0		43.2			
Queue Delay	7.5	1.1			0.0	0.0	0.3		0.0			
Total Delay	62.7	10.0			46.1	0.3	60.3		43.2			
LOS	E	B			D	A	E		D			
Approach Delay		23.0			38.3			56.3				
Approach LOS		C			D			E				

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 34.4		Intersection LOS: C	
Intersection Capacity Utilization 86.2%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 4: I-95 NB Ramp & Becker Road



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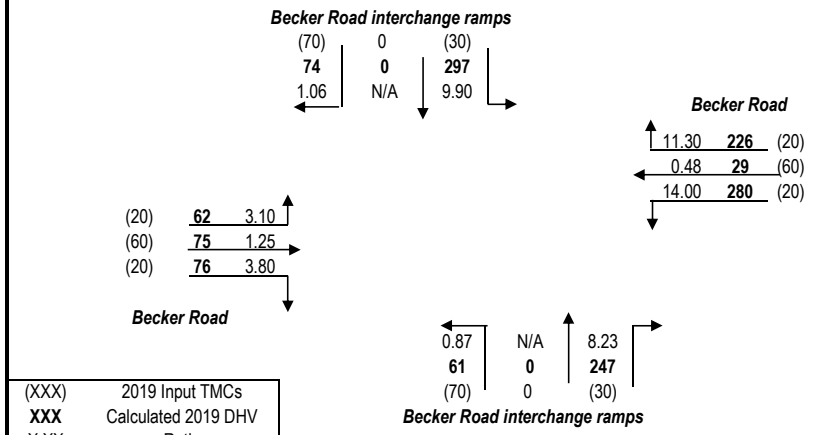
Project Traffic at Becker Road Interchange Ramps

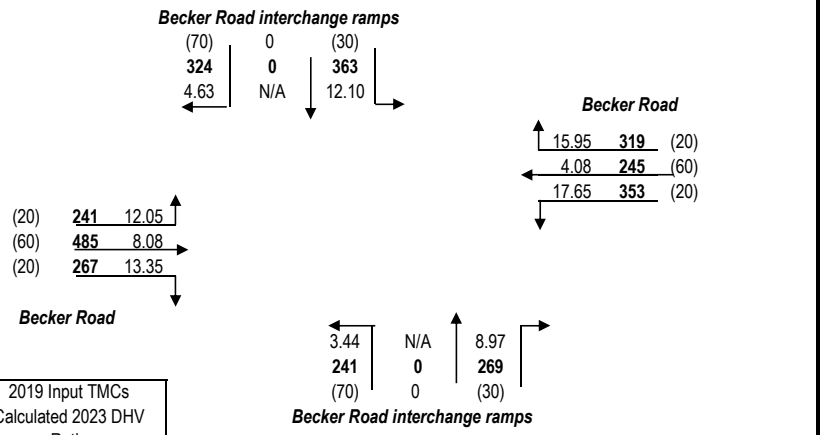
PROJECT TRAFFIC FOR Becker Road AT Becker Road interchange ramps

2019 INPUT TMCs COMPARED TO 2019 DHV



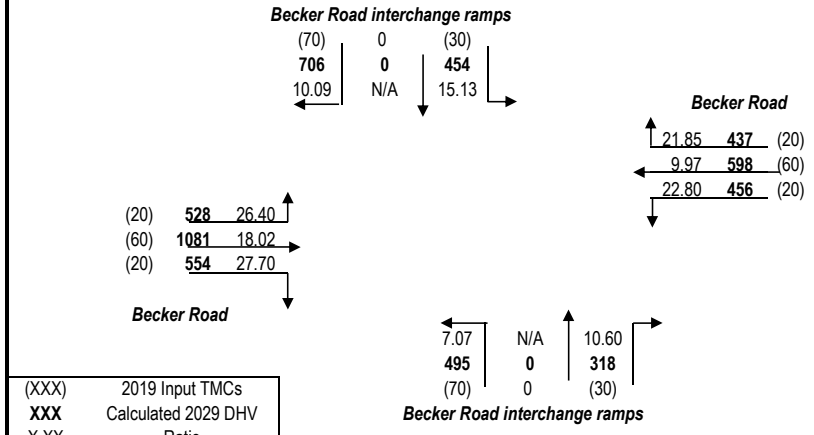
(XXX)	2019 Input TMCs
XXX	Calculated 2019 DHV
X.XX	Ratio

2019 INPUT TMCs COMPARED TO 2023 DHV



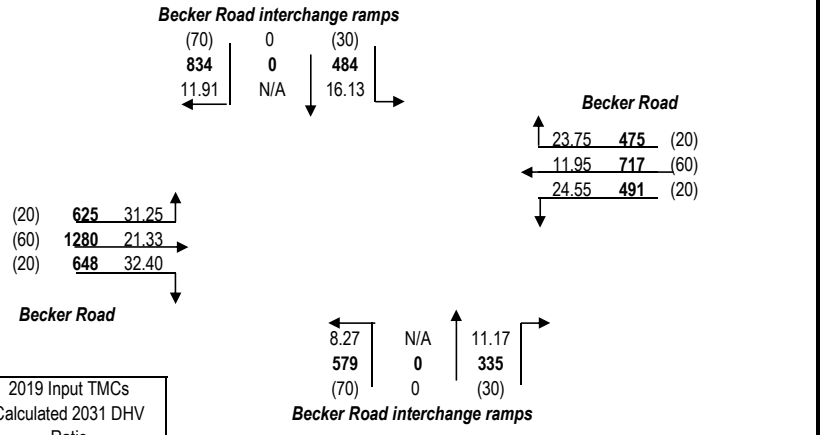
(XXX)	2019 Input TMCs
XXX	Calculated 2023 DHV
X.XX	Ratio

2019 INPUT TMCs COMPARED TO 2029 DHV



(XXX)	2019 Input TMCs
XXX	Calculated 2029 DHV
X.XX	Ratio

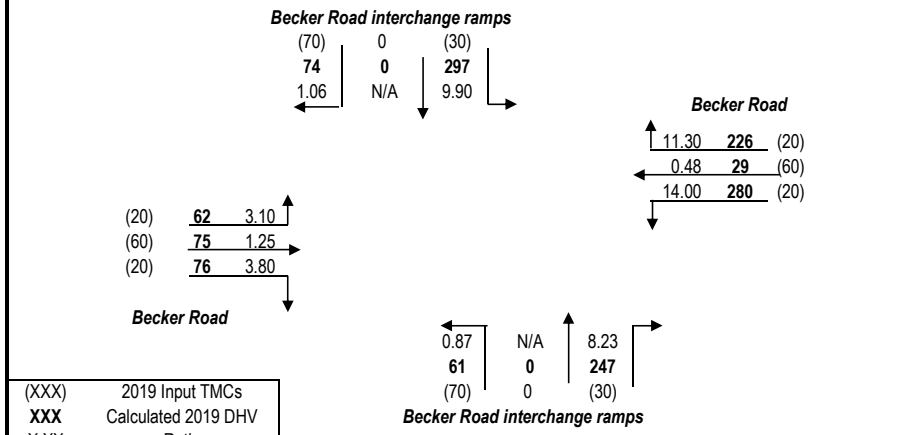
2019 INPUT TMCs COMPARED TO 2031 DHV



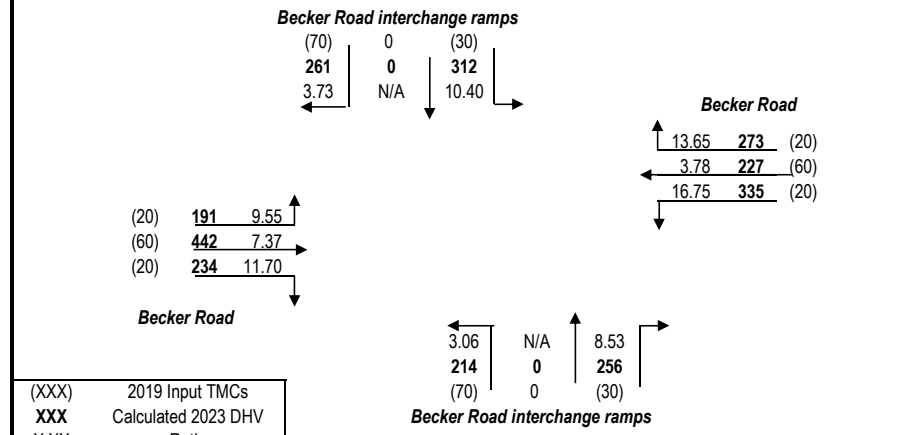
(XXX)	2019 Input TMCs
XXX	Calculated 2031 DHV
X.XX	Ratio

