NOTICE OF PROPOSED CHANGE
TRAFFIC ANALYSIS

Southern Grove DRI
Port St. Lucie, FL

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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, Rangeline Road to the west, Tradition Parkway/Gatlin Boulevard to the north, and the St. Lucie County/Martin County Line to the south. The buildout of the project, which is proposed to be completed by the end of 2040, will consist of 1,907 single family dwelling units, 3,691 multi family dwelling units, 1,370 single family age-restricted dwelling units, 791 hotel rooms, 4,583,336 square feet of industrial park, 3,675,075 square feet of commercial retail, 2,430,728 square feet of service & office, 2,498,602 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 (3200 students), an independent living facility (420 units), and an assisted living facility (150 beds). The proposed development will be divided into four phases with phase buildout dates of 2025, 2030, 2035, and 2040. The proposed development program and phasing for the Southern Grove DRI are summarized in Table 1.

Table 1. Proposed Development Program and Phasing

Land Use	Unit	Phase 1 2025	Phase 2 2030	Phase 3 2035	Phase 4 2040	Total
Single Family	DUs	883	1,024	0	0	1,907
Multi Family	DUs	1,438	2,253	0	0	3,691
Single Family Age-Restricted	DUs	700	670	0	0	1,370
Multi Family Age-Restricted	DUs	0	0	0	0	0
Hotel	Rooms	250	301	240	0	791
Industrial Park	SF	450,000	1,411,112	1,361,112	1,361,112	4,583,336
Commercial Retail	SF	181,595	1,493,480	1,000,000	1,000,001	3,675,075
Service & Office	SF	404,060	639,516	693,576	693,576	2,430,728
Research & Development	SF	715,000	727,867	527,867	527,868	2,498,602
Hospital	Beds	180	120	0	0	300
Civic Use	SF	0	0	25,157	16,770	41,927
Institutional Use	SF	0	54,424	109,095	112,831	276,350
Park	Acres	80	0	0	0	80
K-8 School	Students	0	3,200	0	0	3,200
Independent Living Facility	Beds	420	0	0	0	420
Assisted Living	Beds	150	0	0	0	150

Table 2. Proposed Cumulative Development Program and Phasing

Land Use	Unit	Phase 1 2025	Phase 2 2030	Phase 3 2035	Phase 4 2040
Single Family	DUs	883	1,907	1,907	1,907
Multi Family	DUs	1,438	3,691	3,691	3,691
Single Family Age-Restricted	DUs	700	1,370	1,370	1,370
Multi Family Age-Restricted	DUs	0	0	0	0
Hotel	Rooms	250	551	791	791
Industrial Park	SF	450,000	1,861,112	3,222,224	4,583,336
Commercial Retail	SF	181,595	1,675,075	2,675,075	3,675,075
Service & Office	SF	404,060	1,043,576	1,737,152	2,430,728
Research & Development	SF	715,000	1,442,867	1,970,734	2,498,602
Hospital	Beds	180	300	300	300
Civic Use	SF	0	0	25,157	41,927
Institutional Use	SF	0	54,424	163,519	276,350
Park	Acres	80	80	80	80
K-8 School	Students	0	3,200	3,200	3,200
Independent Living Facility	Beds	420	420	420	420
Assisted Living	Beds	150	150	150	150

HISTORY

The Western Annexation Traffic Study (WATS) was completed in 2005. The traffic study identified regional transportation improvements necessary to support the maximum development anticipated from the Wilson Groves, Western Grove, Southern Grove, and Riverland DRIs. Transportation conditions were developed for each DRI based on significance and adversity. These conditions are reflected within the Southern Grove DRI Development Order (DO).

OWNERSHIP CHANGE

Southern Grove was acquired by Mattamy Homes and the Government Finance Corporation. The phasing of the development has been modified based on the new applicant's buildout schedule and reflects property sales and development activity.

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, 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:

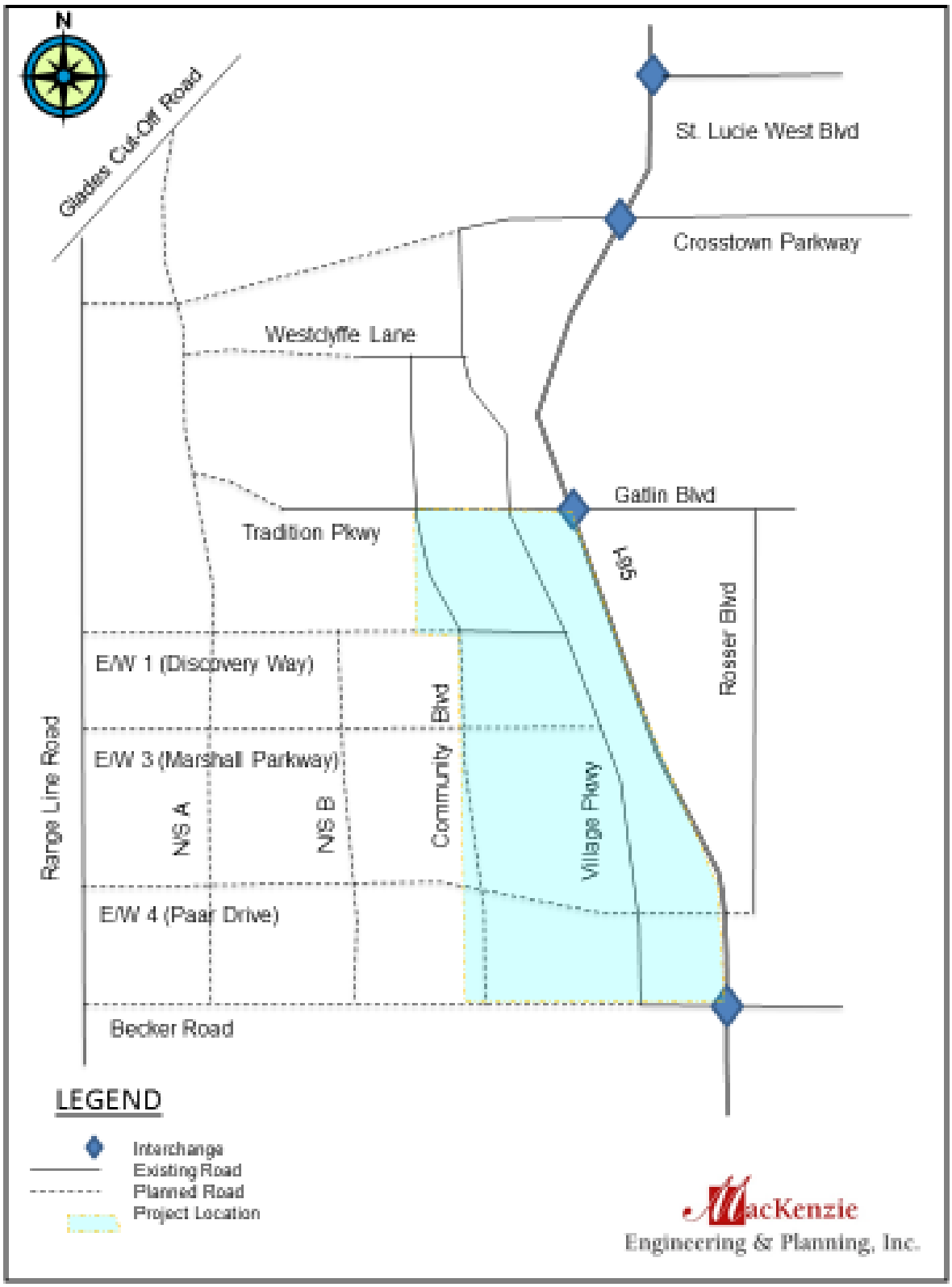
North: Crosstown Parkway

South: Becker Road

East: I-95

West: Rangeline Road

Figure 1. Site Location 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 3. Specific programmed improvement details are located in Appendix C.

Table 3. Programmed Improvements

Roadway	Limits	Improvement	Funding Agency	Year
Gatlin Blvd & I-95		SB – Add 3 SBL 3 SBR	FDOT	2023
Gatlin Blvd & I-95		NB – Add 3NBL 2 NBR	FDOT	2023
Port St. Lucie Blvd	Paar Drive to S. of Alcantarra Blvd	4-Laning	FDOT	2025
Port St. Lucie Blvd	Alcantarra Blvd to Darwin Blvd	4-Laning	FDOT	2022
St. Lucie West Blvd	Commerce Center Dr to E. of I-95	4/5 Laning & Ramp Improvements	FDOT	2022
SR 714	Citrus Boulevard to Martin Downs Blvd	4-Laning	FDOT	2022

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 4. Specific programmed improvement details are located in Appendix D.

Table 4. 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.

PROPOSED CHANGES

Buildout Extension

An extension is not being requested. The current DRI buildout date is 2040 pursuant to Resolution 20-R05.

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

No land use changes are being proposed. However, the DRI proposes to that 1,370 single-family dwelling units will be age restricted which will lowers the trip generation potential of the DRI. The DRI is also adding a 420-unit independent living facility and 150 bed

assisted living facility. The 150 bed assisted living facility is an exempt DRI use, but the traffic impact from the project is included in the analysis. The 420 unit independent living facility is counted as dwelling units for purposes of entitlement tracking, but has reduced trip generation compared to a single family home.

TRIP GENERATION

Trip generation for the DRI is based on Institute of Transportation Engineering's (ITE) manual, *Trip Generation Manual (8th Edition)* consistent with the DRI development Order. Additionally, the study uses trip generation rates for Single Family Age Restricted (ITE Land Use 251), Congregate Care (ITE Land Use 253) and Assisted Living Facility (ITE Land Use 254) published in the Institute of Traffic Engineers' (ITE) report, *Trip Generation (10th Edition)*, which are new uses in the DRI.

Table 5. Proposed Cumulative Development Program and Phasing

Land Use	Unit	Phase 1 2025	Phase 2 2030	Phase 3 2035	Phase 4 2040
Single Family	DUs	883	1,907	1,907	1,907
Multi Family	DUs	1,438	3,691	3,691	3,691
Single Family Age-Restricted	DUs	700	1,370	1,370	1,370
Multi Family Age-Restricted	DUs	0	0	0	0
Hotel	Rooms	250	551	791	791
Industrial Park	SF	450,000	1,861,112	3,222,224	4,583,336
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Hospital	Beds	180	300	300	300
Civic Use	SF	0	0	25,157	41,927
Institutional Use	SF	0	54,424	163,519	276,350
Park	Acres	80	80	80	80
K-8 School	Students	0	3,200	3,200	3,200
Independent Living Facility	Beds	420	420	420	420
Assisted Living	Beds	150	150	150	150

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%

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	25.5%

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 9-14 and detailed in the 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 (2025 - Phase 1 Land Use)

DRI	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
Southern Grove	51,093	4,770	46,323	3,077	43,246	3,676	39,570

Table 9. PM Peak Hour Trip Generation (2025 - Phase 1 Land Use)

DRI	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	
	in	out	in	out	in	out	in	out		in	out	in	out
Southern Grove	2,155	2,929	213	213	144	144	1,798	2,572	8.5%	186	186	1,612	2,386

Table 10. Daily Trip Generation (2030 - Phase 2 Land Use)

DRI	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
Southern Grove	172,233	24,934	147,299	17,704	129,595	19,050	110,545

Table 11. PM Peak Hour Trip Generation (2030 - Phase 2 Land Use)

DRI	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	
	in	out	in	out	in	out	in	out		in	out	in	out
Southern Grove	7,531	9,742	1,132	1,132	852	852	5,547	7,758	14.7%	978	978	4,569	6,780

Table 12. Daily Trip Generation (2035 - Phase 3 Land Use)

DRI	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
Southern Grove	230,893	37,304	193,589	24,685	168,904	34,794	134,110

Table 13. PM Peak Hour Trip Generation (2035 – Phase 3 Land Use)

DRI	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	
	in	out	in	out	in	out	in	out		in	out	in	out
Southern Grove	9,853	13,814	1,651	1,651	1,203	1,203	6,999	10,960	20.6%	1,850	1,850	5,149	9,110

Table 14. Daily Trip Generation (2040 - Phase 4 Land-Use)

DRI	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
Southern Grove	274,928	43,850	231,078	29,623	201,455	51,431	150,024

Table 15. PM Peak Hour Trip Generation (2040 - Phase 4 Land Use)

DRI	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	
	in	out	in	out	in	out	in	out		in	out	in	out
Southern Grove	11,546	17,045	1,918	1,918	1,456	1,456	8,172	13,671	25.5%	2,788	2,788	5,384	10,883

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, Rangeline 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, 2035, and 2040 corresponding to the final three phases of the project. 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 2030 model were carried forward to the 2030, 2035, and 2040 models. Tables 16 through 18 outline the model roadway adjustments for 2030, 2035, and 2040 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 (2025, 2030, 2035, and 2040) correspond to the phasing years of the project. Therefore, Phase 2 corresponds to 2030 model year, Phase 3 corresponds with the 2035 model year, and the 2040 analysis utilizes buildout land uses.

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.

Model Calibration

Each TAZ within the Southern Grove DRI (TAZs 646, 651, 659-664) was calibrated so that the trips out of each model TAZ match the projected new external ITE trips from each TAZ. 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 16 through 18.

Table 16. ITE Trip Generation Compared To Model Calibrated Trips 2030 - Phase 2

Zone	DRI	Model Trips	ITE Trips	% Difference
664	Southern Grove	15,841	15,970	-0.81%
659		12,462	12,773	-2.50%
662		17,960	15,016	16.39%
661		28,770	29,194	-1.47%
646		12,585	11,972	4.87%
651		8,802	8,629	1.96%
660		18,009	19,630	-9.00%
663		18,625	16,411	11.89%
Total		133,053	129,595	2.60%

Table 17. ITE Trip Generation Compared To Model Calibrated Trips 2035 - Phase 3

Zone	DRI	Model Trips	ITE Trips	% Difference
664	Southern Grove	16,154	17,317	-7.20%
659		13,293	12,869	3.19%
662		23,522	20,595	12.44%
661		32,965	33,526	-1.70%
646		21,492	21,610	-0.55%
651		12,824	12,972	-1.15%
660		29,833	30,251	-1.40%
663		19,693	19,764	-0.36%
Total		169,776	168,904	0.51%

Table 18. ITE Trip Generation Compared To Model Calibrated Trips 2040 - Phase 4

Zone	DRI	Model Trips	ITE Trips	% Difference
664	Southern Grove	16,571	17,883	-7.92%
659		14,614	13,497	7.64%
662		25,170	20,970	16.69%
661		51,441	45,762	11.04%
646		35,362	32,395	8.39%
651		14,094	13,279	5.78%
660		37,671	37,143	1.40%
663		19,970	20,526	-2.78%
Total		214,893	201,455	6.25%

Table 19. 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

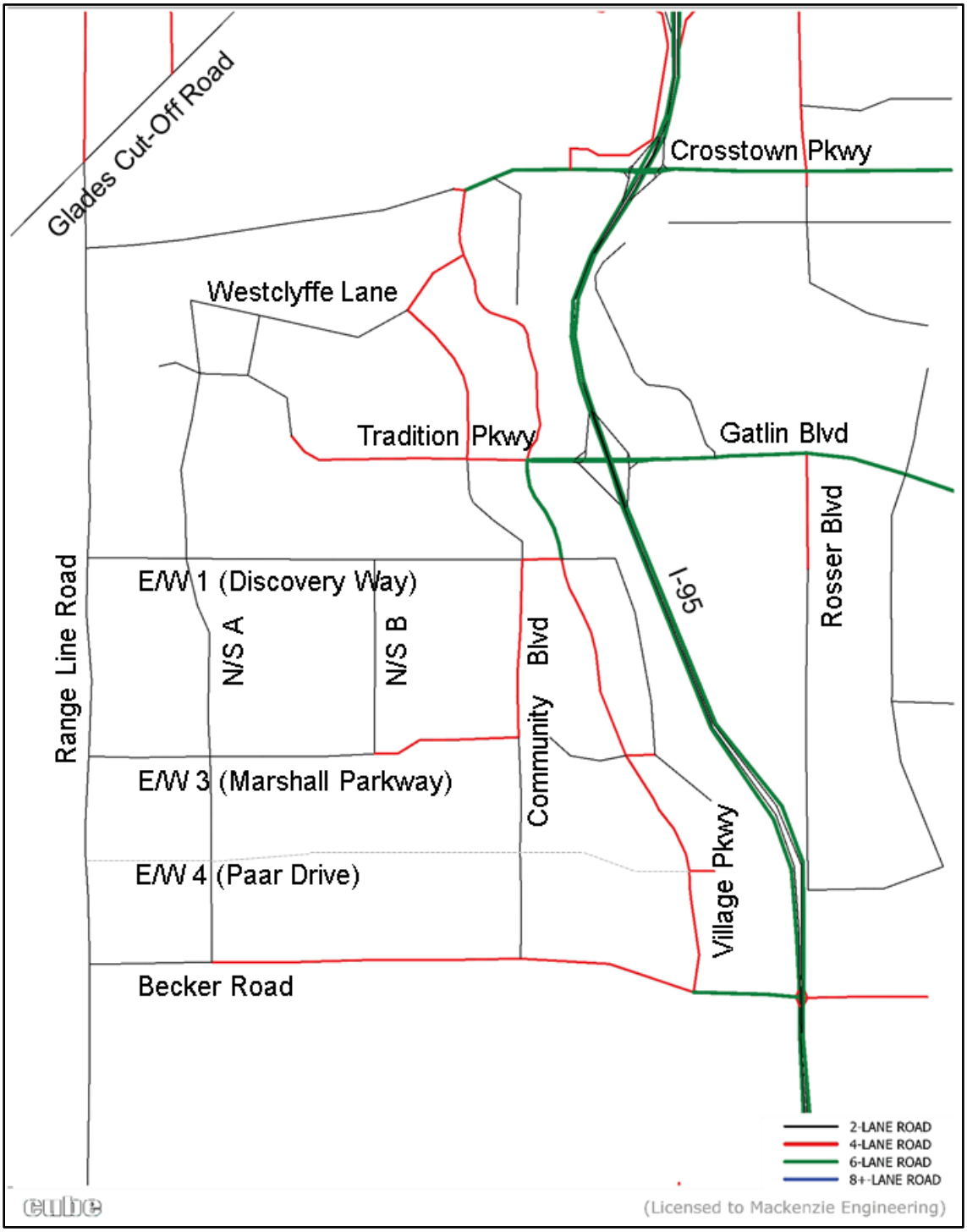


Table 20. 2035 Model Roadway Adjustments

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

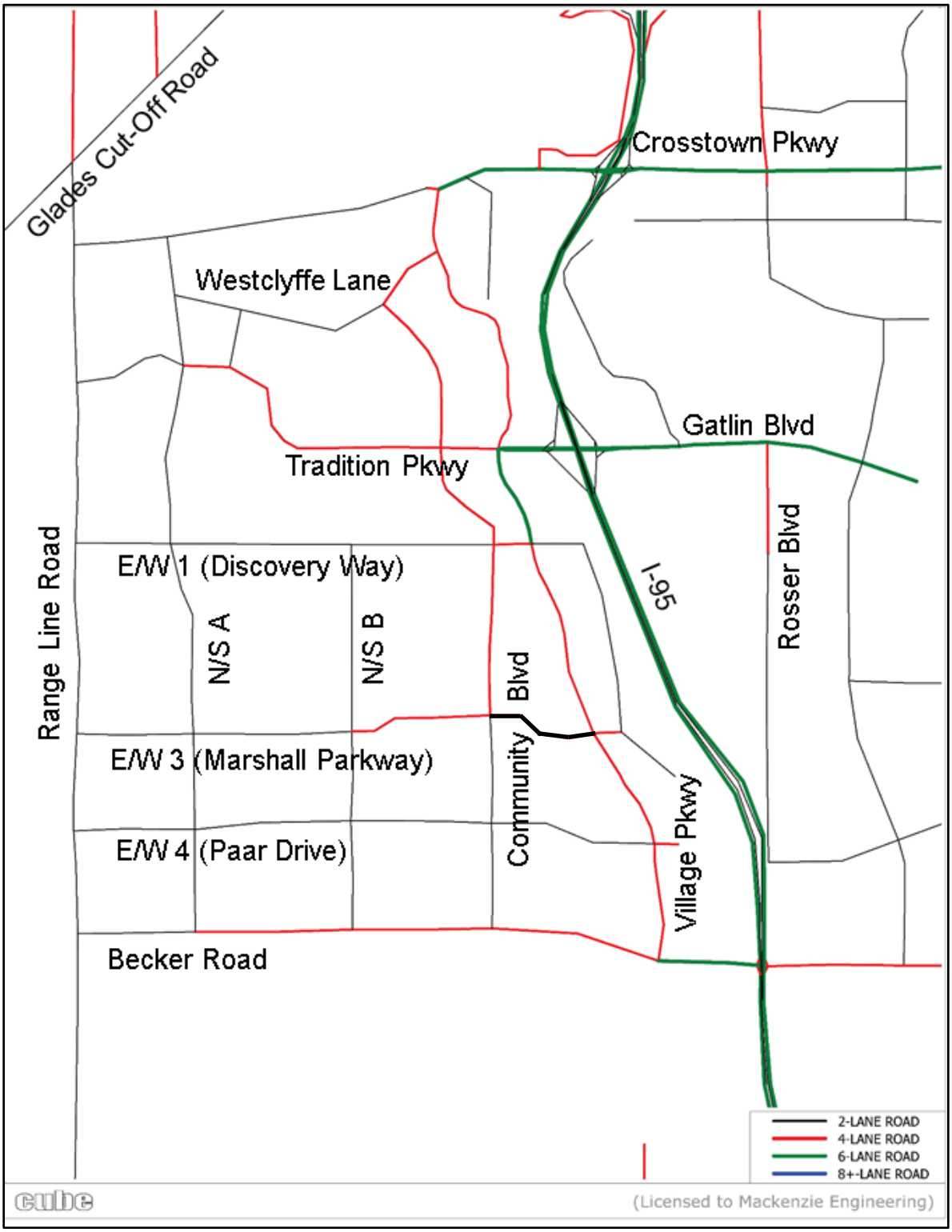
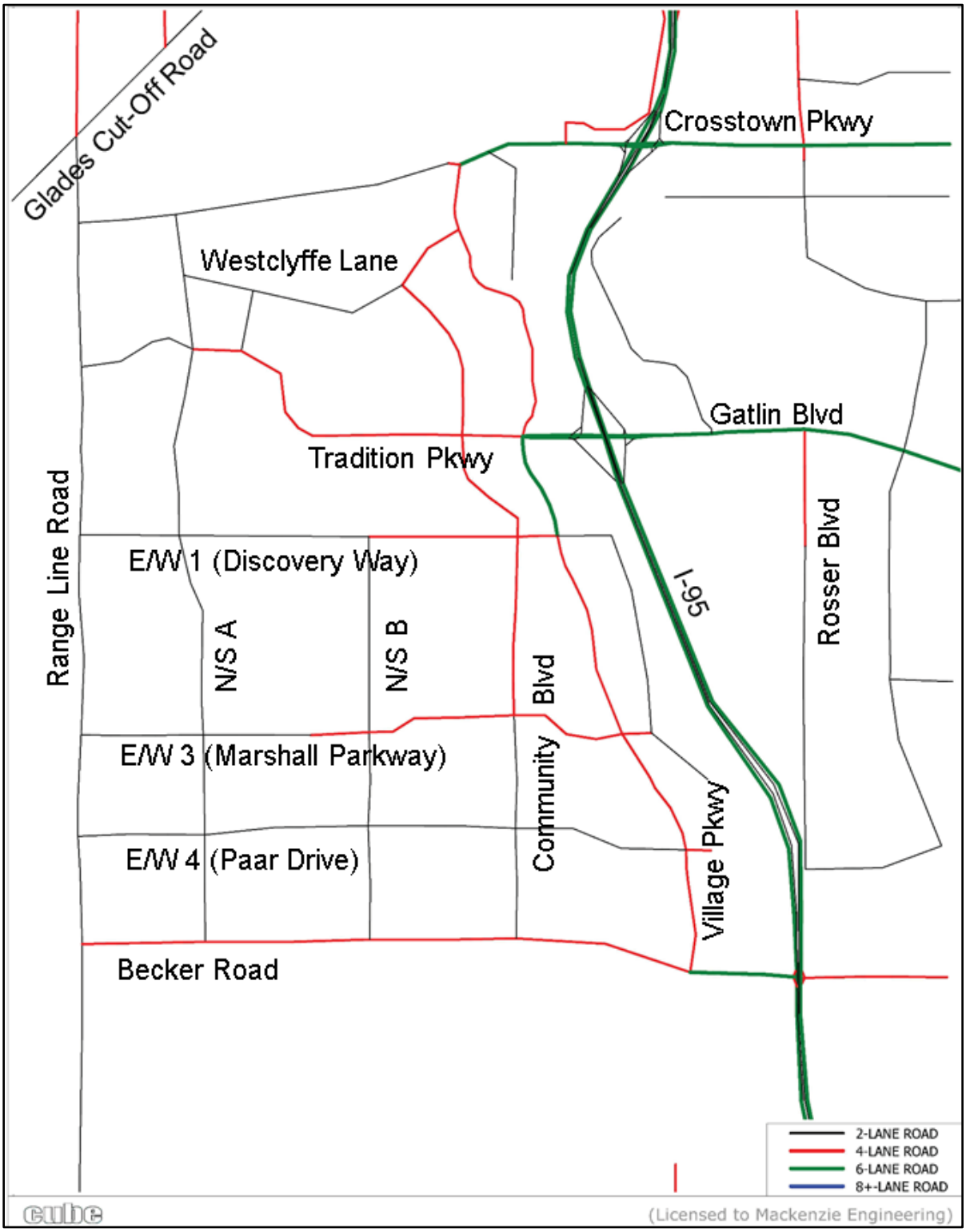


Table 21. 2040 Model Roadway Adjustments

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

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

Total Future Traffic

Future traffic volumes were developed for each phase of the project. 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 of 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 is shown in Tables 22-24.

Table 22. Phase 2 (2030) Land Use Summary

DRI	Single Family (DU)	Multi Family (DU)	Single Family Age-Restricted (DU)	Hotel (Rooms)	Industrial Park (SF)	Commercial Retail (SF)	Service & Office (SF)	Research & Development (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	Elementary School (Students)	K-8 School (Students)	High School (Students)	Independent Living Facility (Units)	ALF (Beds)
Western Grove	3,850	150	0	0	0	100,000	30,000	0	0	0	35,040	25	0	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	0	1,600	2,500	0	0
Southern Grove	1,907	3,691	1,370	551	1,861,112	1,675,075	1,043,576	1,442,867	300	0	54,424	80	0	3,200	0	420	150
Wilson Groves	5,075	1,219	0	0	544,500	330,000	606,500	0	0	0	50,638	50	820	0	0	0	0

Table 23. Phase 3 (2035) Land Use Summary

DRI	Single Family (DU)	Multi Family (DU)	Single Family Age-Restricted (DU)	Hotel (Rooms)	Industrial Park (SF)	Commercial Retail (SF)	Service & Office (SF)	Research & Development (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	Elementary School (Students)	K-8 School (Students)	High School (Students)	Independent Living Facility (Units)	ALF (Beds)
Western Grove	3,850	150	0	0	0	200,000	50,000	0	0	0	54,450	25	0	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	0	1,600	2,500	0	0
Southern Grove	1,907	3,691	1,370	791	3,222,224	2,675,075	1,737,152	1,970,734	300	25,157	163,519	80	0	3,200	0	420	150
Wilson Groves	5,775	1,925	0	0	952,875	590,000	1,094,875	0	0	40,347	185,727	93	0	1,600	0	0	0

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Table 24. Phase 4 (2040 / Buildout) Land Use Summary

DRI	Single Family (DU)	Multi Family (DU)	Single Family Age- (DU)	Hotel (Rooms)	Industrial Park (SF)	Commercial Retail (SF)	Service & Office (SF)	Research & Development (SF)	Hospital (Beds)	Civic Use (SF)	Institutional Use (SF)	Park (Acres)	Elementary School (Students)	K-8 School (Students)	High 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	0	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	0	1,600	2,500	0	0
Southern Grove	1,907	3,691	1,370	791	4,583,336	3,675,075	2,430,728	2,498,602	300	41,927	276,350	80	0	3,200	0	420	150
Wilson Groves	5,775	1,925	0	0	1,361,250	590,000	1,503,250	0	0	40,347	185,727	135	820	1,600	0	0	0

Interchange Analysis

The Tradition Parkway/Gatlin Boulevard and Becker Road interchanges with I-95 were evaluated in 2030, 2035 and 2040 because of the removal of the Paar Drive Overpass. Year 2030, 2035 and 2040 traffic volumes were obtained from model traffic volumes and estimated using FDOT's TURNS5 Turning Movement Analysis Tool – V2014.

The projected 2030, 2035 and 2040 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 or a volume to capacity ratio of 1.0 or less in Synchro 9.0.

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 2030 and a second northbound left turn lane in 2035. The Becker Road interchange is projected to operate acceptably with the needed improvements. The interchange analysis results are shown in Table 22.

Table 25. Interchange Analysis Results

	Tradition Parkway		Becker Road	
	I-95 SB Ramp	**I-95 NB Ramp**	**I-95 SB Ramp**	**I-95 NB Ramp**
2030	C	C	C	D
Needed Improvement	-	-	Add 2nd SBR	-
2035	C	D	D	D
Needed Improvement	-	-	-	Add 2nd NBL
2040	C	D	D	D
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 22,000 to 24,000. 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

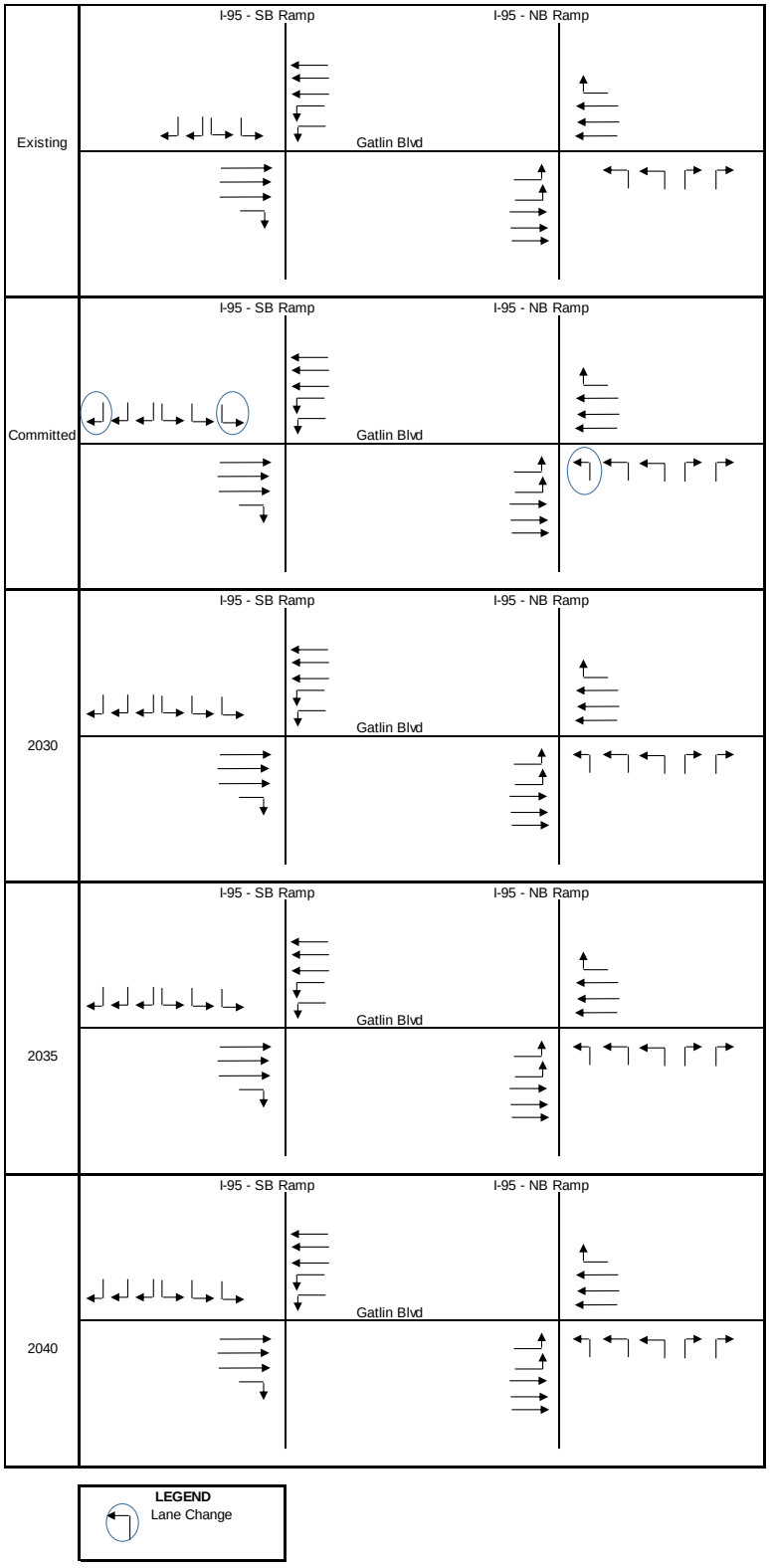
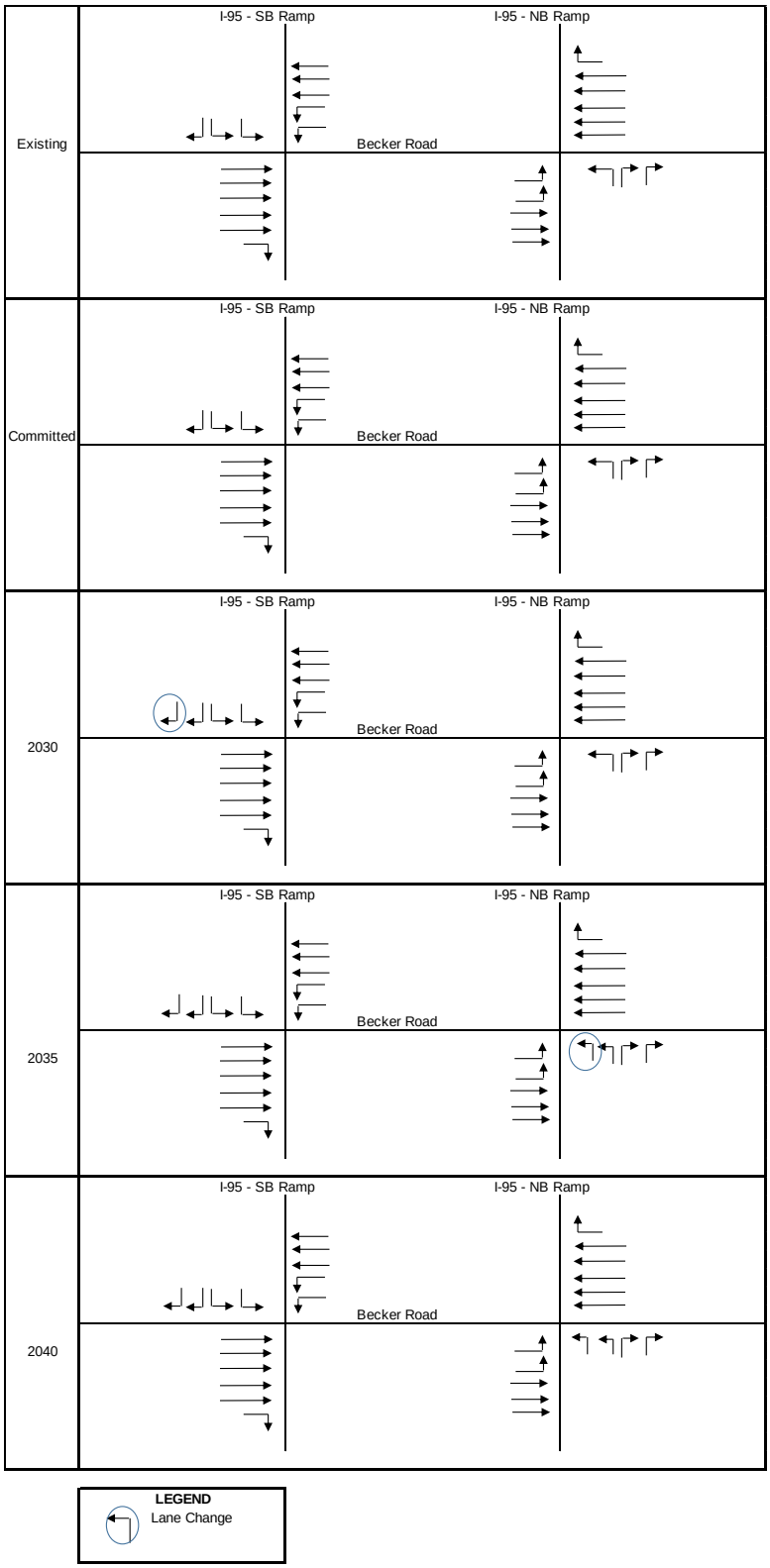


Figure 6. Becker Road Interchange Lane Geometry



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 25 through 31. 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 31 and 32.

SIS Analysis

The applicant is not proposing increases in intensification. Therefore, further analysis of SIS facilities is not required.

Table 26. Projected 2030 Roadway Volumes and Laneage Needs

Roadway	From	To	Model Traffic	AADT	Peak Hour			Planned Service Capacity and Laneage		Vol/MSV Ratio	Meets Capacity ???	Needed Improv
					Two-Way	NB/EB	SB/WB					
Becker Road	Rangeline	N/S A	11,175	11,175	1,006	453	553	924	2-Lanes	0.60	YES	
	N/S A	N/S B	20,787	20,787	1,871	842	1,029	2,100	4-Lanes	0.49	YES	
	N/S B	Community Blvd	31,324	31,324	2,819	1,268	1,551	2,100	4-Lanes	0.74	YES	
	Community Blvd	Village Parkway	37,480	37,480	3,373	1,855	1,518	2,100	4-Lanes	0.88	YES	
	Village Parkway	I-95 Interchange	49,951	49,951	4,496	2,473	2,023	3,171	6-Lanes	0.78	YES	
N/S A	Becker Rd	Paar Drive	12,476	12,476	1,123	505	618	924	2-Lanes	0.67	YES	
	Paar Drive	Marshall Parkway	12,418	12,418	1,118	615	503	924	2-Lanes	0.67	YES	
	Marshall Parkway	Discovery Way	7,940	7,940	715	393	322	924	2-Lanes	0.43	YES	
	Discovery Way	Gatlin Blvd	11,625	11,625	1,046	575	471	924	2-Lanes	0.62	YES	
	Gatlin Blvd	Westcliffe Ln	5,716	5,716	514	283	231	924	2-Lanes	0.31	YES	
N/S B	Marshall Parkway	Discovery Way	7,679	7,679	691	380	311	924	2-Lanes	0.41	YES	
Community Blvd	Becker Rd	Paar Drive	14,337	14,337	1,290	580	710	924	2-Lanes	0.77	YES	
	Paar Drive	Marshall Parkway	14,965	14,965	1,347	606	741	924	2-Lanes	0.80	YES	
	Marshall Parkway	Discovery Way	24,435	24,435	2,199	989	1,210	2,100	4-Lanes	0.58	YES	
	Discovery Way	Gatlin Blvd	14,389	14,389	1,295	583	712	924	2-Lanes	0.77	YES	
	Gatlin Blvd	Westcliffe Ln	8,138	8,138	732	403	329	2,000	4-Lanes	0.20	YES	
Village Parkway	Becker Rd	Paar Drive	22,568	22,568	2,031	914	1,117	2,100	4-Lanes	0.53	YES	
	Paar Drive	Marshall Parkway	20,964	20,964	1,887	849	1,038	2,100	4-Lanes	0.49	YES	
	Marshall Parkway	Discovery Way	29,416	29,416	2,647	1,456	1,191	2,100	4-Lanes	0.69	YES	
	Discovery Way	Gatlin Blvd	51,499	51,499	4,635	2,549	2,086	3,171	6-Lanes	0.80	YES	
	Gatlin Blvd	Westcliffe Ln	8,917	8,917	803	441	362	2,100	4-Lanes	0.21	YES	
	Westcliffe Ln	Crosstown Pkwy	21,577	21,577	1,942	1,068	874	2,100	4-Lanes	0.51	YES	

Table 27. Projected 2030 Roadway Volumes and Laneage Needs (Continued)

Roadway	From	To	Model Traffic	AADT	Peak Hour			Required Service Capacity and Laneage		Vol/MSV Ratio	Meets Capacity ???	Needed Improv
					Two-Way	NB/EB	SB/WB					
E/W 3 (Marshall Parkway)	Rangeline	N/S A	5,773	5,773	520	234	286	924	2-Lanes	0.31	YES	
	N/S A	N/S B	12,622	12,622	1,136	511	625	924	2-Lanes	0.68	YES	
	N/S B	Community Blvd	19,542	19,542	1,759	792	967	2,100	4-Lanes	0.46	YES	
E/W 1 (Discovery Way)	Rangeline	N/S A	8,573	8,573	772	348	424	924	2-Lanes	0.46	YES	
	N/S A	N/S B	11,389	11,389	1,025	461	564	924	2-Lanes	0.61	YES	
	N/S B	Community Blvd	16,927	16,927	1,523	685	838	924	2-Lanes	0.91	YES	
	Community Blvd	Village Parkway	38,203	38,203	3,438	1,547	1,891	2,100	4-Lanes	0.90	YES	
Tradition Parkway/ Gatlin Blvd	N/S A	Community Blvd	14,780	14,780	1,330	598	732	924	2-Lanes	0.79	YES	
	Community Blvd	Village Parkway	19,117	19,117	1,721	775	946	2,100	4-Lanes	0.45	YES	
	Village Parkway	I-95 Interchange	69,860	69,860	6,287	3,458	2,829	3,171	6-Lanes	1.09	No	**Interchange Improvements**
Westcliffe Lane	N/S A	Community Blvd	8,838	8,838	795	437	358	792	2-Lanes	0.55	YES	
	Community Blvd	Village Parkway	16,254	16,254	1,463	805	658	1,800	4-Lanes	0.45	YES	
Crosstown Parkway	Rangeline	N/S A	8,713	8,713	784	431	353	924	2-Lanes	0.47	YES	
	N/S A	Village Parkway	14,399	14,399	1,296	713	583	924	2-Lanes	0.77	YES	
	Village Parkway	Commerce Ctr Pkwy	32,356	32,356	2,912	1,602	1,310	3,171	6-Lanes	0.51	YES	
	Commerce Ctr Pkwy	I-95 Interchange	35,028	35,028	3,153	1,734	1,419	3,171	6-Lanes	0.55	YES	

Table 28. Projected 2035 Roadway Volumes and Laneage Needs

Roadway	From	To	Model Traffic	AADT	Peak Hour			Planned Service Capacity and Laneage		Vol/MSV Ratio	Meets Capacity ???	Needed Improv
					Two-Way	NB/EB	SB/WB					
Becker Road	Rangeline	N/S A	11,295	11,295	1,017	458	559	924	2-Lanes	0.60	YES	
	N/S A	N/S B	18,475	18,475	1,663	748	915	2,100	4-Lanes	0.44	YES	
	N/S B	Community Blvd	27,348	27,348	2,461	1,107	1,354	2,100	4-Lanes	0.64	YES	
	Community Blvd	Village Parkway	30,342	30,342	2,731	1,502	1,229	2,100	4-Lanes	0.72	YES	
	Village Parkway	I-95 Interchange	56,095	56,095	5,049	2,777	2,272	3,171	6-Lanes	0.88	YES	
N/S A	Becker Rd	Paar Drive	7,952	7,952	716	322	394	924	2-Lanes	0.43	YES	
	Paar Drive	Marshall Parkway	7,377	7,377	664	365	299	924	2-Lanes	0.40	YES	
	Marshall Parkway	Discovery Way	10,258	10,258	923	508	415	924	2-Lanes	0.55	YES	
	Discovery Way	Gatlin Blvd	12,026	12,026	1,082	595	487	924	2-Lanes	0.64	YES	
	Gatlin Blvd	Westcliffe Ln	11,390	11,390	1,025	564	461	924	2-Lanes	0.61	YES	
	Westcliffe Ln	Crosstown Pkwy	11,912	11,912	1,072	590	482	924	2-Lanes	0.64	YES	
N/S B	Becker Rd	Paar Drive	5,443	5,443	490	269	221	924	2-Lanes	0.29	YES	
	Paar Drive	Marshall Parkway	13,206	13,206	1,189	535	654	924	2-Lanes	0.71	YES	
	Marshall Parkway	Discovery Way	8,526	8,526	767	422	345	924	2-Lanes	0.46	YES	
Community Blvd	Becker Rd	Paar Drive	7,367	7,367	663	298	365	924	2-Lanes	0.40	YES	
	Paar Drive	Marshall Parkway	11,883	11,883	1,069	481	588	924	2-Lanes	0.64	YES	
	Marshall Parkway	Discovery Way	27,563	27,563	2,481	1,117	1,364	2,100	4-Lanes	0.65	YES	
	Discovery Way	Gatlin Blvd	25,328	25,328	2,280	1,026	1,254	2,100	4-Lanes	0.60	YES	
	Gatlin Blvd	Westcliffe Ln	11,536	11,536	1,038	571	467	2,000	4-Lanes	0.29	YES	
Village Parkway	Becker Rd	Paar Drive	26,039	26,039	2,344	1,055	1,289	2,100	4-Lanes	0.61	YES	
	Paar Drive	Marshall Parkway	25,250	25,250	2,273	1,023	1,250	2,100	4-Lanes	0.60	YES	
	Marshall Parkway	Discovery Way	30,265	30,265	2,724	1,498	1,226	2,100	4-Lanes	0.71	YES	
	Discovery Way	Gatlin Blvd	52,798	52,798	4,752	2,614	2,138	3,171	6-Lanes	0.82	YES	
	Gatlin Blvd	Westcliffe Ln	8,743	8,743	787	433	354	2,100	4-Lanes	0.21	YES	
	Westcliffe Ln	Crosstown Pkwy	20,348	20,348	1,831	1,007	824	2,100	4-Lanes	0.48	YES	

Table 29. Projected 2035 Roadway Volumes and Laneage Needs (Continued)

Roadway	From	To	Model Traffic	AADT	Peak Hour			Required Service Capacity and Laneage		Vol/MSV Ratio	Meets Capacity ???	Needed Improv
					Two-Way	NB/EB	SB/WB					
E/W 4 (Paar Drive)	Rangeline	N/S A	3,381	3,381	304	137	167	924	2-Lanes	0.18	YES	
	N/S A	N/S B	12,495	12,495	1,125	506	619	924	2-Lanes	0.67	YES	
	N/S B	Community Blvd	13,507	13,507	1,216	547	669	924	2-Lanes	0.72	YES	
	Community Blvd	Village Parkway	12,475	12,475	1,123	505	618	924	2-Lanes	0.67	YES	
E/W 3 (Marshall Parkway)	Rangeline	N/S A	6,069	6,069	546	246	300	924	2-Lanes	0.32	YES	
	N/S A	N/S B	12,957	12,957	1,166	525	641	924	2-Lanes	0.69	YES	
	N/S B	Community Blvd	27,720	27,720	2,495	1,123	1,372	2,100	4-Lanes	0.65	YES	
	Community Blvd	Village Parkway	15,763	15,763	1,419	639	780	924	2-Lanes	0.84	YES	
E/W 1 (Discovery Way)	Rangeline	N/S A	6,655	6,655	599	270	329	924	2-Lanes	0.36	YES	
	N/S A	N/S B	11,027	11,027	992	446	546	924	2-Lanes	0.59	YES	
	N/S B	Community Blvd	13,593	13,593	1,223	550	673	924	2-Lanes	0.73	YES	
	Community Blvd	Village Parkway	32,808	32,808	2,953	1,329	1,624	2,100	4-Lanes	0.77	YES	
Tradition Parkway/ Gatlin Blvd	N/S A	Community Blvd	16,748	16,748	1,507	678	829	924	2-Lanes	0.90	YES	
	Community Blvd	Village Parkway	19,378	19,378	1,744	785	959	2,100	4-Lanes	0.46	YES	
	Village Parkway	I-95 Interchange	73,152	73,152	6,584	3,621	2,963	3,171	6-Lanes	1.14	No	Interchange Improvements
Westcliffe Lane	N/S A	Community Blvd	6,185	6,185	557	306	251	792	2-Lanes	0.39	YES	
	Community Blvd	Village Parkway	15,079	15,079	1,357	746	611	1,800	4-Lanes	0.41	YES	
Crosstown Parkway	Rangeline	N/S A	8,716	8,716	784	431	353	924	2-Lanes	0.47	YES	
	N/S A	Village Parkway	17,349	17,349	1,561	859	702	924	2-Lanes	0.93	YES	
	Village Parkway	Commerce Ctr Pkwy	35,906	35,906	3,232	1,777	1,455	3,171	6-Lanes	0.56	YES	
	Commerce Ctr Pkwy	I-95 Interchange	37,898	37,898	3,411	1,876	1,535	3,171	6-Lanes	0.59	YES	

Table 30. Projected 2040 Roadway Volumes and Laneage Needs

Roadway	From	To	Model Traffic	AADT	Peak Hour			Planned Service Capacity and Laneage		Vol/MSV Ratio	Meets Capacity ???	Needed Improv
					Two-Way	NB/EB	SB/WB					
Becker Road	Rangeline	N/S A	13,776	13,776	1,240	558	682	2,100	4-Lanes	0.32	YES	
	N/S A	N/S B	19,187	19,187	1,727	777	950	2,100	4-Lanes	0.45	YES	
	N/S B	Community Blvd	32,409	32,409	2,917	1,313	1,604	2,100	4-Lanes	0.76	YES	
	Community Blvd	Village Parkway	36,244	36,244	3,262	1,794	1,468	2,100	4-Lanes	0.85	YES	
	Village Parkway	I-95 Interchange	68,978	68,978	6,208	3,414	2,794	3,171	6-Lanes	**1.08**	No	**Interchange Improvements**
N/S A	Becker Rd	Paar Drive	5,595	5,595	504	227	277	2,100	4-Lanes	0.13	YES	
	Paar Drive	Marshall Parkway	4,457	4,457	401	221	180	2,100	4-Lanes	0.11	YES	
	Marshall Parkway	Discovery Way	9,233	9,233	831	457	374	2,100	4-Lanes	0.22	YES	
	Discovery Way	Gatlin Blvd	13,772	13,772	1,239	682	557	924	2-Lanes	0.74	YES	
	Gatlin Blvd	Westcliffe Ln	2,619	2,619	236	130	106	924	2-Lanes	0.14	YES	
	Westcliffe Ln	Crosstown Pkwy	9,018	9,018	812	446	366	924	2-Lanes	0.48	YES	
N/S B	Becker Rd	Paar Drive	6,796	6,796	612	336	276	2,100	4-Lanes	0.16	YES	
	Paar Drive	Marshall Parkway	14,144	14,144	1,273	573	700	2,100	4-Lanes	0.33	YES	
	Marshall Parkway	Discovery Way	9,621	9,621	866	476	390	2,100	4-Lanes	0.23	YES	
Community Blvd	Becker Rd	Paar Drive	11,885	11,885	1,070	482	588	2,100	4-Lanes	0.28	YES	
	Paar Drive	Marshall Parkway	18,238	18,238	1,641	738	903	2,100	4-Lanes	0.43	YES	
	Marshall Parkway	Discovery Way	25,255	25,255	2,273	1,023	1,250	2,100	4-Lanes	0.60	YES	
	Discovery Way	Gatlin Blvd	32,154	32,154	2,894	1,302	1,592	2,100	4-Lanes	0.76	YES	
	Gatlin Blvd	Westcliffe Ln	14,510	14,510	1,306	718	588	2,000	4-Lanes	0.36	YES	
Village Parkway	Becker Rd	Paar Drive	42,089	42,089	3,788	1,705	2,083	2,100	4-Lanes	0.99	YES	
	Paar Drive	Marshall Parkway	49,322	49,322	4,439	1,998	2,441	2,100	4-Lanes	**1.16**	No	**6-lanes**
	Marshall Parkway	Discovery Way	48,728	48,728	4,386	2,412	1,974	2,100	4-Lanes	**1.15**	No	**6-lanes**
	Discovery Way	Gatlin Blvd	62,869	62,869	5,658	3,112	2,546	3,171	6-Lanes	0.98	YES	
	Gatlin Blvd	Westcliffe Ln	9,732	9,732	876	482	394	2,100	4-Lanes	0.23	YES	
	Westcliffe Ln	Crosstown Pkwy	23,419	23,419	2,108	1,159	949	2,100	4-Lanes	0.55	YES	

Table 31. Projected 2040 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	Meets Capacity ???	Needed Improv
E/W 4 (Paar Drive)	Rangeline	N/S A	9,137	9,137	822	370	452	924	2-Lanes	0.49	YES	
	N/S A	N/S B	14,830	14,830	1,335	601	734	2,100	4-Lanes	0.35	YES	
	N/S B	Community Blvd	11,337	11,337	1,020	459	561	2,100	4-Lanes	0.27	YES	
	Community Blvd	Village Parkway	9,604	9,604	864	389	475	2,100	4-Lanes	0.23	YES	
E/W 3 (Marshall Parkway)	Rangeline	N/S A	7,668	7,668	690	310	380	924	2-Lanes	0.41	YES	
	N/S A	N/S B	14,976	14,976	1,348	607	741	924	2-Lanes	0.80	YES	
	N/S B	Community Blvd	24,689	24,689	2,222	1,000	1,222	2,100	4-Lanes	0.58	YES	
	Community Blvd	Village Parkway	19,284	19,284	1,736	781	955	2,100	4-Lanes	0.45	YES	
E/W 1 (Discovery Way)	Rangeline	N/S A	6,203	6,203	558	251	307	924	2-Lanes	0.33	YES	
	N/S A	N/S B	9,543	9,543	859	387	472	924	2-Lanes	0.51	YES	
	N/S B	Community Blvd	15,209	15,209	1,369	616	753	2,100	4-Lanes	0.36	YES	
	Community Blvd	Village Parkway	34,565	34,565	3,111	1,400	1,711	2,100	4-Lanes	0.81	YES	
Tradition Parkway/ Gatlin Blvd	Rangeline	N/S A	6,640	6,640	598	329	269	924	2-Lanes	0.36	YES	
	N/S A	Community Blvd	17,908	17,908	1,612	726	886	2,100	4-Lanes	0.42	YES	
	Community Blvd	Village Parkway	20,452	20,452	1,841	829	1,012	2,100	4-Lanes	0.48	YES	
	Village Parkway	I-95 Interchange	81,493	81,493	7,334	4,034	3,300	3,171	6-Lanes	1.27	No	Interchange Improvements
Westcliffe Lane	N/S A	Community Blvd	7,799	7,799	702	386	316	792	2-Lanes	0.49	YES	
	Community Blvd	Village Parkway	17,010	17,010	1,531	842	689	1,800	4-Lanes	0.47	YES	
Crosstown Parkway	Rangeline	N/S A	10,056	10,056	905	498	407	924	2-Lanes	0.54	YES	
	N/S A	Village Parkway	18,739	18,739	1,687	928	759	924	2-Lanes	**1.00**	No	**4-lanes**
	Village Parkway	Commerce Ctr Pkwy	39,187	39,187	3,527	1,940	1,587	3,171	6-Lanes	0.61	YES	
	Commerce Ctr Pkwy	I-95 Interchange	40,632	40,632	3,657	2,011	1,646	3,171	6-Lanes	0.63	YES	

Table 32. Summary of Projected and Needed Roadway Laneage

Roadway	From	To	2030	2035	2040	Needed Lanes
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
N/S A	Becker Rd	Paar Drive	2-lane	-	-	-
	Paar Drive	Marshall Parkway	2-lane	-	-	-
	Marshall Parkway	Discovery Way	2-lane	-	-	-
	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	-	-
	Paar Drive	Marshall Parkway	No Build	New 2-lane	-	-
	Marshall Parkway	Discovery Way	2-lane	-	-	-
Community Blvd	Becker Rd	Paar Drive	2-lane	-	-	-
	Paar Drive	Marshall Parkway	2-lane	-	-	-
	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	-	-	6-lanes
	Marshall Parkway	Discovery Way	4-lanes	-	-	6-lanes
	Discovery Way	Gatlin Blvd	6-lanes	-	-	-
	Gatlin Blvd	Westcliffe Ln	4-lanes	-	-	-
	Westcliffe Ln	Crosstown Pkwy	4-lanes	-	-	-

Table 33. Summary of Projected and Needed Roadway Laneage (Continued)

Roadway	From	To	2030	2035	2040	Needed Lanes
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	-	-
	N/S B	Community Blvd	No Build	New 2-lane	-	-
	Community Blvd	Village Parkway	No Build	New 2-lane	-	-
	Village Parkway	Rosser Blvd	No Build	-	New 2-lane	-
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	-	-	-
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	-	-	Interchange Improvements
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	-	-	4-lanes
	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 Rangeline 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. It is expected that implementation of the improvements results in acceptable levels of service on Becker Road.
- North/South Road A operates acceptably as a 2-lane road from Becker Road to Crosstown Parkway.

RECOMMENDATION

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 34. Condition 20-21 Changes

Roadway	Existing Lanes	Required Improvement	Trip Threshold (1)	Status
~~***Phase 1 (2012) – 2,000 Trips (1)***~~				
Community Blvd				
Tradition Pkwy to E/W 1	0	Construct 2LD	2,000	Satisfied
Discovery Way				
Community Blvd to Village Pkwy	0	Construct 2LD	2,000	Satisfied
~~***Phase II (2018) – 3,979 Trips (1)***~~				
Discovery Way				
Community Blvd to Village Pkwy	2LD	Widen to 4LD	5,670	
E/W 4 (Paar Dr)				
Community Blvd to Village Pkwy	0	Construct 2L	11,606	
~~Community Blvd to Village Pkwy~~	~~2L~~	~~Construct 4LD~~		
Village Pkwy to ~~West of I-95~~ Hegener Dr	0	Construct ~~4LD~~ 2L	11,606	
~~***Phase III (2023) – 9,948 Trips (1)***~~				
Marshall Pkwy (E/W 3)				
Community Blvd to Village Pkwy	0	Construct 2LD	11,606	
Village Pkwy to ~~West of I-95~~ Hegener Dr	~~0~~	Construct 2LD	11,606	
E/W 4 (Paar Dr)				
~~Rosser Road to Port St Lucie Blvd~~ Village Pkwy to West of I-95 Hegener Dr	2	Widen to 4LD	16,450	
Community Blvd				
Tradition Pkwy to E/W 1	2LD	Widen to 4LD	14,464	
Becker Road to E/W 4 (2)	2LD	Widen to 4LD	16,450	
~~***Phase IV (2028) – 14,718 Trips (1)***~~				
Marshall Pkwy (E/W 3)				
Community Blvd to Village Pkwy	2	Widen to 4LD	16,450	
Village Pkwy ~~to West of I-95~~ Hegener Drive	2	Widen to 4LD	16,450	

Table 35. Condition 22 Changes

Roadway	Existing Lanes	Required Improvement	Trip Threshold (1)
~~***Phase 1 (2012) – 2,000 Trips (1)***~~	-	-	-
Community Blvd			-
Tradition Pkwy to E/W 1	0	Construct 2LD	2,000
Discovery Way			-
Community Blvd to Village Pkwy	0	Construct 2LD	2,000
~~***Phase II (2018) – 3,979 Trips (1)***~~	-	-	-
Discovery Way			-
Community Blvd to Village Pkwy	2LD	Widen to 4LD	5,670
E/W 4			-
Community Blvd to Village Pkwy	0	Construct 2L	11,606
~~Community Blvd to Village Pkwy~~	~~2L~~	~~Construct 4LD~~	-
~~Village Pkwy to West of I-95~~	~~0~~	~~Construct 4LD~~	-
~~***Phase III (2023) – 9,948 Trips (1)***~~	-	-	-
Marshall Pkwy (E/W 3)			-
Community Blvd to Village Pkwy	0	Construct 2LD	11,605
~~Village Pkwy to West of I-95~~	~~0~~	~~Construct 2LD~~	-
E/W 4 (Paar Dr)			-
~~Rosser Road to Port St Lucie Blvd~~	~~2~~	~~Widen to 4LD~~	-
Community Blvd			-
Tradition Pkwy to E/W 1	2LD	Widen to 4LD	14,464
Becker Road to E/W 4 (2)	2LD	Widen to 4LD	16,450
~~***Phase IV (2028) – 14,718 Trips (1)***~~	-	-	-
Marshall Pkwy (E/W 3)			-
Community Blvd to Village Pkwy	2	Widen to 4LD	16,450
~~Village Pkwy to West of I-95~~	~~2~~	~~Widen to 4LD~~	-

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 5. 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	
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	(3)

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

(2) Provided sufficient right of way exists for the improvement and improvement is listed in the Martin County LRTP plan

(3) Satisfied from Becker Road to Martin County Line based on Agreement with St. Lucie County

Condition 28 - E/W 3 and I-95 IJR

Condition 28 is removed because an interchange is not needed based on the analysis of Southern Grove buildout traffic.

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

Condition 29 is removed because an interchange is not needed based on the analysis of Southern Grove buildout traffic.

Condition 30 – Lane Geometry

No change is proposed.

Condition 31 – I-95 Interchange Monitoring

No change is proposed. The monitoring condition will provide biennial monitoring of I-95 and the interchanges and provide an effective tool to determine lane needs on I-95, the ramps and the ramp intersections at Becker Road and Tradition Parkway.

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.

CONCLUSION

The changes proposed to the Southern Grove DRI do not result in significant or substantial changes because there are no changes in DRI use and the analysis demonstrates that the changes proposed are mitigated.

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 proposed 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.

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APPENDICES

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Appendix A

Southern Grove Land Use

Southern Grove Land Use

Land Use	Unit	Phase 1 2025	Phase 2 2030	Phase 3 2035	Phase 4 2040	Total
Single Family	DUs	883	1,024	0	0	1,907
Multi Family	DUs	1,438	2,253	0	0	3,691
Single Family Age-Restricted	DUs	700	670	0	0	1,370
Multi Family Age-Restricted	DUs	0	0	0	0	0
Hotel	Rooms	250	301	240	0	791
Industrial Park	SF	450,000	1,411,112	1,361,112	1,361,112	4,583,336
Commercial Retail	SF	181,595	1,493,480	1,000,000	1,000,001	3,675,075
Service & Office	SF	404,060	639,516	693,576	693,576	2,430,728
Research & Development	SF	715,000	727,867	527,867	527,868	2,498,602
Hospital	Beds	180	120	0	0	300
Civic Use	SF	0	0	25,157	16,770	41,927
Institutional Use	SF	0	54,424	109,095	112,831	276,350
Park	Acres	80	0	0	0	80
Elementary School	Students	0	0	0	0	0
K-8 School	Students	0	3,200	0	0	3,200
High School	Students	0	0	0	0	0
Independent Living Facility	Beds	420	0	0	0	420
Assisted Living	Beds	150	0	0	0	150

Southern Grove Cumulative Land Use

Land Use	Unit	Phase 1 2025	Phase 2 2030	Phase 3 2035	Phase 4 2040
Single Family	DUs	883	1,907	1,907	1,907
Multi Family	DUs	1,438	3,691	3,691	3,691
Single Family Age-Restricted	DUs	700	1,370	1,370	1,370
Multi Family Age-Restricted	DUs	0	0	0	0
Hotel	Rooms	250	551	791	791
Industrial Park	SF	450,000	1,861,112	3,222,224	4,583,336
Commercial Retail	SF	181,595	1,675,075	2,675,075	3,675,075
Service & Office	SF	404,060	1,043,576	1,737,152	2,430,728
Research & Development	SF	715,000	1,442,867	1,970,734	2,498,602
Hospital	Beds	180	300	300	300
Civic Use	SF	0	0	25,157	41,927
Institutional Use	SF	0	54,424	163,519	276,350
Park	Acres	80	80	80	80
Elementary School	Students	0	0	0	0
K-8 School	Students	0	3,200	3,200	3,200
High School	Students	0	0	0	0
Independent Living Facility	Beds	420	420	420	420
Assisted Living	Beds	150	150	150	150

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Appendix B

Southern Grove Trip Generation and Internal Capture

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Appendix B-1

Southern Grove Trip Generation and Internal Capture

Phase 1

WATS TAZ	TCRPM TAZ
381	664

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	250	rooms	[310]	T = 8.92*(X)	2,230
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	41,595	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	3,840
Service & Office	300,000	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	3,109
Research & Development(1)	315,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	2,584
Hospital	180	beds	[610]	T = 11.81*(X)	2,126
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 =	13,889
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	13,889
				Internal Capture % among TAZ =	16.36%
				Internal Capture trips among TAZ =	2,272

(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 =	41,595	s.f.
0.75 * Intensity =	31,196	s.f.
External Trips from Matrix =	3,076	trips
0.75 * External Trips from Matrix =	2,307	trips
Pass-By Percent =	34%	
Pass-By Reduction =	784	trips

NET NEW EXTERNAL DAILY TRIPS =	**10,833**

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)			
Hotel	250	rooms	[310]	T = 0.70*(X); (49% in)	175	86	89
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	41,595	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	353	173	180
Service & Office[(2)]	300,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	447	76	371
Research & Development[(1)]	315,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	333	50	283
Hospital	180	beds	[610]	T = 1.31*(X); (36% in)	236	85	151
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 =	1,544	470	1,074
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	1,544	470	1,074
				Internal Capture % among TAZ =	13.73%	-	-
				Internal Capture trips among TAZ =	212	106	106

(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 =	41,595	s.f.
External Trips from Matrix =	286	trips
Pass-By Percent =	34%	
Pass-By Reduction =	73	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,259**	**328**	**931**

WATS TAZ	TCRPM TAZ
382	659

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th 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.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	6,541
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	4,060	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	113
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 =	16,021
				Total Gross Residential Trips =	8,263
				Total Gross Non-Residential Trips =	7,758
				Internal Capture % among TAZ =	9.85%
				Internal Capture trips among TAZ =	1,578

(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.
0.75 * Intensity =	90,000	s.f.
External Trips from Matrix =	6,859	trips
0.75 * External Trips from Matrix =	5,144	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,749	trips

NET NEW EXTERNAL DAILY TRIPS =	**12,694**

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) = 0.90*Ln(X) + 0.51; (63% in)	172	108	64
Multi-Family Residential	1,438	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	535	358	177
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]	4,060	s.f.	[710]	T = 1.49*(X/1000); (17% in)	6	1	5
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 =	1,432	819	613
				Total Gross Residential Trips =	707	466	241
				Total Gross Non-Residential Trips =	725	353	372
				Internal Capture % among TAZ =	10.20%	-	-
				Internal Capture trips among TAZ =	146	73	73

(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 =	646	trips
Pass-By Percent =	34%	
Pass-By Reduction =	165	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,121**	**664**	**457**

WATS TAZ	TCRPM TAZ
383	662

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	300	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	2,857
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	40	acres	[412]	T = 2.28*(X)	91
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 =	2,948
				Total Gross Residential Trips =	2,857
				Total Gross Non-Residential Trips =	91
				Internal Capture % among TAZ =	3.12%
				Internal Capture trips among TAZ =	92

(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 =	2,856

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	300	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	282	178	104
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% 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	40	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 =	284	179	105
				Total Gross Residential Trips =	282	178	104
				Total Gross Non-Residential Trips =	2	1	1
				Internal Capture % among TAZ =	1.41%	-	-
				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 =	**280**	**177**	**103**

WATS TAZ	TCRPM TAZ
384	661

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	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	420	d.u.	[253]	T = 2.02*(X)	848
Assisted Living Facility	150	beds	[254]	T = 2.60*(X)	390
				Total Gross Trips =	1,238
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	1,238
				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.
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 =	**1,238**

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)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)	0	0	0
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)	0	0	0
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	420	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 =	52	32	20
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	52	32	20
				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 =	**52**	**32**	**20**

WATS TAZ	TCRPM TAZ
385	646

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	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 =	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) = 0.90*Ln(X) + 0.51; (63% in)			
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% 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)	0	0	0
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 =	0	0	0
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	0	0	0
				Internal Capture % among TAZ =	#DIV/0!	-	-
				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 =	**0**	**0**	**0**

WATS TAZ	TCRPM TAZ
386	651

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	500	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	2,127
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	25	acres	[412]	T = 2.28*(X)	57
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 =	2,184
				Total Gross Residential Trips =	2,127
				Total Gross Non-Residential Trips =	57
				Internal Capture % among TAZ =	2.74%
				Internal Capture trips among TAZ =	60

(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 =	**2,124**

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	500	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)	157	96	61
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	25	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 =	159	97	62
				Total Gross Residential Trips =	157	96	61
				Total Gross Non-Residential Trips =	2	1	1
				Internal Capture % among TAZ =	2.52%	-	-
				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 =	**155**	**95**	**60**

WATS TAZ	TCRPM TAZ
387	660

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	450,000	s.f.	[130]	T = 6.96*(X/1000)	3,132
Commercial Retail	20,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	2,386
Service & Office	100,000	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	1,334
Research & Development(1)	400,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	3,143
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 =	9,995
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	9,995
				Internal Capture % among TAZ =	7.32%
				Internal Capture trips among TAZ =	732

(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.
0.75 * Intensity =	15,000	s.f.
External Trips from Matrix =	2,134	trips
0.75 * External Trips from Matrix =	1,601	trips
Pass-By Percent =	34%	
Pass-By Reduction =	544	trips

NET NEW EXTERNAL DAILY TRIPS =	**8,719**

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)			
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	450,000	s.f.	[130]	T = 0.86*(X/1000); (21% in)	387	81	306
Commercial Retail	20,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	216	106	110
Service & Office[2]	100,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	149	25	124
Research & Development[1]	400,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	405	61	344
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	273	884
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	1,157	273	884
				Internal Capture % among TAZ =	5.01%	-	-
				Internal Capture trips among TAZ =	58	29	29

(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 =	195	trips
Pass-By Percent =	34%	
Pass-By Reduction =	50	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,049**	**219**	**830**

WATS TAZ	TCRPM TAZ
388	663

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	410	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	3,808
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	
Age-Restricted Single-Family	200	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	976
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	15	acres	[412]	T = 2.28*(X)	34
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 =	4,818
				Total Gross Residential Trips =	4,784
				Total Gross Non-Residential Trips =	34
				Internal Capture % among TAZ =	0.75%
				Internal Capture trips among TAZ =	36

(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 =	**4,782**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	410	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	374	236	138
Multi-Family Residential	0	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)			
Age-Restricted Single-Family	200	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)	81	49	32
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	15	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 =	456	285	171
				Total Gross Residential Trips =	455	285	170
				Total Gross Non-Residential Trips =	1	0	1
				Internal Capture % among TAZ =	0.44%	-	-
				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

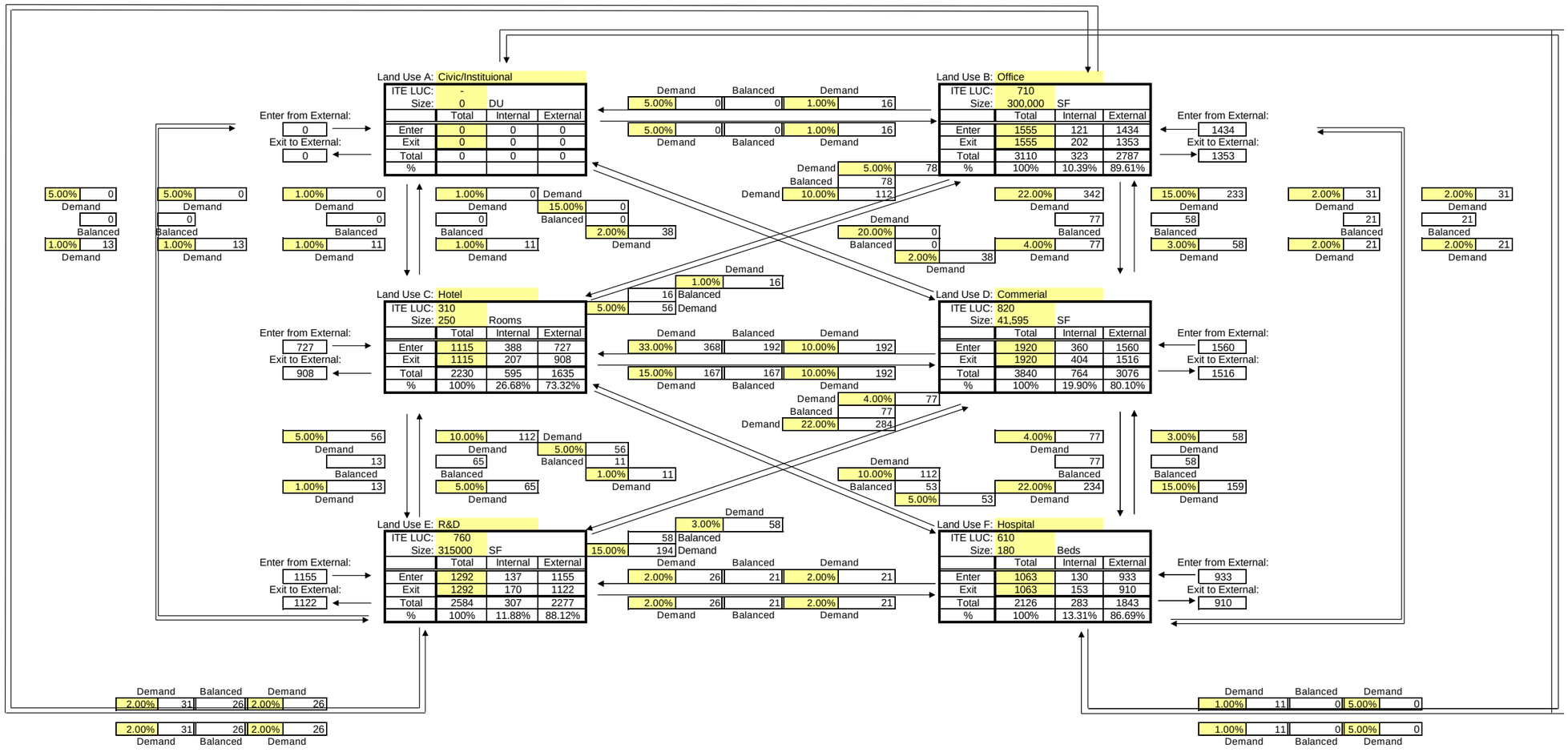
Commercial Retail Pass-By Calculation:		
Intensity =	0	s.f.
External Trips from Matrix =	0	trips
Pass-By Percent =	34%	
Pass-By Reduction =	0	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**454**	**284**	**170**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

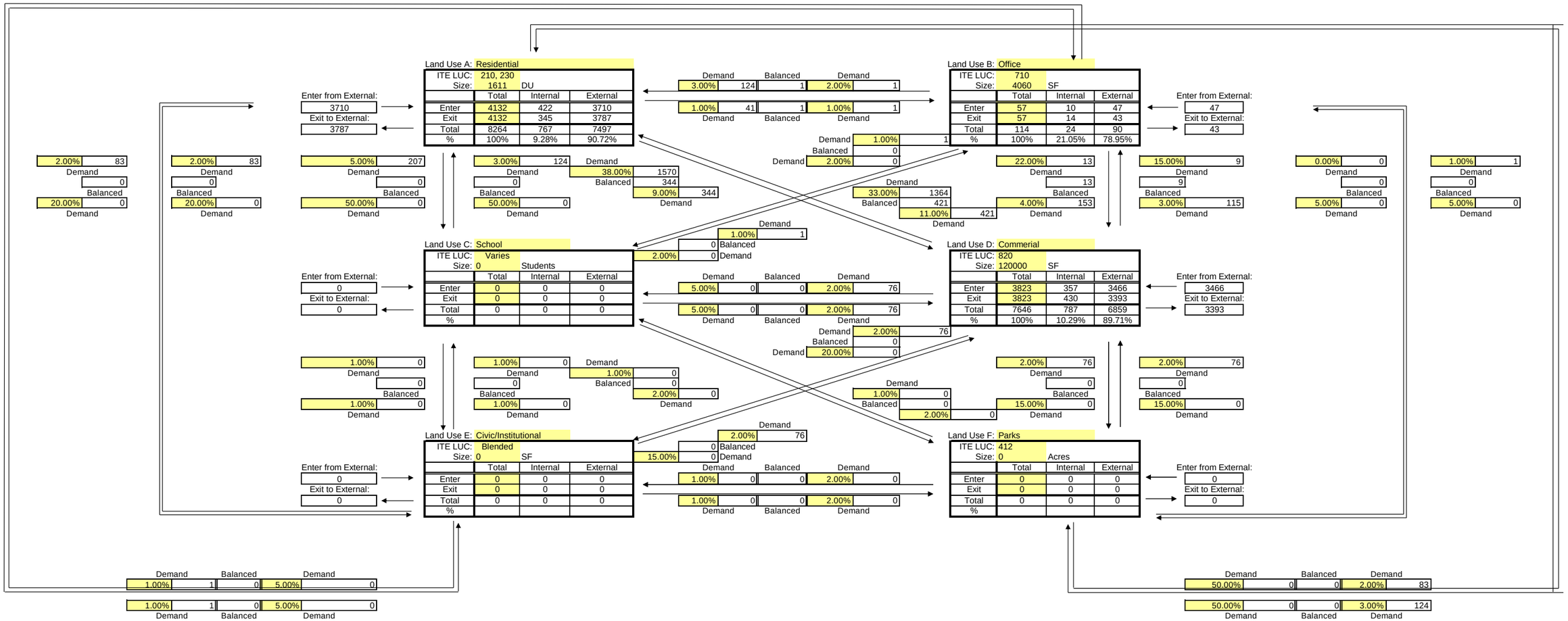
Category	Land Use A Civic/Instituid	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	0	1434	727	1560	1155	933	5809
Exit	0	1353	908	1516	1122	910	5809
Total	0	2787	1635	3076	2277	1843	**11618**
Single Use Trip Gen Estimate	0	3110	2230	3840	2584	2126	**13890**
	0.00%	10.39%	26.68%	19.90%	11.88%	13.31%	

Internal Capture = 16.36%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

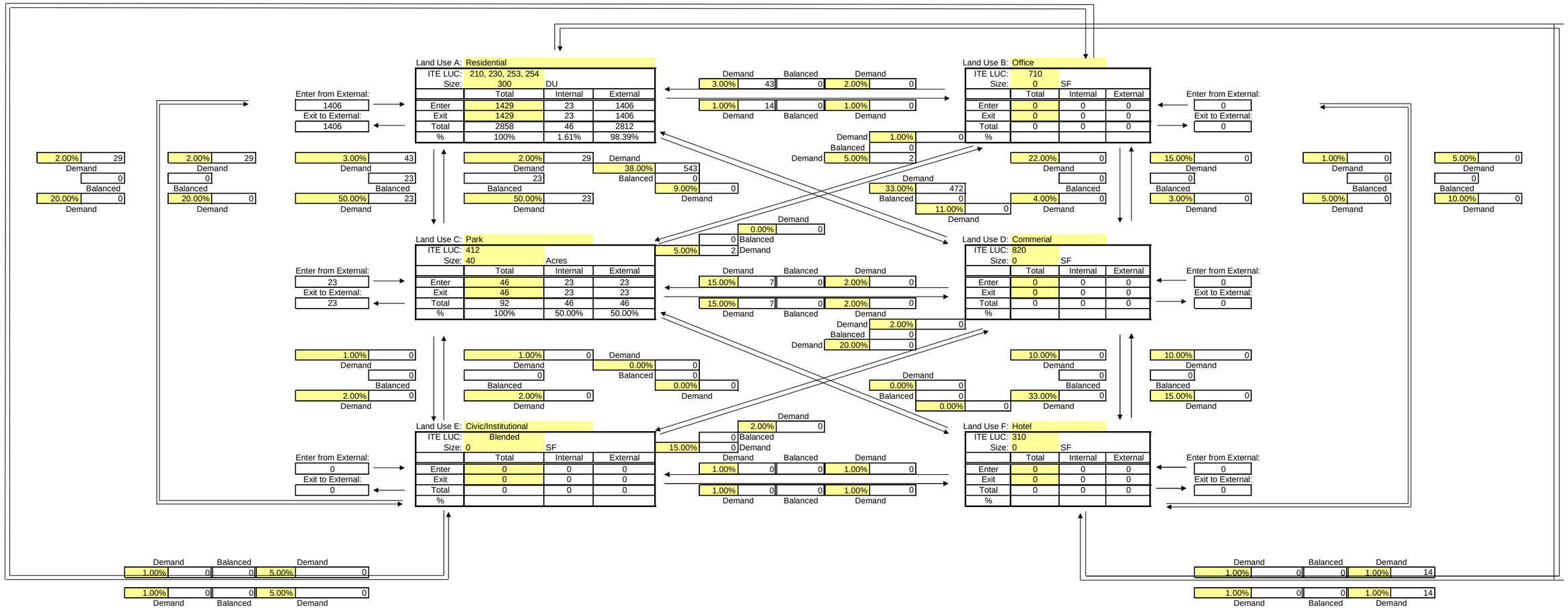
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3710	47	0	3466	0	0	7223
Exit	3787	43	0	3393	0	0	7223
Total	7497	90	0	6859	0	0	**14446**
Single Use Trip Gen Estimate	8264	114	0	7646	0	0	**16024**
	9.28%	21.05%	0.00%	10.29%	0.00%	0.00%	

Internal Capture = 9.85%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

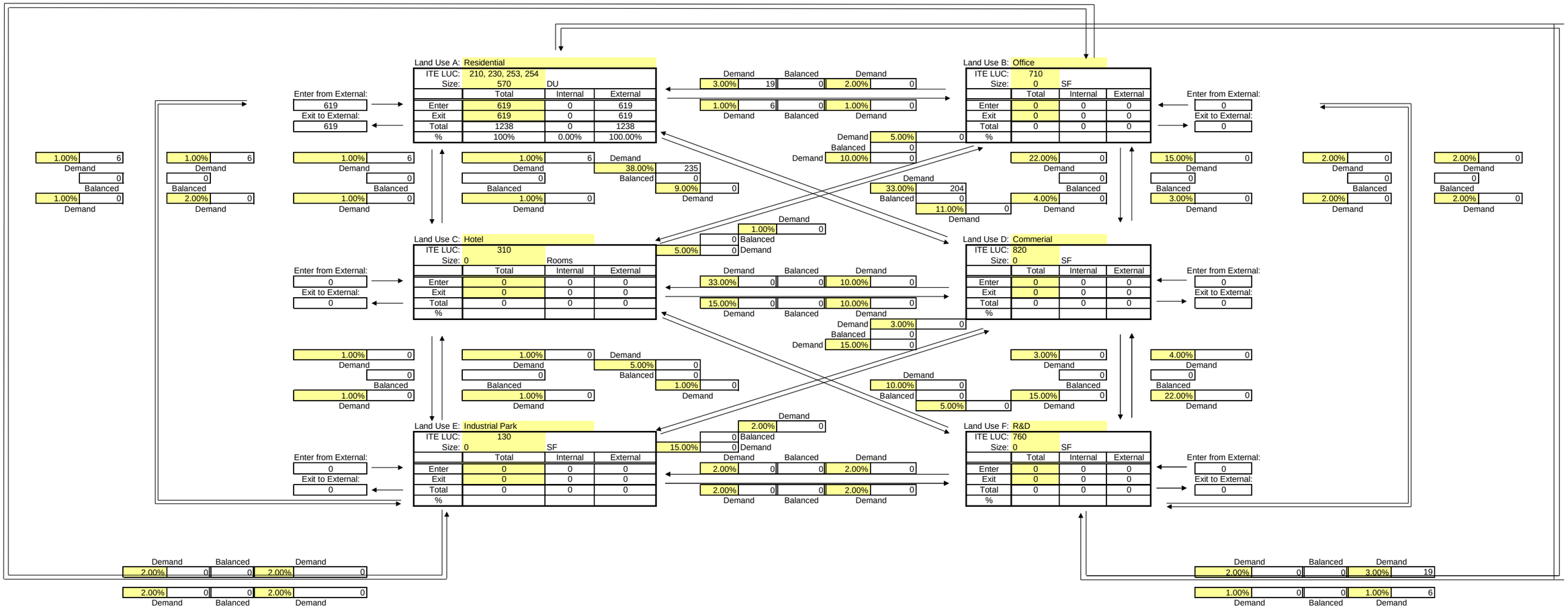
Category	Land Use A Residential	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	1406	0	23	0	0	0	1429
Exit	1406	0	23	0	0	0	1429
Total	2812	0	46	0	0	0	**2858**
Single Use Trip Gen Estimate	2858	0	92	0	0	0	**2950**
	1.61%	0.00%	50.00%	0.00%	0.00%	0.00%	

Internal Capture = 3.12%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

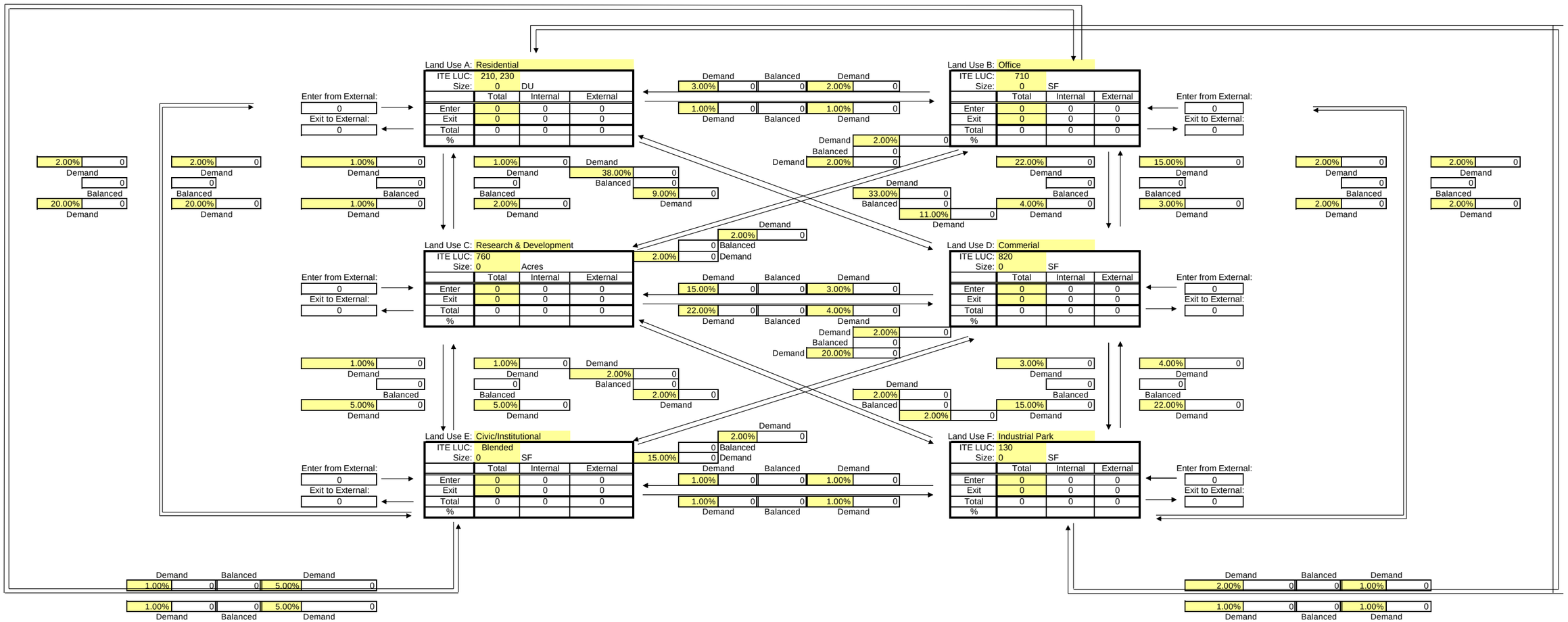
Category	Land Use						
	A	B	C	D	E	F	Total
	Residentia	Office	Hotel	Commerial	Industrial Pa	R&D	
Enter	619	0	0	0	0	0	619
Exit	619	0	0	0	0	0	619
Total	1238	0	0	0	0	0	**1238**
Single Use Trip Gen Estimate	1238	0	0	0	0	0	**1238**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

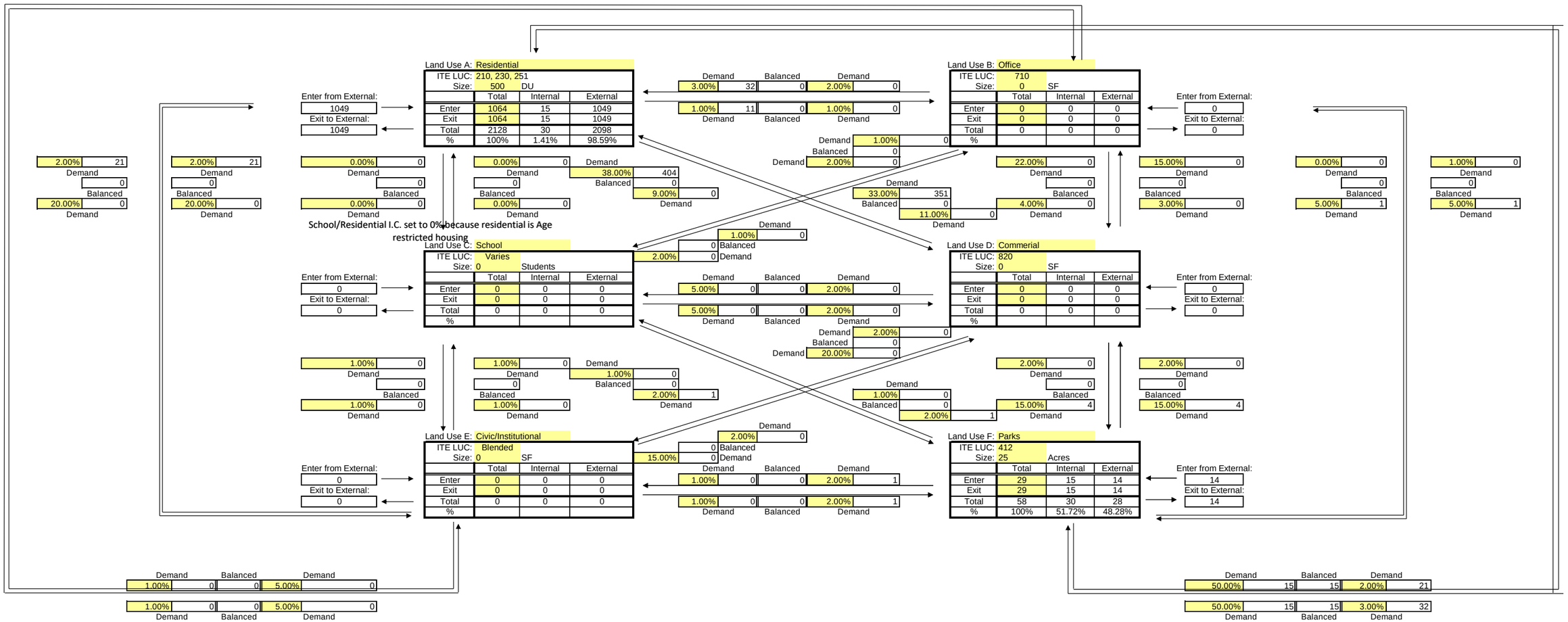
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	0	0	0	0	0	0
Exit	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	**0**
Single Use Trip Gen Estimate	0	0	0	0	0	0	**0**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = #DIV/0!