PROJECT TRAFFIC FOR Becker Road AT Becker Road interchange ramps

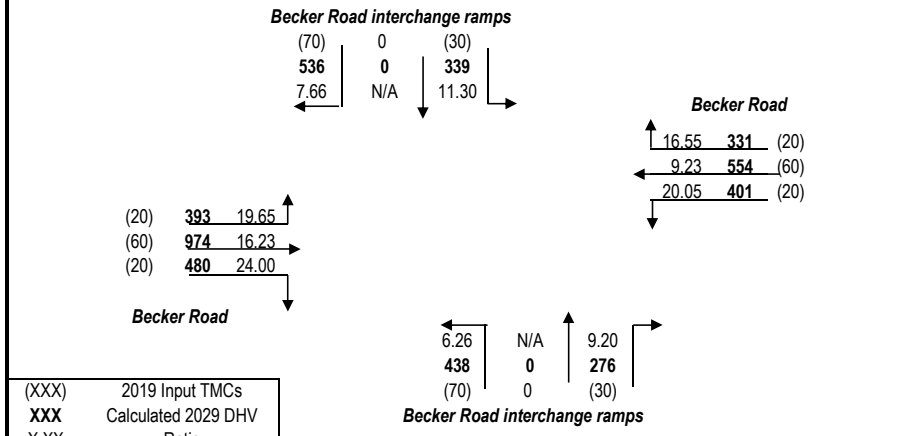
2019 INPUT TMCs COMPARED TO 2019 DHV



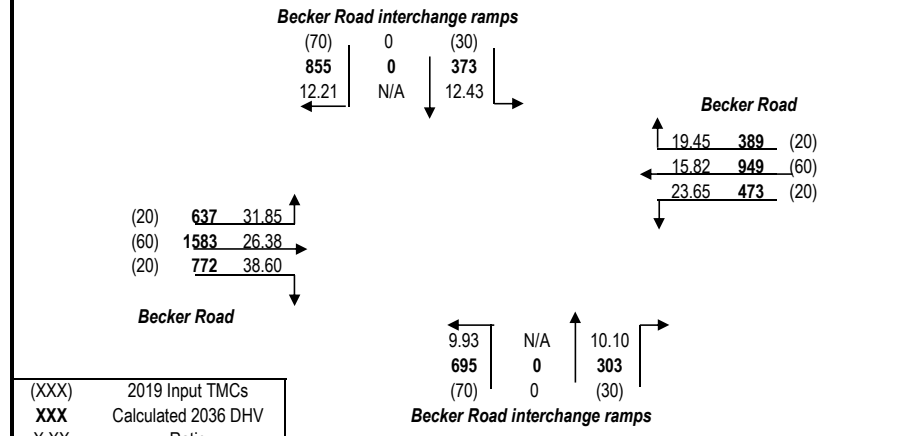
2019 INPUT TMCs COMPARED TO 2023 DHV



2019 INPUT TMCs COMPARED TO 2029 DHV

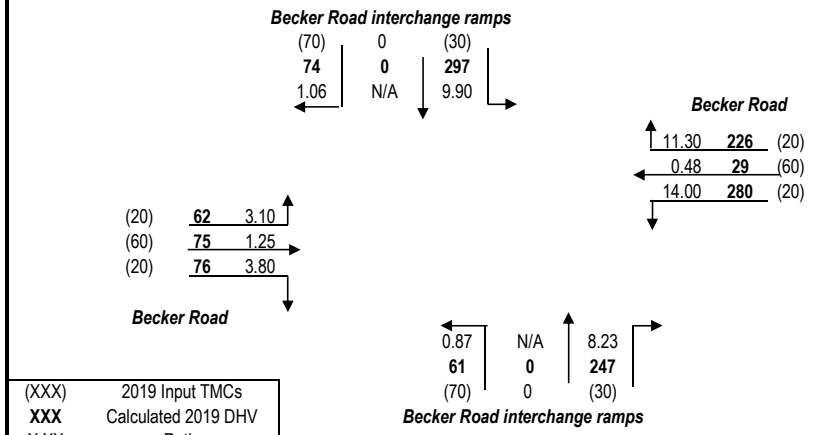


2019 INPUT TMCs COMPARED TO 2036 DHV



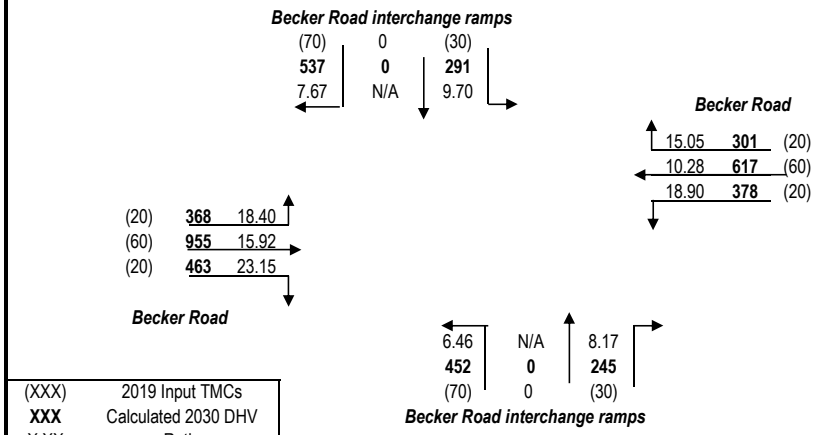
PROJECT TRAFFIC FOR Becker Road AT Becker Road interchange ramps

2019 INPUT TMCs COMPARED TO 2019 DHV



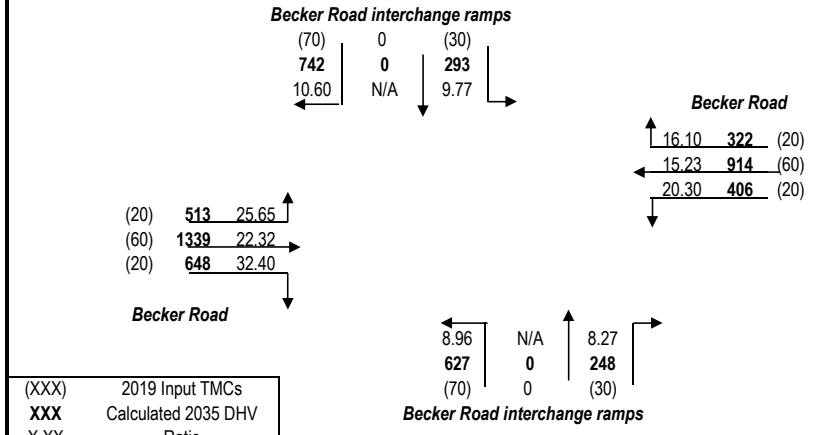
(XXX)	2019 Input TMCs
XXX	Calculated 2019 DHV
X.XX	Ratio

2019 INPUT TMCs COMPARED TO 2030 DHV



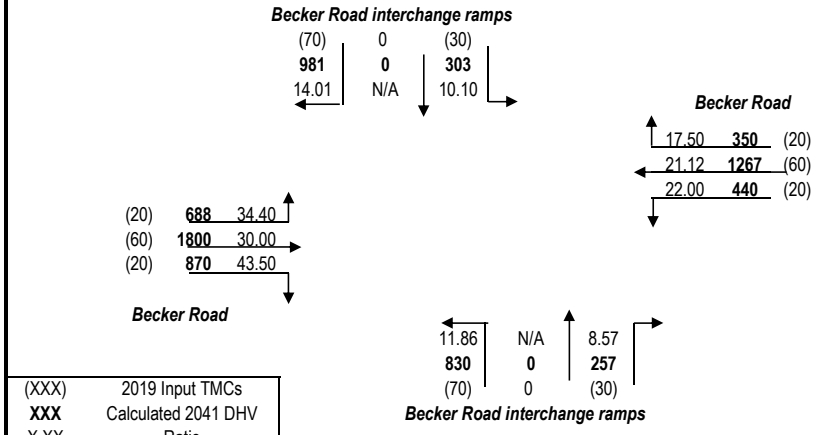
(XXX)	2019 Input TMCs
XXX	Calculated 2030 DHV
X.XX	Ratio

2019 INPUT TMCs COMPARED TO 2035 DHV



(XXX)	2019 Input TMCs
XXX	Calculated 2035 DHV
X.XX	Ratio

2019 INPUT TMCs COMPARED TO 2041 DHV



(XXX)	2019 Input TMCs
XXX	Calculated 2041 DHV
X.XX	Ratio

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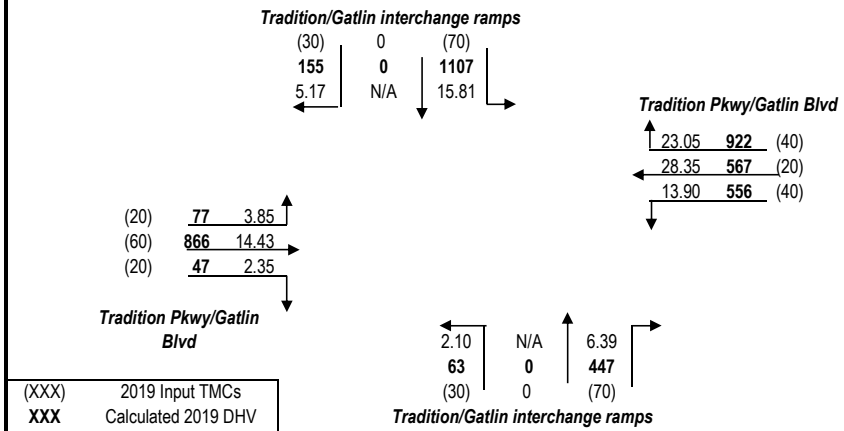
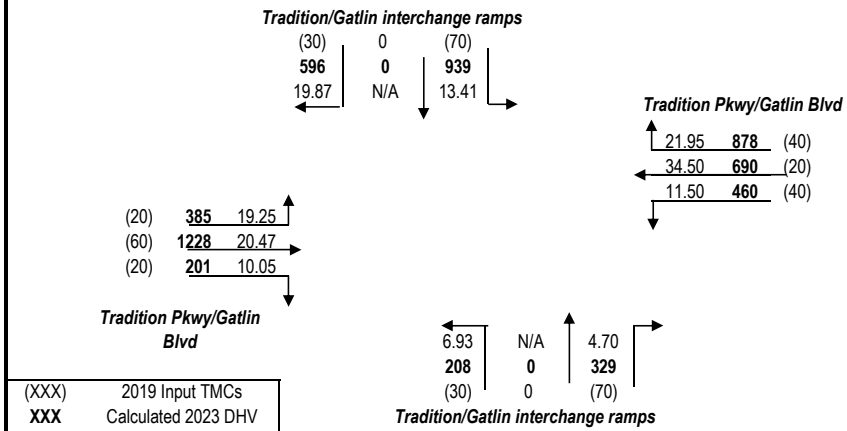
Project Traffic at Gatlin Boulevard/Tradition Parkway Interchange Ramps

PROJECT TRAFFIC FOR Tradition Pkwy/Gatlin Blvd AT Tradition/Gatlin interchange ramps

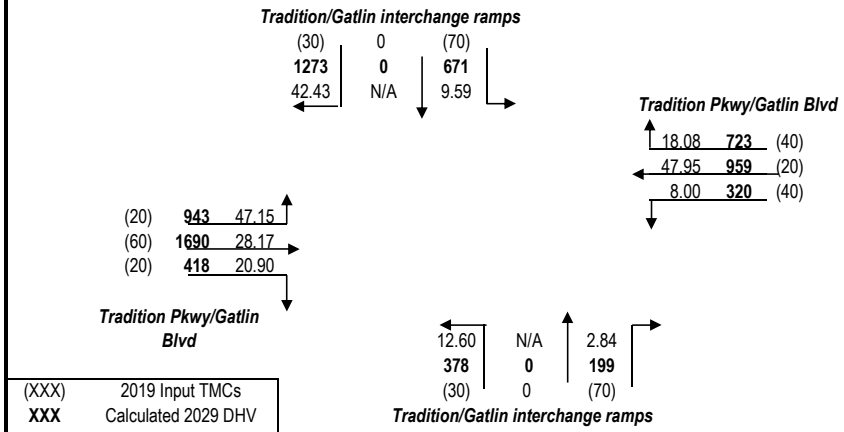
2019 INPUT TMCs COMPARED TO 2019 DHV



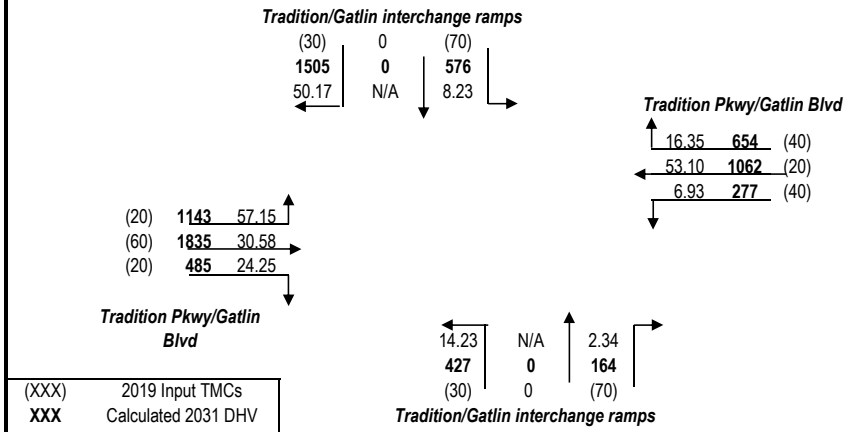
2019 INPUT TMCs COMPARED TO 2023 DHV



2019 INPUT TMCs COMPARED TO 2029 DHV

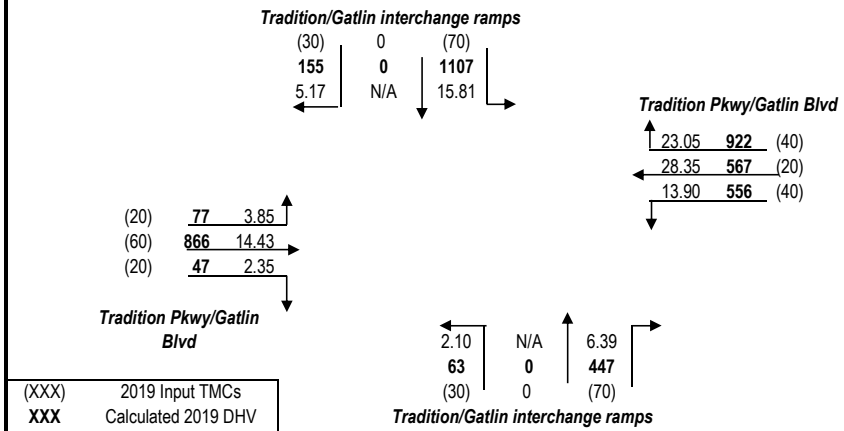


2019 INPUT TMCs COMPARED TO 2031 DHV

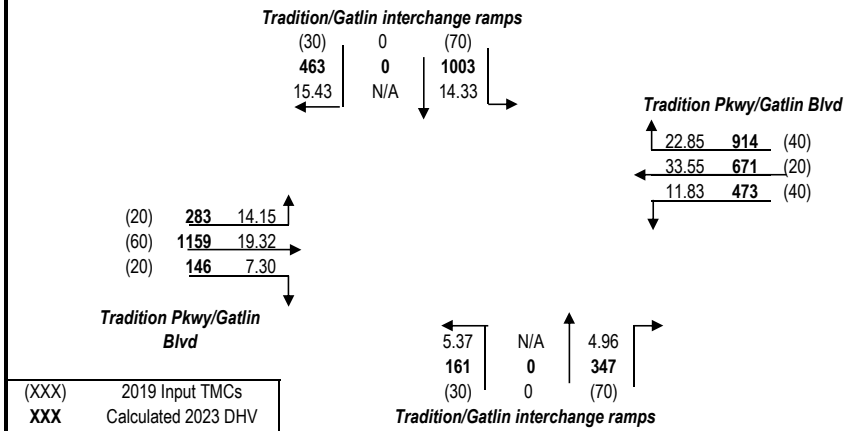


PROJECT TRAFFIC FOR Tradition Pkwy/Gatlin Blvd AT Tradition/Gatlin interchange ramps