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

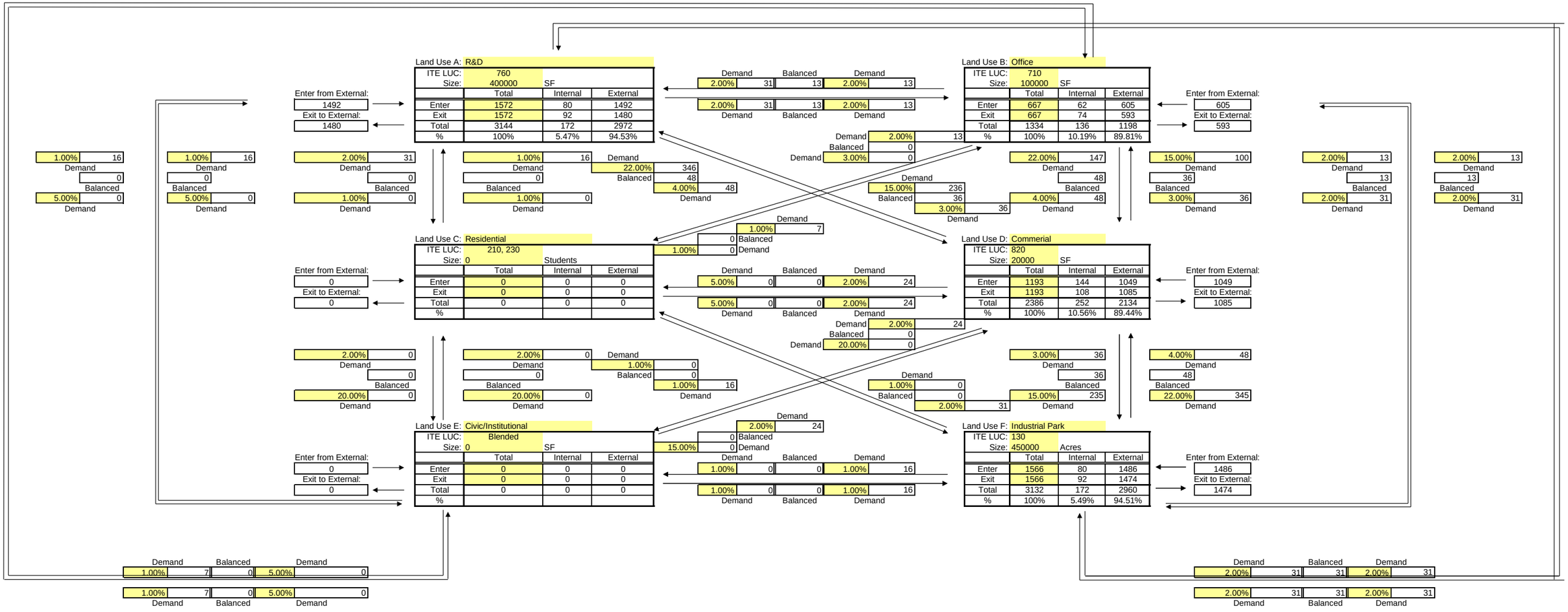
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1049	0	0	0	0	14	1063
Exit	1049	0	0	0	0	14	1063
Total	2098	0	0	0	0	28	**2126**
Single Use Trip Gen Estimate	2128	0	0	0	0	58	**2186**
	1.41%	0.00%	0.00%	0.00%	0.00%	51.72%	

Internal Capture = 2.74%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

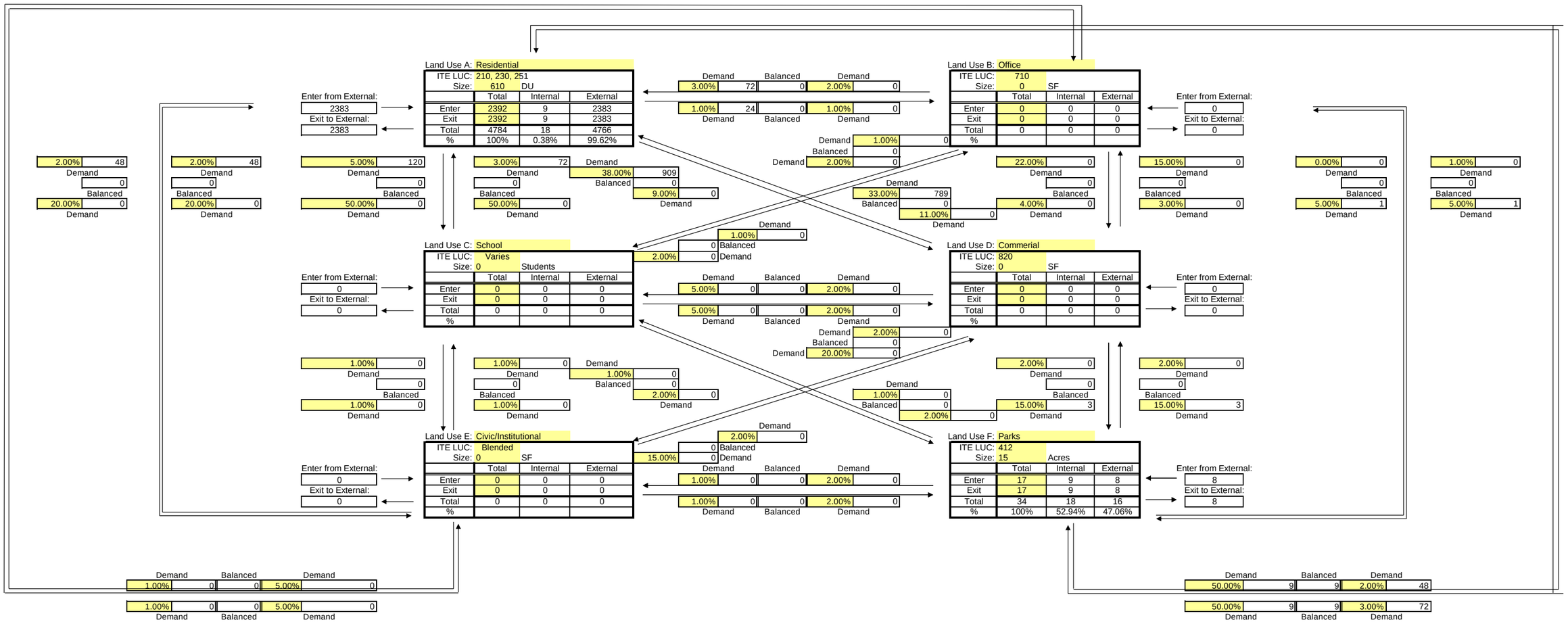
Category	Land Use						
	A	B	C	D	E	F	Total
	R&D	Office	Residential	Commerial	Civic/Institut	Industrial Par	
Enter	1492	605	0	1049	0	1486	4632
Exit	1480	593	0	1085	0	1474	4632
Total	2972	1198	0	2134	0	2960	**9264**
Single Use Trip Gen Estimate	3144	1334	0	2386	0	3132	**9996**
	5.47%	10.19%	0.00%	10.56%	0.00%	5.49%	

Internal Capture = 7.32%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

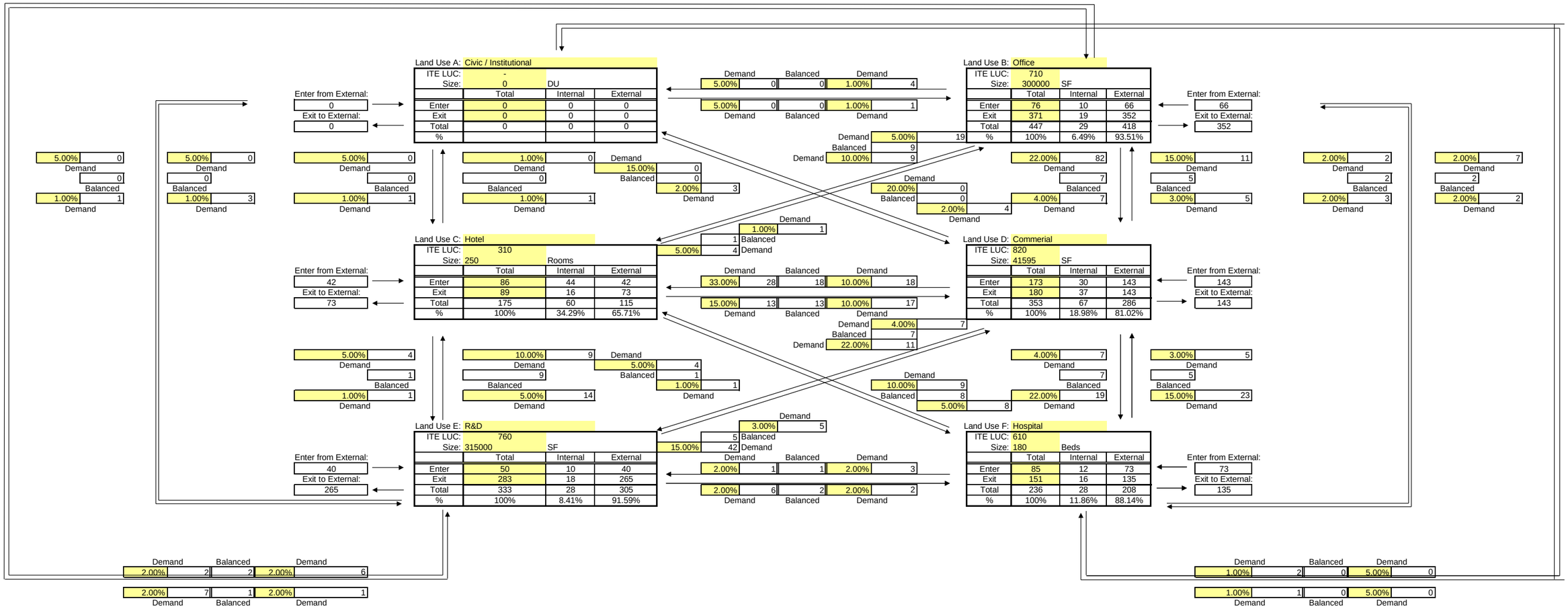
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2383	0	0	0	0	8	2391
Exit	2383	0	0	0	0	8	2391
Total	4766	0	0	0	0	16	**4782**
Single Use Trip Gen Estimate	4784	0	0	0	0	34	**4818**
	0.38%	0.00%	0.00%	0.00%	0.00%	52.94%	

Internal Capture = 0.75%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 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

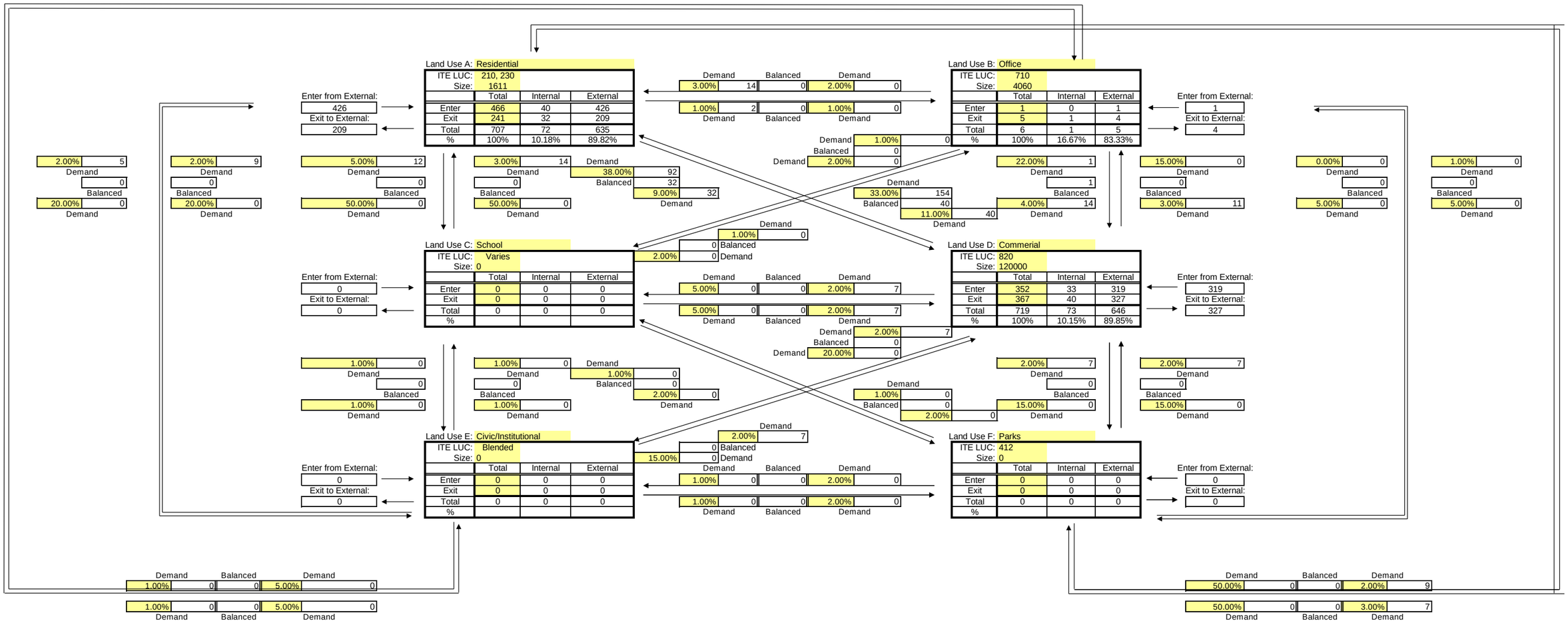
Category	Land Use A Civic / Instituti	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	0	66	42	143	40	73	364
Exit	0	352	73	143	265	135	968
Total	0	418	115	286	305	208	**1332**
Single Use Trip Gen Estimate	0	447	175	353	333	236	**1544**
	0.00%	6.49%	34.29%	18.98%	8.41%	11.86%	

Internal Capture = 13.73%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 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

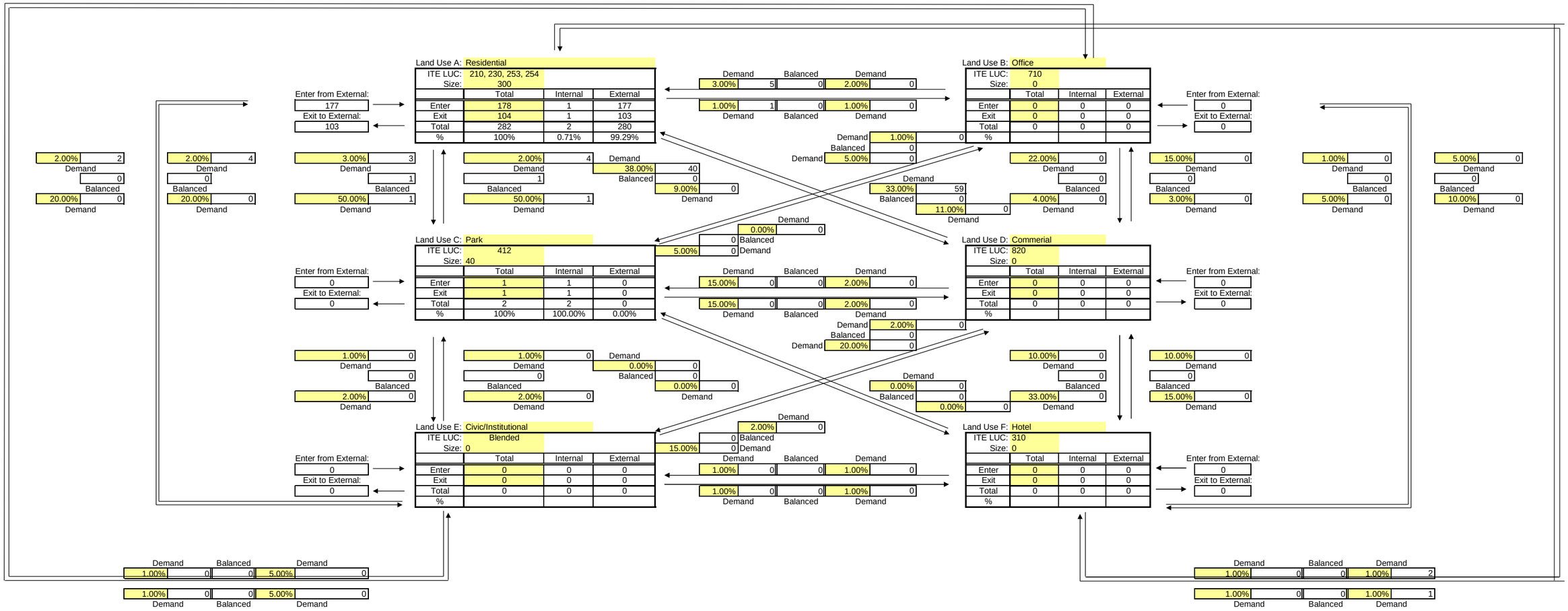
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	426	1	0	319	0	0	746
Exit	209	4	0	327	0	0	540
Total	635	5	0	646	0	0	**1286**
Single Use Trip Gen Estimate	707	6	0	719	0	0	**1432**
	10.18%	16.67%	0.00%	10.15%	0.00%	0.00%	

Internal Capture = 10.20%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 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

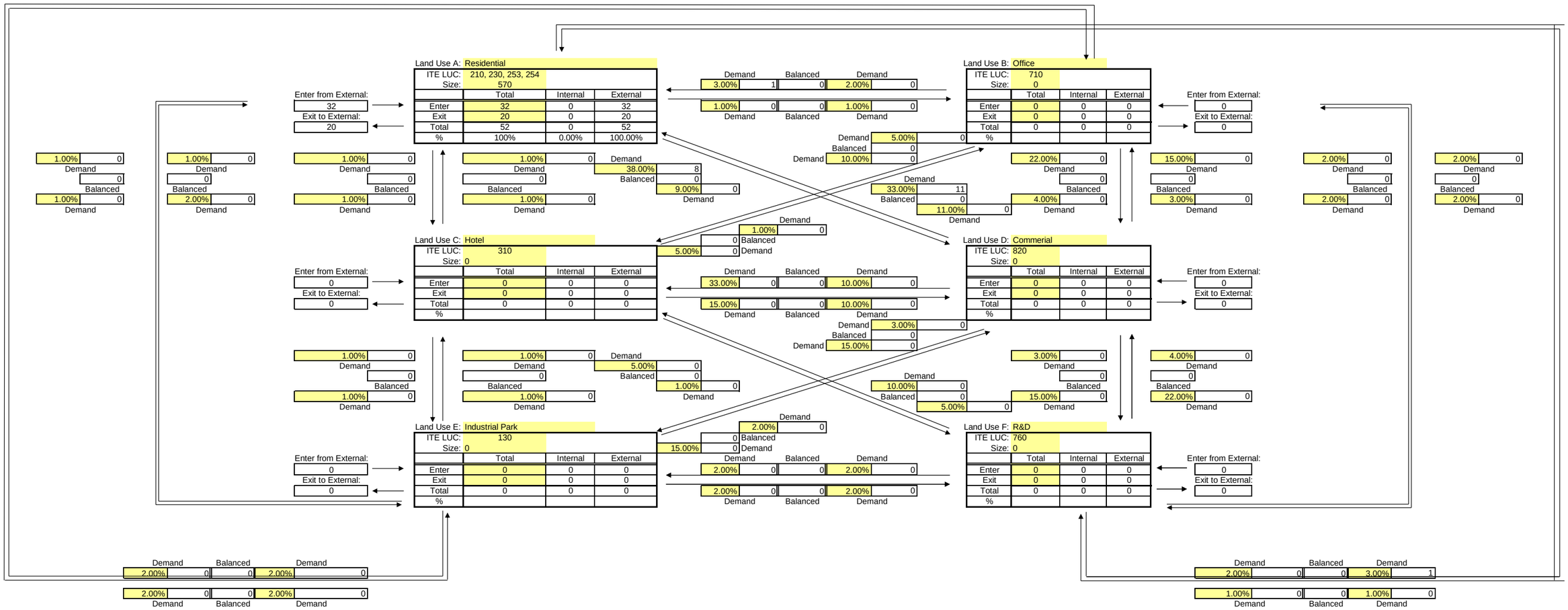
Category	Land Use A Residential	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	177	0	0	0	0	0	177
Exit	103	0	0	0	0	0	103
Total	280	0	0	0	0	0	**280**
Single Use Trip Gen Estimate	282	0	2	0	0	0	**284**
	0.71%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 1.41%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 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

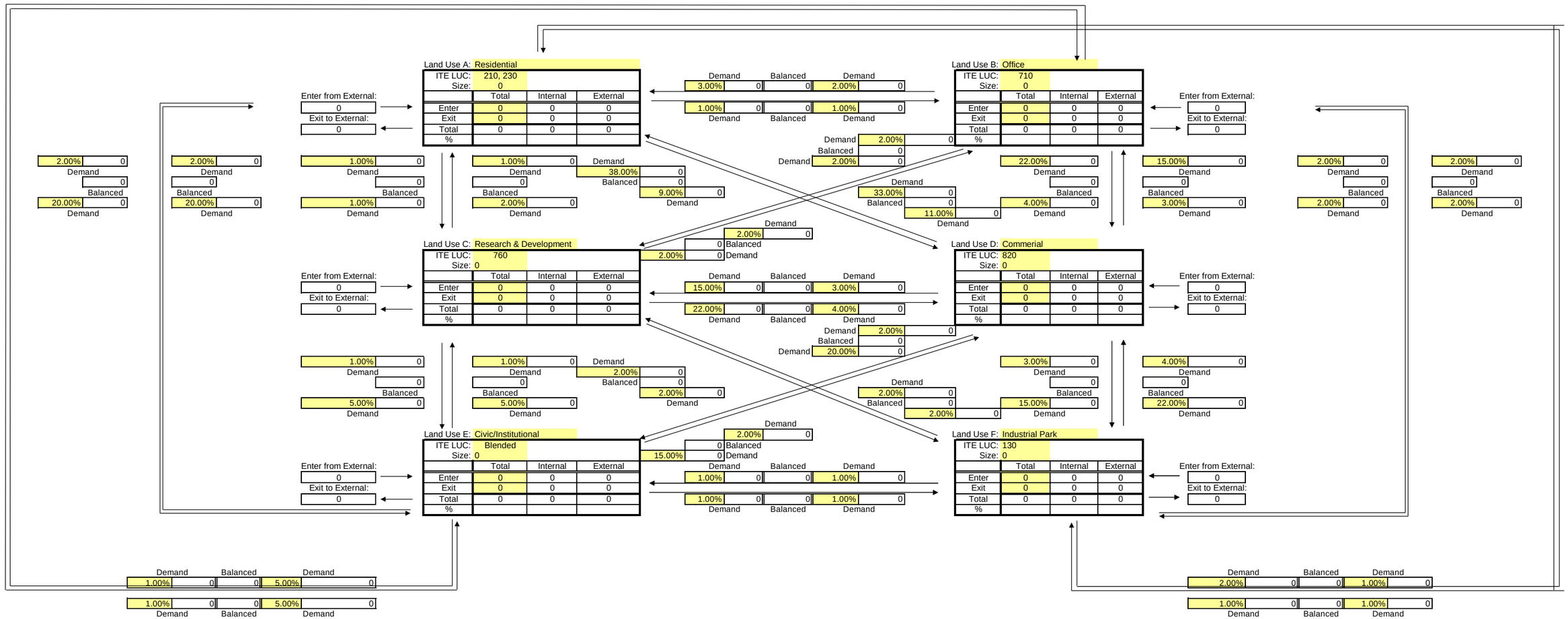
Category	Land Use						
	A	B	C	D	E	F	Total
	Residentia	Office	Hotel	Commerial	Industrial Pa	R&D	
Enter	32	0	0	0	0	0	32
Exit	20	0	0	0	0	0	20
Total	52	0	0	0	0	0	**52**
Single Use Trip Gen Estimate	52	0	0	0	0	0	**52**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.00%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 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

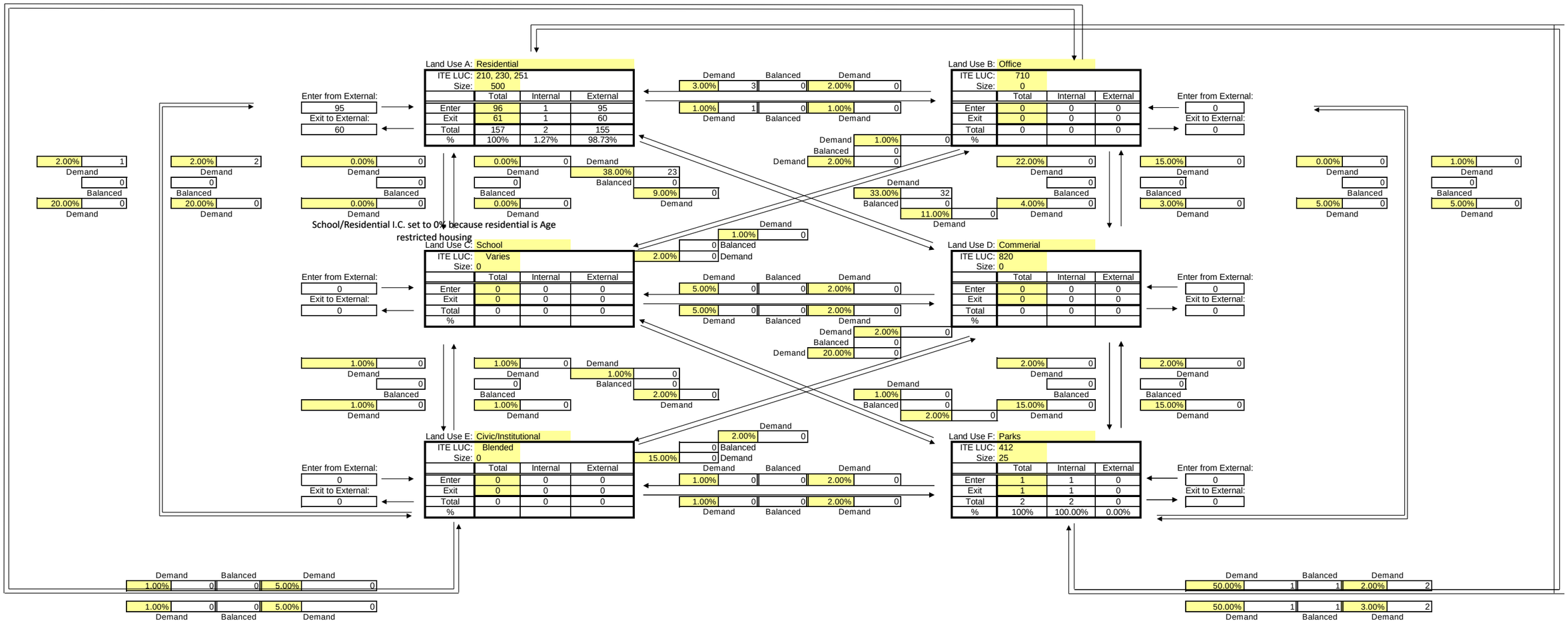
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	0	0	0	0	0	0
Exit	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	**0**
Single Use Trip Gen Estimate	0	0	0	0	0	0	**0**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = #DIV/0!

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 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

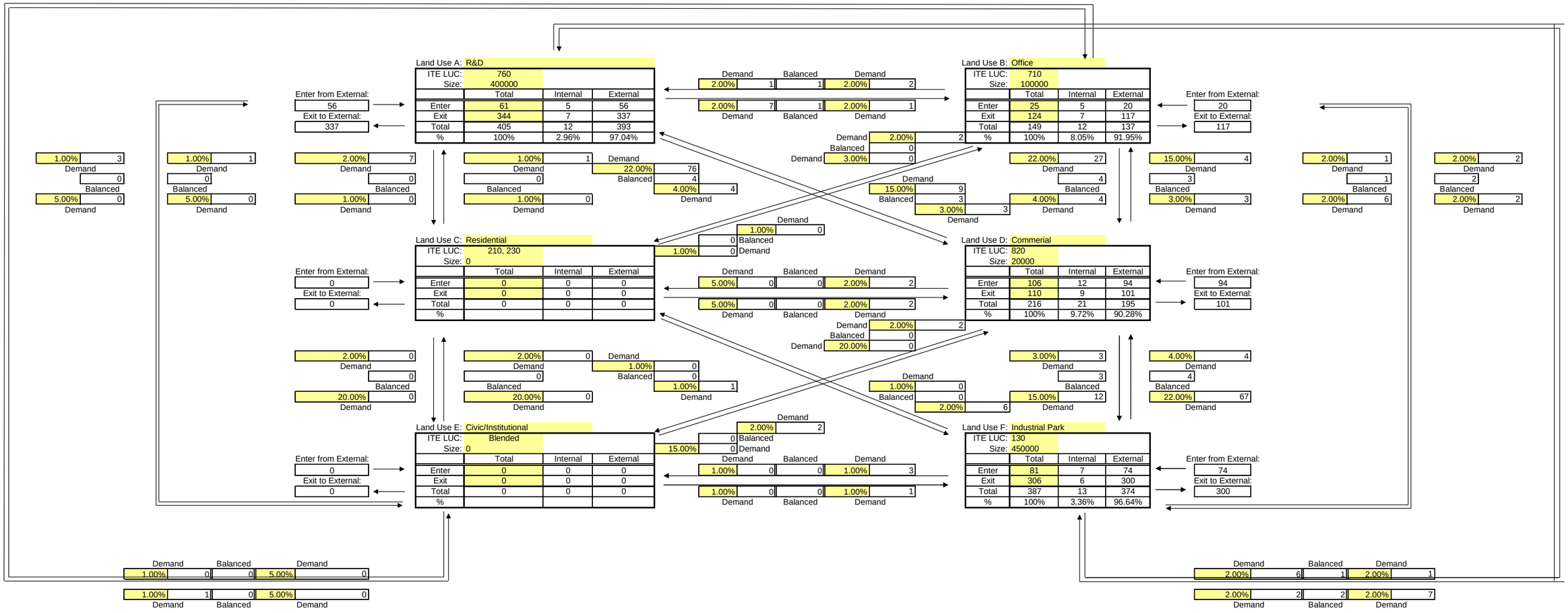
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	95	0	0	0	0	0	95
Exit	60	0	0	0	0	0	60
Total	155	0	0	0	0	0	**155**
Single Use Trip Gen Estimate	157	0	0	0	0	2	**159**
	1.27%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 2.52%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 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

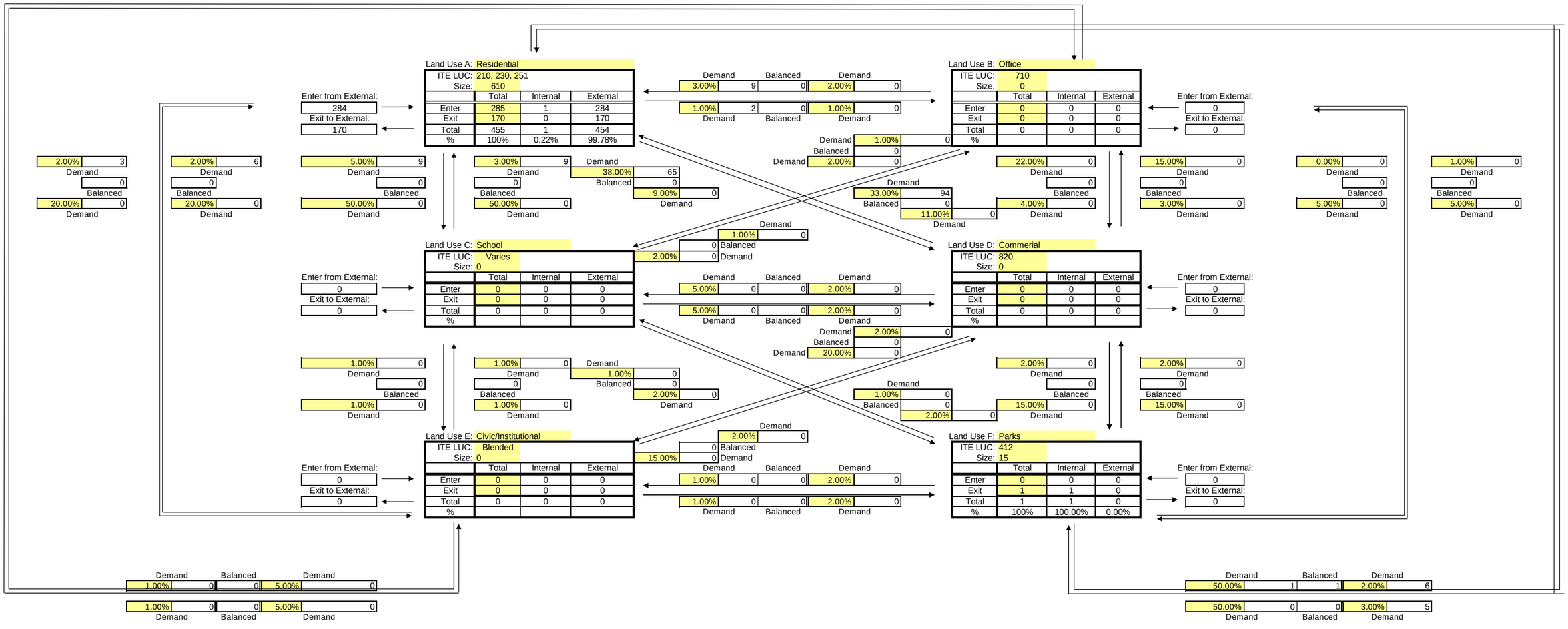
Category	Land Use						
	A	B	C	D	E	F	Total
	R&D	Office	Residential	Commerial	Civic/Institut	Industrial Par	
Enter	56	20	0	94	0	74	244
Exit	337	117	0	101	0	300	855
Total	393	137	0	195	0	374	**1099**
Single Use Trip Gen Estimate	405	149	0	216	0	387	**1157**
	2.96%	8.05%	0.00%	9.72%	0.00%	3.36%	

Internal Capture = 5.01%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2025 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	284	0	0	0	0	0	284
Exit	170	0	0	0	0	0	170
Total	454	0	0	0	0	0	**454**
Single Use Trip Gen Estimate	455	0	0	0	0	1	**456**
	0.22%	0.00%	0.00%	0.00%	0.00%	0.00%	

Internal Capture = 0.44%

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Appendix B-2

Southern Grove Trip Generation and Internal Capture

Phase 2

WATS TAZ	TCRPM TAZ
381	664

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	393	rooms	[310]	T = 8.92*(X)	3,506
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	41,595	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	3,840
Service & Office	459,995	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	4,320
Research & Development(1)	567,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	4,184
Hospital	300	beds	[610]	T = 11.81*(X)	3,543
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	[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 =	19,674
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	19,674
				Internal Capture % among TAZ =	14.93%
				Internal Capture trips among TAZ =	2,938

(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 =	41,595	s.f.
External Trips from Matrix =	3,002	trips
Pass-By Percent =	34%	
Pass-By Reduction =	766	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,970**

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	393	rooms	[310]	T = 0.70*(X); (49% in)	275	135	140
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	41,595	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	353	173	180
Service & Office[2]	459,995	s.f.	[710]	T = 1.49*(X/1000); (17% in)	685	116	569
Research & Development[1]	567,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	539	81	458
Hospital	300	beds	[610]	T = 1.31*(X); (36% in)	393	141	252
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)			
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 =	2,273	657	1,616
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	2,273	657	1,616
				Internal Capture % among TAZ =	12.41%	-	-
				Internal Capture trips among TAZ =	282	141	141

(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 =	41,595	s.f.
External Trips from Matrix =	277	trips
Pass-By Percent =	34%	
Pass-By Reduction =	71	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,920**	**481**	**1,439**

WATS TAZ	TCRPM TAZ
382	659

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th 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.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	6,541
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	4,060	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	113
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	9,212	s.f.	-	T = 30.49*(X/1000)	281
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 =	16,302
				Total Gross Residential Trips =	8,263
				Total Gross Non-Residential Trips =	8,039
				Internal Capture % among TAZ =	10.99%
				Internal Capture trips among TAZ =	1,792

(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 =	6,810	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,737	trips

NET NEW EXTERNAL DAILY TRIPS =	12,773

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) = 0.90*Ln(X) + 0.51; (63% in)	172	108	64
Multi-Family Residential	1,438	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	535	358	177
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]	4,060	s.f.	[710]	T = 1.49*(X/1000); (17% in)	6	1	5
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	9212	s.f.	-	T = 3.05*(X/1000); (40% in)	28	11	17
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 =	1,460	830	630
				Total Gross Residential Trips =	707	466	241
				Total Gross Non-Residential Trips =	753	364	389
				Internal Capture % among TAZ =	11.37%	-	-
				Internal Capture trips among TAZ =	166	83	83

(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 =	641	trips
Pass-By Percent =	34%	
Pass-By Reduction =	164	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,130**	**665**	**465**

WATS TAZ	TCRPM TAZ
383	662

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,168	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	9,977
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	81,500	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	5,946
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	40	acres	[412]	T = 2.28*(X)	91
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 =	17,687
				Total Gross Residential Trips =	11,650
				Total Gross Non-Residential Trips =	6,037
				Internal Capture % among TAZ =	7.41%
				Internal Capture trips among TAZ =	1,310

(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 =	81,500	s.f.
External Trips from Matrix =	5,337	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,361	trips

NET NEW EXTERNAL DAILY TRIPS =	**15,016**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,168	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	960	605	355
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	81,500	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	555	272	283
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	40	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 =	1,665	977	688
				Total Gross Residential Trips =	1,108	704	404
				Total Gross Non-Residential Trips =	557	273	284
				Internal Capture % among TAZ =	6.85%	-	-
				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 =	81,500	s.f.
External Trips from Matrix =	500	trips
Pass-By Percent =	34%	
Pass-By Reduction =	128	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,423**	**856**	**567**

WATS TAZ	TCRPM TAZ
384	661

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	156	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	1,565
Multi-Family Residential	124	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	776
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	158	rooms	[310]	T = 8.92*(X)	1,409
Industrial Park	935,525	s.f.	[130]	T = 6.96*(X/1000)	6,511
Commercial Retail	759,534	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	25,368
Service & Office	230,512	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	2,538
Research & Development(1)	351,581	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	2,828
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	420	d.u.	[253]	T = 2.02*(X)	848
Assisted Living Facility	150	beds	[254]	T = 2.60*(X)	390
				Total Gross Trips =	42,233
				Total Gross Residential Trips =	2,341
				Total Gross Non-Residential Trips =	39,892
				Internal Capture % among TAZ =	17.51%
				Internal Capture trips among TAZ =	7,396

(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 =	759,534	s.f.
External Trips from Matrix =	22,131	trips
Pass-By Percent =	34%	
Pass-By Reduction =	5,643	trips

NET NEW EXTERNAL DAILY TRIPS =	**29,194**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	156	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	157	99	58
Multi-Family Residential	124	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	72	48	24
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	158	rooms	[310]	T = 0.70*(X); (49% in)	111	54	57
Industrial Park	935,525	s.f.	[130]	T = 0.86*(X/1000); (21% in)	805	169	636
Commercial Retail	759,534	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	2,475	1,213	1,262
Service & Office[2]	230,512	s.f.	[710]	T = 1.49*(X/1000); (17% in)	343	58	285
Research & Development[1]	351,581	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	364	55	309
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	420	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 =	4,379	1,728	2,651
				Total Gross Residential Trips =	229	147	82
				Total Gross Non-Residential Trips =	4,150	1,581	2,569
				Internal Capture % among TAZ =	15.07%	-	-
				Internal Capture trips among TAZ =	660	330	330

(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 =	759,534	s.f.
External Trips from Matrix =	2,186	trips
Pass-By Percent =	34%	
Pass-By Reduction =	558	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**3,161**	**1,119**	**2,042**

WATS TAZ	TCRPM TAZ
385	646

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	953	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	4,573
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	211,155	s.f.	[130]	T = 6.96*(X/1000)	1,470
Commercial Retail	171,221	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	9,633
Service & Office	123,464	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	1,569
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 =	17,245
				Total Gross Residential Trips =	4,573
				Total Gross Non-Residential Trips =	12,672
				Internal Capture % among TAZ =	18.59%
				Internal Capture trips among TAZ =	3,206

(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 =	171,221	s.f.
External Trips from Matrix =	8,107	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,067	trips

NET NEW EXTERNAL DAILY TRIPS =	**11,972**

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	953	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	382	256	126
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	211,155	s.f.	[130]	T = 0.86*(X/1000); (21% in)	182	38	144
Commercial Retail	171,221	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	912	447	465
Service & Office[2]	123,464	s.f.	[710]	T = 1.49*(X/1000); (17% in)	184	31	153
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 =	1,660	772	888
				Total Gross Residential Trips =	382	256	126
				Total Gross Non-Residential Trips =	1,278	516	762
				Internal Capture % among TAZ =	17.59%	-	-
				Internal Capture trips among TAZ =	292	146	146

(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 =	171,221	s.f.
External Trips from Matrix =	774	trips
Pass-By Percent =	34%	
Pass-By Reduction =	198	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,170**	**527**	**643**

WATS TAZ	TCRPM TAZ
386	651

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	930	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	3,604
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	54,600	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	4,583
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	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 =	10,836
				Total Gross Residential Trips =	3,604
				Total Gross Non-Residential Trips =	7,232
				Internal Capture % among TAZ =	10.89%
				Internal Capture trips among TAZ =	1,180

(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 =	54,600	s.f.
External Trips from Matrix =	4,026	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,027	trips

NET NEW EXTERNAL DAILY TRIPS =	8,629

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	930	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)	245	149	96
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	54,600	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	424	208	216
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	25	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	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 =	927	483	444
				Total Gross Residential Trips =	245	149	96
				Total Gross Non-Residential Trips =	682	334	348
				Internal Capture % among TAZ =	11.43%	-	-
				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 =	54,600	s.f.
External Trips from Matrix =	373	trips
Pass-By Percent =	34%	
Pass-By Reduction =	95	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**726**	**383**	**343**

WATS TAZ	TCRPM TAZ
387	660

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	651	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	3,282
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	714,432	s.f.	[130]	T = 6.96*(X/1000)	4,972
Commercial Retail	190,625	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	10,329
Service & Office	225,545	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	2,496
Research & Development(1)	524,286	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	3,924
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 =	25,003
				Total Gross Residential Trips =	3,282
				Total Gross Non-Residential Trips =	21,721
				Internal Capture % among TAZ =	12.23%
				Internal Capture trips among TAZ =	3,058

(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 =	190,625	s.f.
External Trips from Matrix =	9,080	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,315	trips

NET NEW EXTERNAL DAILY TRIPS =	**19,630**

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	651	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	279	187	92
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	714,432	s.f.	[130]	T = 0.86*(X/1000); (21% in)	614	129	485
Commercial Retail	190,625	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	980	480	500
Service & Office[2]	225,545	s.f.	[710]	T = 1.49*(X/1000); (17% in)	336	57	279
Research & Development[1]	524,286	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	505	76	429
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 =	2,714	929	1,785
				Total Gross Residential Trips =	279	187	92
				Total Gross Non-Residential Trips =	2,435	742	1,693
				Internal Capture % among TAZ =	9.65%	-	-
				Internal Capture trips among TAZ =	262	131	131

(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 =	190,625	s.f.
External Trips from Matrix =	874	trips
Pass-By Percent =	34%	
Pass-By Reduction =	223	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,229**	**687**	**1,542**

WATS TAZ	TCRPM TAZ
388	663

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	410	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	3,808
Multi-Family Residential	225	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,302
Age-Restricted Single-Family	440	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	1,908
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	256,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	12,511
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	36,000	s.f.	-	T = 30.49*(X/1000)	1,098
Park	15	acres	[412]	T = 2.28*(X)	34
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 =	23,253
				Total Gross Residential Trips =	7,018
				Total Gross Non-Residential Trips =	16,235
				Internal Capture % among TAZ =	17.43%
				Internal Capture trips among TAZ =	4,054

(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 =	256,000	s.f.
External Trips from Matrix =	10,933	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,788	trips

NET NEW EXTERNAL DAILY TRIPS =	16,411

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	410	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	374	236	138
Multi-Family Residential	225	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	117	78	39
Age-Restricted Single-Family	440	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)	143	87	56
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	256,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,194	585	609
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	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
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 =	2,195	1,155	1,040
				Total Gross Residential Trips =	634	401	233
				Total Gross Non-Residential Trips =	1,561	754	807
				Internal Capture % among TAZ =	17.40%	-	-
				Internal Capture trips among TAZ =	382	191	191

(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

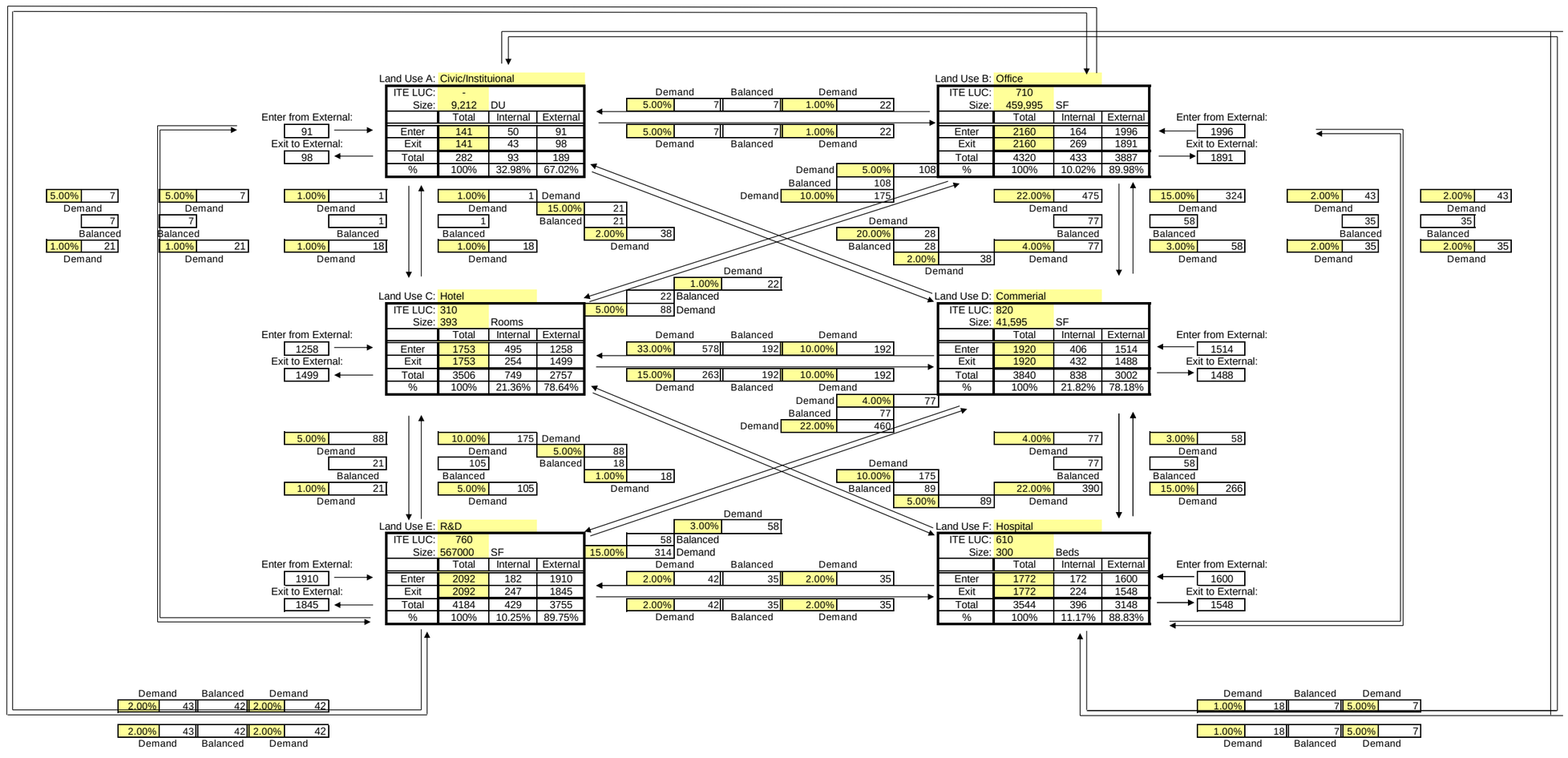
Commercial Retail Pass-By Calculation:		
Intensity =	256,000	s.f.
External Trips from Matrix =	1,042	trips
Pass-By Percent =	34%	
Pass-By Reduction =	266	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,547**	**831**	**716**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 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

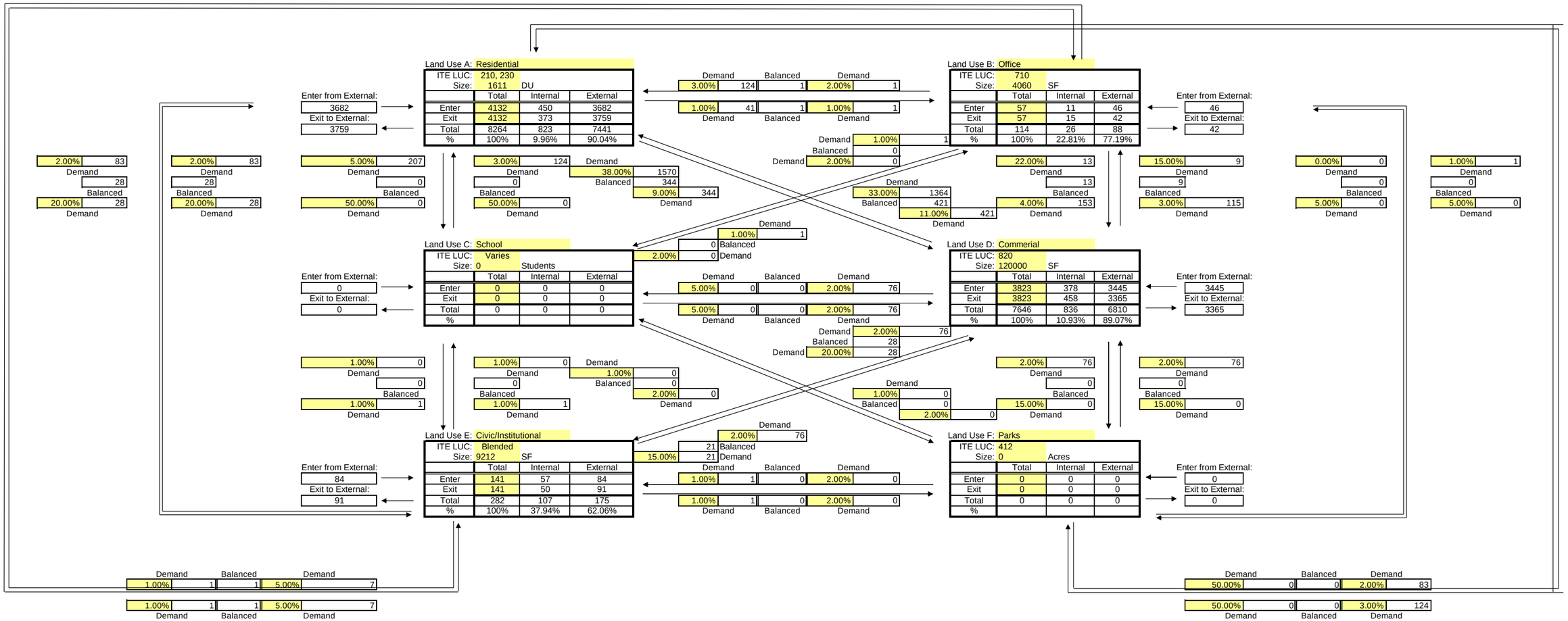
Category	Land Use A Civic/Instituio	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	91	1996	1258	1514	1910	1600	8369
Exit	98	1891	1499	1488	1845	1548	8369
Total	189	3887	2757	3002	3755	3148	**16738**
Single Use Trip Gen Estimate	282	4320	3506	3840	4184	3544	**19676**
	32.98%	10.02%	21.36%	21.82%	10.25%	11.17%	

Internal Capture = 14.93%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

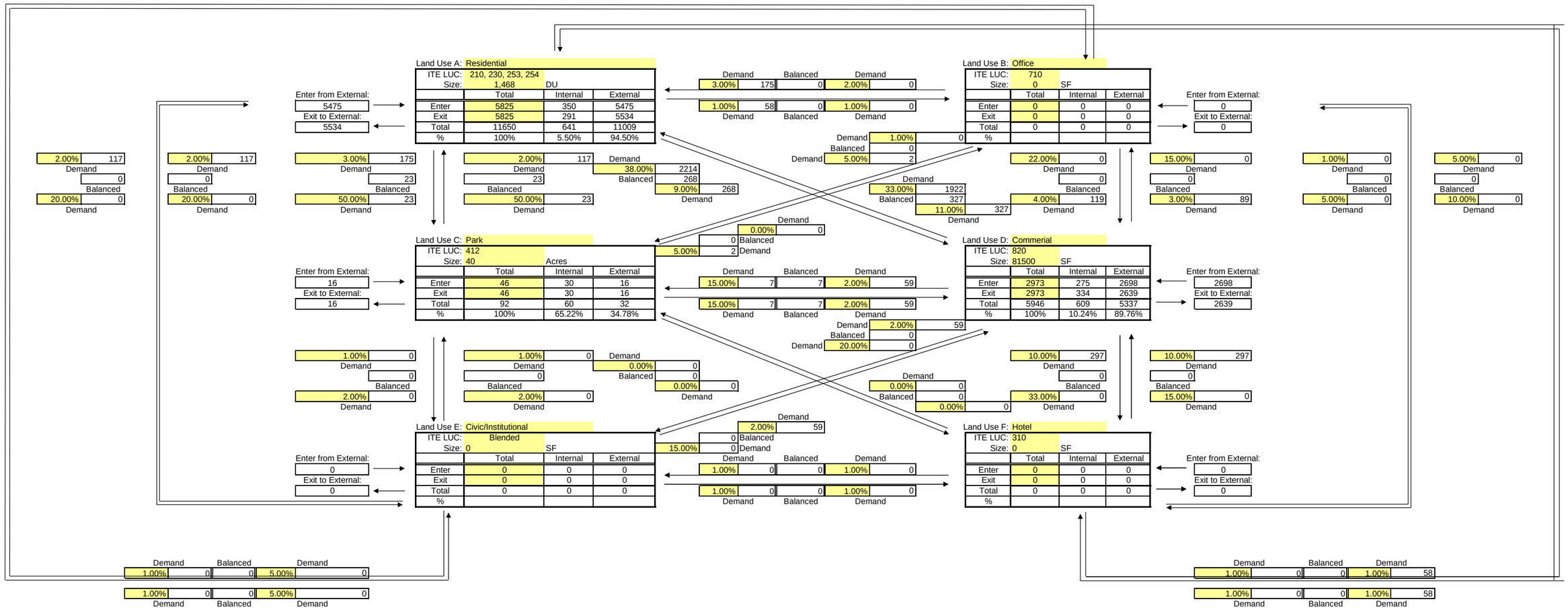
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3682	46	0	3445	84	0	7257
Exit	3759	42	0	3365	91	0	7257
Total	7441	88	0	6810	175	0	**14514**
Single Use Trip Gen Estimate	8264	114	0	7646	282	0	**16306**
	9.96%	22.81%	0.00%	10.93%	37.94%	0.00%	

Internal Capture = 10.99%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

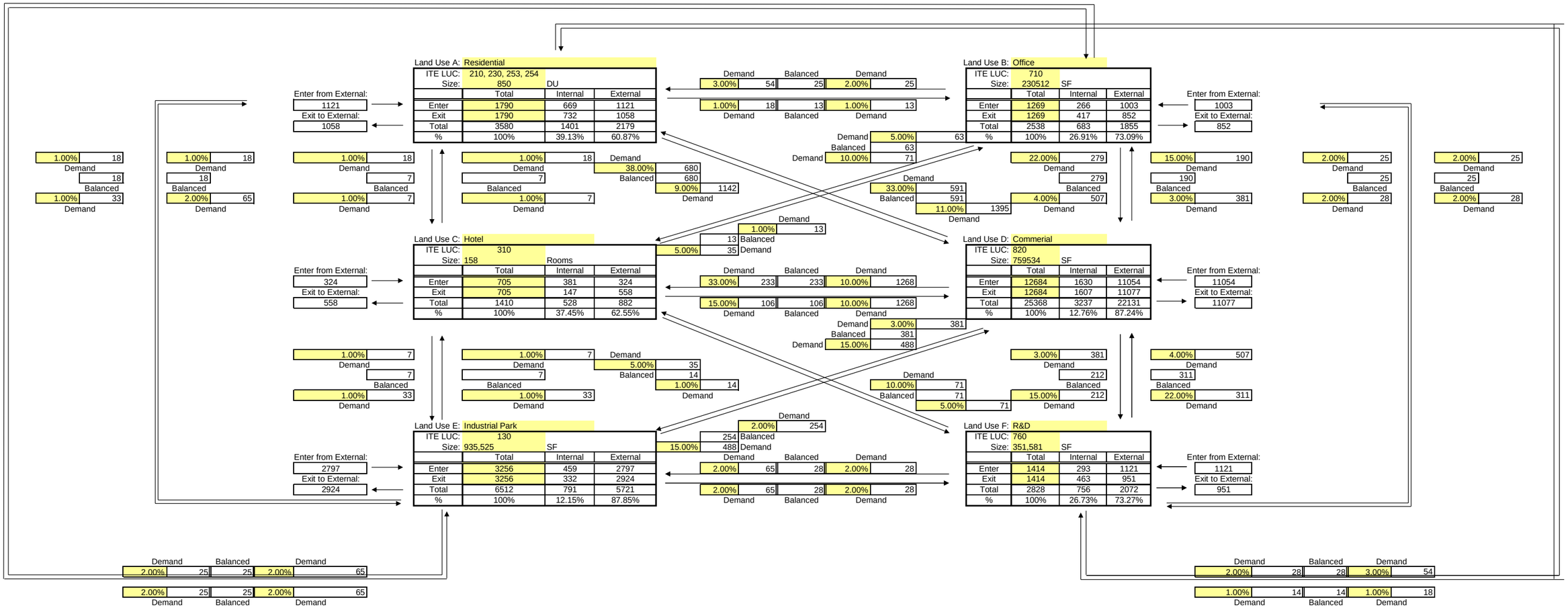
Category	Land Use A Residential	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	5475	0	16	2698	0	0	8189
Exit	5534	0	16	2639	0	0	8189
Total	11009	0	32	5337	0	0	**16378**
Single Use Trip Gen Estimate	11650	0	92	5946	0	0	**17688**
	5.50%	0.00%	65.22%	10.24%	0.00%	0.00%	

Internal Capture = 7.41%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

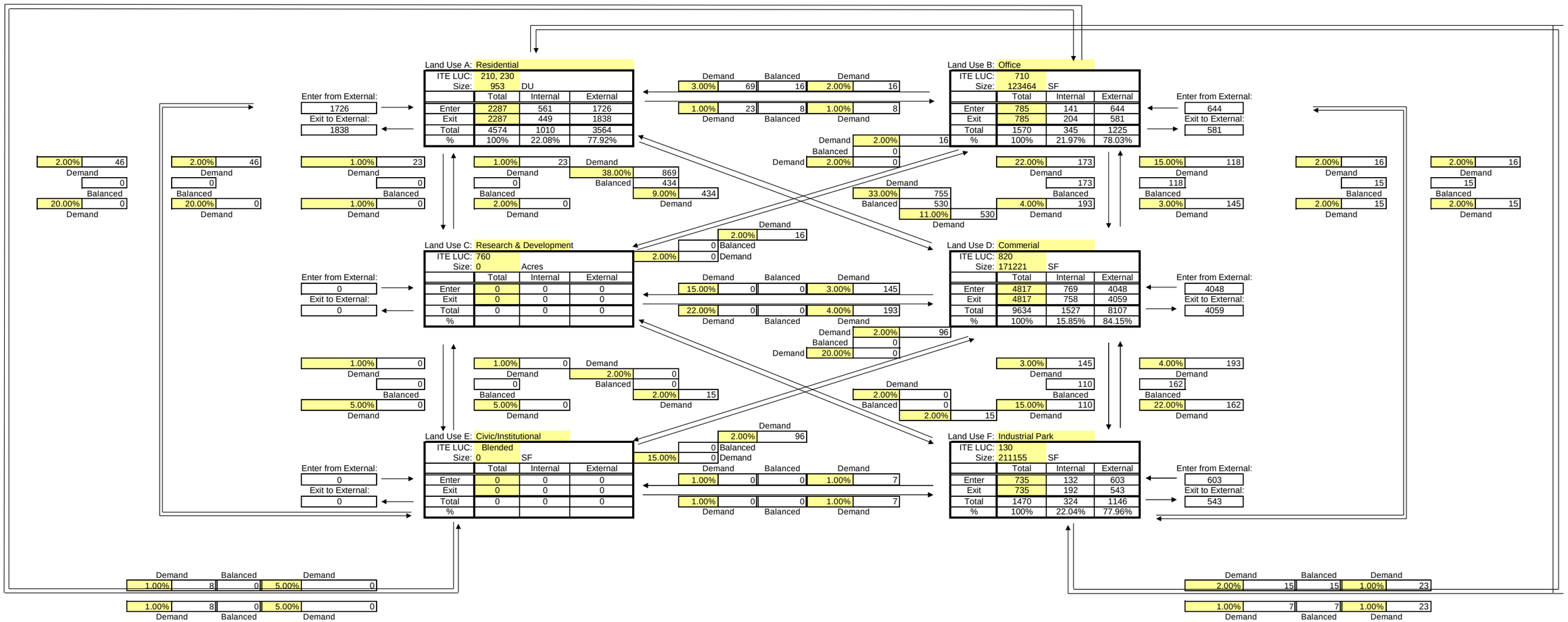
Category	Land Use						
	A	B	C	D	E	F	Total
	Residentia	Office	Hotel	Commerial	Industrial Pa	R&D	
Enter	1121	1003	324	11054	2797	1121	17420
Exit	1058	852	558	11077	2924	951	17420
Total	2179	1855	882	22131	5721	2072	**34840**
Single Use Trip Gen Estimate	3580	2538	1410	25368	6512	2828	**42236**
	39.13%	26.91%	37.45%	12.76%	12.15%	26.73%	

Internal Capture = 17.51%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

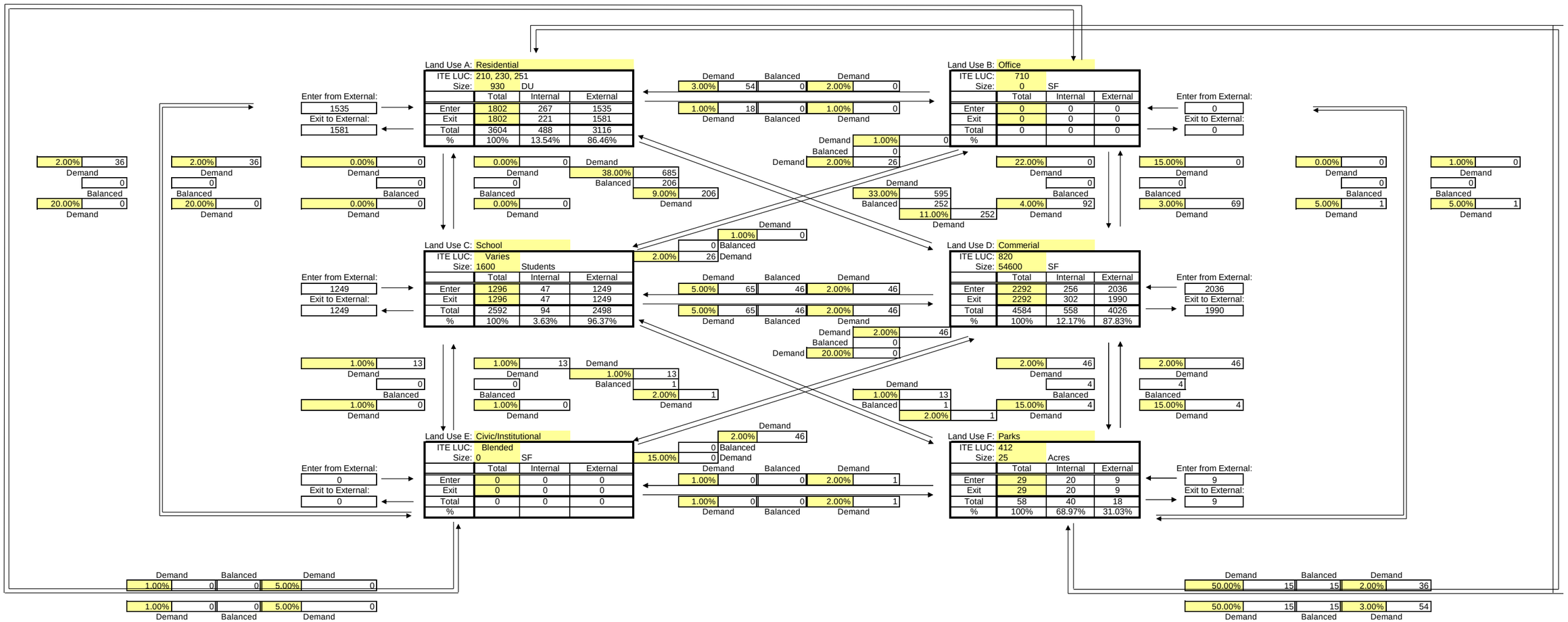
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	1726	644	0	4048	0	603	7021
Exit	1838	581	0	4059	0	543	7021
Total	3564	1225	0	8107	0	1146	**14042**
Single Use Trip Gen Estimate	4574	1570	0	9634	0	1470	**17248**
	22.08%	21.97%	0.00%	15.85%	0.00%	22.04%	

Internal Capture = 18.59%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

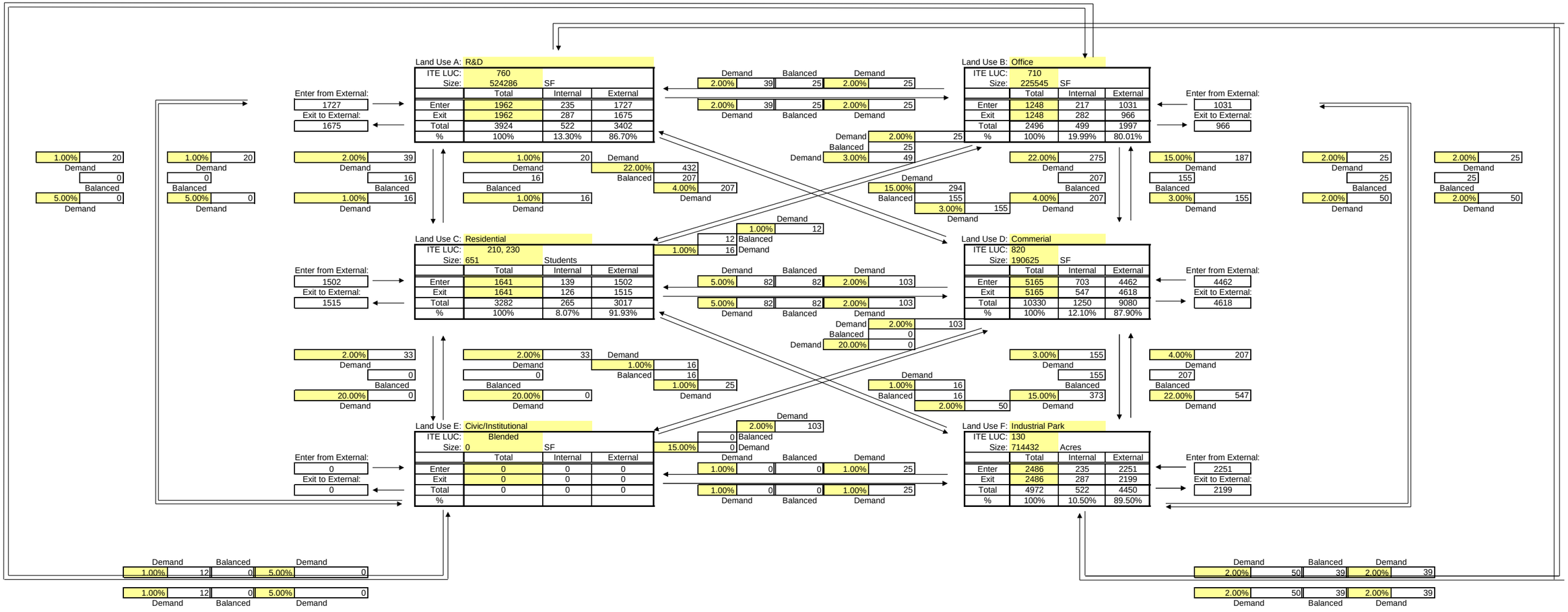
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1535	0	1249	2036	0	9	4829
Exit	1581	0	1249	1990	0	9	4829
Total	3116	0	2498	4026	0	18	**9658**
Single Use Trip Gen Estimate	3604	0	2592	4584	0	58	**10838**
	13.54%	0.00%	3.63%	12.17%	0.00%	68.97%	

Internal Capture = 10.89%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

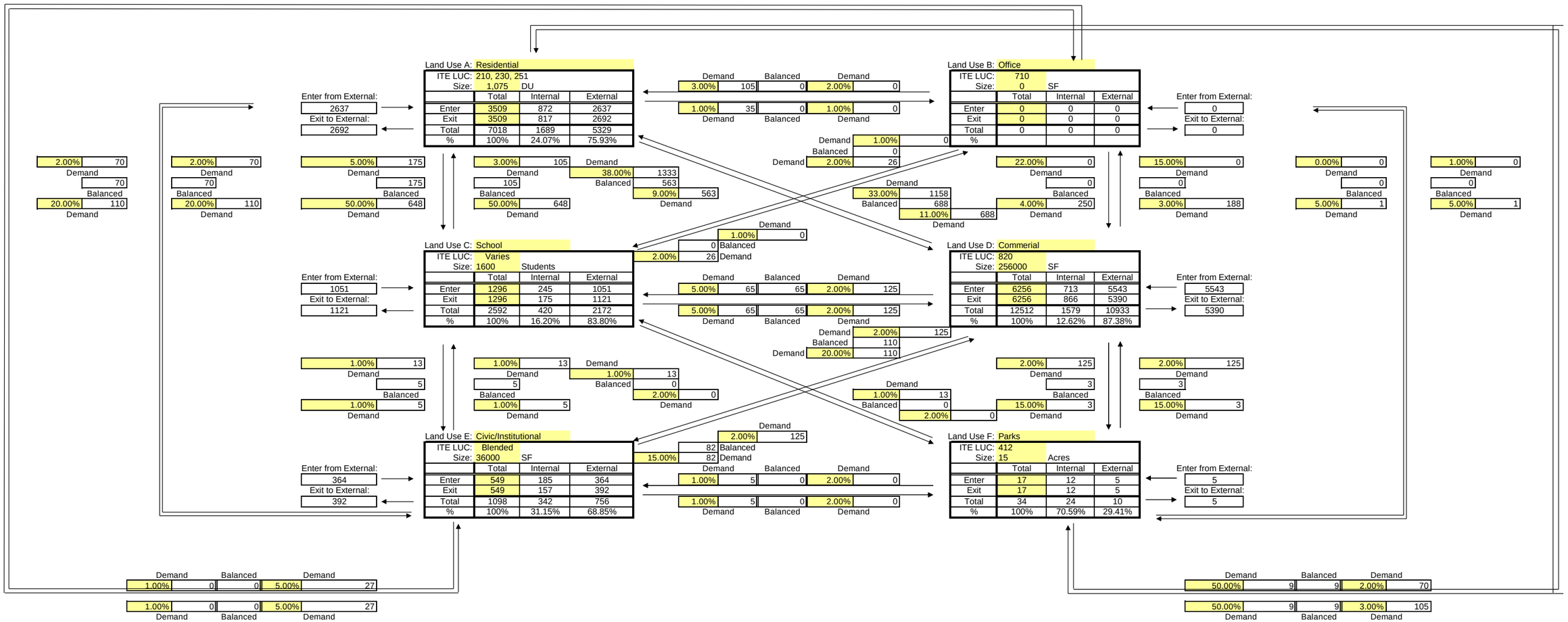
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institut	F Industrial Par	Total
Enter	1727	1031	1502	4462	0	2251	10973
Exit	1675	966	1515	4618	0	2199	10973
Total	3402	1997	3017	9080	0	4450	**21946**
Single Use Trip Gen Estimate	3924	2496	3282	10330	0	4972	**25004**
	13.30%	19.99%	8.07%	12.10%	0.00%	10.50%	

Internal Capture = 12.23%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

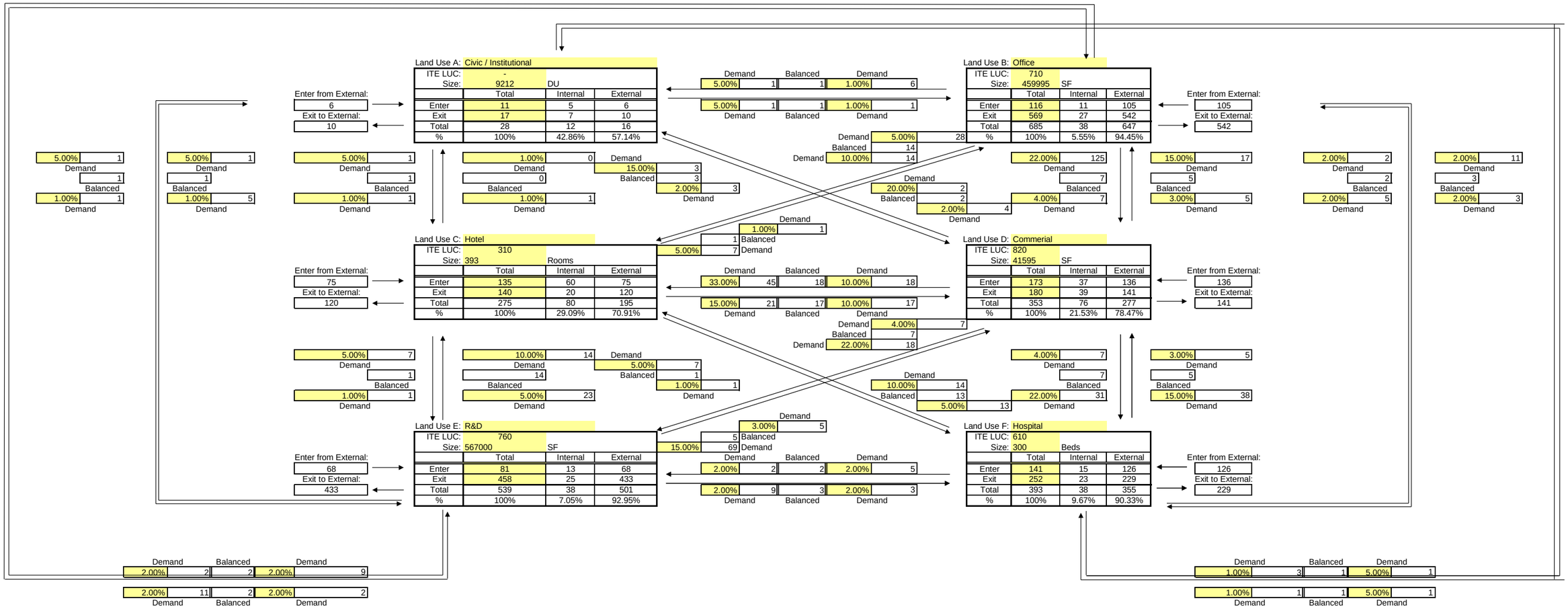
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2637	0	1051	5543	364	5	9600
Exit	2692	0	1121	5390	392	5	9600
Total	5329	0	2172	10933	756	10	**19200**
Single Use Trip Gen Estimate	7018	0	2592	12512	1098	34	**23254**
	24.07%	0.00%	16.20%	12.62%	31.15%	70.59%	

Internal Capture = 17.43%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

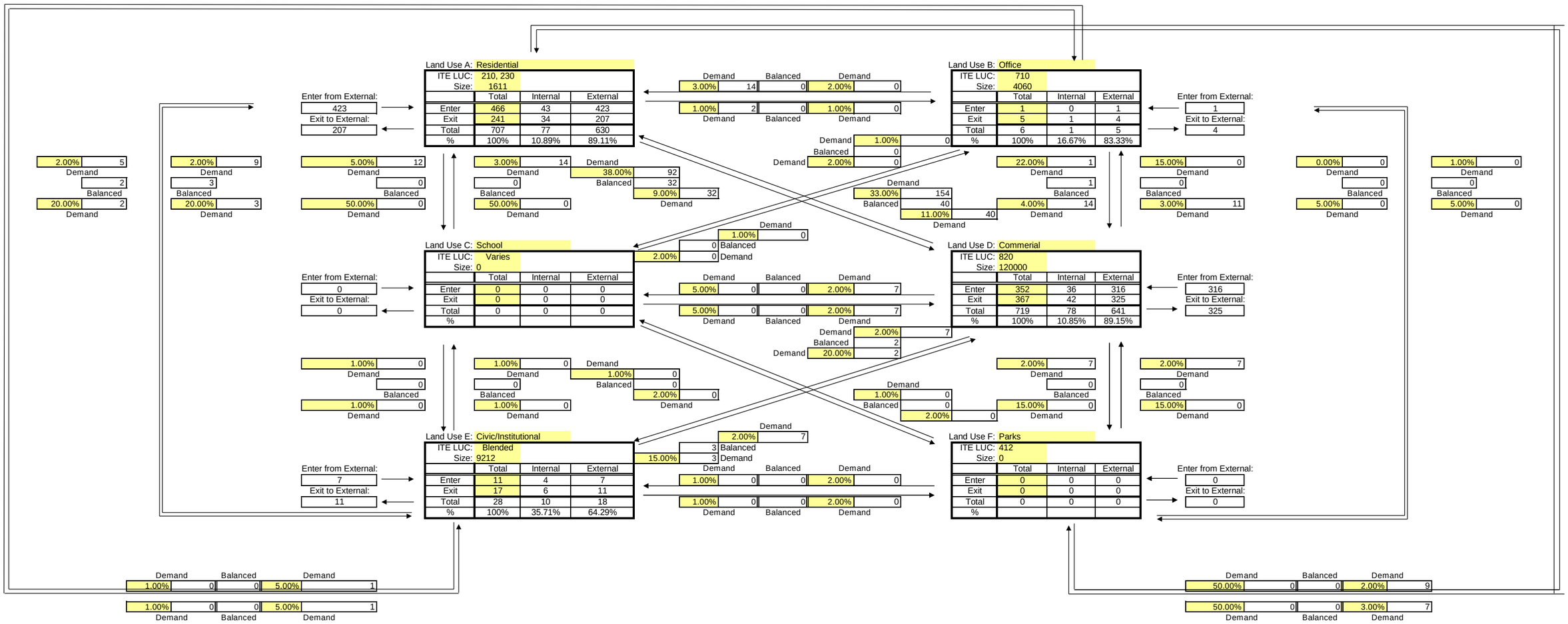
Category	Land Use A Civic / Instituti	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	6	105	75	136	68	126	516
Exit	10	542	120	141	433	229	1475
Total	16	647	195	277	501	355	**1991**
Single Use Trip Gen Estimate	28	685	275	353	539	393	**2273**
	42.86%	5.55%	29.09%	21.53%	7.05%	9.67%	

Internal Capture = 12.41%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

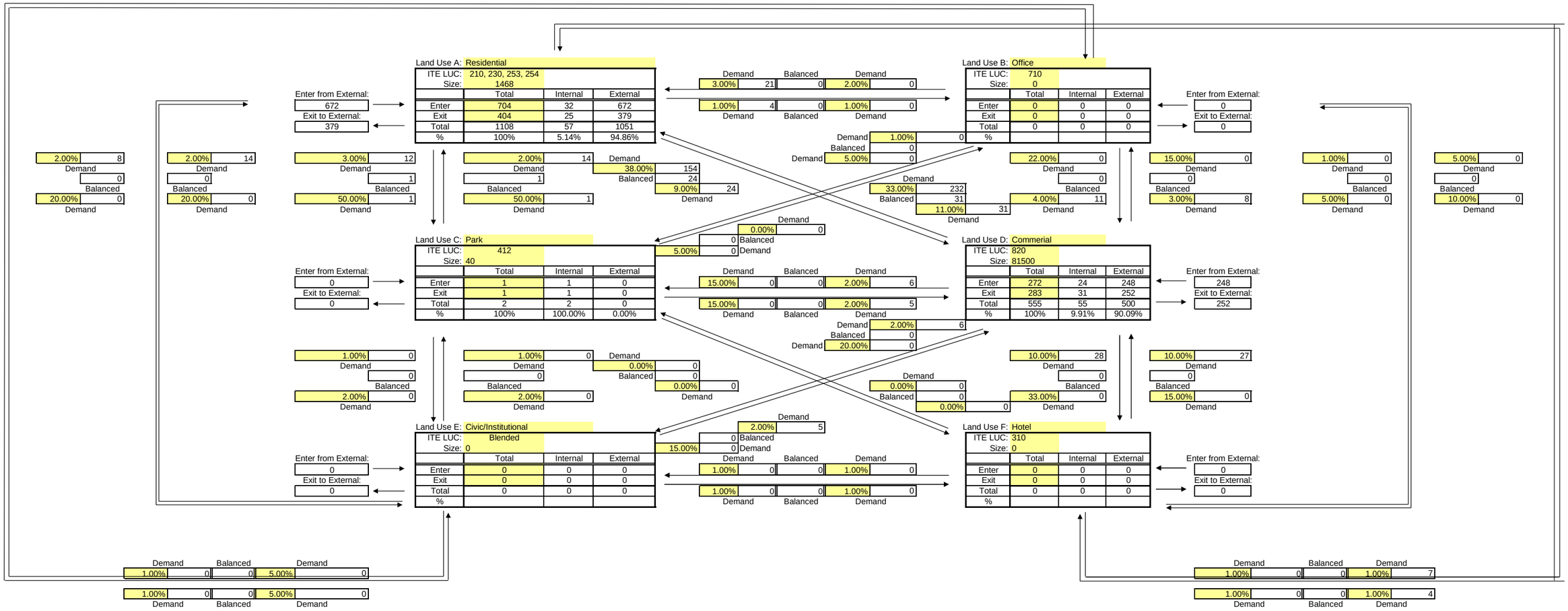
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	423	1	0	316	7	0	747
Exit	207	4	0	325	11	0	547
Total	630	5	0	641	18	0	**1294**
Single Use Trip Gen Estimate	707	6	0	719	28	0	**1460**
	10.89%	16.67%	0.00%	10.85%	35.71%	0.00%	