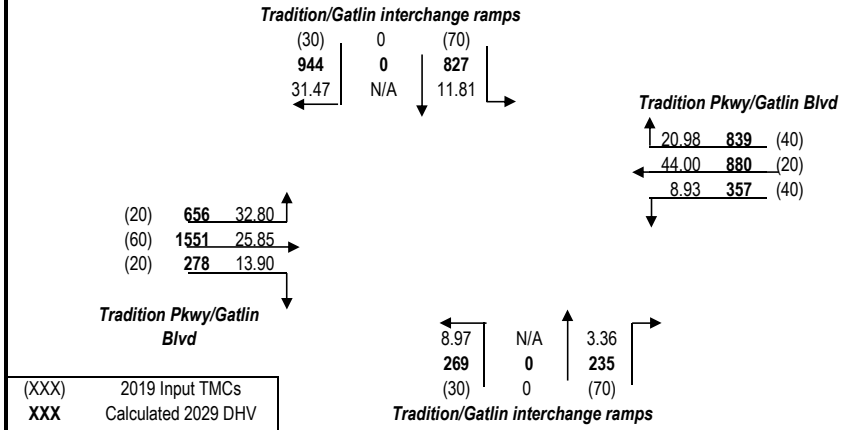
2019 INPUT TMCs COMPARED TO 2019 DHV



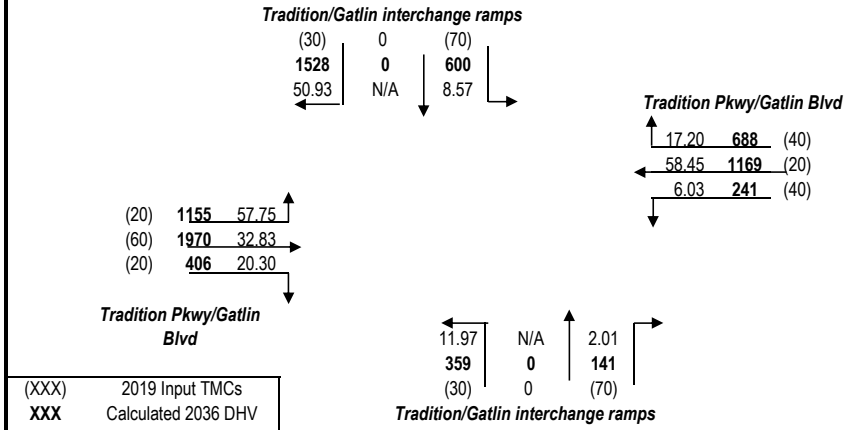
2019 INPUT TMCs COMPARED TO 2023 DHV



2019 INPUT TMCs COMPARED TO 2029 DHV

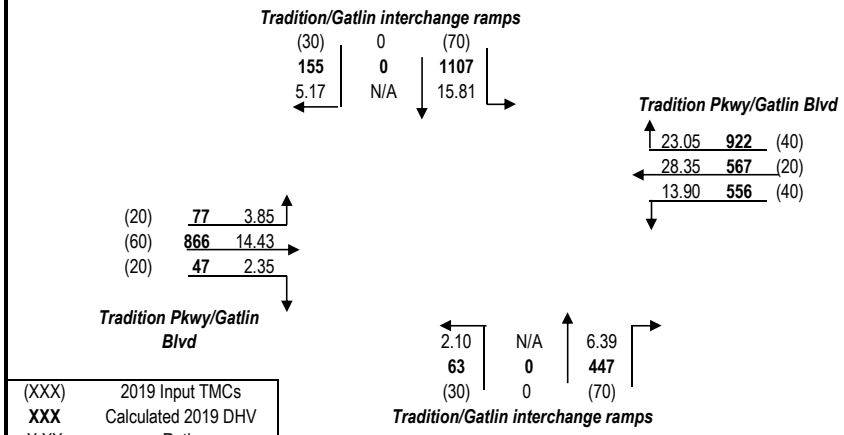


2019 INPUT TMCs COMPARED TO 2036 DHV

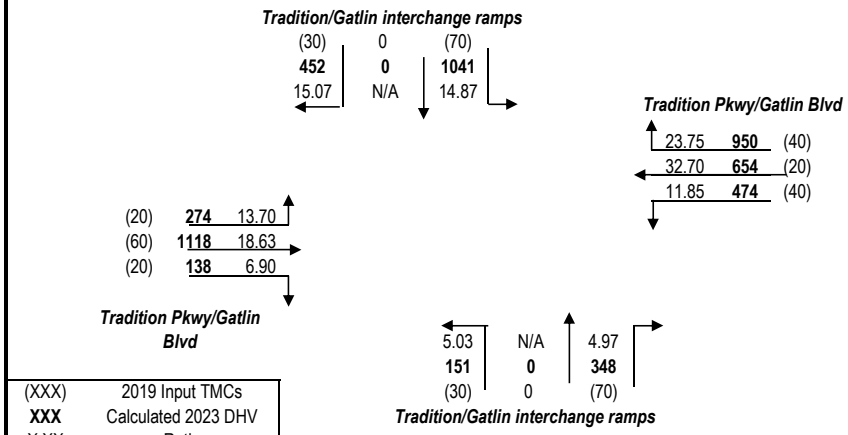


PROJECT TRAFFIC FOR Tradition Pkwy/Gatlin Blvd AT Tradition/Gatlin interchange ramps

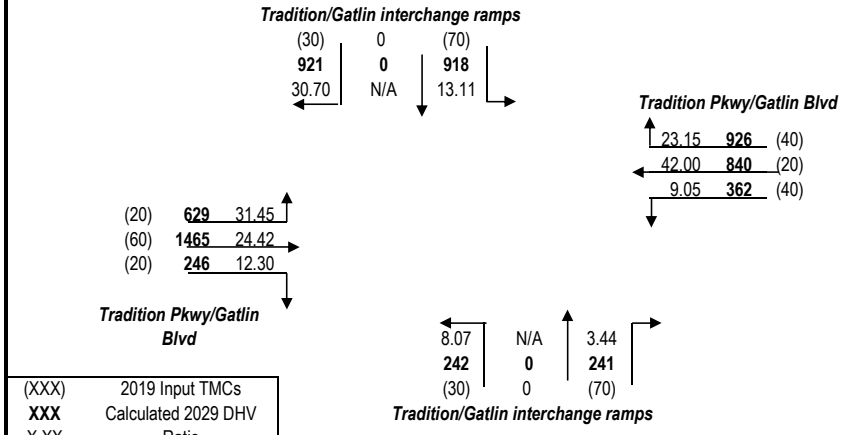
2019 INPUT TMCs COMPARED TO 2019 DHV



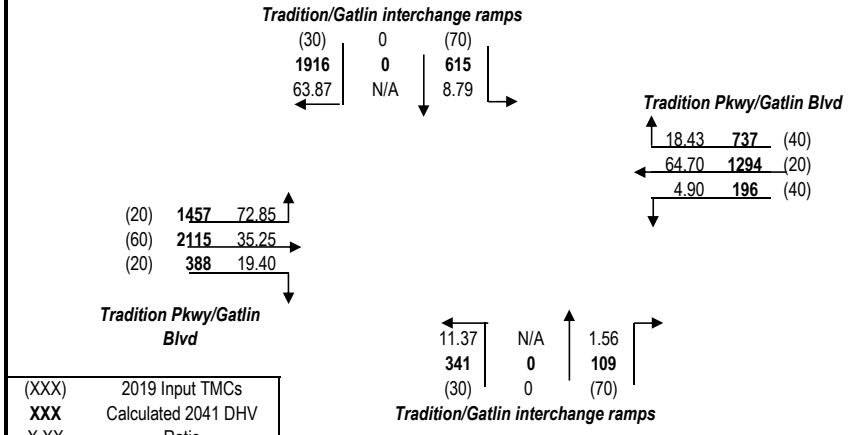
2019 INPUT TMCs COMPARED TO 2023 DHV



2019 INPUT TMCs COMPARED TO 2029 DHV



2019 INPUT TMCs COMPARED TO 2041 DHV



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Signal Timing at Gatlin Boulevard/Tradition Parkway & I-95 West

Station : 124 - Gatlin @ I-95 West (Upload File)

Phase [1.1.1]

	1	2 (WT)	3 (SL)	4	5 (WL)	6 (ET)	7	8 (SR)	9	10	11	12	13	14	15	16
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Ped Clearance	0	25	0	0	0	10	0	0	0	0	0	0	0	0	0	0
Min Green	7	10	7	7	7	10	7	7	5	5	5	5	5	5	5	5
Passage	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1
Max1	15	40	15	25	25	40	15	40	25	25	25	25	25	25	25	25
Max2	15	40	15	25	25	40	15	40	50	50	50	50	50	50	50	50
Yellow	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto Exit		ON				ON										
Rest In Walk																

Phase Option [1.1.2]

	1	2 (WT)	3 (SL)	4	5 (WL)	6 (ET)	7	8 (SR)	9	10	11	12	13	14	15	16
Enable		ON			ON	ON		ON								
Auto Entry				ON				ON								
Non Act1																
Non Act2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable																
Guar Passage																
Cond Service																
Add Init Calc																

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

Prepared By	Date Implemented	Reviewed By	Traffic Engineer

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Station : 124 - Gatlin @ I-95 West (Upload File)

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	OFF		3	10	OFF		STD8	4PH		OFF	ALARM				ON	OFF		OFF	OFF	OFF	1

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
124			OFF					

Port Parameters [6.2]

Comm	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	OFF	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifer Phases	Type	Green	Yellow	Red
Overlap 1	2		NORMAL		3.5	1.5
Overlap 2	4		NORMAL		3.5	1.5
Overlap 3	6		NORMAL		3.5	1.5
Overlap 4	8		NORMAL		3.5	1.5
Overlap 5			NORMAL		3.5	1.5
Overlap 6			NORMAL		3.5	1.5
Overlap 7			NORMAL		3.5	1.5
Overlap 8			NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases	Conflicting Overlaps	Conflicting Peds		
Overlap 1				OFF	OFF
Overlap 2				OFF	OFF
Overlap 3				OFF	OFF
Overlap 4				OFF	OFF
Overlap 5				OFF	OFF
Overlap 6				OFF	OFF
Overlap 7				OFF	OFF
Overlap 8				OFF	OFF

Detector, Vehicle Parameters 1-16 [5.1]

	1 (SL1)	2 (SR1)	3	4 (ET1)	5	6	7 (WL1)	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	1	2	3	4	5	6	7	8	0	0	0	0	0	0	0	0
Switch Phase	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Station : 124 - Gatlin @ I-95 West (Upload File)

Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1 (SL1)	2 (SR1)	3	4 (ET1)	5	6	7 (WL1)	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT	TX2_V14	ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1		1									1	1			
2		1		1							1	1			
3	1								1	1					
4	1		1						1	1					
5				1											
6		1		1											
7			1												
8	1		1												
9															
10															
11															
12															
13		1													
14	1														
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac								Detector								MMU	Diag
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
Present	ON	ON							ON								ON	
Peer to Peer																		

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8

Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

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Station : 124 - Gatlin @ I-95 West (Upload File)

Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
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48	
49	
50	
51	
52	
53	
54	
55	
56	

Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
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49	
50	
51	
52	
53	
54	
55	
56	

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON	ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell	ON	ON	ON	ON	ON	ON
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
40	20	VOT_MON	D-CONN

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
OFF	OFF

57		57	
58		58	
59		59	
60		60	
61		61	
62		62	
63		63	
64		64	

Alarms, Phases/Overlaps [1.4.2]

Auto Flash	1	2	3	4	5	6	7	8	9	10	11	12
Phases												
Overlaps												

Station : 124 - Gatlin @ I-95 West (Upload File)

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Coordination, Modes,+ [2.1]

Modes Modes+

Operational	Correct	Maximum	Force-Off
	SHRT/LNG	MAX INH	FLOAT

Mode	Leave Before	Leave After	Recycle	Stop In Walk	External	Auto Reset	Latch Sec Foff	Coord Easy Float	Yield Value	Coord NTCIP Yield Sign	Closed Loop Active	
FRC	TIMED	TIMED	P3478_INH	ON	OFF	OFF	OFF	OFF	0	+	OFF	OFF

Coordination, Pattern 1-16 [2.1]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	120	120	120			130	120	140								
Offset Time	58	43	87			60	71	80								
Split Number	1	2	3			6	7	8								
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn

Coordination, Pattern 17-32 [2.1]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn

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Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		92	28		61	31		28								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		77	43		29	48		43								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		63	57		17	46		57								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		91		39	39	52		39								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		77		43	29	48		43								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		72		68	19	53		68								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

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Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

Coord-Ph																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Station : 124 - Gatlin @ I-95 West (Upload File)

TB Coor, Advanced Scheduler [4.3]

	Month												Day of Week							Day of Month										1										2										3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4																																																	1
5																																																	1
6																																																	1
7																																																	1
8																																																	1
9																																																	1
10																																																	1
11																																																	1
12																																																	1
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27																																																	1
28																																																	1
29																																																	1
30																																																	1
31																																																	1
32																																																	1

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	10	15	19	21										
Minute																
Action	100	6	7	8	8	100										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	18													
Minute																
Action	100	7	100													

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		9	16													
Minute																
Action	100	7	100													

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Station : 124 - Gatlin @ I-95 West (Upload File)

Day Plan Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

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Station : 124 - Gatlin @ I-95 West (Upload File)

TB Coor, Action Table [4.5]

Action	Pattern	Aux 1	Aux 2	Aux 3	Special 1	Special 2	Special 3	Special 4	Special 5	Special 6	Special 7	Special 8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25	255											
26	1											
27	2											
28	3											
29	4											
30	5											
31	6											
32	7											
33	8											
34	9											
35	10											
36	11											
37	12											
38	13											
39	14											
40	15											
41	16											
42	17											
43	18											
44	19											
45	20											
46	21											
47	22											
48	23											
49	24											
50	100											
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63												
64												
99												
100	254											

MacKenzie
Engineering & Planning, Inc.

Signal Timing at Gatlin Boulevard/Tradition Parkway & I-95 East

Station : 27 - Gatlin @ I-95 East (Upload File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3	4 (NT)	5	6 (ET)	7 (NL)	8	9	10	11	12	13	14	15	16
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Ped Clearance	0	20	0	20	0	20	0	20	0	0	0	0	0	0	0	0
Min Green	7	10	7	7	7	10	7	7	5	5	5	5	5	5	5	5
Passage	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1
Max1	30	40	25	25	25	40	25	30	25	25	25	25	25	25	25	25
Max2	30	40	25	25	25	40	25	30	50	50	50	50	50	50	50	50
Yellow	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto Exit		ON				ON										
Rest In Walk																

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3	4 (NT)	5	6 (ET)	7 (NL)	8	9	10	11	12	13	14	15	16
Enable	ON	ON		ON		ON										
Auto Entry				ON				ON								
Non Act1																
Non Act2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable																
Guar Passage																
Cond Service																
Add Init Calc																

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

Prepared By	Date Implemented	Reviewed By	Traffic Engineer

Station : 27 - Gatlin @ I-95 East (Upload File)

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	OFF		3	10	OFF		STD8	4PH		OFF	ALARM				ON	OFF		OFF	OFF	OFF	1

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
27			OFF					

Port Parameters [6.2]

Comm	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	OFF	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1	2																NORMAL		3.5	1.5
Overlap 2	4																NORMAL		3.5	1.5
Overlap 3	6																NORMAL		3.5	1.5
Overlap 4	8																NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds									
Overlap 1																									OFF	OFF
Overlap 2																									OFF	OFF
Overlap 3																									OFF	OFF
Overlap 4																									OFF	OFF
Overlap 5																									OFF	OFF
Overlap 6																									OFF	OFF
Overlap 7																									OFF	OFF
Overlap 8																									OFF	OFF

Detector, Vehicle Parameters 1-16 [5.1]

	1	2	3 (EL1)	4 (ET1)	5 (NL1)	6 (NT1)	7	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	3	4	1	6	7	4	5	2	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1	2	3 (EL1)	4 (ET1)	5 (NL1)	6 (NT1)	7	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT	TX2_V14	ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1		1									1	1			
2		1		1							1	1			
3	1								1	1					
4	1		1						1	1					
5				1											
6		1		1											
7			1												
8	1		1												
9															
10															
11															
12															
13		1													
14	1														
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac								Detector								MMU	Diag
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
Present	ON	ON							ON								ON	
Peer to Peer																		

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8

Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

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Station : 27 - Gatlin @ I-95 East (Upload File)

Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
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Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
14	
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Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON	ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell	ON	ON	ON	ON	ON	ON
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
40	20	VOT_MON	D-CONN

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
OFF	OFF

57		57	
58		58	
59		59	
60		60	
61		61	
62		62	
63		63	
64		64	

Alarms, Phases/Overlaps [1.4.2]

Auto Flash	1	2	3	4	5	6	7	8	9	10	11	12
Phases												
Overlaps												

Station : 27 - Gatlin @ I-95 East (Upload File)

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Coordination, Modes,+ [2.1]

Modes Modes+

Operational	Correct	Maximum	Force-Off
	SHRT/LNG	MAX INH	FLOAT

Mode	Leave Before	Leave After	Recycle	Stop In Walk	External	Auto Reset	Latch Sec Foff	Coord Easy Float	Yield Value	Coord NTCIP Yield Sign	Closed Loop Active	
FRC	TIMED	TIMED	P3478_INH	ON	OFF	OFF	OFF	OFF	0	+	OFF	OFF

Coordination, Pattern 1-16 [2.1]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	120	120	120			130	120	140								
Offset Time	23	51	26			13	36	38								
Split Number	1	2	3			6	7	8								
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn

Coordination, Pattern 17-32 [2.1]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn

Station : 27 - Gatlin @ I-95 East (Upload File)

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	74		26		94	26									
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	28	62		30		90	30									
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	23	45		52		68	52									
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	23	83		24		106		24								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	23	73		24		96		24								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	31	59		50		90		50								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

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Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

Coord-Ph																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Station : 27 - Gatlin @ I-95 East (Upload File)

TB Coor, Advanced Scheduler [4.3]

	Month												Day of Week							Day of Month										1										2										3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4																																																	1
5																																																	1
6																																																	1
7																																																	1
8																																																	1
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29																																																	1
30																																																	1
31																																																	1
32																																																	1

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	10	15	19	21										
Minute																
Action	100	6	7	8	8	100										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	18													
Minute																
Action	100	7	100													

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		9	16													
Minute																
Action	100	7	100													

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Station : 27 - Gatlin @ I-95 East (Upload File)

Day Plan Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

City of Port St Lucie Timing Sheet 5/5/2020 9:39:18 AM

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TB Coor, Action Table [4.5]

Action	Pattern	Aux 1	Aux 2	Aux 3	Special 1	Special 2	Special 3	Special 4	Special 5	Special 6	Special 7	Special 8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25	255											
26	1											
27	2											
28	3											
29	4											
30	5											
31	6											
32	7											
33	8											
34	9											
35	10											
36	11											
37	12											
38	13											
39	14											
40	15											
41	16											
42	17											
43	18											
44	19											
45	20											
46	21											
47	22											
48	23											
49	24											
50	100											
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63												
64												
99												
100	254											

MacKenzie
Engineering & Planning, Inc.

Signal Timing at Becker Road & I-95 West

Station : 38 - Becker @ I-95 West (Upload File)

Phase [1.1.1]

	1	2 (WT)	3 (SL)	4	5 (WL)	6 (ET)	7	8 (SR)	9	10	11	12	13	14	15	16
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Ped Clearance	0	15	0	20	0	15	0	20	0	0	0	0	0	0	0	0
Min Green	7	10	7	7	7	10	7	7	5	5	5	5	5	5	5	5
Passage	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1
Max1	30	60	30	35	30	60	30	35	25	25	25	25	25	25	25	25
Max2	30	60	30	35	30	60	30	35	50	50	50	50	50	50	50	50
Yellow	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto Exit		ON				ON										
Rest In Walk																

Phase Option [1.1.2]

	1	2 (WT)	3 (SL)	4	5 (WL)	6 (ET)	7	8 (SR)	9	10	11	12	13	14	15	16
Enable		ON	ON		ON	ON										
Auto Entry				ON				ON								
Non Act1																
Non Act2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON			ON											
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable																
Guar Passage																
Cond Service																
Add Init Calc																

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

Prepared By	Date Implemented	Reviewed By	Traffic Engineer

Station : 38 - Becker @ I-95 West (Upload File)

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	OFF		3	10	OFF		STD8	4PH		OFF	ALARM				ON	OFF		OFF	OFF	OFF	1

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
38			OFF					

Port Parameters [6.2]

Comm	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	OFF	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1	2																NORMAL		3.5	1.5
Overlap 2	4																NORMAL		3.5	1.5
Overlap 3	6																NORMAL		3.5	1.5
Overlap 4	8																NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds									
Overlap 1																									OFF	OFF
Overlap 2																									OFF	OFF
Overlap 3																									OFF	OFF
Overlap 4																									OFF	OFF
Overlap 5																									OFF	OFF
Overlap 6																									OFF	OFF
Overlap 7																									OFF	OFF
Overlap 8																									OFF	OFF

Detector, Vehicle Parameters 1-16 [5.1]

	1 (SL1)	2 (SR1)	3	4 (ET1)	5	6	7 (WL1)	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	3	8	1	6	7	4	5	2	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1 (SL1)	2 (SR1)	3	4 (ET1)	5	6	7 (WL1)	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT	TX2_V14	ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1		1									1	1			
2		1		1							1	1			
3	1								1	1					
4	1		1						1	1					
5				1											
6		1		1											
7			1												
8	1		1												
9															
10															
11															
12															
13		1													
14	1														
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac								Detector								MMU	Diag
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
Present	ON	ON							ON								ON	
Peer to Peer																		

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8

Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

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Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
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53	
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55	
56	

Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
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56	

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON	ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell	ON	ON	ON	ON	ON	ON
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
40	20	VOT_MON	D-CONN

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
OFF	OFF

57		57	
58		58	
59		59	
60		60	
61		61	
62		62	
63		63	
64		64	

Alarms, Phases/Overlaps [1.4.2]

Auto Flash	1	2	3	4	5	6	7	8	9	10	11	12
Phases												
Overlaps												

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Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Coordination, Modes,+ [2.1]

Modes Modes+

Operational	Correct	Maximum	Force-Off
	SHRT/LNG	MAX INH	FLOAT

Mode	Leave Before	Leave After	Recycle	Stop In Walk	External	Auto Reset	Latch Sec Foff	Coord Easy Float	Yield Value	Coord NTCIP Yield Sign	Closed Loop Active	
FRC	TIMED	TIMED	P3478_INH	ON	OFF	OFF	OFF	OFF	0	+	OFF	OFF

Coordination, Pattern 1-16 [2.1]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	120	110	120													
Offset Time																
Split Number	1	2	3													
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn

Coordination, Pattern 17-32 [2.1]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn

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Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	50	15	40	15	50	15	40								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	40	15	40	15	40	15	40								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	50	15	40	15	50	15	40								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

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Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

Coord-Ph																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

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TB Coor, Advanced Scheduler [4.3]

	Month												Day of Week							Day of Month										1										2										3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4																																																		1
5																																																			1
6																																																			1
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30																																																			1
31																																																			1
32																																																			1

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	10	15	19	22										
Minute		30														
Action	100	1	2	3	4	100										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	18													
Minute																
Action	100	2	100													

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		9	16													
Minute																
Action	100	2	100													

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

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Day Plan Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

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TB Coor, Action Table [4.5]

Action	Pattern	Aux 1	Aux 2	Aux 3	Special 1	Special 2	Special 3	Special 4	Special 5	Special 6	Special 7	Special 8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25	255											
26	1											
27	2											
28	3											
29	4											
30	5											
31	6											
32	7											
33	8											
34	9											
35	10											
36	11											
37	12											
38	13											
39	14											
40	15											
41	16											
42	17											
43	18											
44	19											
45	20											
46	21											
47	22											
48	23											
49	24											
50	100											
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63												
64												
99												
100	254											

MacKenzie
Engineering & Planning, Inc.