Internal Capture = 11.37%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

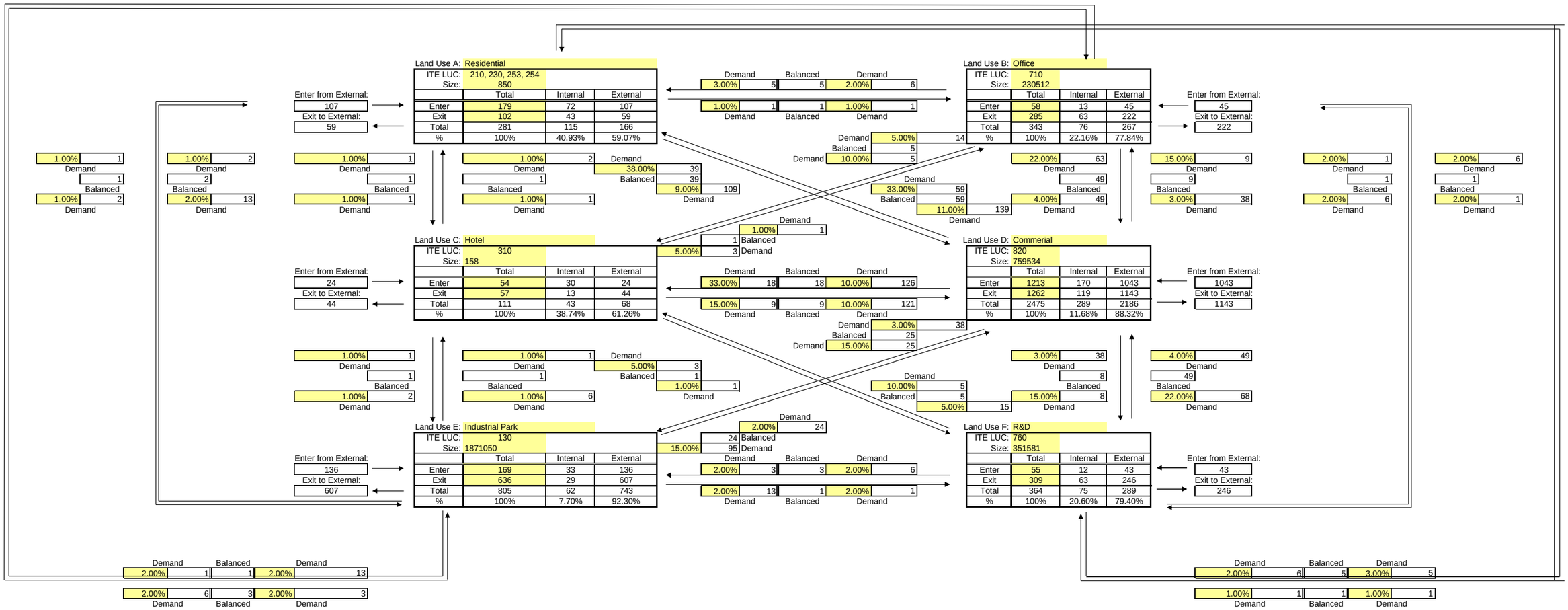
Category	Land Use A Residential	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	672	0	0	248	0	0	920
Exit	379	0	0	252	0	0	631
Total	1051	0	0	500	0	0	**1551**
Single Use Trip Gen Estimate	1108	0	2	555	0	0	**1665**
	5.14%	0.00%	0.00%	9.91%	0.00%	0.00%	

Internal Capture = 6.85%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

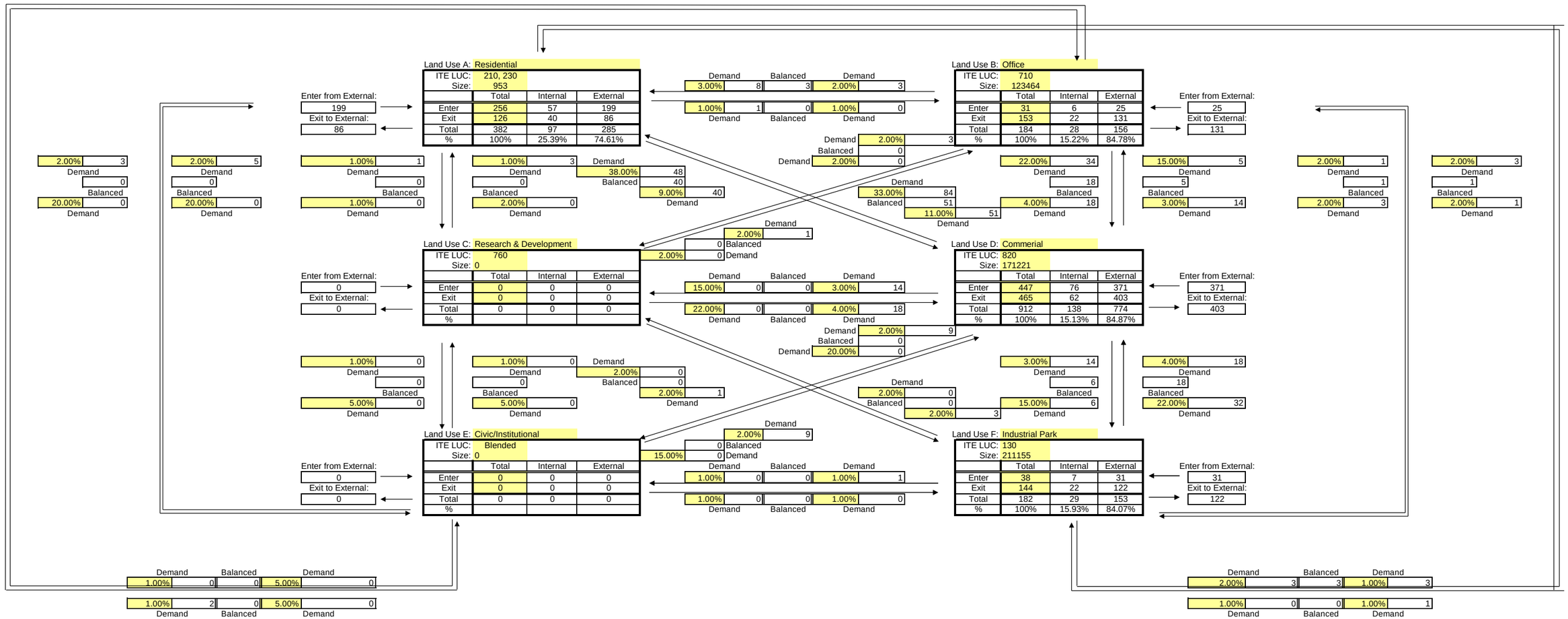
Category	Land Use						
	A	B	C	D	E	F	Total
	Residentia	Office	Hotel	Commerial	Industrial Pa	R&D	
Enter	107	45	24	1043	136	43	1398
Exit	59	222	44	1143	607	246	2321
Total	166	267	68	2186	743	289	**3719**
Single Use Trip Gen Estimate	281	343	111	2475	805	364	**4379**
	40.93%	22.16%	38.74%	11.68%	7.70%	20.60%	

Internal Capture = 15.07%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

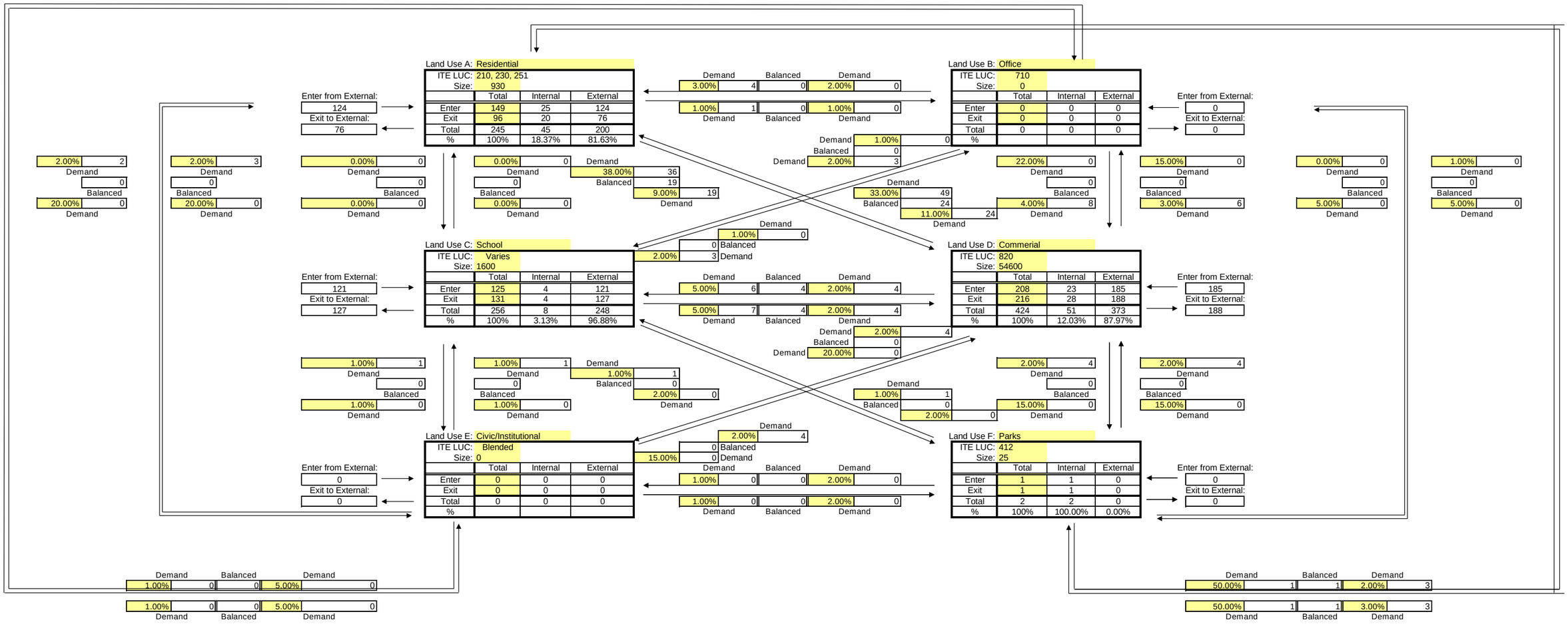
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	199	25	0	371	0	31	626
Exit	86	131	0	403	0	122	742
Total	285	156	0	774	0	153	**1368**
Single Use Trip Gen Estimate	382	184	0	912	0	182	**1660**
	25.39%	15.22%	0.00%	15.13%	0.00%	15.93%	

Internal Capture = 17.59%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

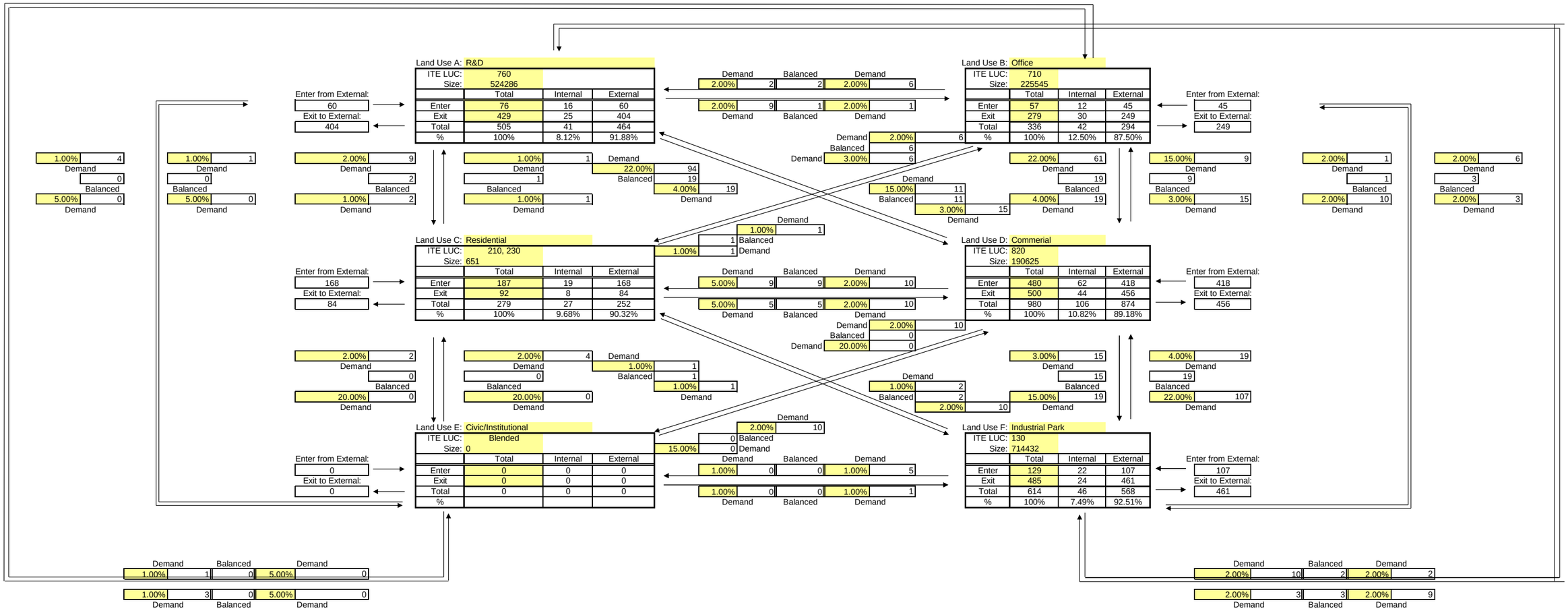
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	124	0	121	185	0	0	430
Exit	76	0	127	188	0	0	391
Total	200	0	248	373	0	0	**821**
Single Use Trip Gen Estimate	245	0	256	424	0	2	**927**
	18.37%	0.00%	3.13%	12.03%	0.00%	0.00%	

Internal Capture = 11.43%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

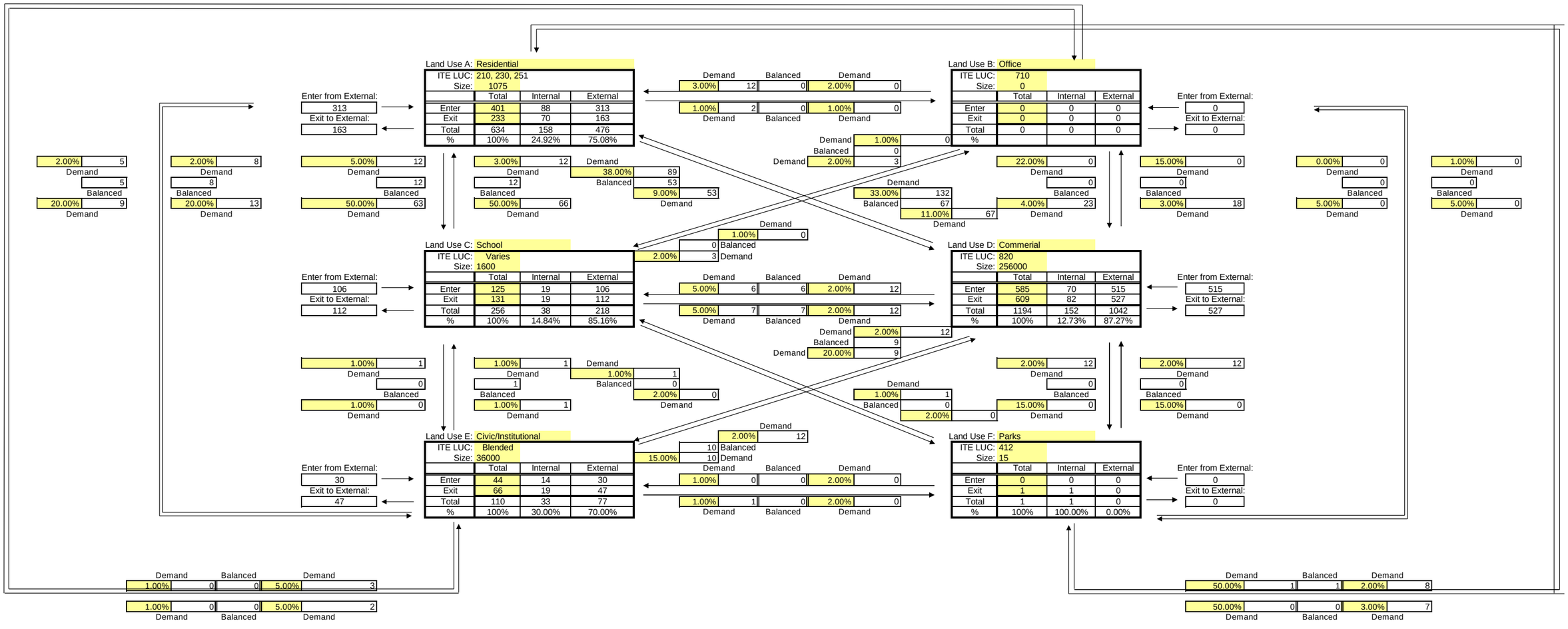
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institut	F Industrial Par	Total
Enter	60	45	168	418	0	107	798
Exit	404	249	84	456	0	461	1654
Total	464	294	252	874	0	568	**2452**
Single Use Trip Gen Estimate	505	336	279	980	0	614	**2714**
	8.12%	12.50%	9.68%	10.82%	0.00%	7.49%	

Internal Capture = 9.65%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2030 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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	313	0	106	515	30	0	964
Exit	163	0	112	527	47	0	849
Total	476	0	218	1042	77	0	**1813**
Single Use Trip Gen Estimate	634	0	256	1194	110	1	**2195**
	24.92%	0.00%	14.84%	12.73%	30.00%	0.00%	

Internal Capture = 17.40%

MacKenzie
Engineering & Planning, Inc.

Appendix B-3

Southern Grove Trip Generation and Internal Capture

Phase 3

WATS TAZ	TCRPM TAZ
381	664

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	393	rooms	[310]	T = 8.92*(X)	3,506
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	41,595	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	3,840
Service & Office	613,327	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	5,391
Research & Development(1)	630,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	4,562
Hospital	300	beds	[610]	T = 11.81*(X)	3,543
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	[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 =	21,147
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	21,147
				Internal Capture % among TAZ =	14.50%
				Internal Capture trips among TAZ =	3,066

(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 =	41,595	s.f.
0.75 * Intensity =	31,196	s.f.
External Trips from Matrix =	2,997	trips
0.75 * External Trips from Matrix =	2,248	trips
Pass-By Percent =	34%	
Pass-By Reduction =	764	trips

NET NEW EXTERNAL DAILY TRIPS =	**17,317**

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)			
Hotel	393	rooms	[310]	T = 0.70*(X); (49% in)	275	135	140
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	41,595	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	353	173	180
Service & Office[2]	613,327	s.f.	[710]	T = 1.12*(X/1000)+78.81; (17% in)	766	130	636
Research & Development[1]	630,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	587	88	499
Hospital	300	beds	[610]	T = 1.31*(X); (36% in)	393	141	252
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)			
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 =	2,405	679	1,726
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	2,405	679	1,726
				Internal Capture % among TAZ =	11.89%	-	-
				Internal Capture trips among TAZ =	286	143	143

(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 =	41,595	s.f.
External Trips from Matrix =	277	trips
Pass-By Percent =	34%	
Pass-By Reduction =	71	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,048**	**501**	**1,547**

WATS TAZ	TCRPM TAZ
382	659

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th 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.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	6,541
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	4,060	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	113
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	20,000	s.f.	-	T = 30.49*(X/1000)	610
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 =	16,631
				Total Gross Residential Trips =	8,263
				Total Gross Non-Residential Trips =	8,368
				Internal Capture % among TAZ =	12.26%
				Internal Capture trips among TAZ =	2,040

(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.
0.75 * Intensity =	90,000	s.f.
External Trips from Matrix =	6,752	trips
0.75 * External Trips from Matrix =	5,064	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,722	trips

NET NEW EXTERNAL DAILY TRIPS =	12,869

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) = 0.90*Ln(X) + 0.51; (63% in)	172	108	64
Multi-Family Residential	1,438	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	535	358	177
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]	4,060	s.f.	[710]	T = 1.49*(X/1000); (17% in)	6	1	5
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	20000	s.f.	-	T = 3.05*(X/1000); (40% in)	61	24	37
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 =	1,493	843	650
				Total Gross Residential Trips =	707	466	241
				Total Gross Non-Residential Trips =	786	377	409
				Internal Capture % among TAZ =	12.86%	-	-
				Internal Capture trips among TAZ =	192	96	96

(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 =	635	trips
Pass-By Percent =	34%	
Pass-By Reduction =	162	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,139**	**666**	**473**

WATS TAZ	TCRPM TAZ
383	662

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,168	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	9,977
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	326,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	14,640
Service & Office	50,000	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	782
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	15,000	s.f.	-	T = 30.49*(X/1000)	457
Park	40	acres	[412]	T = 2.28*(X)	91
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 =	27,620
				Total Gross Residential Trips =	11,650
				Total Gross Non-Residential Trips =	15,970
				Internal Capture % among TAZ =	13.49%
				Internal Capture trips among TAZ =	3,726

(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 =	326,000	s.f.
0.75 * Intensity =	244,500	s.f.
External Trips from Matrix =	12,937	trips
0.75 * External Trips from Matrix =	9,703	trips
Pass-By Percent =	34%	
Pass-By Reduction =	3,299	trips

NET NEW EXTERNAL DAILY TRIPS =	**20,595**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,168	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	960	605	355
Multi-Family Residential	300	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	148	99	49
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	326,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,404	688	716
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) = 0.82*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	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
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 =	2,635	1,424	1,211
				Total Gross Residential Trips =	1,108	704	404
				Total Gross Non-Residential Trips =	1,527	720	807
				Internal Capture % among TAZ =	13.59%	-	-
				Internal Capture trips among TAZ =	358	179	179

(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 =	326,000	s.f.
External Trips from Matrix =	1,239	trips
Pass-By Percent =	34%	
Pass-By Reduction =	316	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,961**	**1,087**	**874**

WATS TAZ	TCRPM TAZ
384	661

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	156	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	1,565
Multi-Family Residential	124	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	776
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	158	rooms	[310]	T = 8.92*(X)	1,409
Industrial Park	1,403,287	s.f.	[130]	T = 6.96*(X/1000)	9,767
Commercial Retail	759,534	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	25,368
Service & Office	350,000	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	3,500
Research & Development(1)	500,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	3,774
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	420	d.u.	[253]	T = 2.02*(X)	848
Assisted Living Facility	150	beds	[254]	T = 2.60*(X)	390
				Total Gross Trips =	47,397
				Total Gross Residential Trips =	2,341
				Total Gross Non-Residential Trips =	45,056
				Internal Capture % among TAZ =	17.55%
				Internal Capture trips among TAZ =	8,318

(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 =	759,534	s.f.
0.75 * Intensity =	569,651	s.f.
External Trips from Matrix =	21,777	trips
0.75 * External Trips from Matrix =	16,333	trips
Pass-By Percent =	34%	
Pass-By Reduction =	5,553	trips

NET NEW EXTERNAL DAILY TRIPS =	33,526

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	156	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	157	99	58
Multi-Family Residential	124	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	72	48	24
Hotel	158	rooms	[310]	T = 0.70*(X); (49% in)	111	54	57
Industrial Park	1,403,287	s.f.	[130]	T = 0.86*(X/1000); (21% in)	1,207	253	954
Commercial Retail	759,534	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	2,475	1,213	1,262
Service & Office[2]	350,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	522	89	433
Research & Development[1]	500,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	486	73	413
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	420	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 =	5,082	1,861	3,221
				Total Gross Residential Trips =	229	147	82
				Total Gross Non-Residential Trips =	4,853	1,714	3,139
				Internal Capture % among TAZ =	14.01%	-	-
				Internal Capture trips among TAZ =	712	356	356

(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 =	759,534	s.f.
External Trips from Matrix =	2,166	trips
Pass-By Percent =	34%	
Pass-By Reduction =	553	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**3,817**	**1,229**	**2,588**

AM PEAK HOUR TRIP GENERATION:

WATS TAZ	TCRPM TAZ
385	646

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	953	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	4,573
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	747,290	s.f.	[130]	T = 6.96*(X/1000)	5,201
Commercial Retail	342,443	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	15,115
Service & Office	350,000	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	3,500
Research & Development(1)	258,194	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	2,195
Hospital	0	beds	[610]	T = 11.81*(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	[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 =	31,803
				Total Gross Residential Trips =	4,573
				Total Gross Non-Residential Trips =	27,230
				Internal Capture % among TAZ =	22.42%
				Internal Capture trips among TAZ =	7,132

(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 =	342,443	s.f.
0.75 * Intensity =	256,832	s.f.
External Trips from Matrix =	12,002	trips
0.75 * External Trips from Matrix =	9,002	trips
Pass-By Percent =	34%	
Pass-By Reduction =	3,061	trips

NET NEW EXTERNAL DAILY TRIPS =	**21,610**

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	953	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	382	256	126
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	747,290	s.f.	[130]	T = 0.86*(X/1000); (21% in)	643	135	508
Commercial Retail	342,443	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,451	711	740
Service & Office[2]	350,000	s.f.	[710]	T = 1.49*(X/1000); (17% in)	522	89	433
Research & Development[1]	258,194	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	283	42	241
Hospital	0	beds	[610]	T = 1.31*(X); (36% 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)			
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 =	3,403	1,291	2,112
				Total Gross Residential Trips =	382	256	126
				Total Gross Non-Residential Trips =	3,021	1,035	1,986
				Internal Capture % among TAZ =	18.69%	-	-
				Internal Capture trips among TAZ =	636	318	318

(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 =	342,443	s.f.
External Trips from Matrix =	1,177	trips
Pass-By Percent =	34%	
Pass-By Reduction =	300	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,467**	**823**	**1,644**

WATS TAZ	TCRPM TAZ
386	651

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	930	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	3,604
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	218,400	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	11,284
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	33,519	s.f.	-	T = 30.49*(X/1000)	1,022
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 =	18,559
				Total Gross Residential Trips =	3,604
				Total Gross Non-Residential Trips =	14,955
				Internal Capture % among TAZ =	16.55%
				Internal Capture trips among TAZ =	3,072

(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 =	218,400	s.f.
0.75 * Intensity =	163,800	s.f.
External Trips from Matrix =	9,864	trips
0.75 * External Trips from Matrix =	7,398	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,515	trips

NET NEW EXTERNAL DAILY TRIPS =	**12,972**

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	930	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)	245	149	96
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	218,400	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,074	526	548
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	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
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 =	1,679	842	837
				Total Gross Residential Trips =	245	149	96
				Total Gross Non-Residential Trips =	1,434	693	741
				Internal Capture % among TAZ =	14.65%	-	-
				Internal Capture trips among TAZ =	246	123	123

(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 =	218,400	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 =	**1,189**	**597**	**592**

WATS TAZ	TCRPM TAZ
387	660

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	651	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	3,282
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	1,071,648	s.f.	[130]	T = 6.96*(X/1000)	7,459
Commercial Retail	611,103	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	22,025
Service & Office	369,765	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	3,652
Research & Development(1)	582,540	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	4,278
Hospital	0	beds	[610]	T = 11.81*(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	[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 =	41,001
				Total Gross Residential Trips =	3,282
				Total Gross Non-Residential Trips =	37,719
				Internal Capture % among TAZ =	14.03%
				Internal Capture trips among TAZ =	5,752

(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 =	611,103	s.f.
0.75 * Intensity =	458,327	s.f.
External Trips from Matrix =	19,599	trips
0.75 * External Trips from Matrix =	14,699	trips
Pass-By Percent =	34%	
Pass-By Reduction =	4,998	trips

NET NEW EXTERNAL DAILY TRIPS =	**30,251**

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	651	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	279	187	92
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	1,071,648	s.f.	[130]	T = 0.86*(X/1000); (21% in)	922	194	728
Commercial Retail	611,103	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	2,139	1,048	1,091
Service & Office[2]	369,765	s.f.	[710]	T = 1.49*(X/1000); (17% in)	551	94	457
Research & Development[1]	582,540	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	551	83	468
Hospital	0	beds	[610]	T = 1.31*(X); (36% 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)			
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 =	4,473	1,618	2,855
				Total Gross Residential Trips =	279	187	92
				Total Gross Non-Residential Trips =	4,194	1,431	2,763
				Internal Capture % among TAZ =	10.69%	-	-
				Internal Capture trips among TAZ =	478	239	239

(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 =	611,103	s.f.
External Trips from Matrix =	1,939	trips
Pass-By Percent =	34%	
Pass-By Reduction =	494	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**3,501**	**1,132**	**2,369**

WATS TAZ	TCRPM TAZ
388	663

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	410	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	3,808
Multi-Family Residential	225	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,302
Age-Restricted Single-Family	440	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	1,908
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	240	rooms	[310]	T = 8.92*(X)	2,141
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	256,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	12,511
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	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	[412]	T = 2.28*(X)	34
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 =	26,735
				Total Gross Residential Trips =	7,018
				Total Gross Non-Residential Trips =	19,717
				Internal Capture % among TAZ =	17.07%
				Internal Capture trips among TAZ =	4,198

(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 =	256,000	s.f.
0.75 * Intensity =	192,000	s.f.
External Trips from Matrix =	10,875	trips
0.75 * External Trips from Matrix =	8,156	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,773	trips

NET NEW EXTERNAL DAILY TRIPS =	**19,764**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	410	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	374	236	138
Multi-Family Residential	225	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	117	78	39
Age-Restricted Single-Family	440	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)	143	87	56
Hotel	240	rooms	[310]	T = 0.70*(X); (49% in)	168	82	86
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	256,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,194	585	609
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	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
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 =	2,497	1,295	1,202
				Total Gross Residential Trips =	634	401	233
				Total Gross Non-Residential Trips =	1,863	894	969
				Internal Capture % among TAZ =	15.78%	-	-
				Internal Capture trips among TAZ =	394	197	197

(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

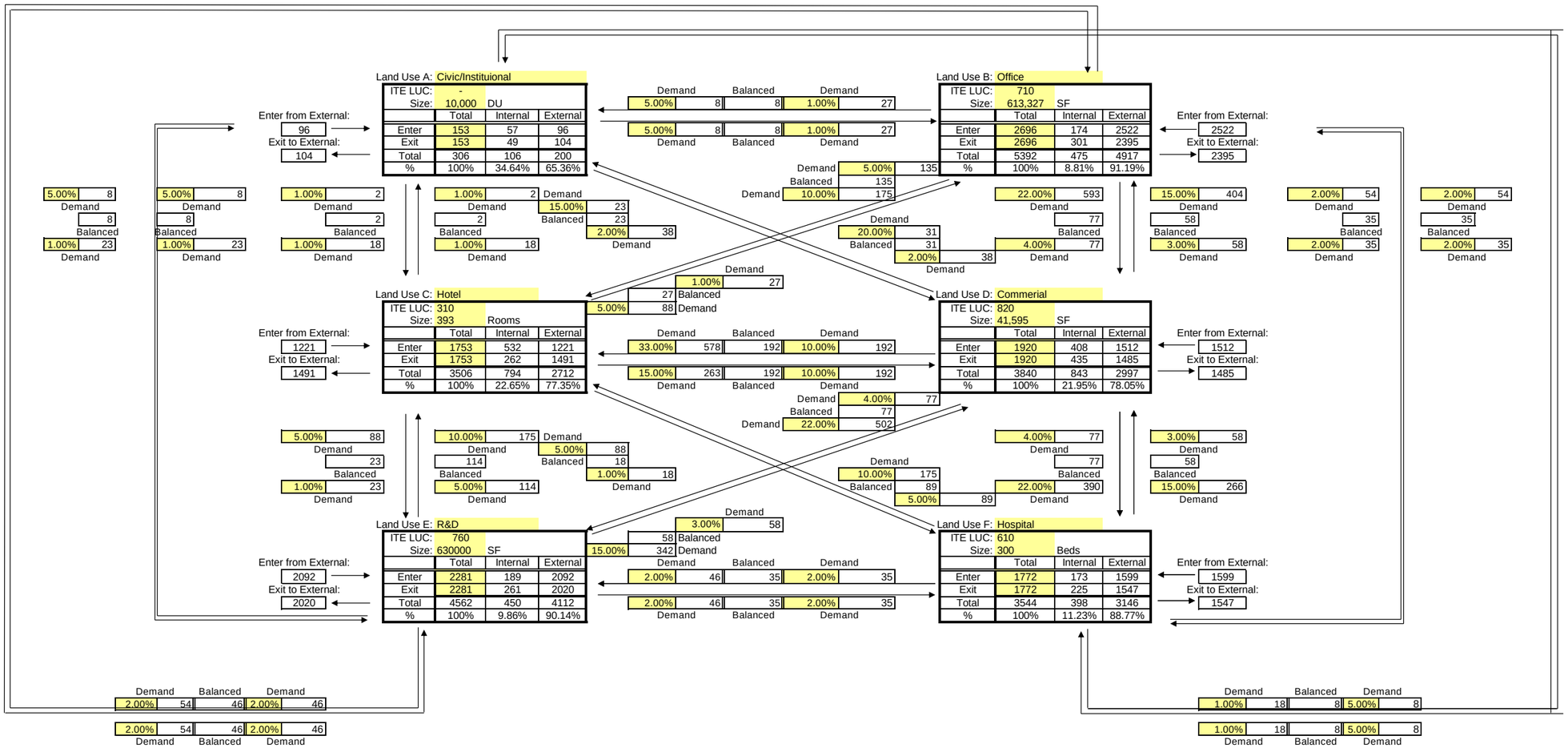
Commercial Retail Pass-By Calculation:		
Intensity =	256,000	s.f.
External Trips from Matrix =	1,037	trips
Pass-By Percent =	34%	
Pass-By Reduction =	265	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,838**	**966**	**872**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

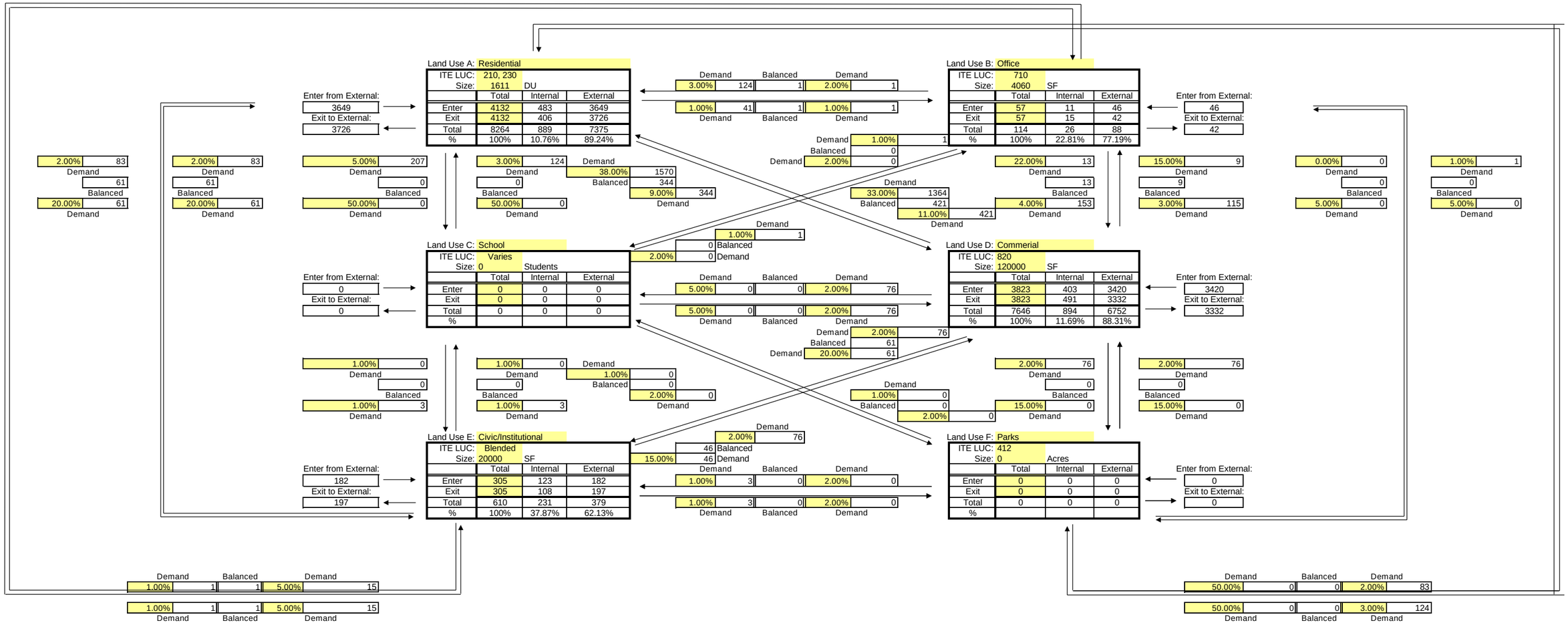
Category	Land Use A Civic/Instituid	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	96	2522	1221	1512	2092	1599	9042
Exit	104	2395	1491	1485	2020	1547	9042
Total	200	4917	2712	2997	4112	3146	**18084**
Single Use Trip Gen Estimate	306	5392	3506	3840	4562	3544	**21150**
	34.64%	8.81%	22.65%	21.95%	9.86%	11.23%	

Internal Capture = 14.50%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

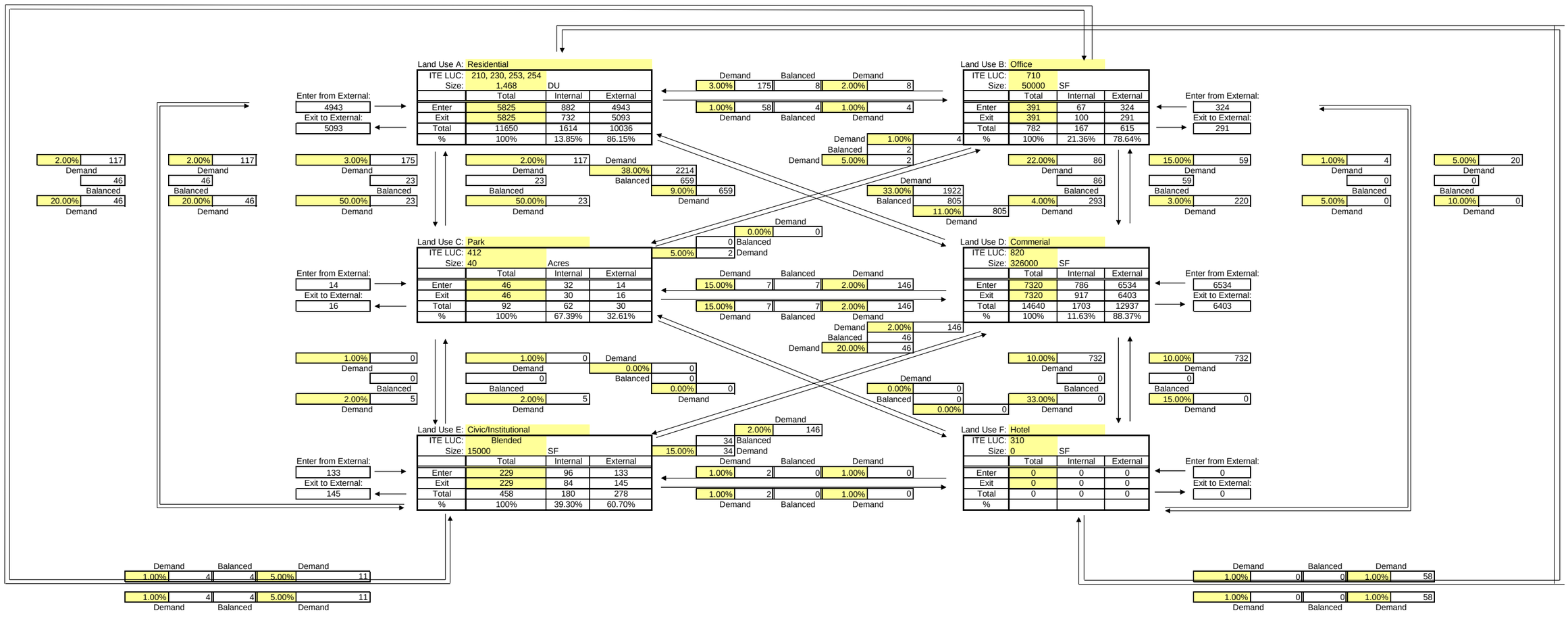
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3649	46	0	3420	182	0	7297
Exit	3726	42	0	3332	197	0	7297
Total	7375	88	0	6752	379	0	**14594**
Single Use Trip Gen Estimate	8264	114	0	7646	610	0	**16634**
	10.76%	22.81%	0.00%	11.69%	37.87%	0.00%	