Signal Timing at Becker Road & I-95 East

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Phase [1.1.1]

	1 (EL)	2 (WT)	3	4 (NR)	5	6 (ET)	7 (NL)	8	9	10	11	12	13	14	15	16
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Ped Clearance	0	15	0	20	0	15	0	20	0	0	0	0	0	0	0	0
Min Green	7	7	7	7	7	7	7	7	5	5	5	5	5	5	5	5
Passage	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1
Max1	30	50	30	35	30	50	35	35	25	25	25	25	25	25	25	25
Max2	30	50	30	35	30	50	35	35	50	50	50	50	50	50	50	50
Yellow	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto Exit		ON				ON										
Rest In Walk																

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3	4 (NR)	5	6 (ET)	7 (NL)	8	9	10	11	12	13	14	15	16
Enable	ON	ON				ON	ON									
Auto Entry				ON				ON								
Non Act1																
Non Act2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable																
Guar Passage																
Cond Service																
Add Init Calc																

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

Prepared By	Date Implemented	Reviewed By	Traffic Engineer

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Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	OFF		3	10	OFF		STD8	4PH		OFF	ALARM				ON	OFF		OFF	OFF	OFF	1

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
39			OFF					

Port Parameters [6.2]

Comm	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	OFF	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1	2																NORMAL		3.5	1.5
Overlap 2	4																NORMAL		3.5	1.5
Overlap 3	6																NORMAL		3.5	1.5
Overlap 4	8																NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds									
Overlap 1																									OFF	OFF
Overlap 2																									OFF	OFF
Overlap 3																									OFF	OFF
Overlap 4																									OFF	OFF
Overlap 5																									OFF	OFF
Overlap 6																									OFF	OFF
Overlap 7																									OFF	OFF
Overlap 8																									OFF	OFF

Detector, Vehicle Parameters 1-16 [5.1]

	1	2	3 (EL1)	4 (ET1)	5 (NL1)	6 (NR1)	7	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	3	8	1	6	7	4	5	2	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1	2	3 (EL1)	4 (ET1)	5 (NL1)	6 (NR1)	7	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	8	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT	TX2_V14	ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1		1									1	1			
2		1		1							1	1			
3	1								1	1					
4	1		1						1	1					
5				1											
6		1		1											
7			1												
8	1		1												
9															
10															
11															
12															
13		1													
14	1														
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac								Detector								MMU	Diag
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
Present	ON	ON							ON								ON	
Peer to Peer																		

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8

Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

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Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
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42	
43	
44	
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46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	

Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	ON
8	ON
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
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49	
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51	
52	
53	
54	
55	
56	

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON	ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell	ON	ON	ON	ON	ON	ON
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
40	20	VOT_MON	D-CONN

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
OFF	OFF

57		57	
58		58	
59		59	
60		60	
61		61	
62		62	
63		63	
64		64	

Alarms, Phases/Overlaps [1.4.2]

Auto Flash	1	2	3	4	5	6	7	8	9	10	11	12
Phases												
Overlaps												

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Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Coordination, Modes,+ [2.1]

Modes Modes+

Operational	Correct	Maximum	Force-Off
	SHRT/LNG	MAX INH	FLOAT

Mode	Leave Before	Leave After	Recycle	Stop In Walk	External	Auto Reset	Latch Sec Foff	Coord Easy Float	Yield Value	Coord NTCIP Yield Sign	Closed Loop Active	
FRC	TIMED	TIMED	P3478_INH	ON	OFF	OFF	OFF	OFF	0	+	OFF	OFF

Coordination, Pattern 1-16 [2.1]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	120	110	120													
Offset Time																
Split Number	1	2	3													
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn

Coordination, Pattern 17-32 [2.1]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn

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Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	50	15	40	15	50	15	40								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	40	15	40	15	40	15	40								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	50	15	40	15	50	15	40								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

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Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

Coord-Ph																

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

City of Port St Lucie Timing Sheet 5/5/2020 9:42:19 AM

Station : 39 - Becker @ I-95 East (Upload File)

TB Coor, Advanced Scheduler [4.3]

	Month												Day of Week							Day of Month										1										2										3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4																																																		1
5																																																			1
6																																																			1
7																																																			1
8																																																			1
9																																																			1
10																																																			1
11																																																			1
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25																																																			1
26																																																			1
27																																																			1
28																																																			1
29																																																			1
30																																																			1
31																																																			1
32																																																			1

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	10	15	19	22										
Minute		30														
Action	100	1	2	3	4	100										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	18													
Minute																
Action	100	2	100													

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		9	16													
Minute																
Action	100	2	100													

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Station : 39 - Becker @ I-95 East (Upload File)

Day Plan Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

City of Port St Lucie Timing Sheet 5/5/2020 9:42:19 AM

Station : 39 - Becker @ I-95 East (Upload File)

TB Coor, Action Table [4.5]

Action	Pattern	Aux 1	Aux 2	Aux 3	Special 1	Special 2	Special 3	Special 4	Special 5	Special 6	Special 7	Special 8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25	255											
26	1											
27	2											
28	3											
29	4											
30	5											
31	6											
32	7											
33	8											
34	9											
35	10											
36	11											
37	12											
38	13											
39	14											
40	15											
41	16											
42	17											
43	18											
44	19											
45	20											
46	21											
47	22											
48	23											
49	24											
50	100											
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63												
64												
99												
100	254											

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Appendix J

ITE Land Use 820 Pass-by Rate

Table E.9 (Cont'd) Pass-By and Non-Pass-By Trips Weekday, PM Peak Period
Land Use Code 820—Shopping Center

SIZE (1,000 SQ. FT. GLA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIP (%)			ADJ. STREET PEAK HOUR VOLUME	AVERAGE 24-HOUR TRAFFIC	SOURCE
						PRIMARY	DIVERTED	TOTAL			
237	W. Windsor Twp, NJ	Winter 1988/89	—	4:00–6:00 p.m.	48	—	—	52	—	46,000	Booz Allen & Hamilton
242	Willow Grove, PA	Winter 1988/89	—	4:00–6:00 p.m.	37	—	—	63	—	26,000	McMahon Associates
297	Whitehall, PA	Winter 1988/89	—	4:00–6:00 p.m.	33	—	—	67	—	26,000	Orth-Rodgers & Assoc. Inc.
360	Broward Cnty., FL	Winter 1988/89	—	4:00–6:00 p.m.	44	—	—	56	—	73,000	McMahon Associates
370	Pittsburgh, PA	Winter 1988/89	—	4:00–6:00 p.m.	19	—	—	81	—	33,000	Wilbur Smith
150	Portland, OR	—	519	4:00–6:00 p.m.	68	6	26	32	—	25,000	Kittelson and Associates
150	Portland, OR	—	655	4:00–6:00 p.m.	65	7	28	35	—	30,000	Kittelson and Associates
760	Calgary, Alberta	Oct.-Dec. 1987	15,436	4:00–6:00 p.m.	20	39	41	80	—	—	City of Calgary DOT
178	Bordentown, NJ	Apr. 1989	154	2:00–6:00 p.m.	35	—	—	65	—	37,980	Raymond Keyes Assoc.
144	Manalapan, NJ	July 1990	176	3:30–6:15 p.m.	32	44	24	68	—	69,347	Raymond Keyes Assoc.
549	Natick, MA	Feb. 1989	—	4:45–5:45 p.m.	33	26	41	67	—	48,782	Raymond Keyes Assoc.

Average Pass-By Trip Percentage: 34
"—" means no data were provided

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Appendix K

Martin County Traffic Volumes

Martin County 2019 Roadway Level of Service Inventory Report

Road Name	From	To	Type	Generalized Service Capacity	2019 Average Annual Daily Traffic	2019 Peak Hour Directional Volume	2019 Generalized LOS	Avg. Annual Growth Rate
Baker Rd	SR-5	CR-723	Class II: 2-Ln Undivided	750	5,349	243	C	1.8%
Berry Ave	Golden Bear Wy	CR-714	Class II: 2-Ln Undivided	750	3,487	177	C	1.3%
Berry Ave	CR-714	Sunset Tr	Class II: 2-Ln Undivided	750	1,809	97	C	0.5%
Britt Rd	Pine Lake Dr	SR-5	Class II: 2-Ln Undivided	750	4,565	212	C	0.6%
Citrus Blvd.	CR-714 (Martin Hwy)	Port St. Lucie Blvd.	Transitional 2-Ln Uninter /Undivided Flow	1200	5,391	469	C	7.0%
Commerce Ave	Salerno Rd	Monroe St	Class II: 2-Ln Undivided	750	6,156	393	D	3.1%
Commerce Ave	Monroe St	Indian St	Class II: 2-Ln Undivided	750	6,704	366	C	0.7%
Country Club Dr	Palm Beach County	Island Way	Class II: 2-Ln Undivided	750	2,827	134	C	0.5%
Country Club Dr	Island Way	Little Club Dr	Class II: 2-Ln Undivided	750	3,512	159	C	1.9%
County Line Rd	Little Club Dr	SR-5	Class II: 2-Ln Undivided	750	2,703	124	C	2.9%
Cove Rd	SR-76	Willoughby Blvd	Class I: 2-Ln Undivided	880	13,855	749	C	1.5%
Cove Rd	Willoughby Blvd	SR-5	Class I: 2-Ln Undivided	880	15,446	699	C	0.9%
Cove Rd	SR-5	CR-A1A	Class II: 2-Ln Undivided	750	13,161	586	D	2.5%
Cove Rd	CR-A1A	End	2-Ln Undivided Non-State	675	5,739	322	C	1.7%
CR-609 (Allapattah Rd)	SR-710	CR-714	Uninterrupted Rural Hwy: 2-Ln Undivided	740	1,892	109	A/B	3.5%
CR-609 (Allapattah Rd)	CR-714	St Lucie County	Uninterrupted Rural Hwy: 2-Ln Undivided	740	1,786	88	A/B	2.9%
CR-707 (Beach Rd)	Palm Beach County	CR-708	2-Ln Undivided Non-State	675	1,782	116	C	1.4%
CR-707 (Dixie Hwy)	CR-723/CR-707	CR-707 (Indian River Dr)	Class II: 2-Ln Undivided	750	5,383	235	C	0.8%
CR-707 (Indian River Dr)	CR-707 (Dixie Hwy)	CR-707A (Jensen Beach Blvd.)	2-Ln Undivided Non-State	675	10,521	601	D	0.5%
CR-707 (Indian River Dr)	CR-707A	SR-732	Class II: 2-Ln Undivided	750	6,007	336	C	8.0%
CR-707 (Indian River Dr)	SR-732	St. Lucie County	2-Ln Undivided Non-State	675	6,615	351	D	8.0%

effective K&D

(469/5391) =

0.087

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB) and Murphy Rd (PM/NB).

Effective March 13, 2020

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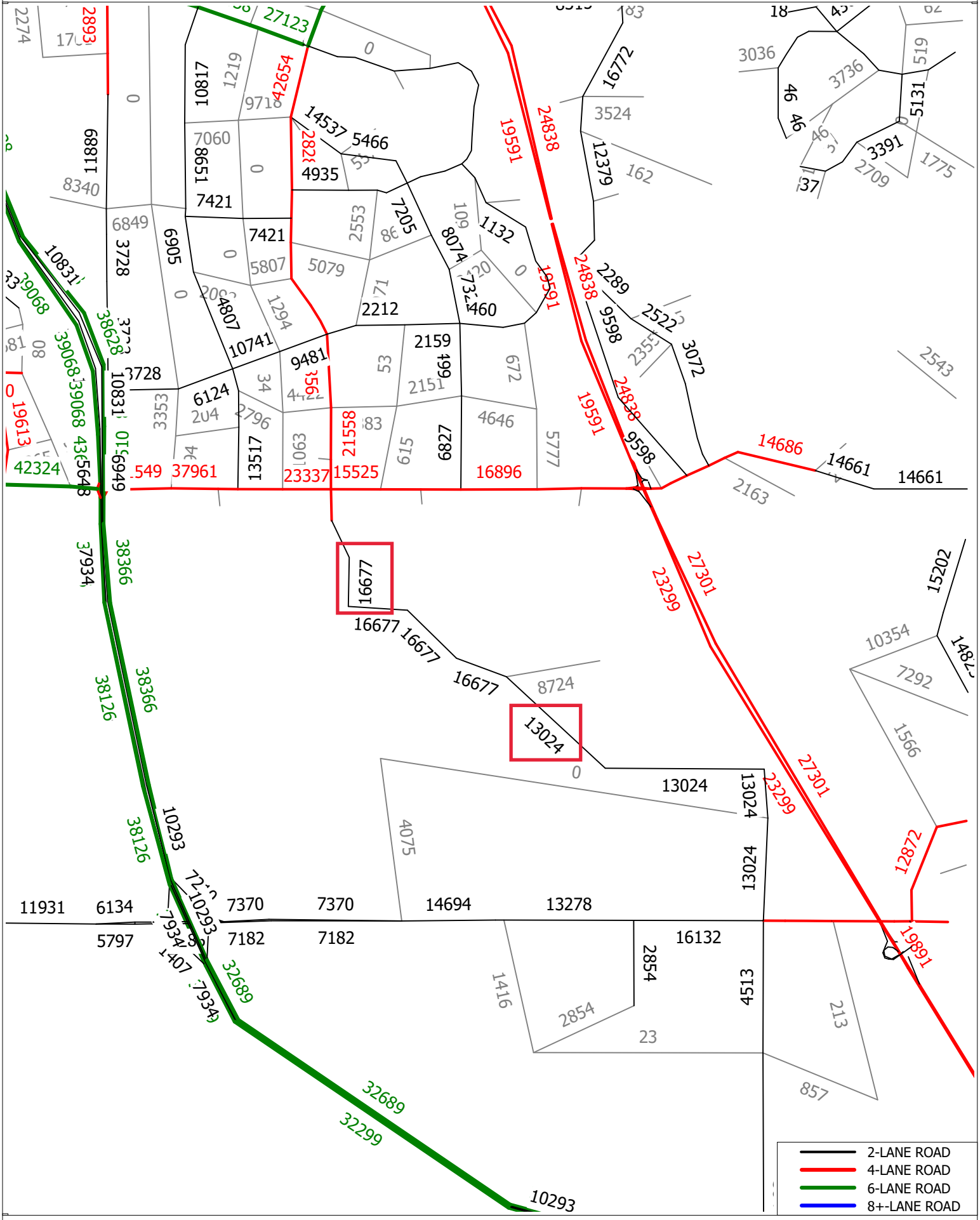
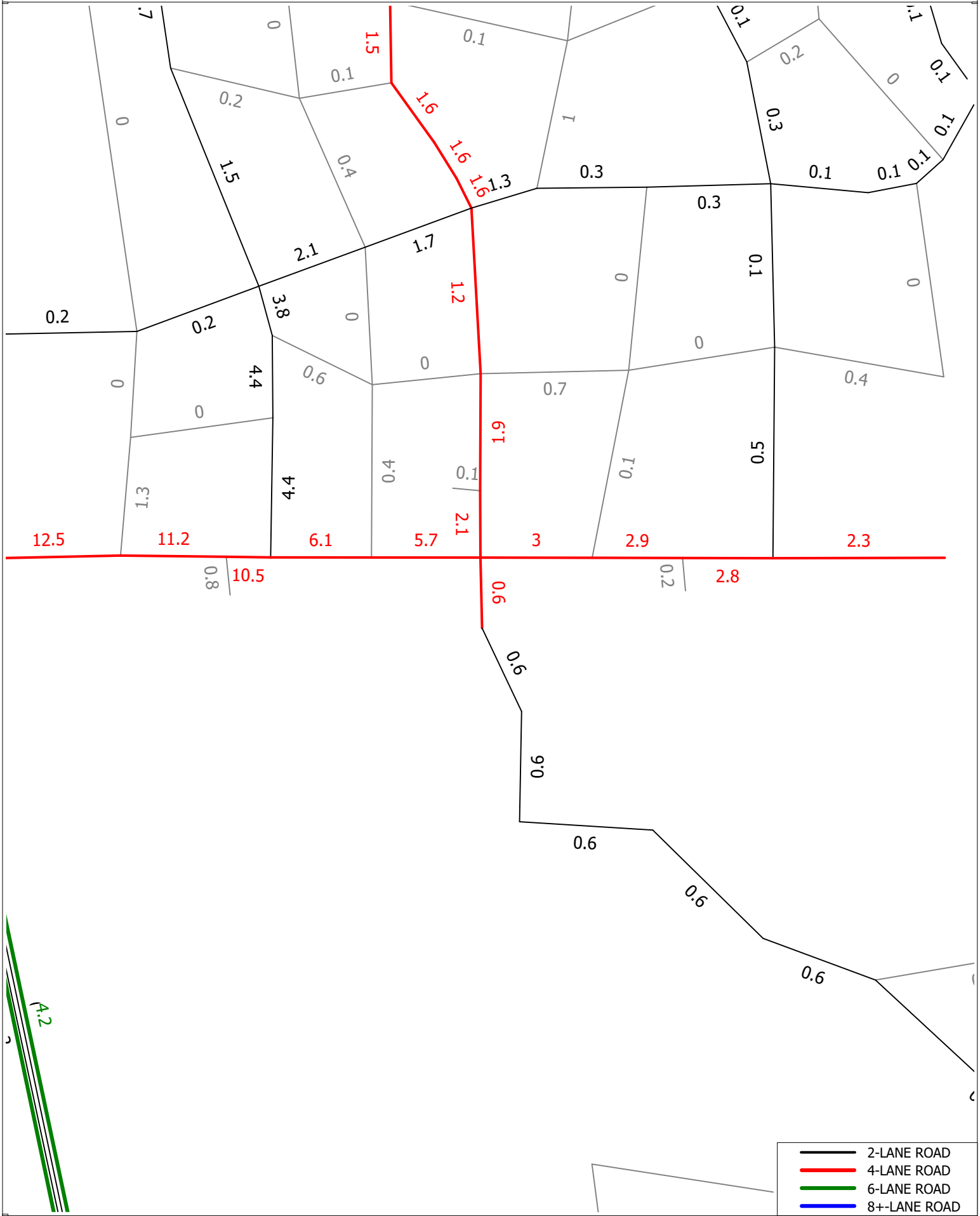
Appendix L