Internal Capture = 12.26%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

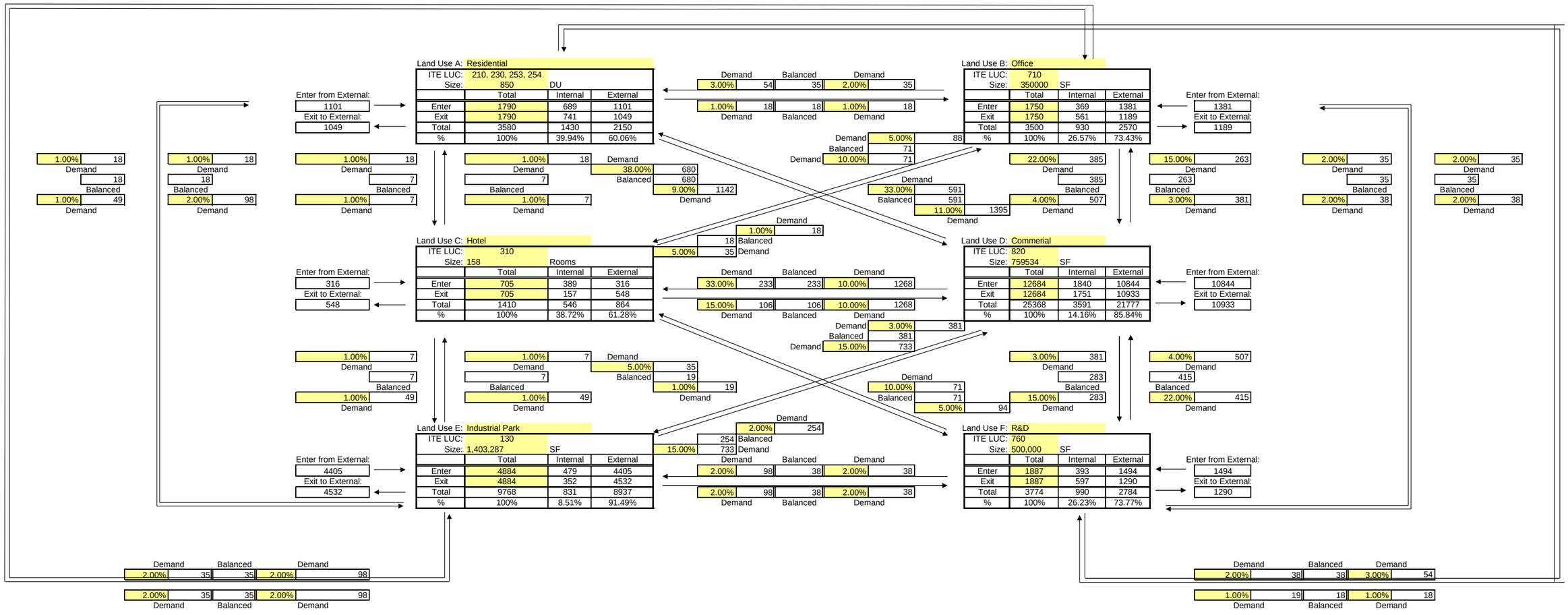
Category	Land Use A Residentia	B Office	C Park	D Commerial	E Civic/Institu	F Hotel	Total
Enter	4943	324	14	6534	133	0	11948
Exit	5093	291	16	6403	145	0	11948
Total	10036	615	30	12937	278	0	**23896**
Single Use Trip Gen Estimate	11650	782	92	14640	458	0	**27622**
	13.85%	21.36%	67.39%	11.63%	39.30%	0.00%	

Internal Capture = 13.49%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

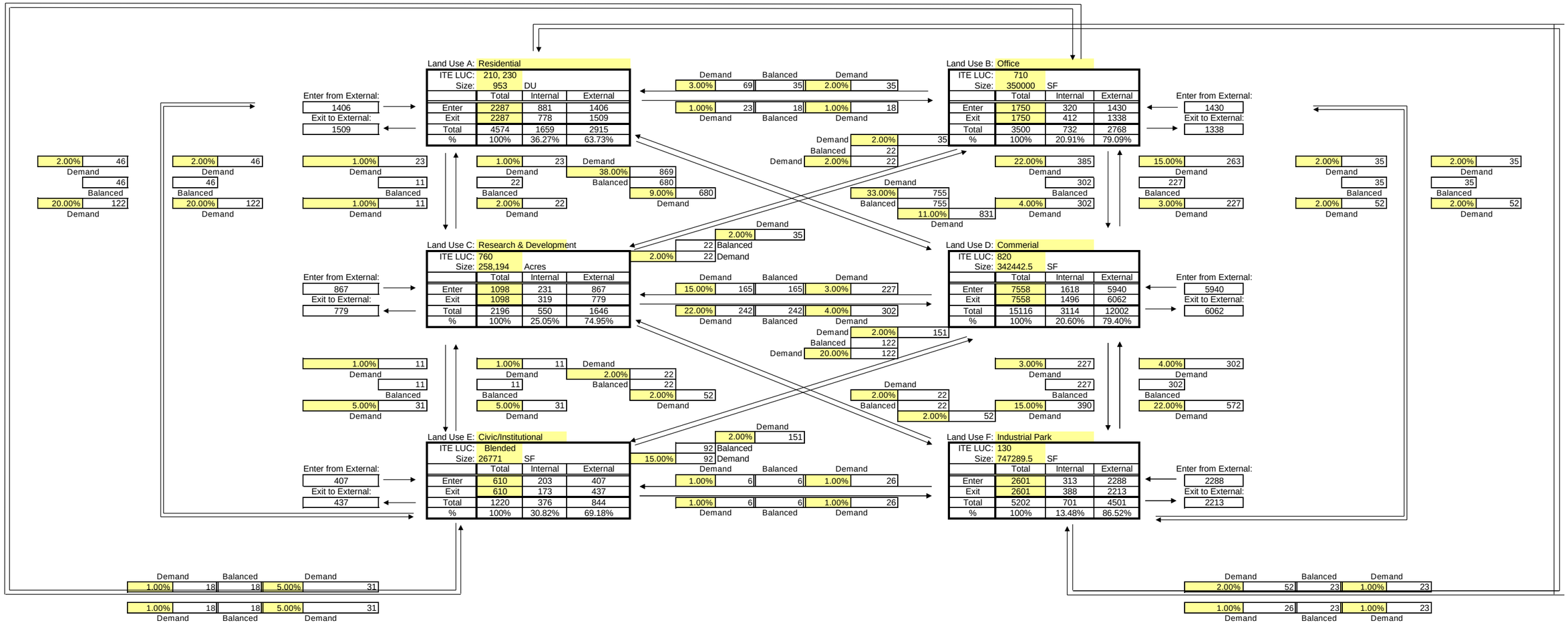
Category	Land Use A Residential	B Office	C Hotel	D Commerial	E Industrial Pa	F R&D	Total
Enter	1101	1381	316	10844	4405	1494	19541
Exit	1049	1189	548	10933	4532	1290	19541
Total	2150	2570	864	21777	8937	2784	**39082**
Single Use Trip Gen Estimate	3580	3500	1410	25368	9768	3774	**47400**
	39.94%	26.57%	38.72%	14.16%	8.51%	26.23%	

Internal Capture = 17.55%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

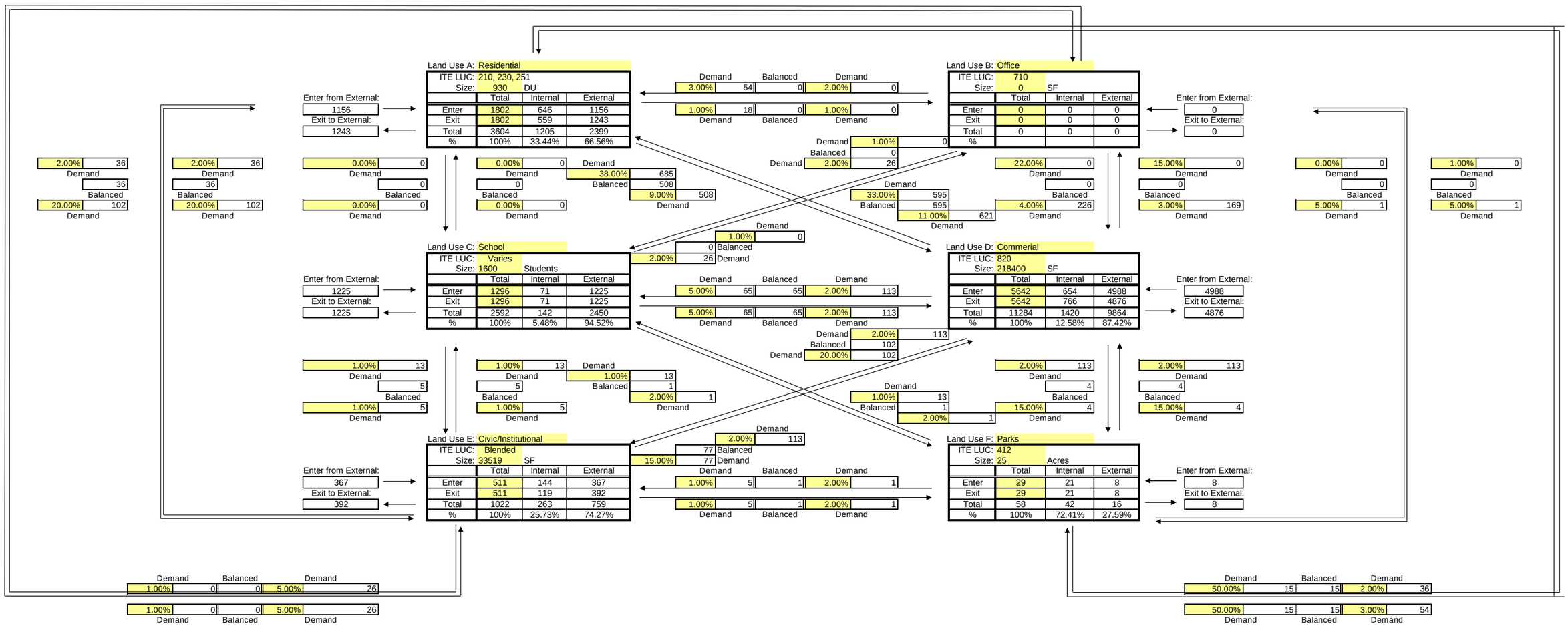
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial Par	Total
Enter	1406	1430	867	5940	407	2288	12338
Exit	1509	1338	779	6062	437	2213	12338
Total	2915	2768	1646	12002	844	4501	**24676**
Single Use Trip Gen Estimate	4574	3500	2196	15116	1220	5202	**31808**
	36.27%	20.91%	25.05%	20.60%	30.82%	13.48%	

Internal Capture = 22.42%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

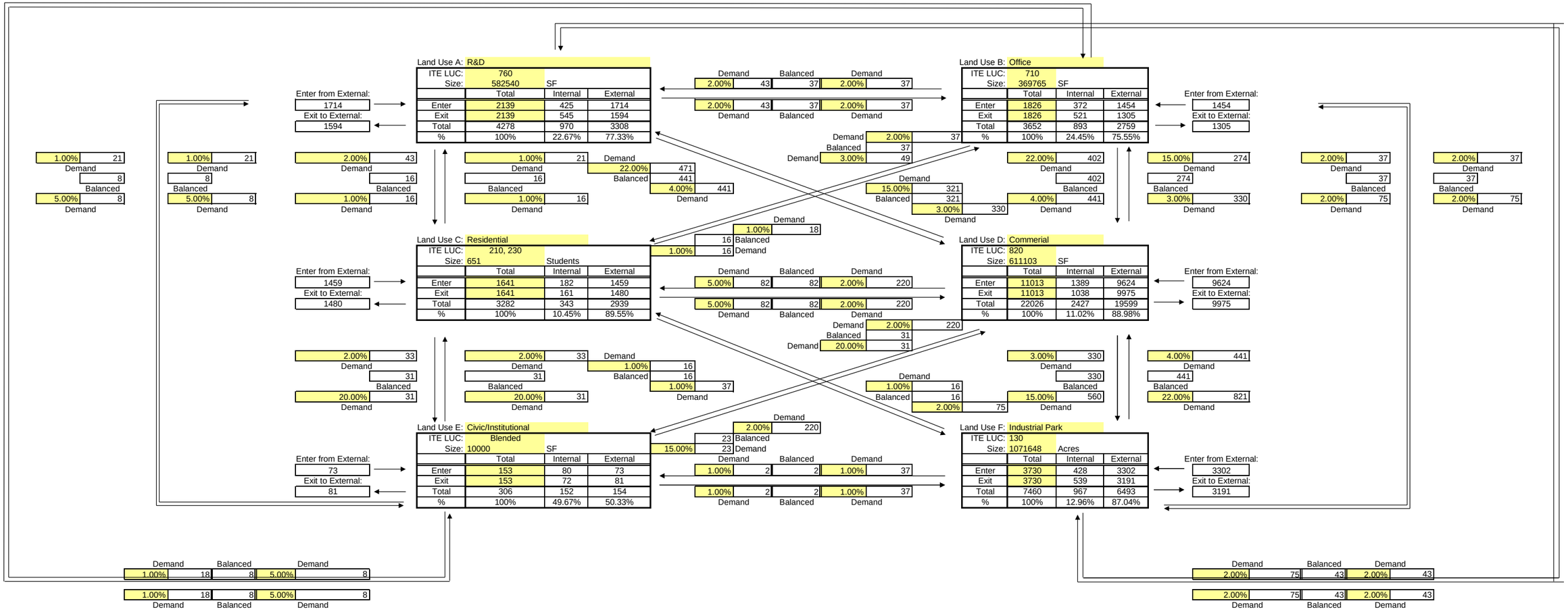
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1156	0	1225	4988	367	8	7744
Exit	1243	0	1225	4876	392	8	7744
Total	2399	0	2450	9864	759	16	**15488**
Single Use Trip Gen Estimate	3604	0	2592	11284	1022	58	**18560**
	33.44%	0.00%	5.48%	12.58%	25.73%	72.41%	

Internal Capture = 16.55%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

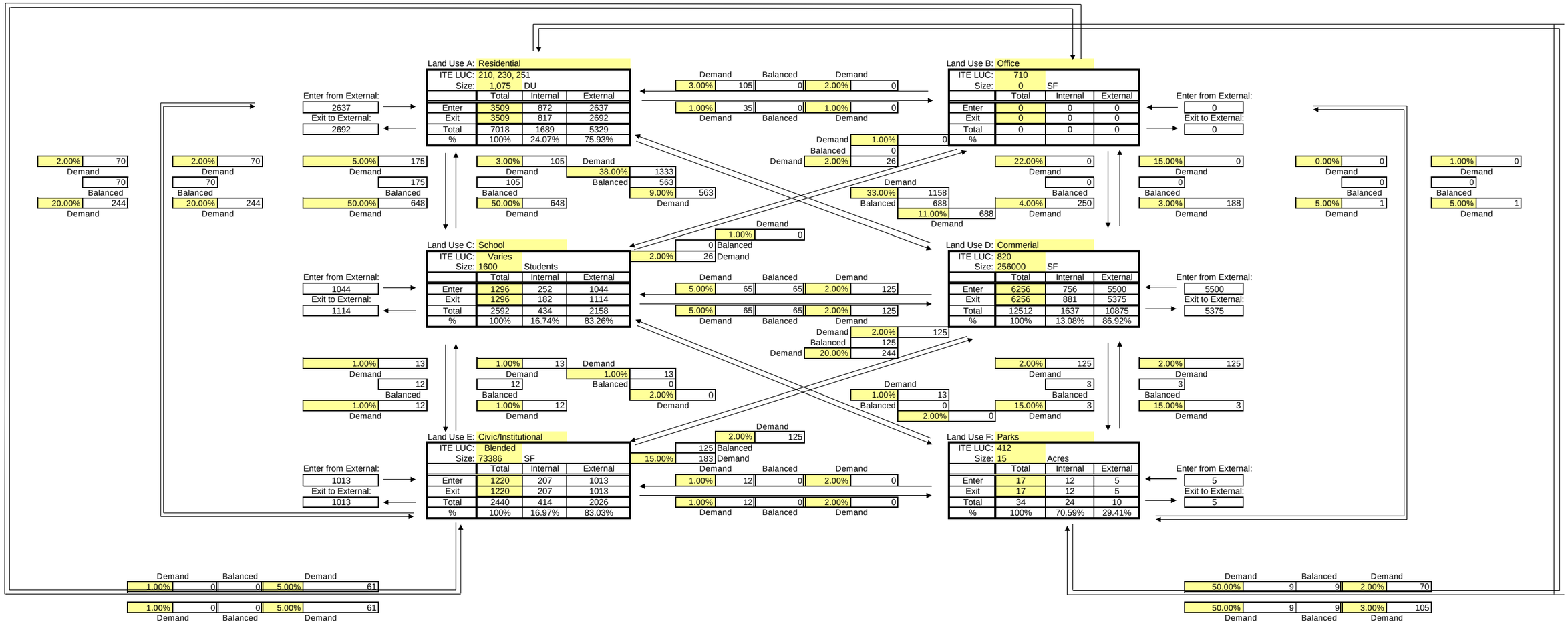
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institu	F Industrial Par	Total
Enter	1714	1454	1459	9624	73	3302	17626
Exit	1594	1305	1480	9975	81	3191	17626
Total	3308	2759	2939	19599	154	6493	**35252**
Single Use Trip Gen Estimate	4278	3652	3282	22026	306	7460	**41004**
	22.67%	24.45%	10.45%	11.02%	49.67%	12.96%	

Internal Capture = 14.03%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

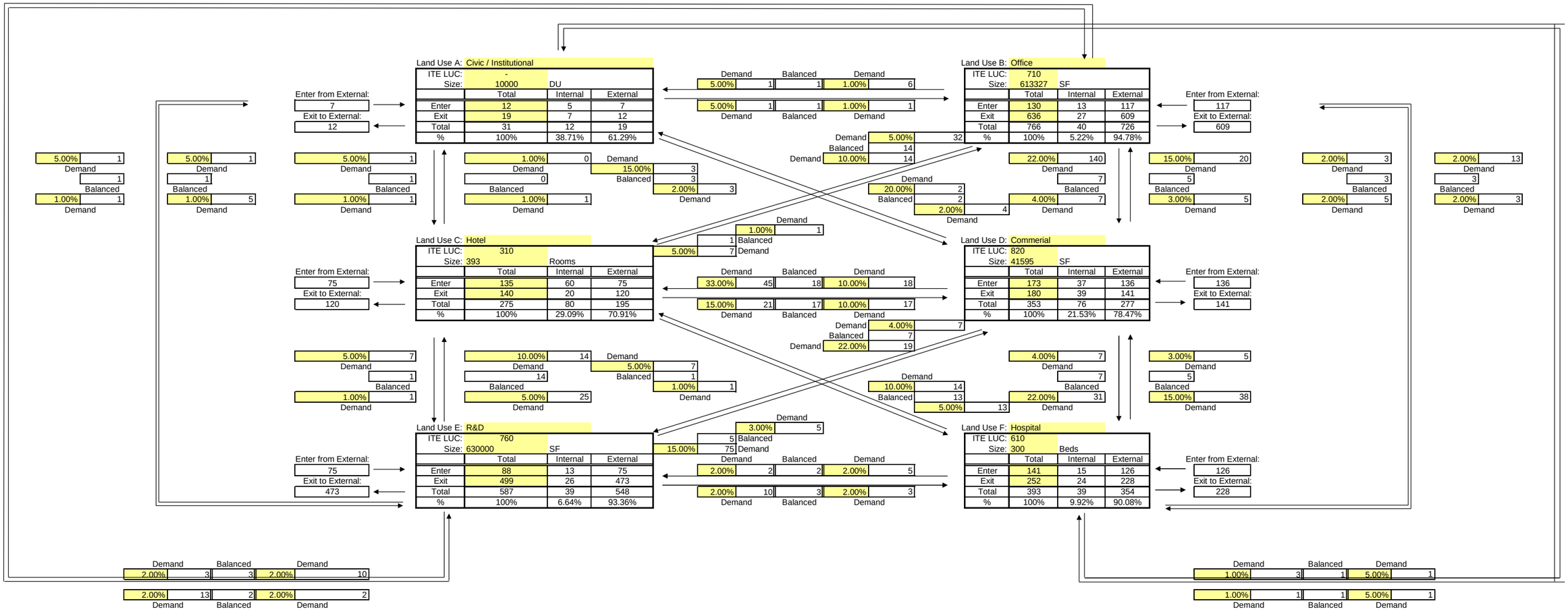
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2637	0	1044	5500	1013	5	10199
Exit	2692	0	1114	5375	1013	5	10199
Total	5329	0	2158	10875	2026	10	**20398**
Single Use Trip Gen Estimate	7018	0	2592	12512	2440	34	**24596**
	24.07%	0.00%	16.74%	13.08%	16.97%	70.59%	

Internal Capture = 17.07%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

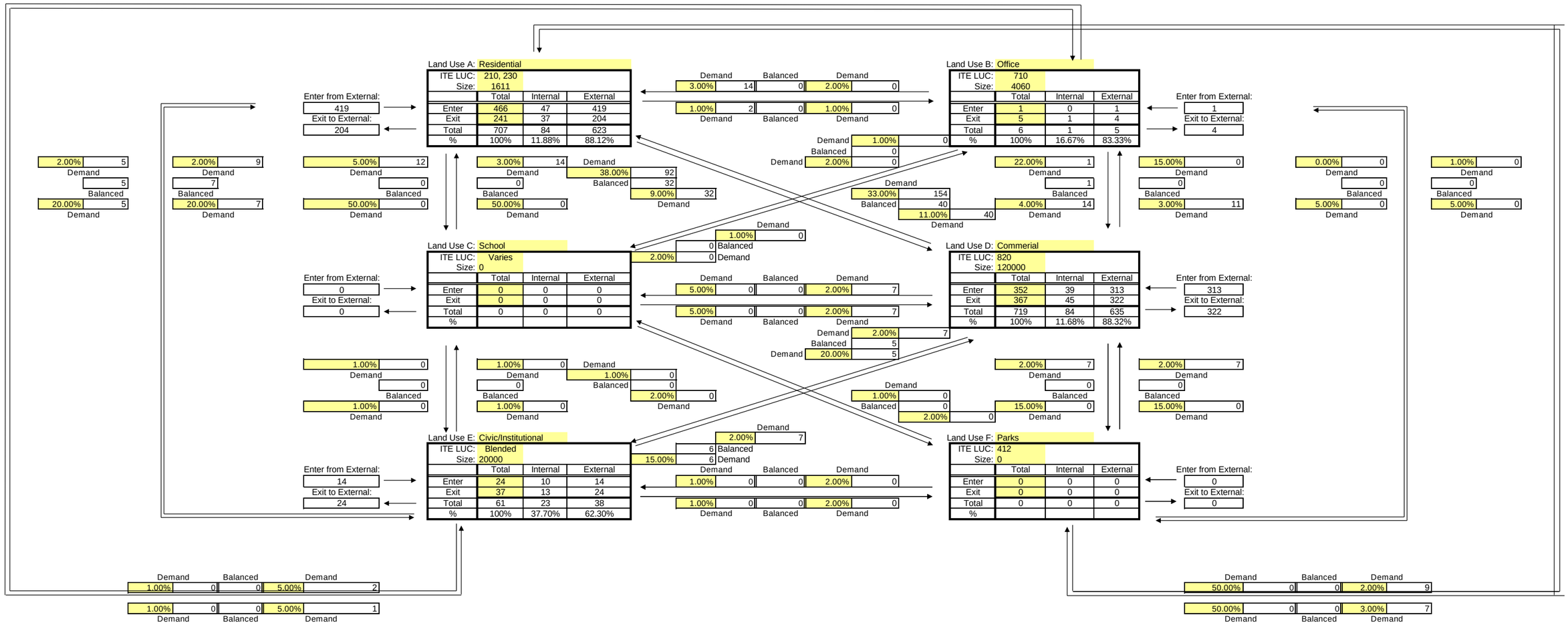
Category	Land Use A Civic / Instituti	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	7	117	75	136	75	126	536
Exit	12	609	120	141	473	228	1583
Total	19	726	195	277	548	354	**2119**
Single Use Trip Gen Estimate	31	766	275	353	587	393	**2405**
	38.71%	5.22%	29.09%	21.53%	6.64%	9.92%	

Internal Capture = 11.89%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

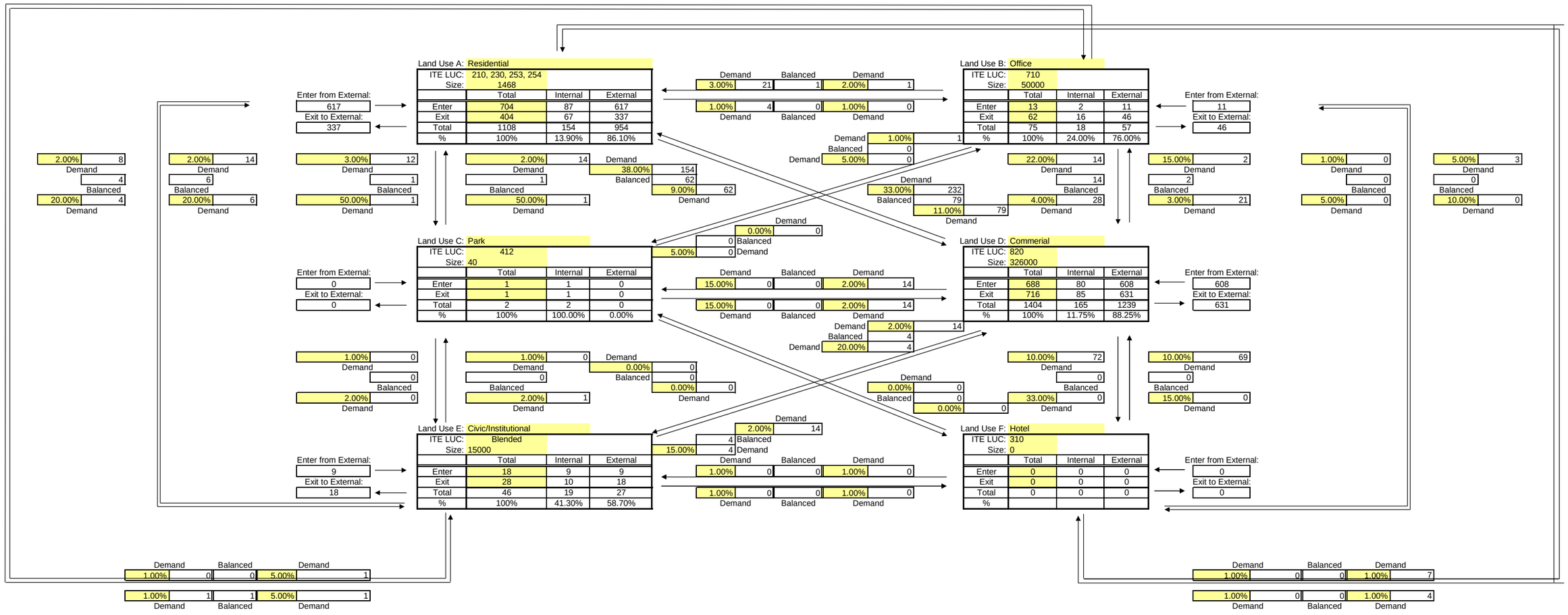
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institut	F Parks	Total
Enter	419	1	0	313	14	0	747
Exit	204	4	0	322	24	0	554
Total	623	5	0	635	38	0	**1301**
Single Use Trip Gen Estimate	707	6	0	719	61	0	**1493**
	11.88%	16.67%	0.00%	11.68%	37.70%	0.00%	

Internal Capture = 12.86%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

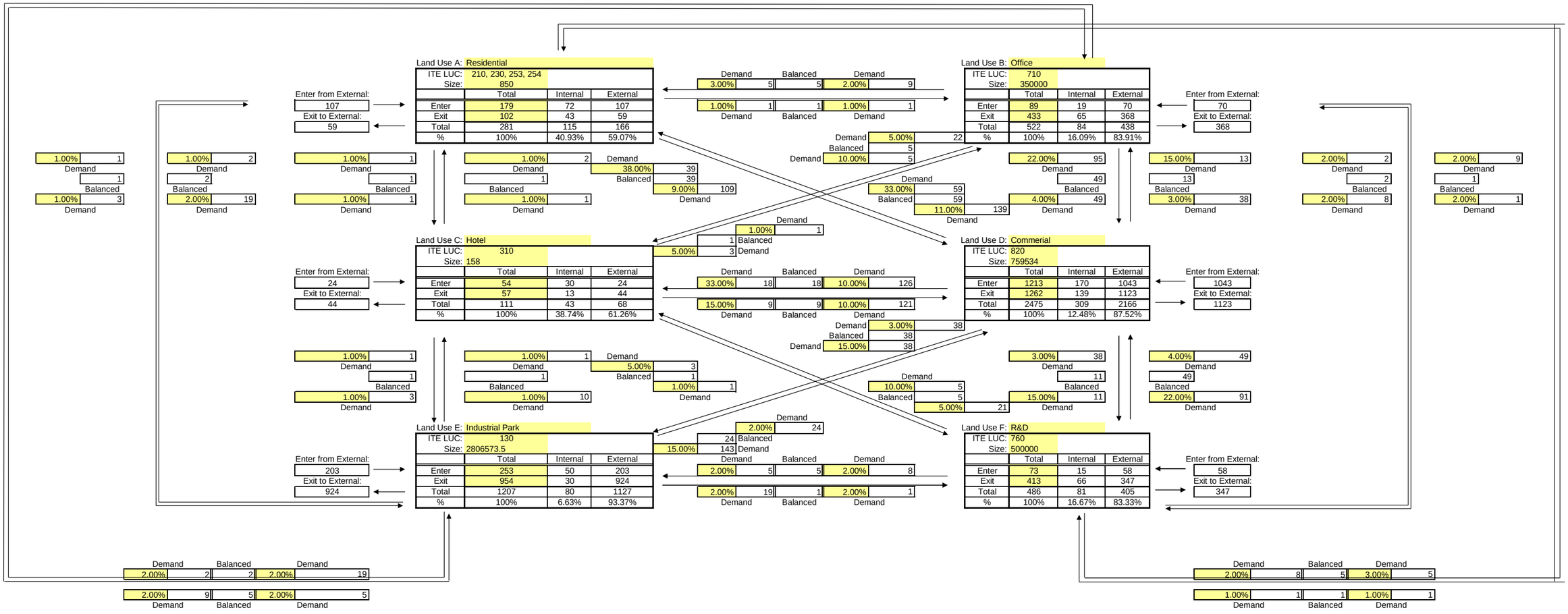
Category	Land Use A Residentia	B Office	C Park	D Commerial	E Civic/Institu	F Hotel	Total
Enter	617	11	0	608	9	0	1245
Exit	337	46	0	631	18	0	1032
Total	954	57	0	1239	27	0	**2277**
Single Use Trip Gen Estimate	1108	75	2	1404	46	0	**2635**
	13.90%	24.00%	0.00%	11.75%	41.30%	0.00%	

Internal Capture = 13.59%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

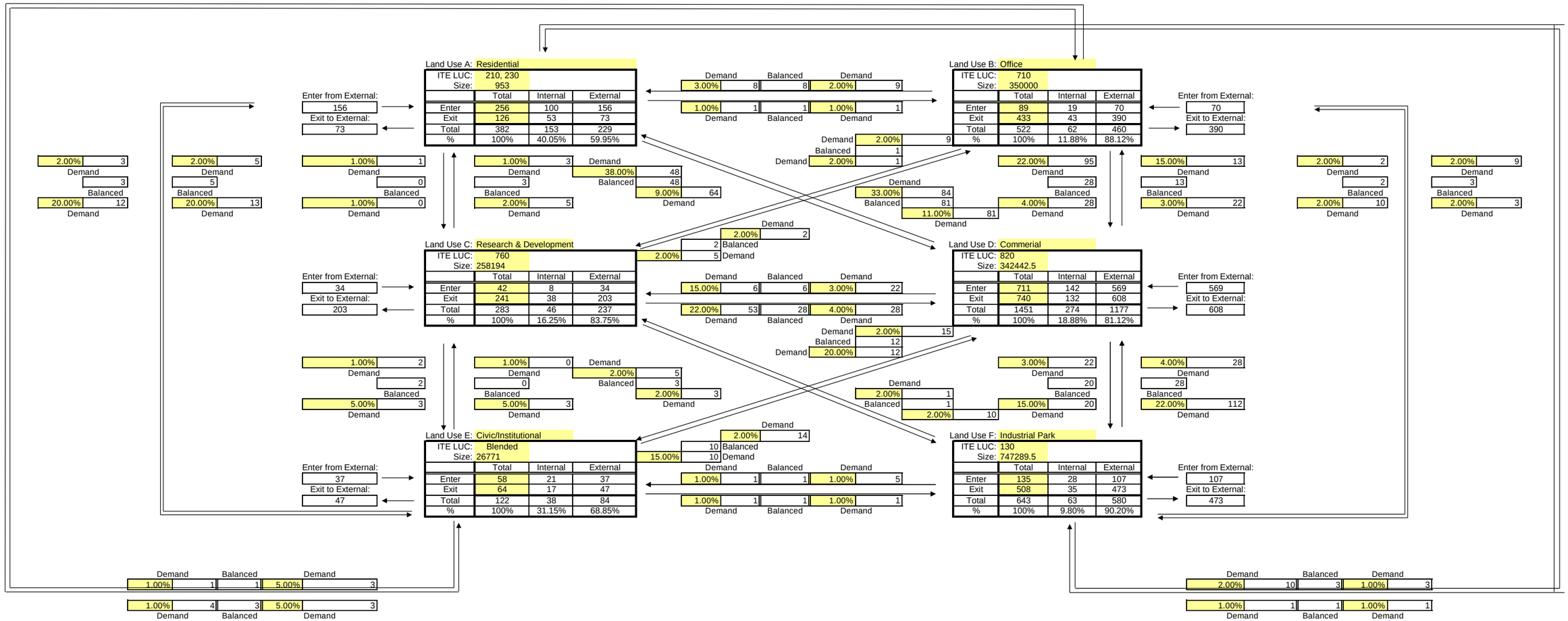
Category	Land Use A Residentia	B Office	C Hotel	D Commerial	E Industrial Pa	F R&D	Total
Enter	107	70	24	1043	203	58	1505
Exit	59	368	44	1123	924	347	2865
Total	166	438	68	2166	1127	405	**4370**
Single Use Trip Gen Estimate	281	522	111	2475	1207	486	**5082**
	40.93%	16.09%	38.74%	12.48%	6.63%	16.67%	

Internal Capture = 14.01%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

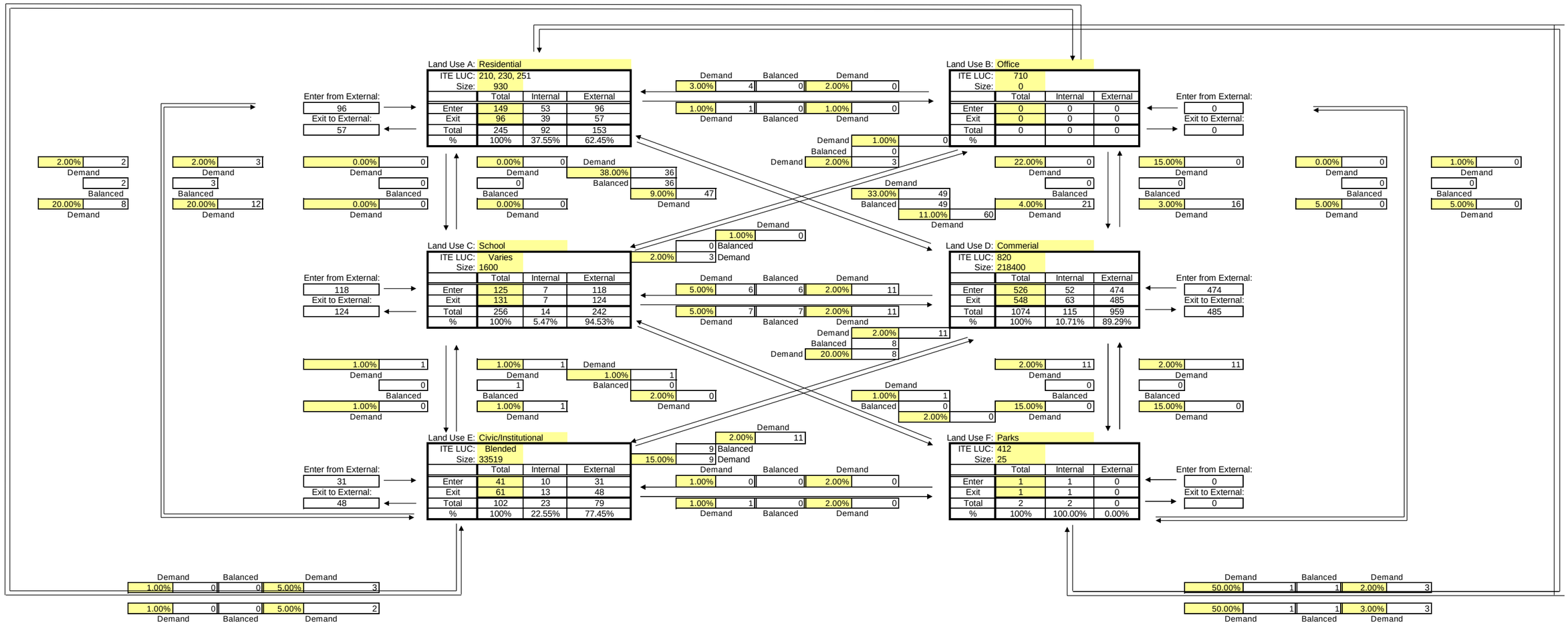
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	156	70	34	569	37	107	973
Exit	73	390	203	608	47	473	1794
Total	229	460	237	1177	84	580	**2767**
Single Use Trip Gen Estimate	382	522	283	1451	122	643	**3403**
	40.05%	11.88%	16.25%	18.88%	31.15%	9.80%	

Internal Capture = 18.69%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

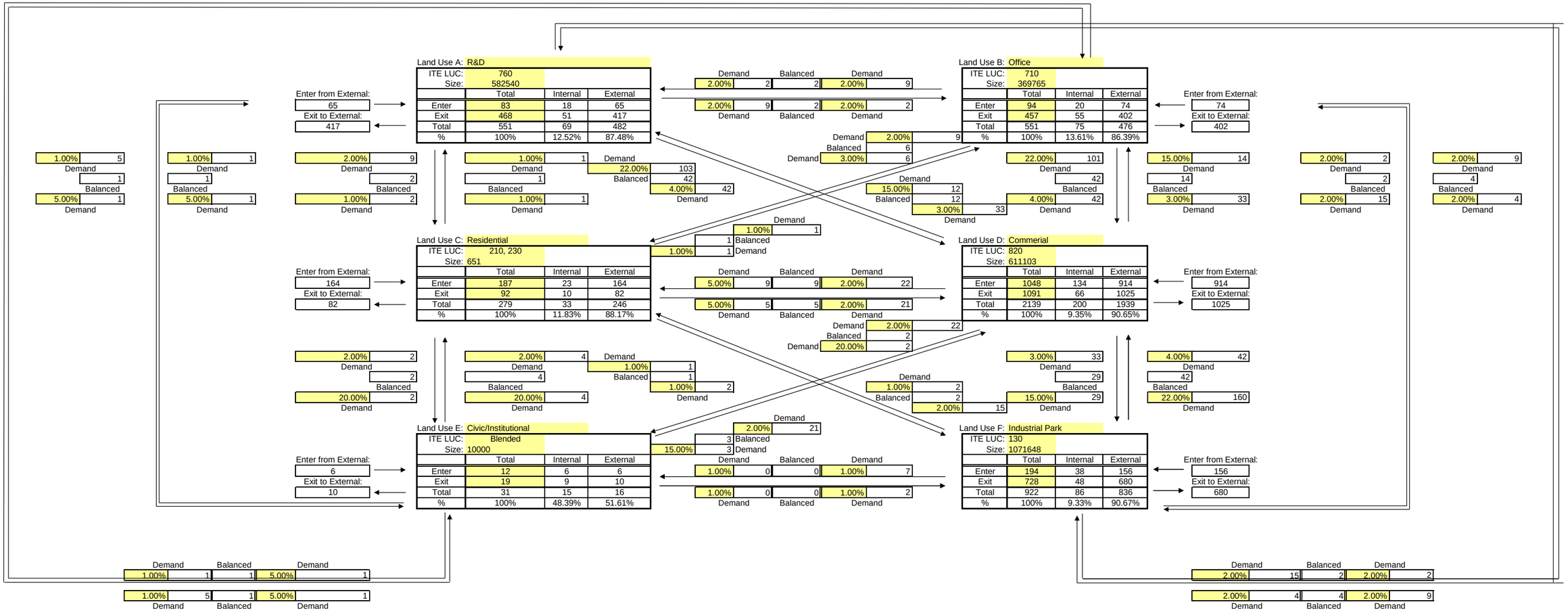
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institut	F Parks	Total
Enter	96	0	118	474	31	0	719
Exit	57	0	124	485	48	0	714
Total	153	0	242	959	79	0	**1433**
Single Use Trip Gen Estimate	245	0	256	1074	102	2	**1679**
	37.55%	0.00%	5.47%	10.71%	22.55%	0.00%	

Internal Capture = 14.65%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

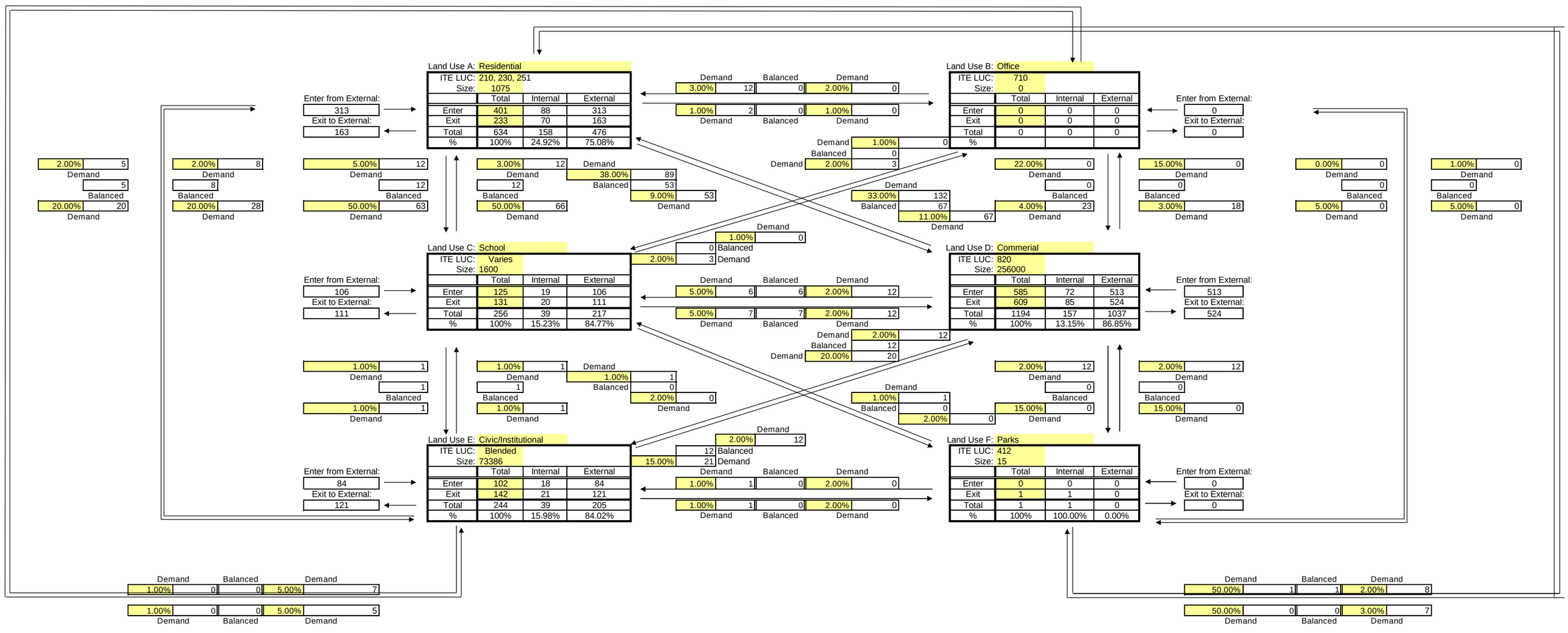
Category	Land Use A R&D	B Office	C Residential	D Commerial	E Civic/Institut	F Industrial Par	Total
Enter	65	74	164	914	6	156	1379
Exit	417	402	82	1025	10	680	2616
Total	482	476	246	1939	16	836	**3995**
Single Use Trip Gen Estimate	551	551	279	2139	31	922	**4473**
	12.52%	13.61%	11.83%	9.35%	48.39%	9.33%	