Citrus Boulevard Analysis Volumes

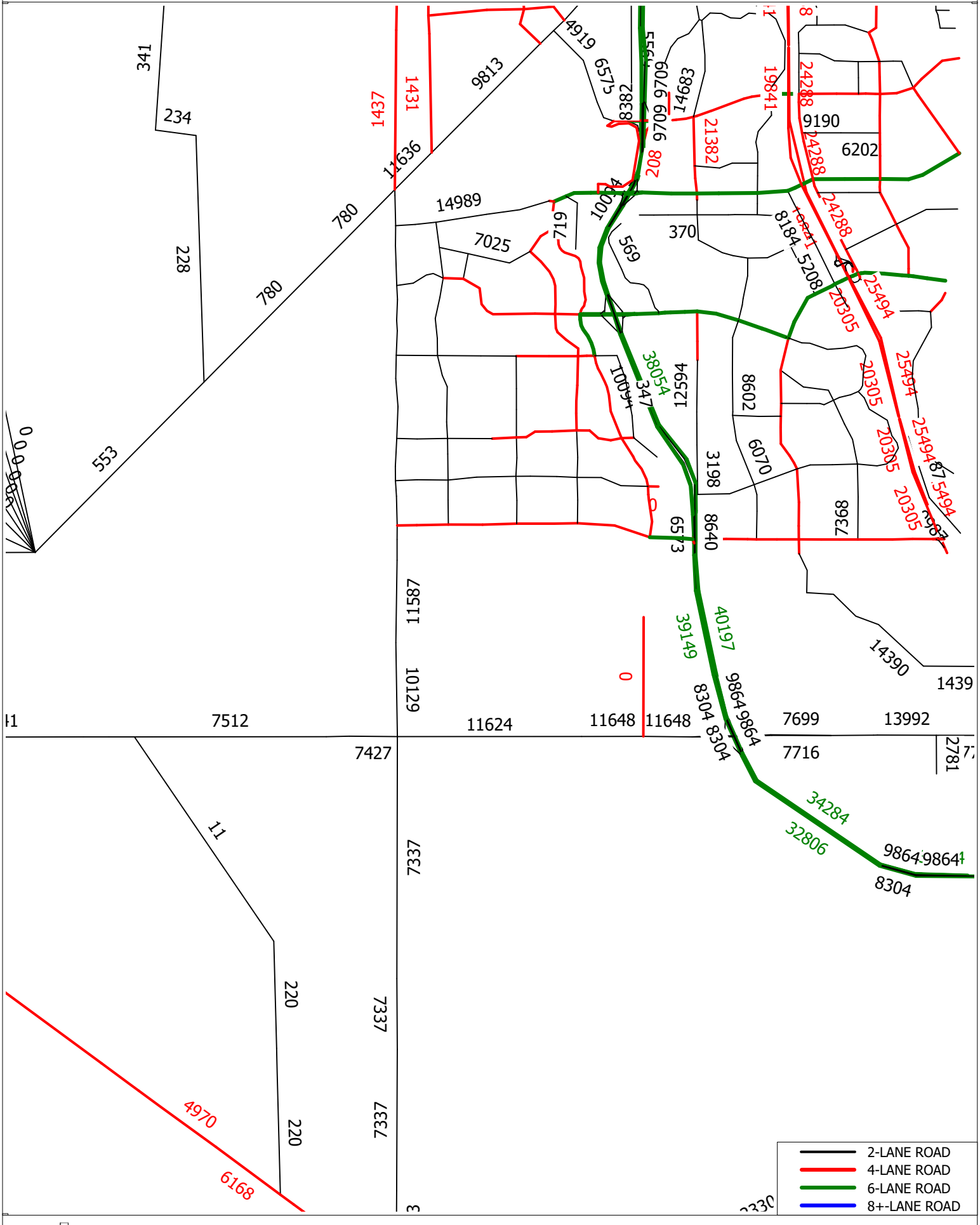
PHASE 2 DAILY MODEL VOLUMES



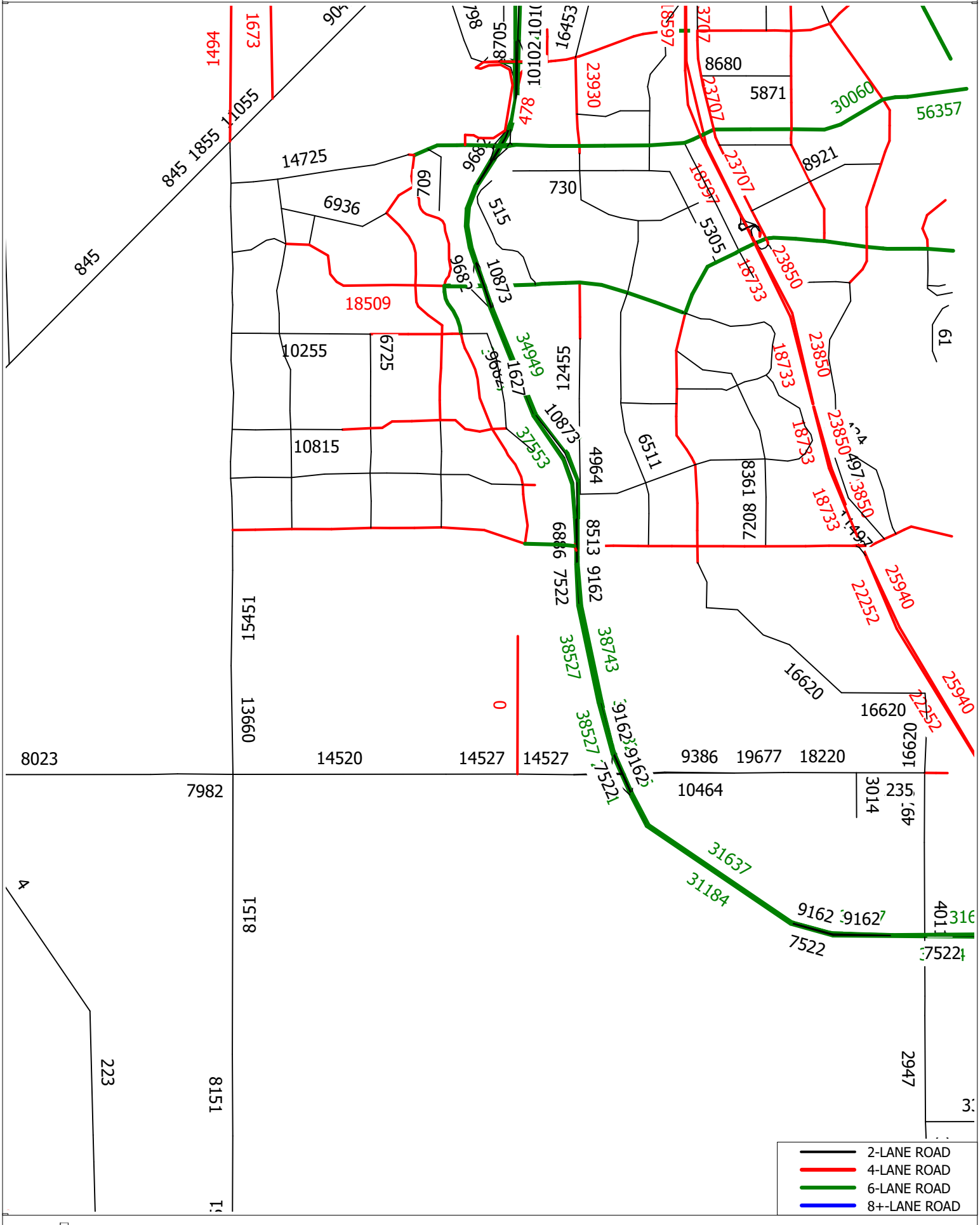
PHASE 2 ASSIGNMENT (%)



2035 DAILY TRAFFIC VOLUME



2040 ROAD LANEAGE - PROPOSED



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Appendix M

Trade-Off Matrix

SOUTHERN GROVE TRADE-OFF AND CONVERSION MATRIX

TO			Residential SF Unit	Residential MF Unit	Hotel Unit	1000 SF Industrial	1000 SF Office	1000 SF Retail	Hospital Bed	1000SF Warehouse	Age Restricted SF Unit	Age Restricted MF Unit	1000 SF R & D
	ITE Code		210	221	310	130	710	820	610	150	251	252	760
From		PM Total Trip Rate	0.99	0.44	0.60	0.4	1.15	3.81	1.89	0.19	0.3	0.26	0.49
Residential SF Unit	210	0.99	1.00	2.25	1.65	2.48	0.86	0.26	0.52	5.21	3.30	3.81	2.02
Residential MF Unit	221	0.44	0.44	1.00	0.73	1.10	0.38	0.12	0.23	2.32	1.47	1.69	0.90
Hotel Unit	310	0.60	0.61	1.36	1.00	1.50	0.52	0.16	0.32	3.16	2.00	2.31	1.22
1000 SF Industrial	130	0.4	0.40	0.91	0.67	1.00	0.35	0.10	0.21	2.11	1.33	1.54	0.82
1000 SF Office	710	1.15	1.16	2.61	1.92	2.88	1.00	0.30	0.61	6.05	3.83	4.42	2.35
1000 SF Retail	820	3.81	3.85	8.66	6.35	9.53	3.31	1.00	2.02	20.05	12.70	14.65	7.78
Hospital Bed	610	1.89	1.91	4.30	3.15	4.73	1.64	0.50	1.00	9.95	6.30	7.27	3.86
1000SF Warehouse	150	0.19	0.19	0.43	0.32	0.48	0.17	0.05	0.10	1.00	0.63	0.73	0.39
Age Restricted SF Unit	251	0.3	0.30	0.68	0.50	0.75	0.26	0.08	0.16	1.58	1.00	1.15	0.61
Age Restricted MF Unit	252	0.26	0.26	0.59	0.43	0.65	0.23	0.07	0.14	1.37	0.87	1.00	0.53
1000 SF R & D	760	0.49	0.49	1.11	0.82	1.23	0.43	0.13	0.26	2.58	1.63	1.88	1.00

Example 1: Convert 10,000 SF of Office to Industrial

10,000 SF Office x 2.88 = 28,800 SF Industrial

Example 2: Convert 40 Hotel Rooms to Warehouse

40 Hotel Rooms x 3.16 = 126.4 (1,000 SF) Warehouse = 126,400 SF Warehouse

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Appendix N

2005 WESTERN ANNEXATION
TRAFFIC STUDY TRIP GENERATION
(ORIGINAL WATS APPENDIX C)

APPENDIX C

TRIP GENERATION

MTP Group, Inc.
12798 Forest Hill Boulevard, Suite 303
Wellington, FL 33414-4704
Phone: (561) 795-0678 Telefax: (561) 795-0230
http://www.mtpgroup.net

Western Annexation Study
Port St. Lucie
Daily Trip Generation

TAZ 387

Land Use	Amount		ITE	Trip Generation Rate/Equation	Trip Generation
Single Family	-	d.u.	210	LN(T)=0.92*LN(X)+2.71	-
Multi-Family	-	d.u.	230	LN(T)=0.85*LN(X)+2.55	-
Hotel	-	rooms	310	8.92	-
Industrial	-	s.f.	110	6.97	-
Commercial	-	s.f.	820	LN(T)=0.65*LN(X)+5.83	-
Service	-	s.f.	710	LN(T)=0.77*LN(X)+3.65	-
Civic	-	s.f.	*	54.51	-
Institutional	-	s.f.	**	30.49	-
School	-	Students	-	-	-
Park	-	Acres	412	2.28	-
				Total	-
				Residential	-
				Non-Residential	-

TAZ 388

Land Use	Amount		ITE	Trip Generation Rate/Equation	Trip Generation
Single Family	476	d.u.	210	LN(T)=0.92*LN(X)+2.71	4,369
Multi-Family	-	d.u.	230	LN(T)=0.85*LN(X)+2.55	-
Hotel	-	rooms	310	8.92	-
Industrial	-	s.f.	110	6.97	-
Commercial	-	s.f.	820	LN(T)=0.65*LN(X)+5.83	-
Service	-	s.f.	710	LN(T)=0.77*LN(X)+3.65	-
Civic	-	s.f.	*	54.51	-
Institutional	-	s.f.	**	30.49	-
School	-	Students	-	-	-
Park	5.0	Acres	412	2.28	11
				Total	4,380
				Residential	4,369
				Non-Residential	11

TAZ 380

Land Use	Amount		ITE	Trip Generation Rate/Equation	Trip Generation
Single Family	-	d.u.	210	LN(T)=0.92*LN(X)+2.71	-
Multi-Family	-	d.u.	230	LN(T)=0.85*LN(X)+2.55	-
Hotel	-	rooms	310	8.92	-
Industrial	-	s.f.	110	6.97	-
Commercial	-	s.f.	820	LN(T)=0.65*LN(X)+5.83	-
Service	-	s.f.	710	LN(T)=0.77*LN(X)+3.65	-
Civic	-	s.f.	*	54.51	-
Institutional	-	s.f.	**	30.49	-
School	-	Students	-	-	-
Park	-	Acres	412	2.28	-
				Total	-
				Residential	-
				Non-Residential	-

Western Annexation Study
Port St. Lucie
PM Trip Generation

TAZ 387

Land Use	Amount		ITE	Trip Generation Rate/Equation	Trip Generation	IN	OUT
Single	-	d.u.	210	LN(T)=0.90*LN(X)+0.53	-	-	-
Multi-Family	-	d.u.	230	LN(T)=0.82*LN(X)+0.32	-	-	-
Hotel	-	rooms	310	0.70	-	-	-
Industrial	-	s.f.	110	0.98	-	-	-
Commercial	-	s.f.	820	LN(T)=0.66*LN(X)+3.40	-	-	-
Service	-	s.f.	710	1.49	-	-	-
Civic	-	s.f.	*	5.45	-	-	-
Institutional	-	s.f.	**	3.05	-	-	-
School	-	Students	-	-	-	-	-
Park	-	Acres	412	0.06	-	-	-
				Total	-	-	-
				Residential	-	-	-
				Non-Residential	-	-	-

TAZ 388

Land Use	Amount		ITE	Trip Generation Rate/Equation	Trip Generation	IN	OUT
Single	476	d.u.	210	LN(T)=0.90*LN(X)+0.53	437	275	162
Multi-Family	-	d.u.	230	LN(T)=0.82*LN(X)+0.32	-	-	-
Hotel	-	rooms	310	0.70	-	-	-
Industrial	-	s.f.	110	0.98	-	-	-
Commercial	-	s.f.	820	LN(T)=0.66*LN(X)+3.40	-	-	-
Service	-	s.f.	710	1.49	-	-	-
Civic	-	s.f.	*	5.45	-	-	-
Institutional	-	s.f.	**	3.05	-	-	-
School	-	Students	-	-	-	-	-
Park	5.0	Acres	412	0.06	-	-	-
				Total	437	275	162
				Residential	437	275	162
				Non-Residential	-	-	-

TAZ 380

Land Use	Amount		ITE	Trip Generation Rate/Equation	Trip Generation	IN	OUT
Single	-	d.u.	210	LN(T)=0.90*LN(X)+0.53	-	-	-
Multi-Family	-	d.u.	230	LN(T)=0.82*LN(X)+0.32	-	-	-
Hotel	-	rooms	310	0.70	-	-	-
Industrial	-	s.f.	110	0.98	-	-	-
Commercial	-	s.f.	820	LN(T)=0.66*LN(X)+3.40	-	-	-
Service	-	s.f.	710	1.49	-	-	-
Civic	-	s.f.	*	5.45	-	-	-
Institutional	-	s.f.	**	3.05	-	-	-
School	-	Students	-	-	-	-	-
Park	-	Acres	412	0.06	-	-	-
				Total	-	-	-
				Residential	-	-	-
				Non-Residential	-	-	-

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Appendix O

DRI Annual Traffic Report
DRI Exhibit E
Trip Generation Rates & Equations
including Internal and Pass-By Capture

DRI EXHIBIT E

Southern Grove Development of Regional Impact
Trip Generation/Pass-By Rates and Equations

PM PEAK HOUR TRIP GENERATION RATES AND EQUATIONS:			
Land Use	ITE Code	Unit	Trip Generation Rate/Equation
Single-Family Residential	[210]	d.u.	Ln(T) = 0.96*Ln(X) + 0.20; (63% in)
Multi-Family Residential	[221]	d.u.	Ln(T) = 096*Ln(X) - 0.63; (61% in)
Age-Restricted Single-Family	[251]	d.u.	Ln(T) = 0.78*Ln(X) + 0.28; (61% in)
Age-Restricted Multi-Family	[252]	d.u.	T = 0.24*(X) + 2.26; (55% in)
Hotel	[310]	rooms	T = 0.60*(X); (51% in)
Industrial	[130]	s.f.	T = 0.40*(X/1000); (21% in)
Commercial Retail	[820]	s.f.	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)
Service & Office	[710]	s.f.	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)
Research & Development	[760]	s.f.	T = 0.49*(X); (15% in)
Hospital	[610]	beds	T = 2.08*(X) - 104.00; (28% in)
Civic Use[(1)]	na	s.f.	T = 5.45*(X/1000); (50% in)
Institutional Use[(2)]	na	s.f.	T = 3.05*(X/1000); (40% in)
Park	[412]	acres	T = 0.06*(X); (41% in)
K-8 School	[522]	students	T = 0.17*(X); (49% in)
Congregate Care Facility	[253]	d.u.	T = 0.05*(X) + 2.13; (60% in)
Assisted Living Facility	[254]	beds	T = 0.19*(X); (63% in)

Notes:

(1) Civic uses include libraries, governmental buildings, cultural buildings or other uses of public and social importance

(2) Institutional uses include daycare facilities, places of worship, lodges, fraternal organizations and ALFs

PASS-BY CAPTURE PERCENTAGES	
Commercial Retail	34% PASS-BY

Notes:

The applicable pass-by percentage idenfitied in the table above shall be applied to the external retail trips.
External trips are equal to the gross trips minus an applicable TAZ internal capture.

DRI EXHIBIT E
Southern Grove Development of Regional Impact
Internal Capture Details

TABLE 1	
Internal Capture Percentages between Various Uses within the Same Development	
Category	**Internal Capture Percentage**
from Residential to Office // to Office from Residential	1% // 1%
from Office to Residential // to Residential from Office	2% // 3%
from Residential to Commercial // to Commercial from Residential	38% // 9%
from Commercial to Resident ial // to Residential from Commercial	11% // 33%
from Residential to Industrial // to Industrial from Residential	1% // 1%
from Industrial to Residential // to Residential from Industrial	2% // 1%
from Residential to Civic/Inst. // to Civic/Inst. from Residential	2% // 20%
from Civic/Inst. to Residential // to Residential from Civic/Inst.	20% // 2%
from Residential to Hotel // to Civic/Inst. from Hotel	1% // 1%
from Hotel to Residential // to Residential from Hotel	1% // 1%
from Office to Commercial // to Commercial from Office	22% // 4%
from Commercial to Office // to Office from Commercial	3% // 15%
from Office to Industrial // to Industrial from Office	2% // 2%
from lndustrial to Office // to Office from Industrial	2% // 2%
from lndustrial to Hotel // to Hotel from Industrial	1% // 1%
from Hotel to Industrial // to Industrial from Hotel	1% // 1%
from Office to Civic/Inst. // to Civic/Inst. from Office	1% // 5%
from Civic/Inst. to Office / / to Office from Civic/Inst.	5% // 1%
from Commercial to Civic/Inst. // to Civic/Inst. from Commercial	2% // 20%
from Civic/Inst. to Commercial // to Commercial from Civic/Inst.	15% // 2%
from Commercial to lndustrial // to Industrial from Commercial	3% // 15%
from Industrial to Commercial // to Commercial from Industrial	22% // 4%
from Civic/Inst. to Industrial // to Industrial from Civic/Inst .	1% // 1%
from lndustrial to Civic/Inst. // to Civic/Inst. from Industrial	1% // 1%
from Hotel to Office // to Office from Hotel	5% // 1%
from Office to Hotel // to Hotel from Office	5% // 10%
from Hotel to Commercial // to Commercial from Hotel	15% // 10%
from Commercial to Hotel // to Hotel from Commercial	10% // 33%
from Hotel to Civic/Inst. // to Civic/Inst. from Hotel	1% // 1%
from Civic/Inst. to Hotel // to Hotel from Civic/Inst.	1% // 1%
from Hotel to Hospital // to Hospital from Hotel	5% // 1%
from Hospital to Hotel // to Hotel from Hospital	5% // 10%

Internal Capture Percentages between Various Uses within the Same Development	
Category	**Internal Capture Percentage**
from Hotel to R&D // to R&D from Hotel	5% // 1%
from R&D to Hotel // to Hotel from R&D	5% // 10%
from R&D to Civic/Inst. // to Civic/Inst. from R&D	1% // 5%
from Civic/Inst . to R&D // to R&D from Civic/ Inst.	5% // 1%
from R&D to Office // to Office from R&D	2% // 2%
from Office to R&D // to R&D from Office	2% // 2%
from R&D to Commercial // to Commercial from R&D	15% // 3%
from Commercial to R&D // to R&D from Commercial	4% // 22%
from R&D to Hospital // to Hospital from R&D	2% // 2%
from Hospital to R&D // to R&D from Hospital	2% // 2%
from R&D to Residential // to Residential from R&D	2% // 3%
from Residential to R&D // to R&D from Residential	1% // 1%
from R&D to Industrial // to Industrial from R&D	2% // 2%
from Industrial to R&D // to R&D from Industrial	2% // 2%
from Hospital to Commercial // to Commercial from Hospital	15% // 3%
from Commercial to Hospital // to Hospital fromCommercial	4% // 22%
from Hospital to Office // to Office from Hospital	2% // 2%
from Office to Hospital // to Hospital from Office	2% // 2%
from Hospital to Civic/Inst. // to Civic/Inst. from Hospital	1% // 5%
from Civic/Inst. to Hospital // to Hospital from Civic/Inst.	5% // 1%
from School to Office // to Office from School	2% // 1%
from Office to School // to School from Office	1% // 2%
from School to Residential // to Residential fromSchool	50% // 3%
from Residential to School // to School from Residential	5% // 50%
from School to Commercial // to Commercial from School	5% // 2%
from Commercial to School // to School from Commercial	2% // 5%
from School to Civic/Inst. // to Civic/Inst. from School	1% // 1%
from Civic/Inst. to School // to School fromCivic/Inst .	1% // 1%

TABLE 2	
Internal Capture Percentages between Various Areas within Southern Grove	
Category	**Internal Capture Percentage**
Phase 1 (Up to 3,172 net external PM peak hour trips)	8.5%
Phase 2 (Up to 8,361 net external PM peak hour trips)	14.7%
Phase 3 (Up to 9,326 net external PM peak hour trips)	20.6%
Phase 4 (Up to 14,718 net external PM peak hour trips)	24.4%

ADDITIONAL NOTES:

1. Table 1 percentages are for application between uses proposed within a single TAZ (i.e. one development within Southern Grove)
2. Table 2 percentages are for application between different development area (TAZs) within Southern Grove (i.e. interaction between multiple Southern Grove developments)

DRI EXHIBIT E

Example 1:

Proposed Uses = 200 Hotel Rooms
40,000 SF of Retail Use
120,000 SF of Office Use
200,000 SF of R&D
10,000 SF of Institutional Use

PM PEAK HOUR TRIP GENERATION RATES AND EQUATIONS:

Land Use	Intensity	ITE Code	Unit	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Hotel	200	[310]	rooms	T = 0.60*(X); (51% in)	120	61	59
Commercial Retail	40,000	[820]	s.f.	Ln(T) = 0.74*Ln(X/1000) + 2.89; (48% in)	276	132	144
Service & Office	120,000	[710]	s.f.	Ln(T) = 0.95*Ln(X/1000) + 0.36; (16% in)	135	22	113
Research & Development	200,000	[760]	s.f.	T = 0.49*(X); (15% in)	98	15	83
Institutional Use	10,000	na	s.f.	T = 3.05*(X/1000); (40% in)	31	12	19
				Total Gross Trips =	660	242	418
				Total Gross Non-Residential Trips =	660	242	418
				Internal Capture % among TAZ =	16.97%	-	-
				Internal Capture trips among TAZ =	112	56	56
				Retail Pass-by Trips =	79	38	41
				Net New PM Peak Hour TAZ Trips =	469	148	321
				DRI Internal Capture between TAZs* =	69	35	34
				Final Net New PM Peak Hour Trips =	400	113	287

* Southern Grove is in Phase 2 in the example and therefore has a 14.7% internal capture rate

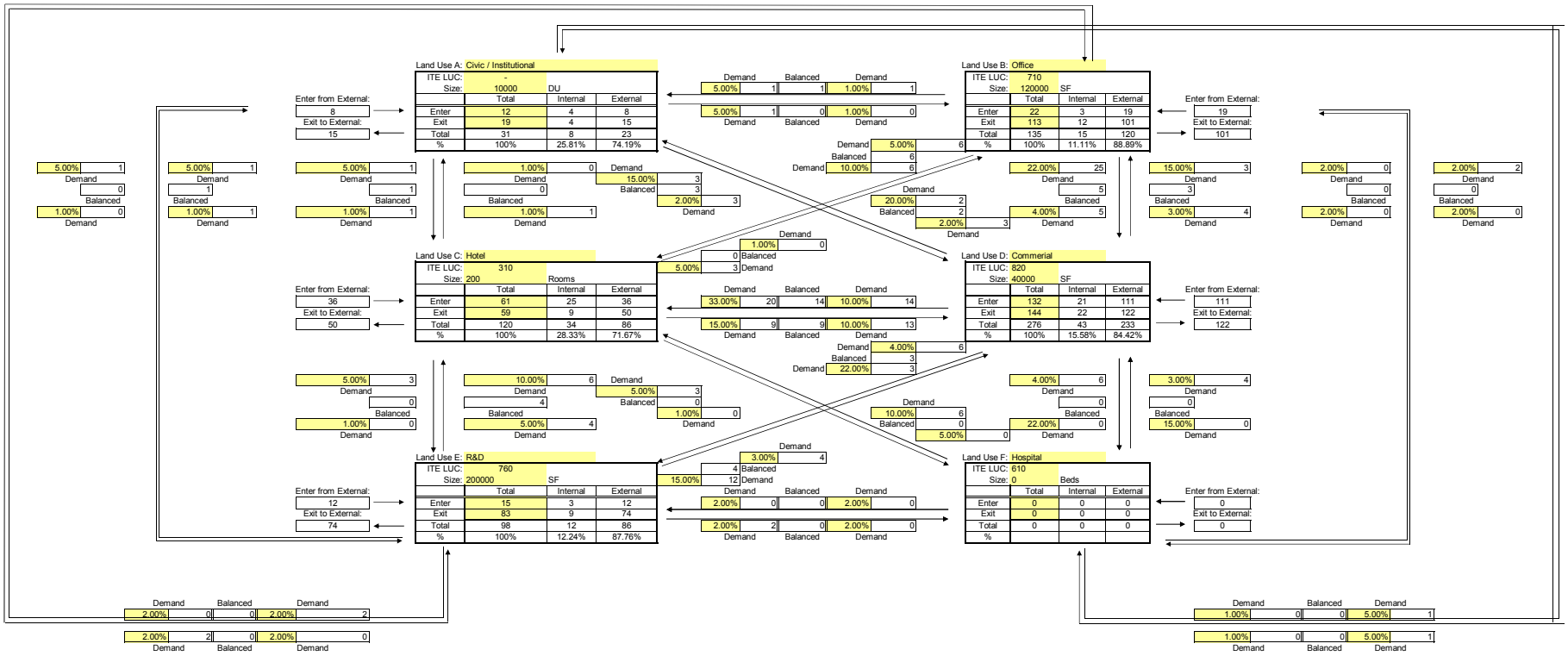
PASS-BY TRIPS	Total	In	Out
Gross Retail Trips	276	132	144
Retail Internal Capture Trips **	43	21	22
Net Retail Trips	233	111	122
Retail Pass-by Trips (34% Pass-by Rate)	79	38	41

**(from internal capture matrices)

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date:

Project Number:
Task Number:
Project Name: Southern Grove
Scenario: Example Internal Capture
DRI EXHIBIT E



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

Category	Land Use A Inst	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	8	19	36	111	12	0	186
Exit	15	101	50	122	74	0	362
Total	23	120	86	233	86	0	**548**
Single Use Trip Gen Estimate	31	135	120	276	98	0	**660**
	25.81%	11.11%	28.33%	15.58%	12.24%	0.00%	

Internal Capture = 16.97%