Internal Capture = 10.69%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2035 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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/Institut	F Parks	Total
Enter	313	0	106	513	84	0	1016
Exit	163	0	111	524	121	0	919
Total	476	0	217	1037	205	0	**1935**
Single Use Trip Gen Estimate	634	0	256	1194	244	1	**2329**
	24.92%	0.00%	15.23%	13.15%	15.98%	0.00%	

Internal Capture = 16.92%

MacKenzie
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Appendix B-4

Southern Grove Trip Generation and Internal Capture

Phase 4

WATS TAZ	TCRPM TAZ
381	664

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	393	rooms	[310]	T = 8.92*(X)	3,506
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	41,595	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	3,840
Service & Office	613,327	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	5,391
Research & Development(1)	630,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	4,562
Hospital	300	beds	[610]	T = 11.81*(X)	3,543
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	[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 =	21,940
				Total Gross Residential Trips =	0
				Total Gross Non-Residential Trips =	21,940
				Internal Capture % among TAZ =	15.03%
				Internal Capture trips among TAZ =	3,298

(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 =	41,595	s.f.
0.75 * Intensity =	31,196	s.f.
External Trips from Matrix =	2,975	trips
0.75 * External Trips from Matrix =	2,231	trips
Pass-By Percent =	34%	
Pass-By Reduction =	759	trips

NET NEW EXTERNAL DAILY TRIPS =	**17,883**

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)			
Hotel	393	rooms	[310]	T = 0.70*(X); (49% in)	275	135	140
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	41,595	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	353	173	180
Service & Office[2]	613,327	s.f.	[710]	T = 1.12*(X/1000)+78.81; (17% in)	766	130	636
Research & Development[1]	630,000	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	587	88	499
Hospital	300	beds	[610]	T = 1.31*(X); (36% in)	393	141	252
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)			
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 =	2,484	711	1,773
				Total Gross Residential Trips =	0	0	0
				Total Gross Non-Residential Trips =	2,484	711	1,773
				Internal Capture % among TAZ =	11.92%	-	-
				Internal Capture trips among TAZ =	296	148	148

(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 =	41,595	s.f.
External Trips from Matrix =	275	trips
Pass-By Percent =	34%	
Pass-By Reduction =	70	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,118**	**528**	**1,590**

WATS TAZ	TCRPM TAZ
382	659

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th 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.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	6,541
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	4,060	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	113
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	46,046	s.f.	-	T = 30.49*(X/1000)	1,404
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 =	17,425
				Total Gross Residential Trips =	8,263
				Total Gross Non-Residential Trips =	9,162
				Internal Capture % among TAZ =	12.73%
				Internal Capture trips among TAZ =	2,218

(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.
0.75 * Intensity =	90,000	s.f.
External Trips from Matrix =	6,707	trips
0.75 * External Trips from Matrix =	5,030	trips
Pass-By Percent =	34%	
Pass-By Reduction =	1,710	trips

NET NEW EXTERNAL DAILY TRIPS =	**13,497**

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) = 0.90*Ln(X) + 0.51; (63% in)	172	108	64
Multi-Family Residential	1,438	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	535	358	177
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]	4,060	s.f.	[710]	T = 1.49*(X/1000); (17% in)	6	1	5
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	46046	s.f.	-	T = 3.05*(X/1000); (40% in)	140	56	84
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 =	1,572	875	697
				Total Gross Residential Trips =	707	466	241
				Total Gross Non-Residential Trips =	865	409	456
				Internal Capture % among TAZ =	12.85%	-	-
				Internal Capture trips among TAZ =	202	101	101

(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 =	632	trips
Pass-By Percent =	34%	
Pass-By Reduction =	161	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,209**	**694**	**515**

WATS TAZ	TCRPM TAZ
383	662

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	1,168	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	9,977
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	326,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	14,640
Service & Office	50,000	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	782
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	46,046	s.f.	-	T = 30.49*(X/1000)	1,404
Park	40	acres	[412]	T = 2.28*(X)	91
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 =	28,567
				Total Gross Residential Trips =	11,650
				Total Gross Non-Residential Trips =	16,917
				Internal Capture % among TAZ =	15.19%
				Internal Capture trips among TAZ =	4,340

(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 =	326,000	s.f.
0.75 * Intensity =	244,500	s.f.
External Trips from Matrix =	12,772	trips
0.75 * External Trips from Matrix =	9,579	trips
Pass-By Percent =	34%	
Pass-By Reduction =	3,257	trips

NET NEW EXTERNAL DAILY TRIPS =	**20,970**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	1,168	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	960	605	355
Multi-Family Residential	300	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	148	99	49
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	326,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,404	688	716
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) = 0.82*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	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
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 =	2,729	1,462	1,267
				Total Gross Residential Trips =	1,108	704	404
				Total Gross Non-Residential Trips =	1,621	758	863
				Internal Capture % among TAZ =	15.17%	-	-
				Internal Capture trips among TAZ =	414	207	207

(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 =	326,000	s.f.
External Trips from Matrix =	1,223	trips
Pass-By Percent =	34%	
Pass-By Reduction =	312	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**2,003**	**1,099**	**904**

WATS TAZ	TCRPM TAZ
384	661

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	156	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	1,565
Multi-Family Residential	124	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	776
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	158	rooms	[310]	T = 8.92*(X)	1,409
Industrial Park	1,871,049	s.f.	[130]	T = 6.96*(X/1000)	13,023
Commercial Retail	1,265,697	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	35,355
Service & Office	599,978	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	5,301
Research & Development(1)	762,817	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	5,337
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	420	d.u.	[253]	T = 2.02*(X)	848
Assisted Living Facility	150	beds	[254]	T = 2.60*(X)	390
				Total Gross Trips =	64,004
				Total Gross Residential Trips =	2,341
				Total Gross Non-Residential Trips =	61,663
				Internal Capture % among TAZ =	16.19%
				Internal Capture trips among TAZ =	10,364

(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 =	1,265,697	s.f.
0.75 * Intensity =	949,273	s.f.
External Trips from Matrix =	30,894	trips
0.75 * External Trips from Matrix =	23,171	trips
Pass-By Percent =	34%	
Pass-By Reduction =	7,878	trips

NET NEW EXTERNAL DAILY TRIPS =	45,762

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	156	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	157	99	58
Multi-Family Residential	124	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	72	48	24
Hotel	158	rooms	[310]	T = 0.70*(X); (49% in)	111	54	57
Industrial Park	1,871,049	s.f.	[130]	T = 0.86*(X/1000); (21% in)	1,609	338	1,271
Commercial Retail	1,265,697	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	3,484	1,707	1,777
Service & Office[2]	599,978	s.f.	[710]	T = 1.12*(X/1000)+78.81; (17% in)	751	128	623
Research & Development[1]	762,817	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	687	103	584
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	420	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 =	6,923	2,509	4,414
				Total Gross Residential Trips =	229	147	82
				Total Gross Non-Residential Trips =	6,694	2,362	4,332
				Internal Capture % among TAZ =	12.57%	-	-
				Internal Capture trips among TAZ =	870	435	435

(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 =	1,265,697	s.f.
External Trips from Matrix =	3,104	trips
Pass-By Percent =	34%	
Pass-By Reduction =	792	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**5,261**	**1,678**	**3,583**

WATS TAZ	TCRPM TAZ
385	646

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	953	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	4,573
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	1,283,423	s.f.	[130]	T = 6.96*(X/1000)	8,933
Commercial Retail	684,885	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	23,719
Service & Office	411,547	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	3,965
Research & Development(1)	523,245	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	3,918
Hospital	0	beds	[610]	T = 11.81*(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	[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 =	46,998
				Total Gross Residential Trips =	4,573
				Total Gross Non-Residential Trips =	42,425
				Internal Capture % among TAZ =	20.50%
				Internal Capture trips among TAZ =	9,636

(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 =	684,885	s.f.
0.75 * Intensity =	513,664	s.f.
External Trips from Matrix =	19,477	trips
0.75 * External Trips from Matrix =	14,608	trips
Pass-By Percent =	34%	
Pass-By Reduction =	4,967	trips

NET NEW EXTERNAL DAILY TRIPS =	32,395

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	953	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	382	256	126
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	1,283,423	s.f.	[130]	T = 0.86*(X/1000); (21% in)	1,104	232	872
Commercial Retail	684,885	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	2,309	1,131	1,178
Service & Office[2]	411,547	s.f.	[710]	T = 1.49*(X/1000); (17% in)	613	104	509
Research & Development[1]	523,245	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	504	76	428
Hospital	0	beds	[610]	T = 1.31*(X); (36% 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)			
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 =	5,101	1,890	3,211
				Total Gross Residential Trips =	382	256	126
				Total Gross Non-Residential Trips =	4,719	1,634	3,085
				Internal Capture % among TAZ =	16.39%	-	-
				Internal Capture trips among TAZ =	836	418	418

(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 =	684,885	s.f.
External Trips from Matrix =	1,947	trips
Pass-By Percent =	34%	
Pass-By Reduction =	496	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**3,769**	**1,224**	**2,545**

WATS TAZ	TCRPM TAZ
386	651

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	930	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	3,604
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	218,400	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	11,284
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	46,065	s.f.	-	T = 30.49*(X/1000)	1,405
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 =	18,942
				Total Gross Residential Trips =	3,604
				Total Gross Non-Residential Trips =	15,338
				Internal Capture % among TAZ =	16.67%
				Internal Capture trips among TAZ =	3,158

(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 =	218,400	s.f.
0.75 * Intensity =	163,800	s.f.
External Trips from Matrix =	9,825	trips
0.75 * External Trips from Matrix =	7,369	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,505	trips

NET NEW EXTERNAL DAILY TRIPS =	**13,279**

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	930	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)	245	149	96
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	218,400	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,074	526	548
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	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
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 =	1,717	857	860
				Total Gross Residential Trips =	245	149	96
				Total Gross Non-Residential Trips =	1,472	708	764
				Internal Capture % among TAZ =	15.03%	-	-
				Internal Capture trips among TAZ =	258	129	129

(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 =	218,400	s.f.
External Trips from Matrix =	954	trips
Pass-By Percent =	34%	
Pass-By Reduction =	243	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,216**	**607**	**609**

WATS TAZ	TCRPM TAZ
387	660

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	651	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	3,282
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	1,428,864	s.f.	[130]	T = 6.96*(X/1000)	9,945
Commercial Retail	762,498	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	25,433
Service & Office	751,816	s.f.	[710]	Ln(T) = 0.77*Ln(X/1000) + 3.65	6,306
Research & Development(1)	582,540	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 3.14	4,278
Hospital	0	beds	[610]	T = 11.81*(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	[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 =	49,551
				Total Gross Residential Trips =	3,282
				Total Gross Non-Residential Trips =	46,269
				Internal Capture % among TAZ =	13.39%
				Internal Capture trips among TAZ =	6,634

(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 =	762,498	s.f.
0.75 * Intensity =	571,874	s.f.
External Trips from Matrix =	22,642	trips
0.75 * External Trips from Matrix =	16,982	trips
Pass-By Percent =	34%	
Pass-By Reduction =	5,774	trips

NET NEW EXTERNAL DAILY TRIPS =	**37,143**

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	651	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	279	187	92
Hotel	0	rooms	[310]	T = 0.70*(X); (49% in)			
Industrial Park	1,428,864	s.f.	[130]	T = 0.86*(X/1000); (21% in)	1,229	258	971
Commercial Retail	762,498	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	2,481	1,216	1,265
Service & Office[2]	751,816	s.f.	[710]	T = 1.12*(X/1000)+78.81; (17% in)	921	157	764
Research & Development[1]	582,540	s.f.	[760]	Ln(T) = 0.82*Ln(X/1000) + 1.09; (15% in)	551	83	468
Hospital	0	beds	[610]	T = 1.31*(X); (36% 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)			
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 =	5,492	1,913	3,579
				Total Gross Residential Trips =	279	187	92
				Total Gross Non-Residential Trips =	5,213	1,726	3,487
				Internal Capture % among TAZ =	10.31%	-	-
				Internal Capture trips among TAZ =	566	283	283

(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 =	762,498	s.f.
External Trips from Matrix =	2,241	trips
Pass-By Percent =	34%	
Pass-By Reduction =	572	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**4,354**	**1,344**	**3,010**

WATS TAZ	TCRPM TAZ
388	663

DAILY TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation (8th Ed)	Daily Trips
Single-Family Residential	410	d.u.	[210]	Ln(T) = 0.92*Ln(X) + 2.71	3,808
Multi-Family Residential	225	d.u.	[230]	Ln(T) = 0.87*Ln(X) + 2.46	1,302
Age-Restricted Single-Family	440	d.u.	[251]	Ln(T) = 0.85*Ln(X) + 2.38	1,908
Age-Restricted Multi-Family	0	d.u.	[252]	T = 3.48*(X)	
Hotel	240	rooms	[310]	T = 8.92*(X)	2,141
Industrial Park	0	s.f.	[130]	T = 6.96*(X/1000)	
Commercial Retail	256,000	s.f.	[820]	Ln(T) = 0.65*Ln(X/1000) + 5.83	12,511
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	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	[412]	T = 2.28*(X)	34
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 =	27,501
				Total Gross Residential Trips =	7,018
				Total Gross Non-Residential Trips =	20,483
				Internal Capture % among TAZ =	16.57%
				Internal Capture trips among TAZ =	4,202

(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 =	256,000	s.f.
0.75 * Intensity =	192,000	s.f.
External Trips from Matrix =	10,875	trips
0.75 * External Trips from Matrix =	8,156	trips
Pass-By Percent =	34%	
Pass-By Reduction =	2,773	trips

NET NEW EXTERNAL DAILY TRIPS =	**20,526**

PM PEAK HOUR TRIP GENERATION:

Land Use	Intensity	Unit	ITE Code	Trip Generation Rate/Equation	Total Trips	Inbound	Outbound
Single-Family Residential	410	d.u.	[210]	Ln(T) = 0.90*Ln(X) + 0.51; (63% in)	374	236	138
Multi-Family Residential	225	d.u.	[230]	Ln(T) = 0.82*Ln(X) + 0.32; (67% in)	117	78	39
Age-Restricted Single-Family	440	d.u.	[251]	Ln(T) = 0.72*Ln(X) + 0.58; (61% in)	143	87	56
Hotel	240	rooms	[310]	T = 0.70*(X); (49% in)	168	82	86
Industrial Park	0	s.f.	[130]	T = 0.86*(X/1000); (21% in)			
Commercial Retail	256,000	s.f.	[820]	Ln(T) = 0.67*Ln(X/1000) + 3.37; (49% in)	1,194	585	609
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	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
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 =	2,573	1,329	1,244
				Total Gross Residential Trips =	634	401	233
				Total Gross Non-Residential Trips =	1,939	928	1,011
				Internal Capture % among TAZ =	15.31%	-	-
				Internal Capture trips among TAZ =	394	197	197

(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

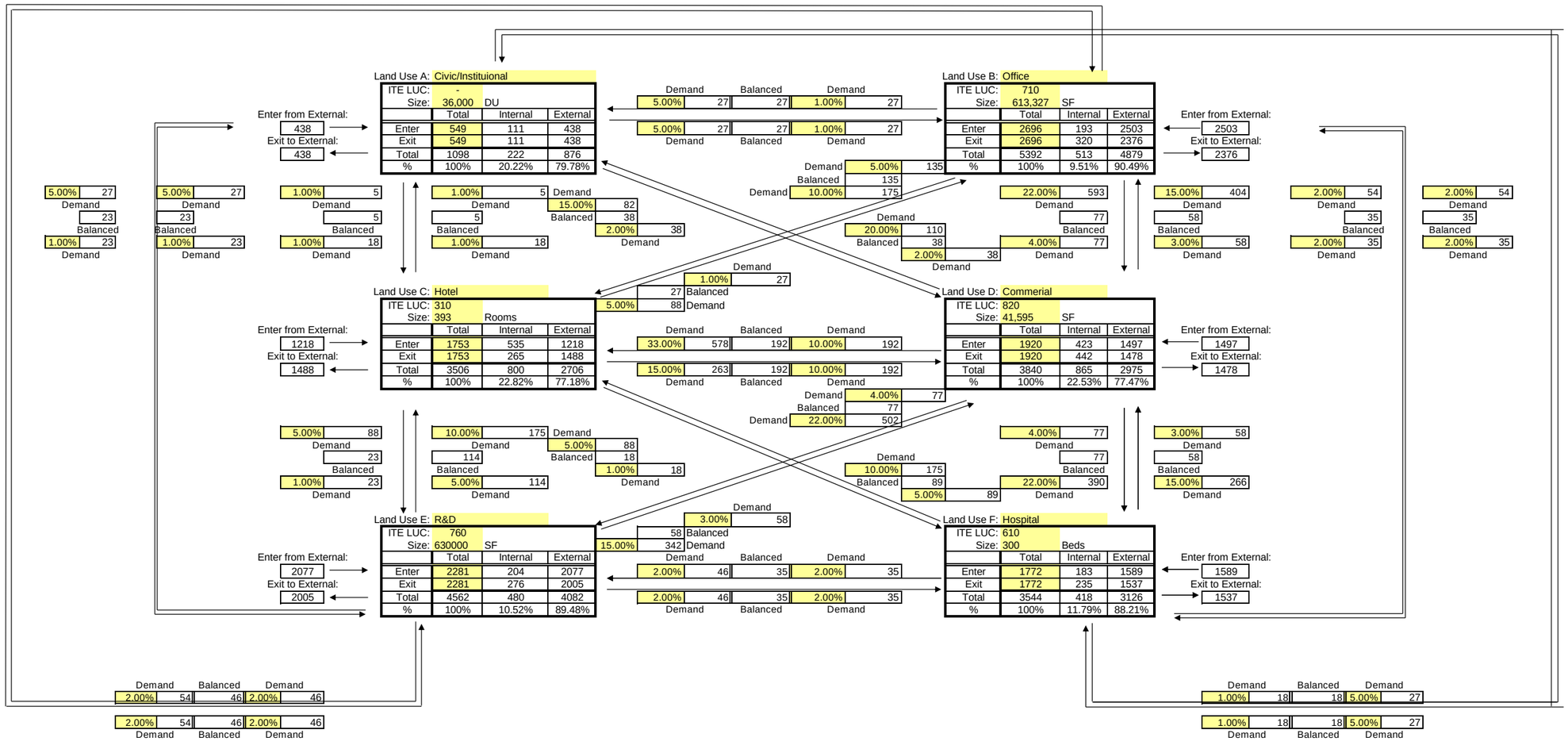
Commercial Retail Pass-By Calculation:		
Intensity =	256,000	s.f.
External Trips from Matrix =	1,037	trips
Pass-By Percent =	34%	
Pass-By Reduction =	265	trips

	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,914**	**1,000**	**914**

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

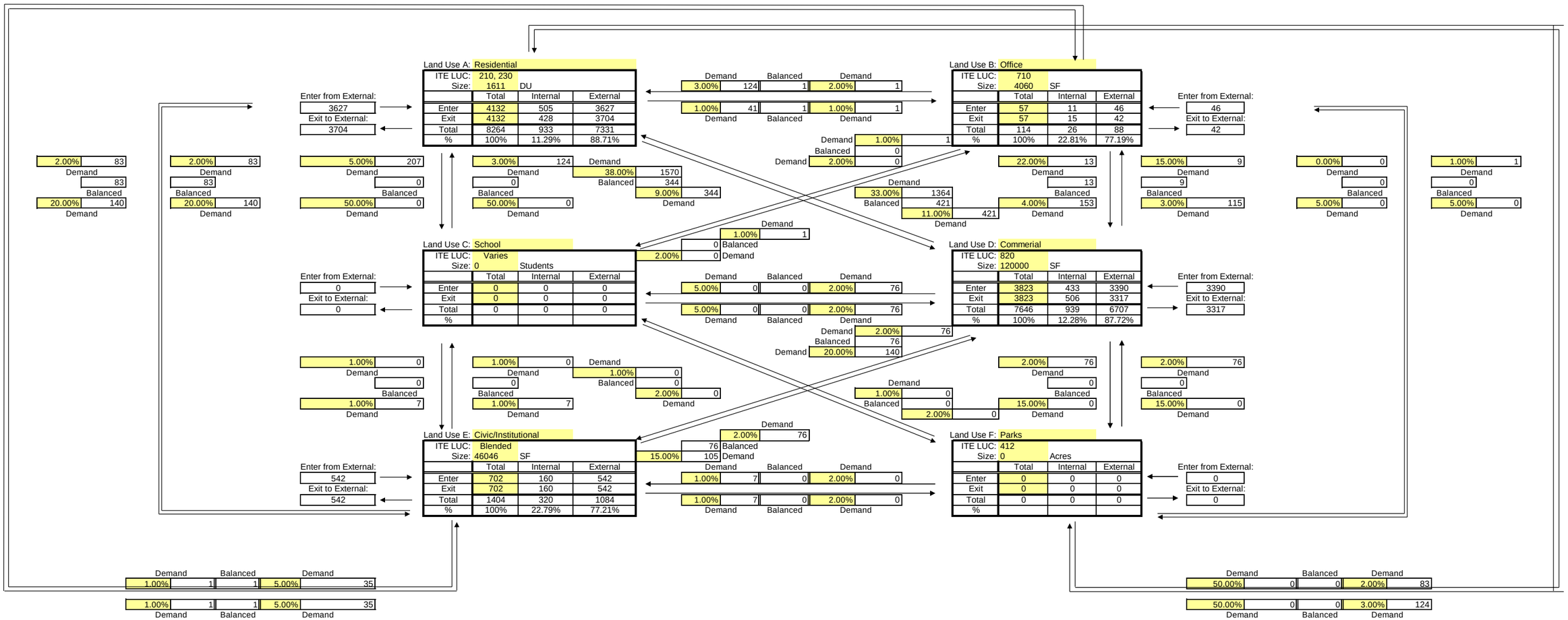
Category	Land Use A Civic/Instituio	B Office	C Hotel	D Commerial	E R&D	F Hospital	Total
Enter	438	2503	1218	1497	2077	1589	9322
Exit	438	2376	1488	1478	2005	1537	9322
Total	876	4879	2706	2975	4082	3126	**18644**
Single Use Trip Gen Estimate	1098	5392	3506	3840	4562	3544	**21942**
	20.22%	9.51%	22.82%	22.53%	10.52%	11.79%	

Internal Capture = 15.03%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

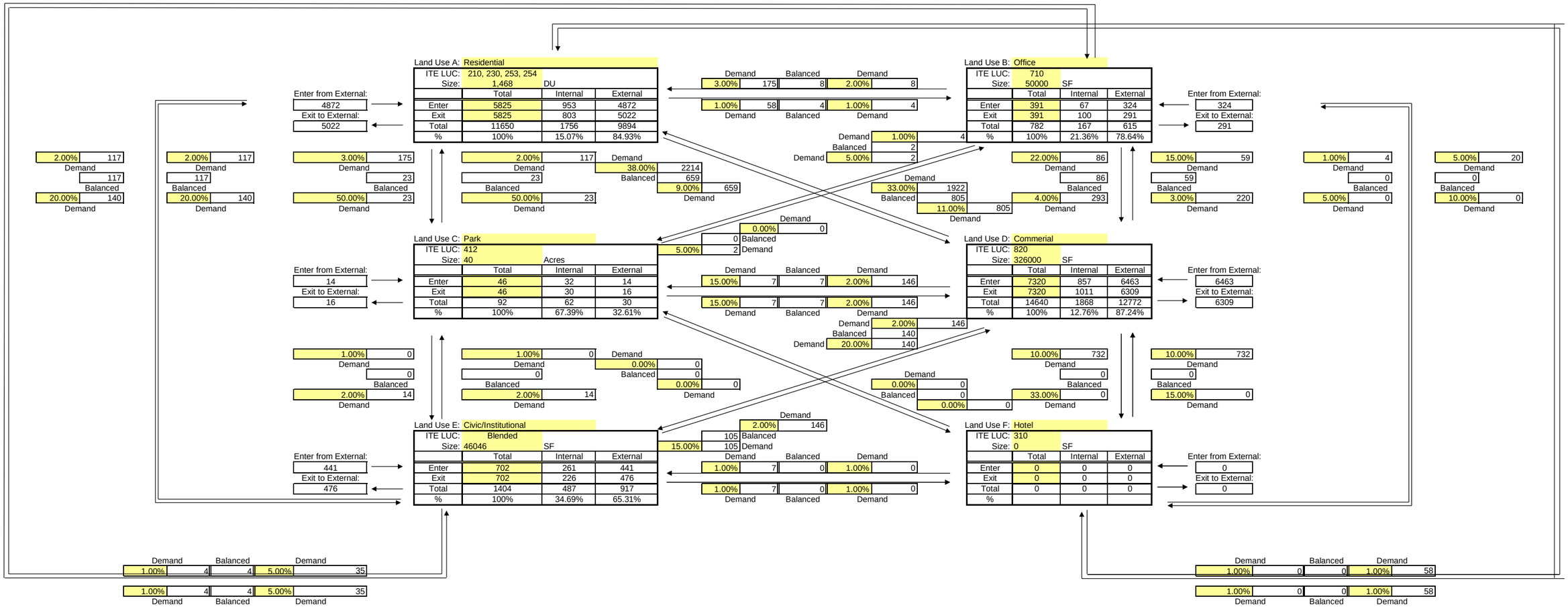
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3627	46	0	3390	542	0	7605
Exit	3704	42	0	3317	542	0	7605
Total	7331	88	0	6707	1084	0	**15210**
Single Use Trip Gen Estimate	8264	114	0	7646	1404	0	**17428**
	11.29%	22.81%	0.00%	12.28%	22.79%	0.00%	

Internal Capture = 12.73%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

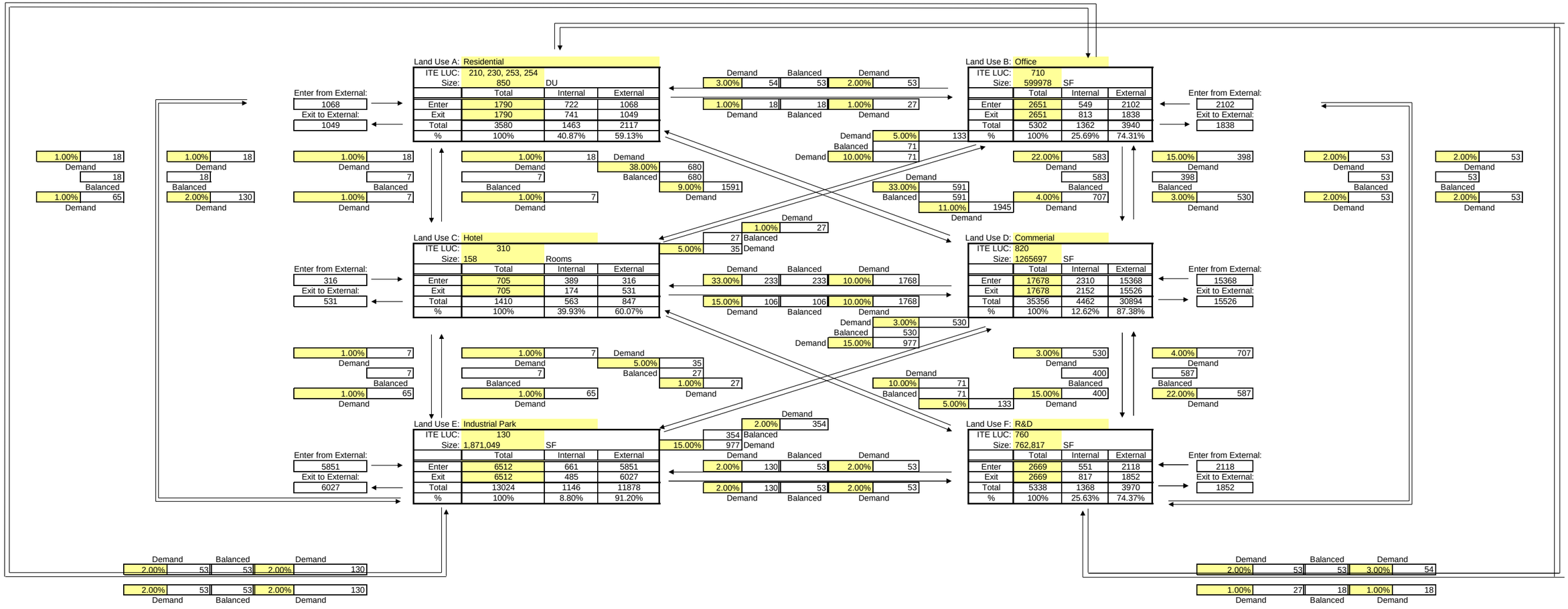
Category	Land Use A Residential	B Office	C Park	D Commerial	E Civic/Institut	F Hotel	Total
Enter	4872	324	14	6463	441	0	12114
Exit	5022	291	16	6309	476	0	12114
Total	9894	615	30	12772	917	0	**24228**
Single Use Trip Gen Estimate	11650	782	92	14640	1404	0	**28568**
	15.07%	21.36%	67.39%	12.76%	34.69%	0.00%	

Internal Capture = 15.19%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

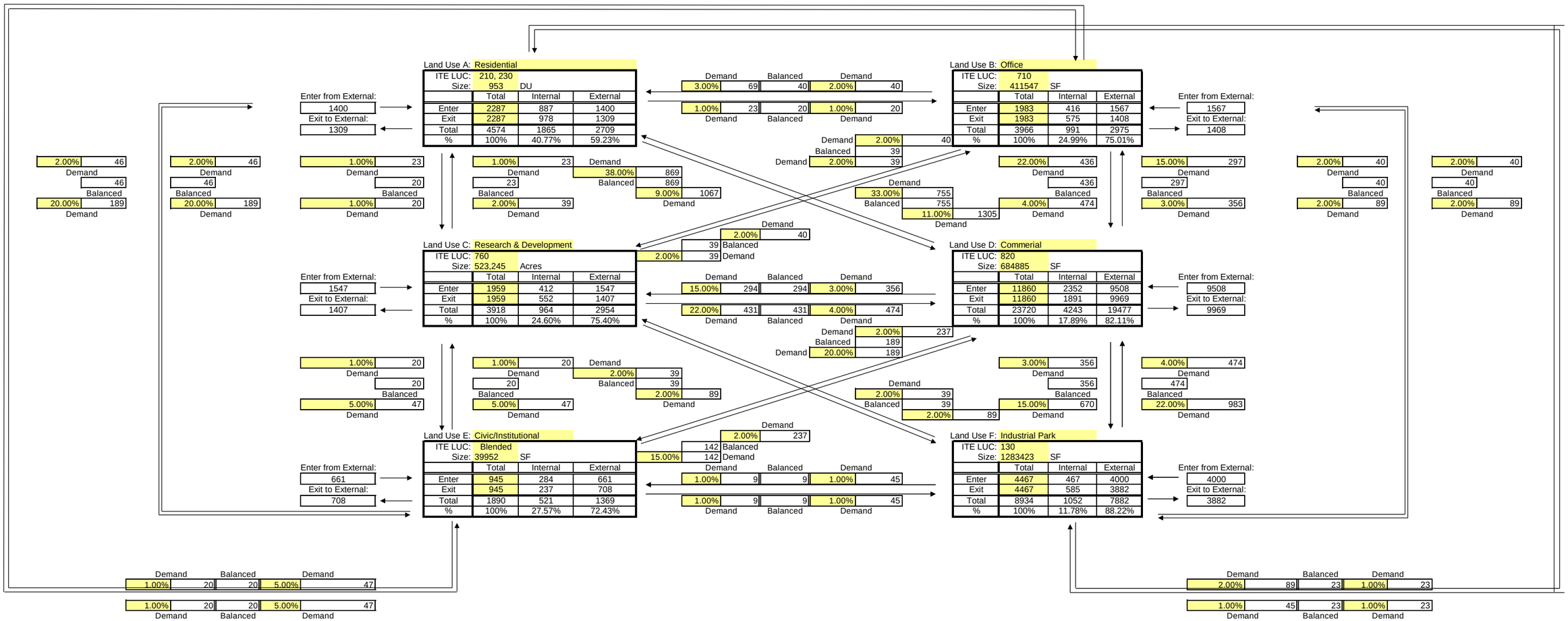
Category	Land Use						
	A	B	C	D	E	F	Total
	Residentia	Office	Hotel	Commerial	Industrial Pa	R&D	
Enter	1068	2102	316	15368	5851	2118	26823
Exit	1049	1838	531	15526	6027	1852	26823
Total	2117	3940	847	30894	11878	3970	**53646**
Single Use Trip Gen Estimate	3580	5302	1410	35356	13024	5338	**64010**
	40.87%	25.69%	39.93%	12.62%	8.80%	25.63%	

Internal Capture = 16.19%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

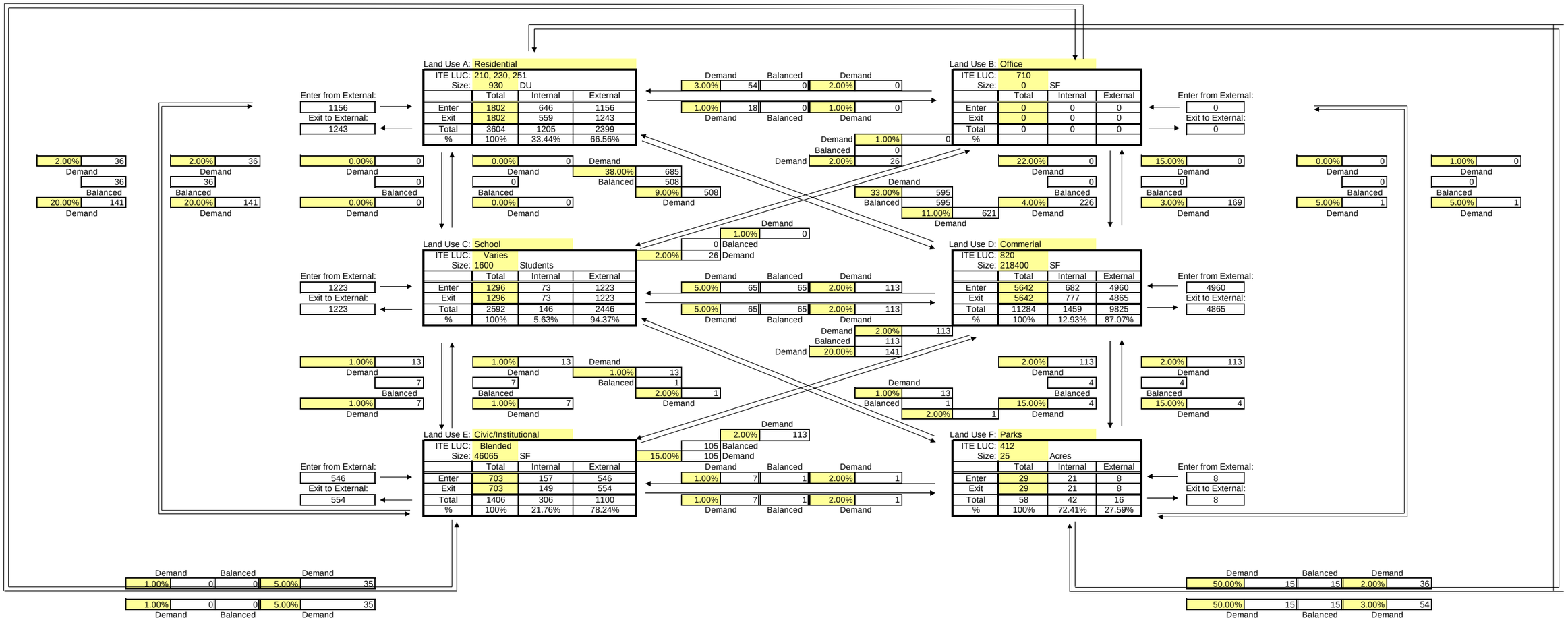
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	1400	1567	1547	9508	661	4000	18683
Exit	1309	1408	1407	9969	708	3882	18683
Total	2709	2975	2954	19477	1369	7882	**37366**
Single Use Trip Gen Estimate	4574	3966	3918	23720	1890	8934	**47002**
	40.77%	24.99%	24.60%	17.89%	27.57%	11.78%	

Internal Capture = 20.50%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

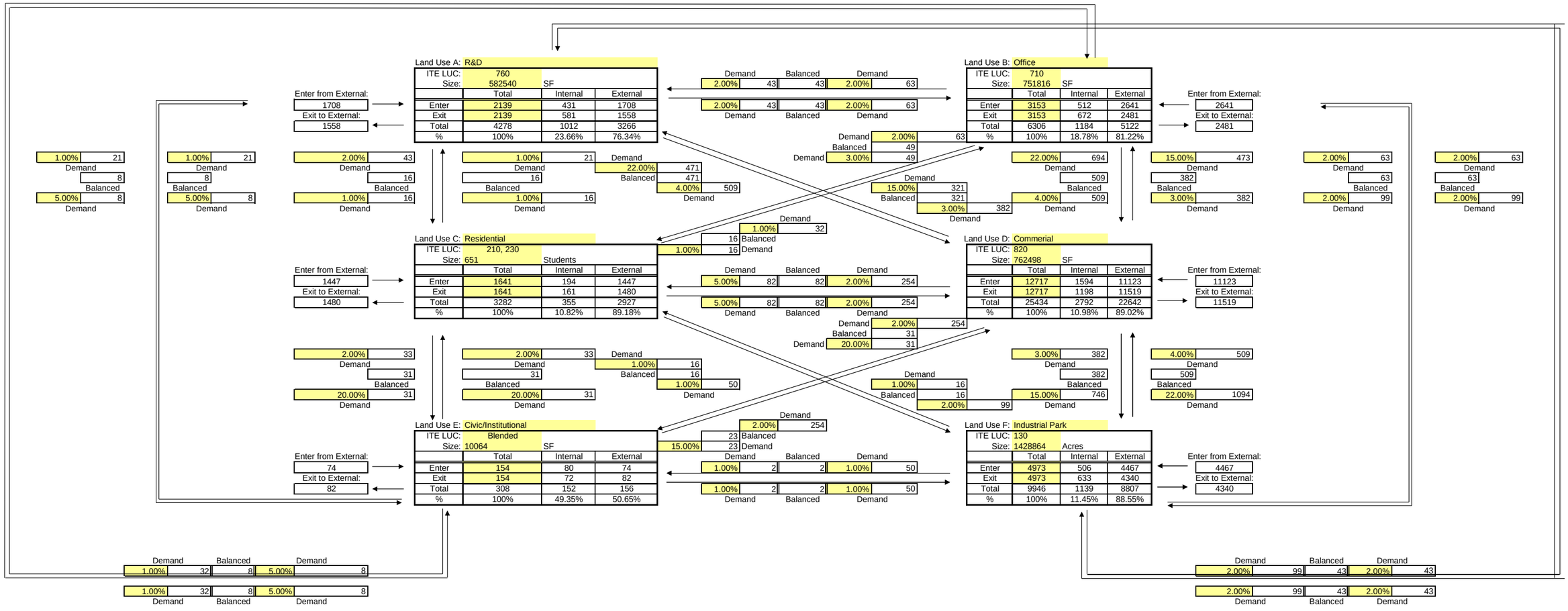
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1156	0	1223	4960	546	8	7893
Exit	1243	0	1223	4865	554	8	7893
Total	2399	0	2446	9825	1100	16	**15786**
Single Use Trip Gen Estimate	3604	0	2592	11284	1406	58	**18944**
	33.44%	0.00%	5.63%	12.93%	21.76%	72.41%	

Internal Capture = 16.67%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

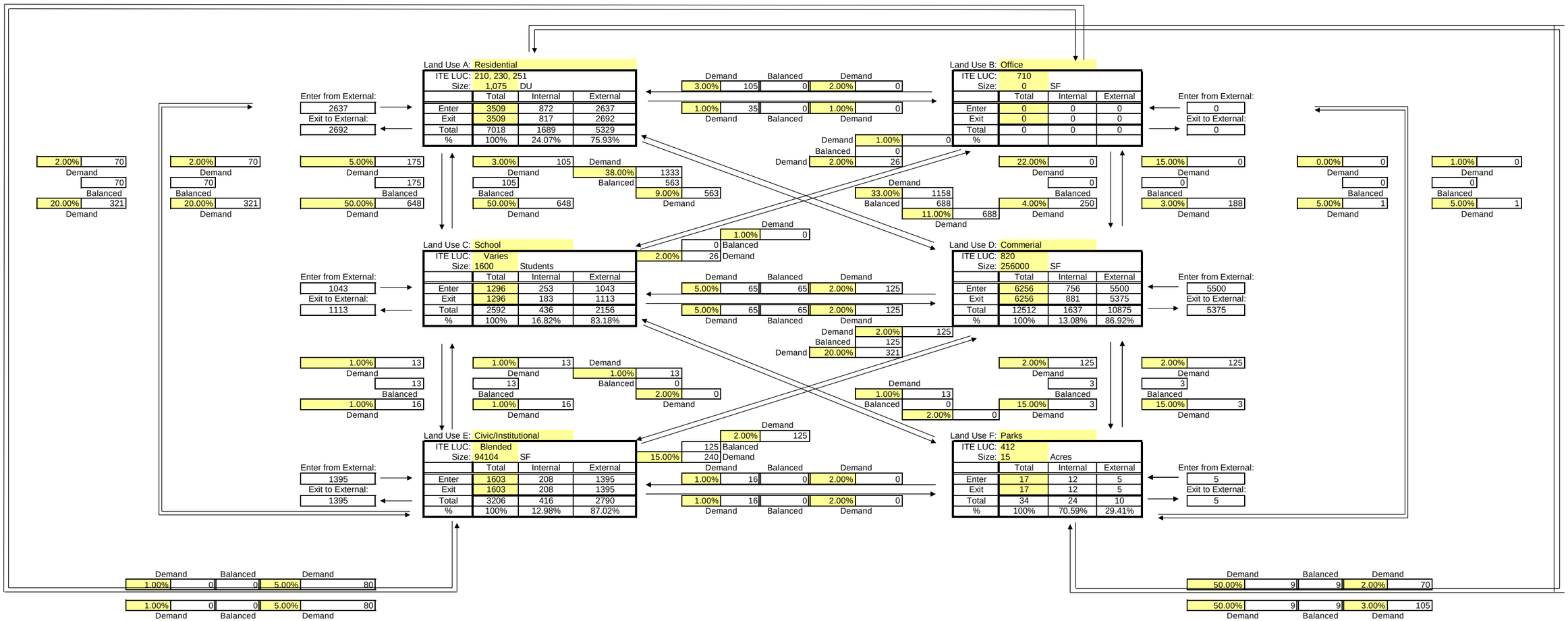
Category	Land Use						
	A	B	C	D	E	F	Total
	R&D	Office	Residential	Commerial	Civic/Institu	Industrial Par	
Enter	1708	2641	1447	11123	74	4467	21460
Exit	1558	2481	1480	11519	82	4340	21460
Total	3266	5122	2927	22642	156	8807	**42920**
Single Use Trip Gen Estimate	4278	6306	3282	25434	308	9946	**49554**
	23.66%	18.78%	10.82%	10.98%	49.35%	11.45%	

Internal Capture = 13.39%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

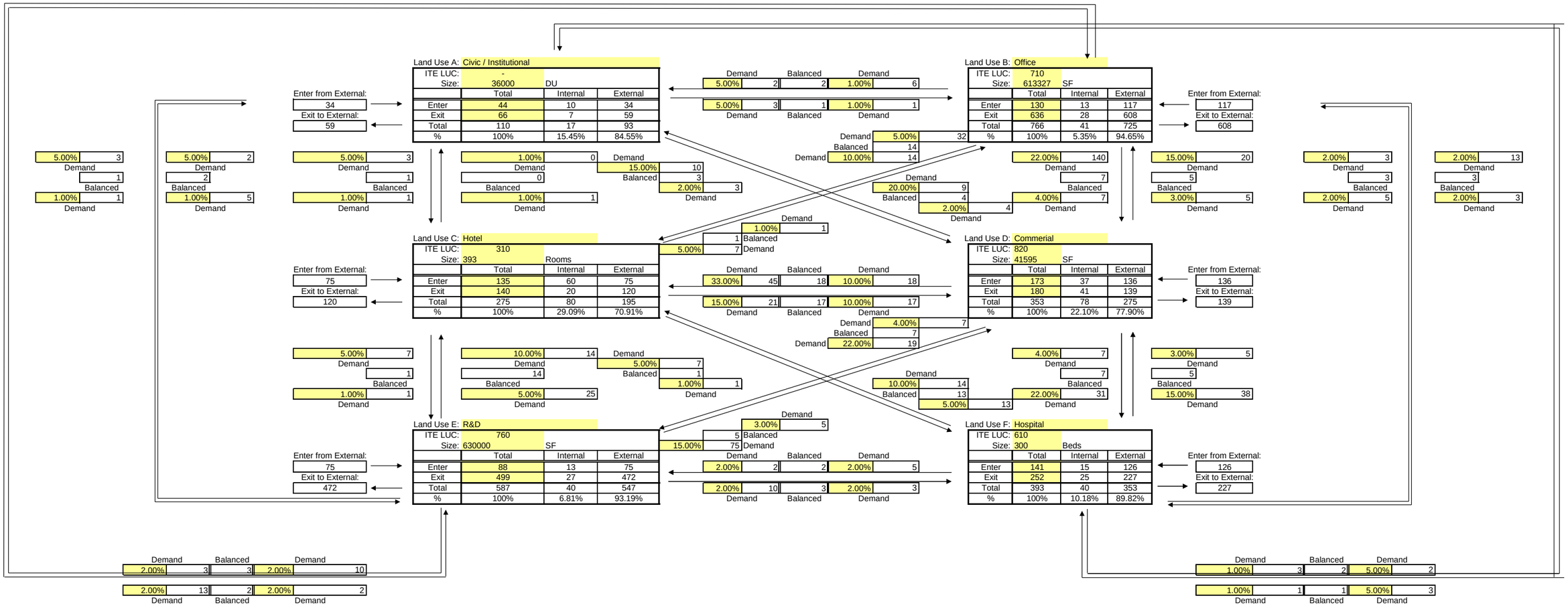
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2637	0	1043	5500	1395	5	10580
Exit	2692	0	1113	5375	1395	5	10580
Total	5329	0	2156	10875	2790	10	**21160**
Single Use Trip Gen Estimate	7018	0	2592	12512	3206	34	**25362**
	24.07%	0.00%	16.82%	13.08%	12.98%	70.59%	

Internal Capture = 16.57%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

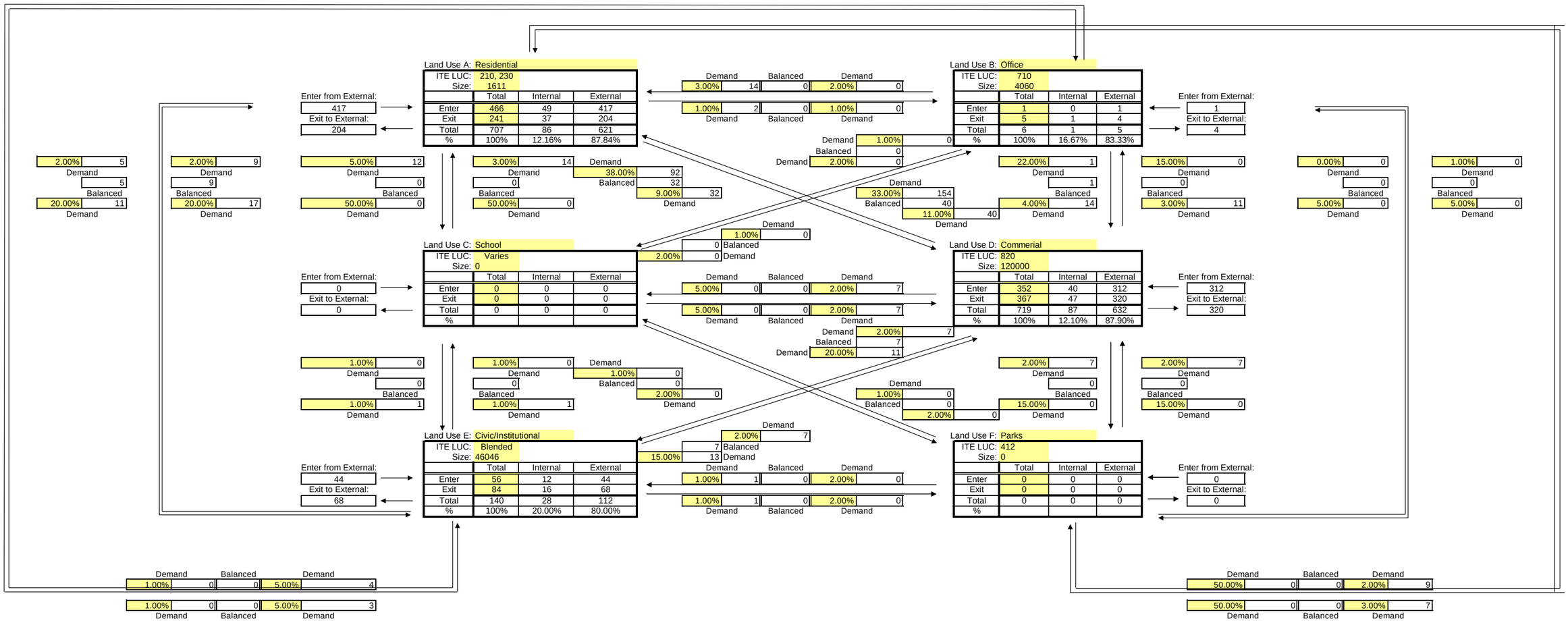
Category	Land Use A	B	C	D	E	F	Total
	Civic / Instituti	Office	Hotel	Commerial	R&D	Hospital	
Enter	34	117	75	136	75	126	563
Exit	59	608	120	139	472	227	1625
Total	93	725	195	275	547	353	**2188**
Single Use Trip Gen Estimate	110	766	275	353	587	393	**2484**
	15.45%	5.35%	29.09%	22.10%	6.81%	10.18%	

Internal Capture = 11.92%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

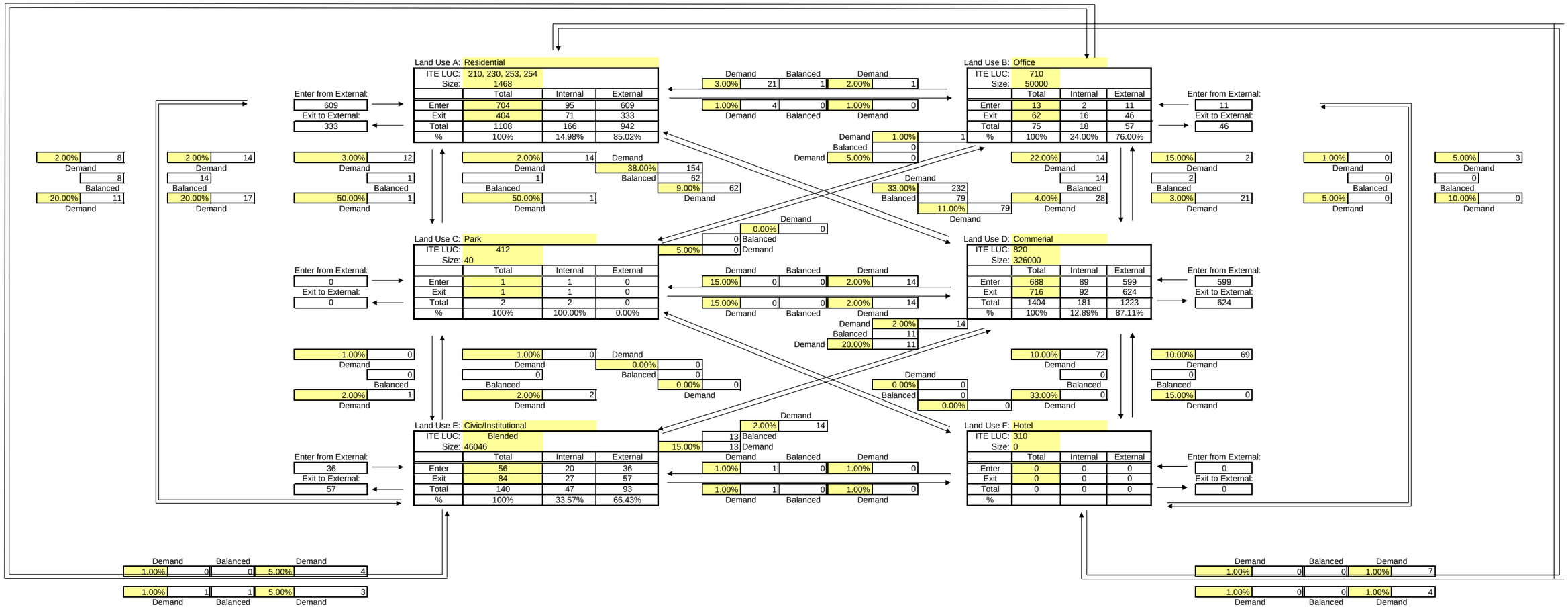
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	417	1	0	312	44	0	774
Exit	204	4	0	320	68	0	596
Total	621	5	0	632	112	0	**1370**
Single Use Trip Gen Estimate	707	6	0	719	140	0	**1572**
	12.16%	16.67%	0.00%	12.10%	20.00%	0.00%	

Internal Capture = 12.85%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

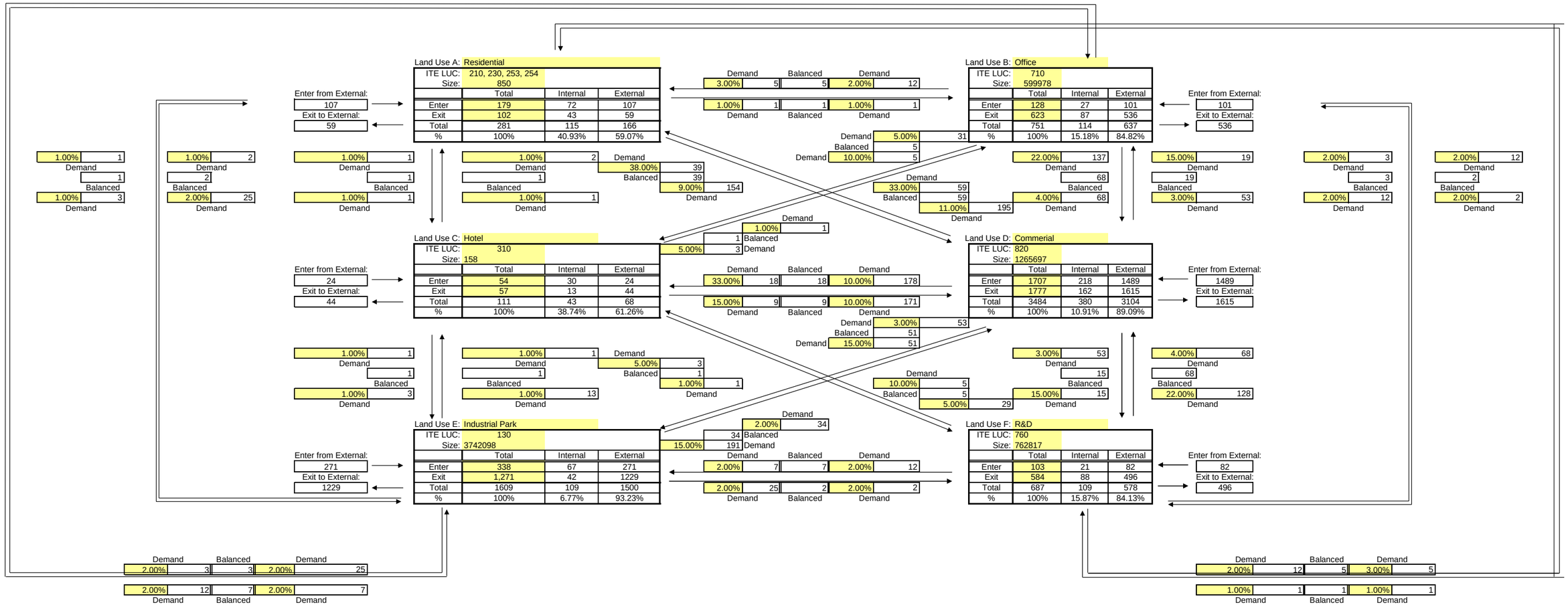
Category	Land Use						
	A	B	C	D	E	F	Total
	Residentia	Office	Park	Commerial	Civic/Institut	Hotel	
Enter	609	11	0	599	36	0	1255
Exit	333	46	0	624	57	0	1060
Total	942	57	0	1223	93	0	**2315**
Single Use Trip Gen Estimate	1108	75	2	1404	140	0	**2729**
	14.98%	24.00%	0.00%	12.89%	33.57%	0.00%	

Internal Capture = 15.17%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

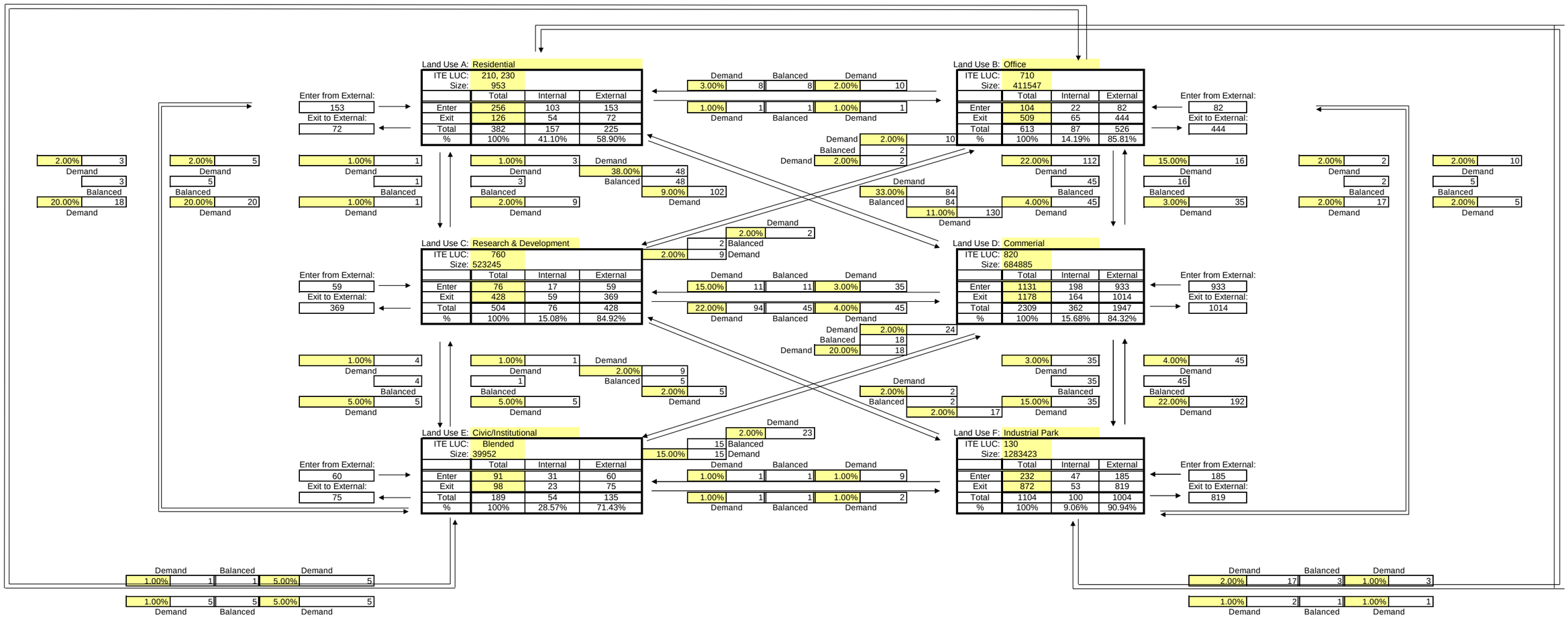
Category	Land Use A Residentia	B Office	C Hotel	D Commerial	E Industrial Pa	F R&D	Total
Enter	107	101	24	1489	271	82	2074
Exit	59	536	44	1615	1229	496	3979
Total	166	637	68	3104	1500	578	**6053**
Single Use Trip Gen Estimate	281	751	111	3484	1609	687	**6923**
	40.93%	15.18%	38.74%	10.91%	6.77%	15.87%	

Internal Capture = 12.57%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

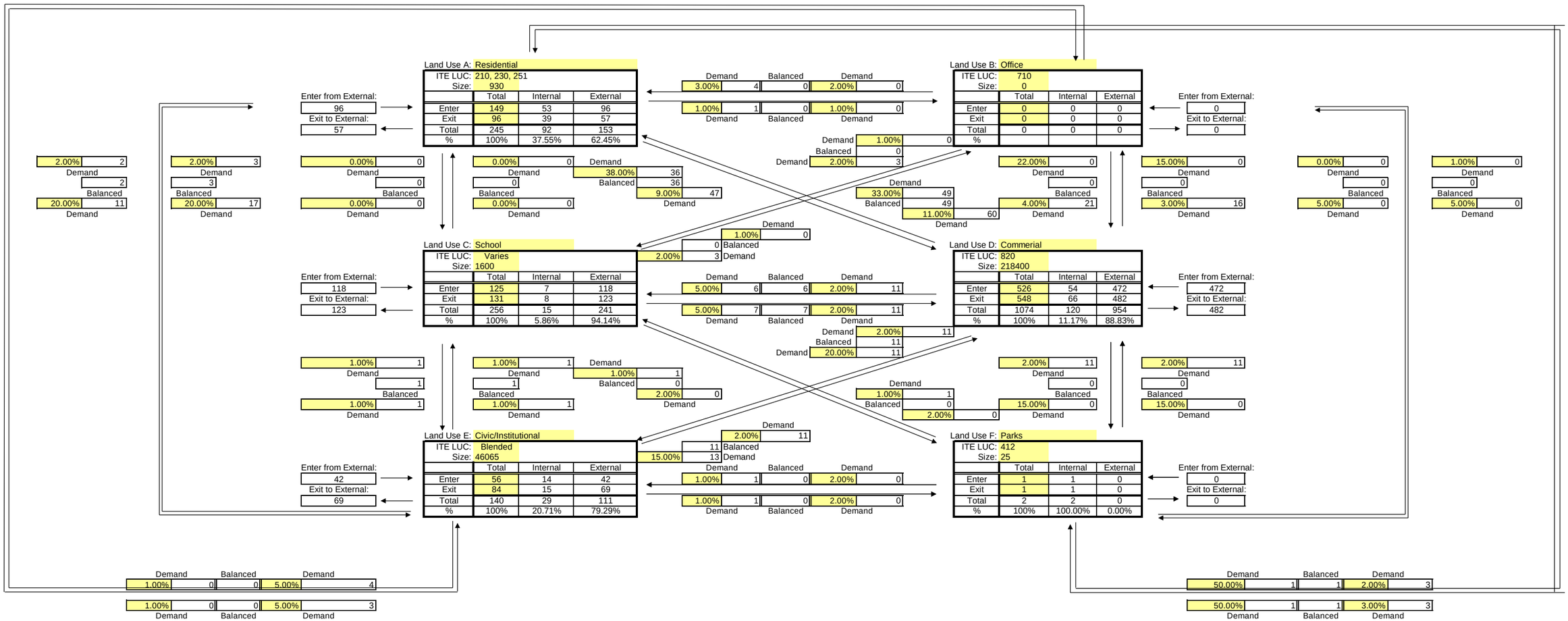
Category	Land Use A Residentia	B Office	C Research &	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	153	82	59	933	60	185	1472
Exit	72	444	369	1014	75	819	2793
Total	225	526	428	1947	135	1004	**4265**
Single Use Trip Gen Estimate	382	613	504	2309	189	1104	**5101**
	41.10%	14.19%	15.08%	15.68%	28.57%	9.06%	

Internal Capture = 16.39%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

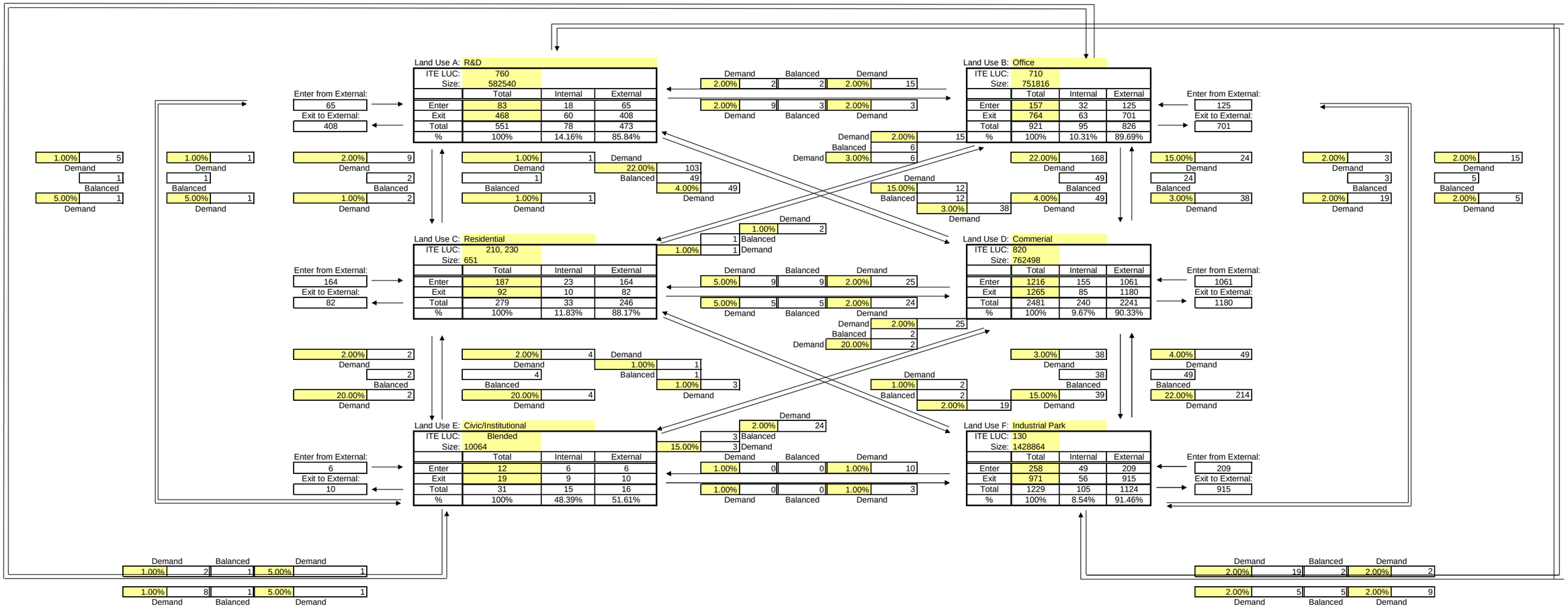
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	96	0	118	472	42	0	728
Exit	57	0	123	482	69	0	731
Total	153	0	241	954	111	0	**1459**
Single Use Trip Gen Estimate	245	0	256	1074	140	2	**1717**
	37.55%	0.00%	5.86%	11.17%	20.71%	0.00%	

Internal Capture = 15.03%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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



NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

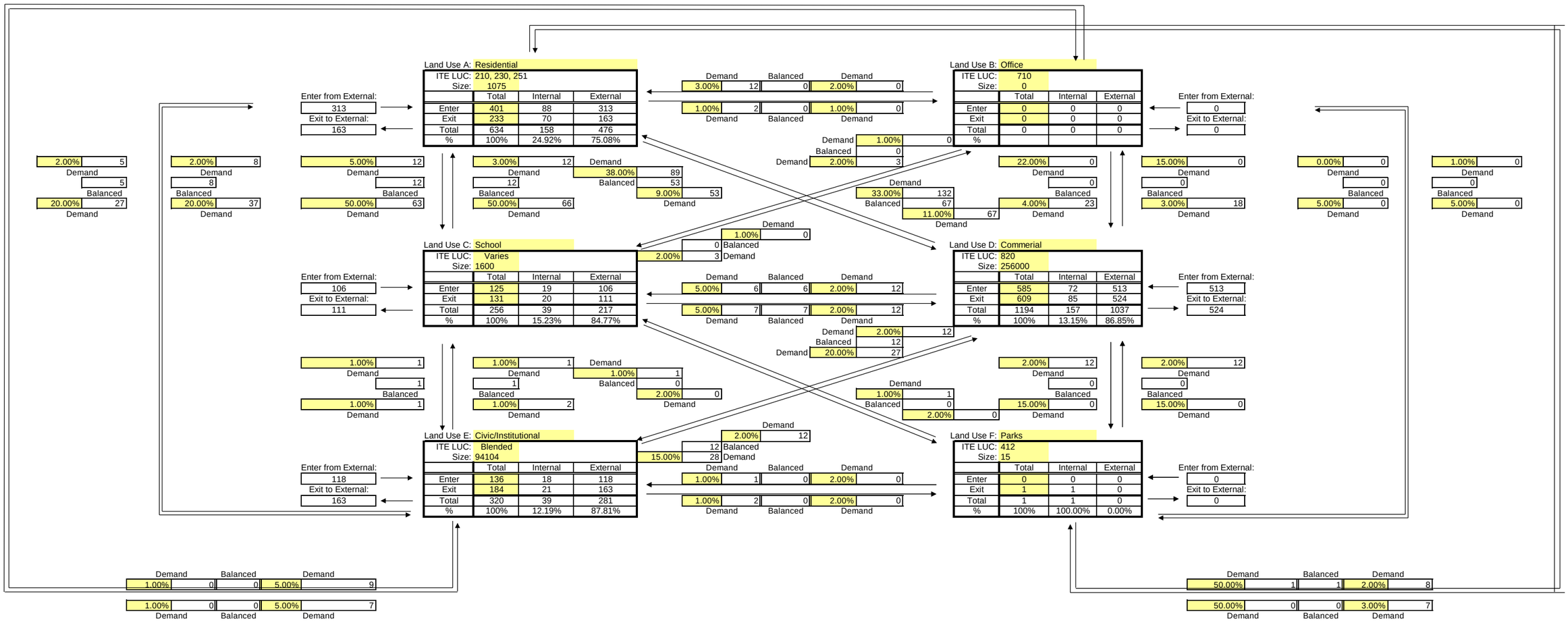
Category	Land Use						
	A	B	C	D	E	F	Total
	R&D	Office	Residential	Commerial	Civic/Institut	Industrial Par	
Enter	65	125	164	1061	6	209	1630
Exit	408	701	82	1180	10	915	3296
Total	473	826	246	2241	16	1124	**4926**
Single Use Trip Gen Estimate	551	921	279	2481	31	1229	**5492**
	14.16%	10.31%	11.83%	9.67%	48.39%	8.54%	

Internal Capture = 10.31%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 PM PEAK HOUR
Analyst: MacKenzie Engineering and Planning
Date: 6/29/2020

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	313	0	106	513	118	0	1050
Exit	163	0	111	524	163	0	961
Total	476	0	217	1037	281	0	**2011**
Single Use Trip Gen Estimate	634	0	256	1194	320	1	**2405**
	24.92%	0.00%	15.23%	13.15%	12.19%	0.00%	

Internal Capture = 16.38%

MacKenzie
Engineering & Planning, Inc.

Appendix C

Committed Improvements

FDOT Emergency Travel Alert: For information on the current situation, please visit the following page - Alerts.

Florida Department of

TRANSPORTATION

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**

This site is maintained by the Office of Work Program and Budget, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 32399.

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

FDOT Emergency Travel Alert: For information on the current situation, please visit the following page - Alerts.

Florida Department of

TRANSPORTATION

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**		

This site is maintained by the Office of Work Program and Budget, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 32399.

For additional information please e-mail questions or comments to:

FDOT Emergency Travel Alert: For information on the current situation, please visit the following page - Alerts.

Florida Department of

TRANSPORTATION

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:**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**		

FDOT Emergency Travel Alert: For information on the current situation, please visit the following page - Alerts.

Florida Department of

TRANSPORTATION

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:**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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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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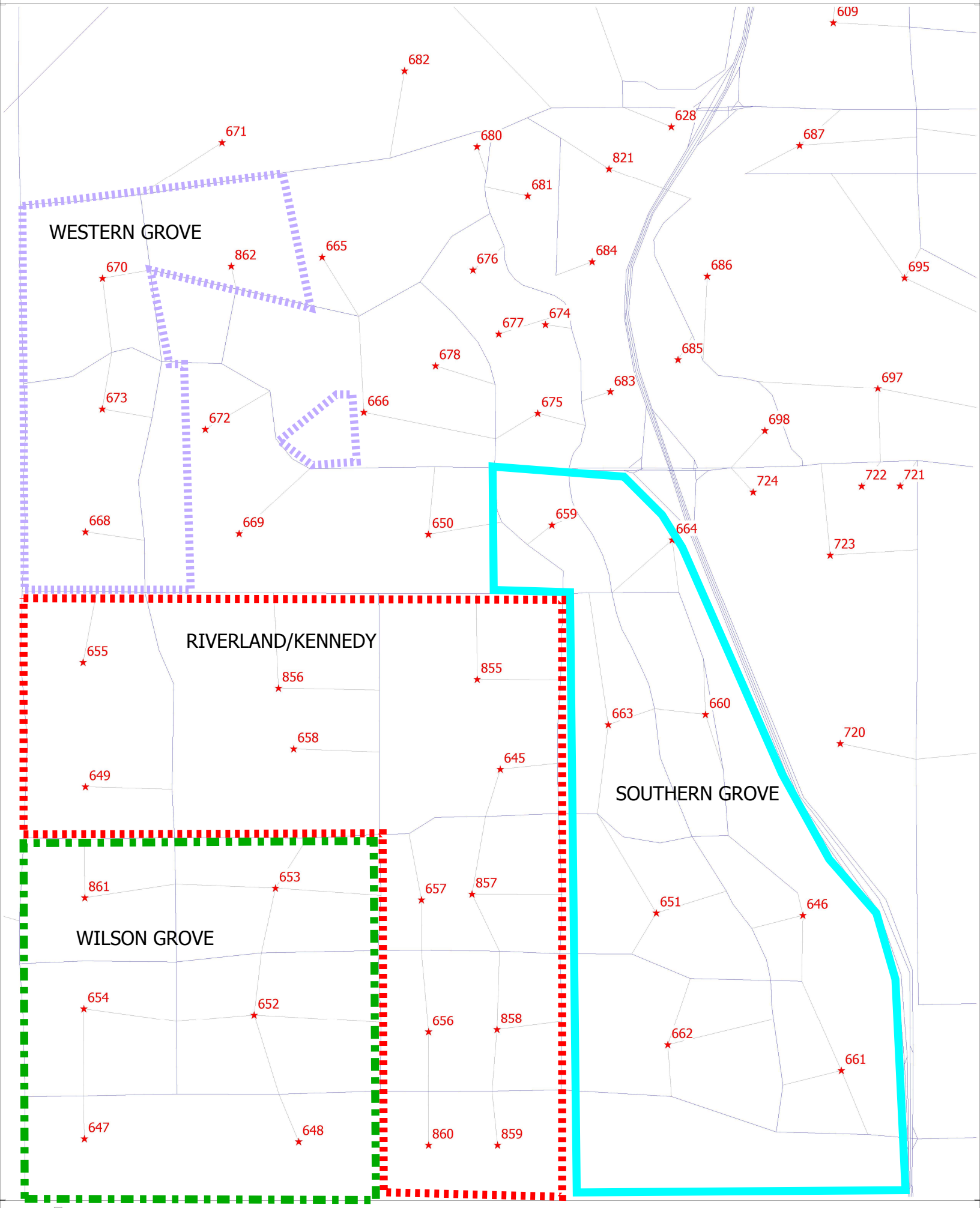
Appendix E

Traffic Analysis Zone Map

2040 TAZ MAP



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Appendix F

Western Annexation DRI Use and TAZ Numbers

Phase 2 (2030) Land Use

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Single Family Age-Restricted (DU)	Hotel (Rooms)	Industrial Park (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)	Independent Living Facility (Units)	ALF (Beds)
-	862		750	150															
371	670	Western	1,000					100,000	30,000				14,520						
372	673	Grove	1,400					0	0				14,520	25	0	1,600			
373	668		700										6,000						
374	858		1,009	0	0		0	112,000	0			0	0	8	0	1,600	0		
400	656		0	374	0		0	208,668	0			101,781	171,327	54.5	0	0	2,500		
375	645		1,132	256	0		0	0	0			0	0	0	0	0	0		
379	855		1,020	300	0		0	0	0			0	0	10	0	0	0		
376	857		592	0	0		0	60,000	0			0	69,000	6.3	0	0	0		
399	657	Riverland	700	350	0		0	60,000	0			0	0	0	0	0	0		
377	859		0	926	0		0	0	0			0	0	0	0	0	0		
378	658		1,209	0	0		0	20,000	0			0	0	0	0	0	0		
396	856		983	0	0		0	272,000	0			0	0	29	0	0	0		
380	655		550	0	0		0	0	0			0	0	11.0	0	0	0		
397	860		0	0	0		544,500	0	544,500			0	0	0	0	0	0		
398	649		1,000	0	0		0	0	0			0	0	29	0	0	0		
381	664		-	-		393	-	41,595	459,995	567,000	300	0	9,212	0	0	0			
382	659		173	1,438			-	120,000	4,060	-		0	9,212	0	0	0			
383	662		1,168	300		0	-	81,500	-	-		0	0	40	0	0			
384	661	Southern	156	124		158	935,525	759,534	230,512	351,581		0	0	0	0	0		420	150
385	646	Grove	-	953			211,155	171,221	123,464	-		0	0	0	0	0			
386	651		-	-	930		-	54,600	-	-		0	0	25	0	1,600			
387	660		-	651			714,432	190,625	225,545	524,286		0	0	0	0	0			
388	663		410	225	440	0	-	256,000	-	-		0	36,000	15	0	1,600			
389	647		1,294	425	0		0	40,000	0			0	0	0	0	0	0		
390	648		0	0	0		544,500	0	544,500			0	0	0	0	0	0		
392	654	Wilson Groves	977	0	0		0	120,000	0			0	50,638	0	0	0	0		
393	861		732	100	0		0	0	0			0	0	0	0	0	0		
394	653		800	100	0		0	120,000	0			0	0	0	0	0	0		
395	652		1,272	594	0		0	50,000	62,000			0	0	50	820	0	0		

DRI	Single Family (DU)	Multi Family (DU)	Single Family Age-Restricted (DU)	Hotel (Rooms)	Industrial Park (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)	Independent Living Facility (Units)	ALF (Beds)
Western Grove	3,850	150	0	0	0	100,000	30,000	0	0	0	35,040	25	0	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	0	1,600	2,500	0	0
Southern Grove	1,907	3,691	1,370	551	1,861,112	1,675,075	1,043,576	1,442,867	300	0	54,424	80	0	3,200	0	420	150
Wilson Groves	5,075	1,219	0	0	544,500	330,000	606,500	0	0	0	50,638	50	820	0	0	0	0

Phase 3 (2035) Land Use

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	SF Age-Restricted (DU)	Hotel (Rooms)	Industrial Park (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)	Independent Living Facility (Units)	ALF (Beds)
-	862	Western Grove	750	150														
371	670		1,000					200,000	50,000				18,150					
372	673		1,400					0	0				30,300	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	500	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		
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		
377	859		0	1,870	0		0	0	0			0	0		0	0		
378	658		1,209	0	0		0	20,000	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	160,000	0			0	87,000	35.3	0	0		
397	860		0	0	0		952,875	0	952,785			0	0		0	0		
398	649		1,229	0	0		0	0	0			0	0	29	0	0		
381	664	Southern Grove	-	-		393		41,595	613,327	630,000	300	0	10,000	0	0			
382	659		173	1,438				120,000	4,060	-		0	20,000	0	0			
383	662		1,168	300		0		326,000	50,000	-		0	15,000	40	0			
384	661		156	124		158	1,403,287	759,534	350,000	500,000		0	0	0	0		420	150
385	646		-	953			747,290	342,443	350,000	258,194		16,771	10,000	0	0			
386	651		-	-	930			218,400	-	-		0	33,519	25	1,600			
387	660		-	651			1,071,648	611,103	369,765	582,540		0	10,000	0	0			
388	663		410	225	440	240	-	256,000	-	-		8,386	65,000	15	1,600			
389	647	Wilson Groves	1,294	550			0	80,000	0			0	0	35	0			
390	648		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	120,000	0			0	0		0			
394	653		1,200	200			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 Park (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)	Independent Living Facility (Units)	ALF (Beds)
Western Grove	3,850	150	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	1,907	3,691	1,370	791	3,222,224	2,675,075	1,737,152	1,970,734	300	25,157	163,519	80	3,200	0	420	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

Phase 4 (2040) Land Use

WATS TAZ	TCRPM 4.0 TAZ	DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Industrial Park (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)
-	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	0	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											0			
379	855		1,020	300										10					
376	857		992		0			60,000					69,000	6.3					
399	657		700	350				60,000											
377	859			1,870															
378	658		1,209					20,000											
396	856		983					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	-	-		393	-	41,595	613,327	630,000	300	0	36,000	0					
382	659		173	1,438			-	120,000	4,060	-		0	46,046	0					
383	662		1,168	300		0	-	326,000	50,000	-		0	46,046	40					
384	661		156	124		158	1,871,049	1,265,697	599,978	762,817		0	0	0				420	150
385	646		-	953			1,283,423	684,885	411,547	523,245		27,952	12,000	0					
386	651		-	-	930		-	218,400	-	-		0	46,065	25		1,600			
387	660		-	651			1,428,864	762,498	751,816	582,540		0	10,064	0					
388	663		410	225	440	240	-	256,000	-	-		13,975	80,129	15		1,600			
389	647	Wilson Groves	1,294	550			0	80,000	0				0	35		0			
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	820	1,600			

DRI	Single Family (DU)	Multi Family (DU)	Restricted (DU)	Hotel (Rooms)	Industrial Park (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)
Western Grove	4,000	0	0	0	0	200,000	50,000	0	0	0	54,450	25	0	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	0	1,600	2,500	0	0
Southern Grove	1,907	3,691	1,370	791	4,583,336	3,675,075	2,430,728	2,498,602	300	41,927	276,350	80	0	3,200	0	420	150
Wilson Groves	5,775	1,925	0	0	1,361,250	590,000	1,503,250	0	0	40,347	185,727	135	820	1,600	0	0	0

MacKenzie
Engineering & Planning, Inc.

Appendix G-1

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

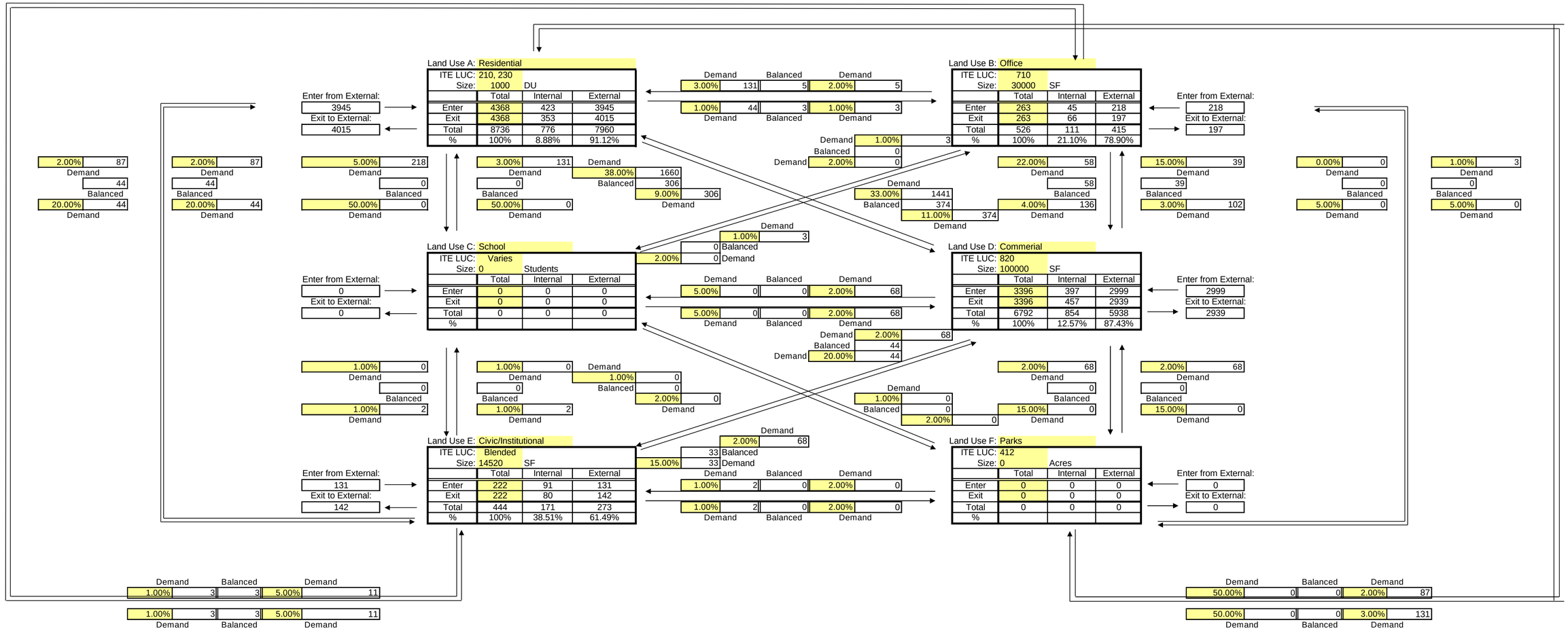
	Total	Inbound	Outbound
NET NEW EXTERNAL PM PEAK HOUR TRIPS =	**1,607**	**947**	**660**

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%	

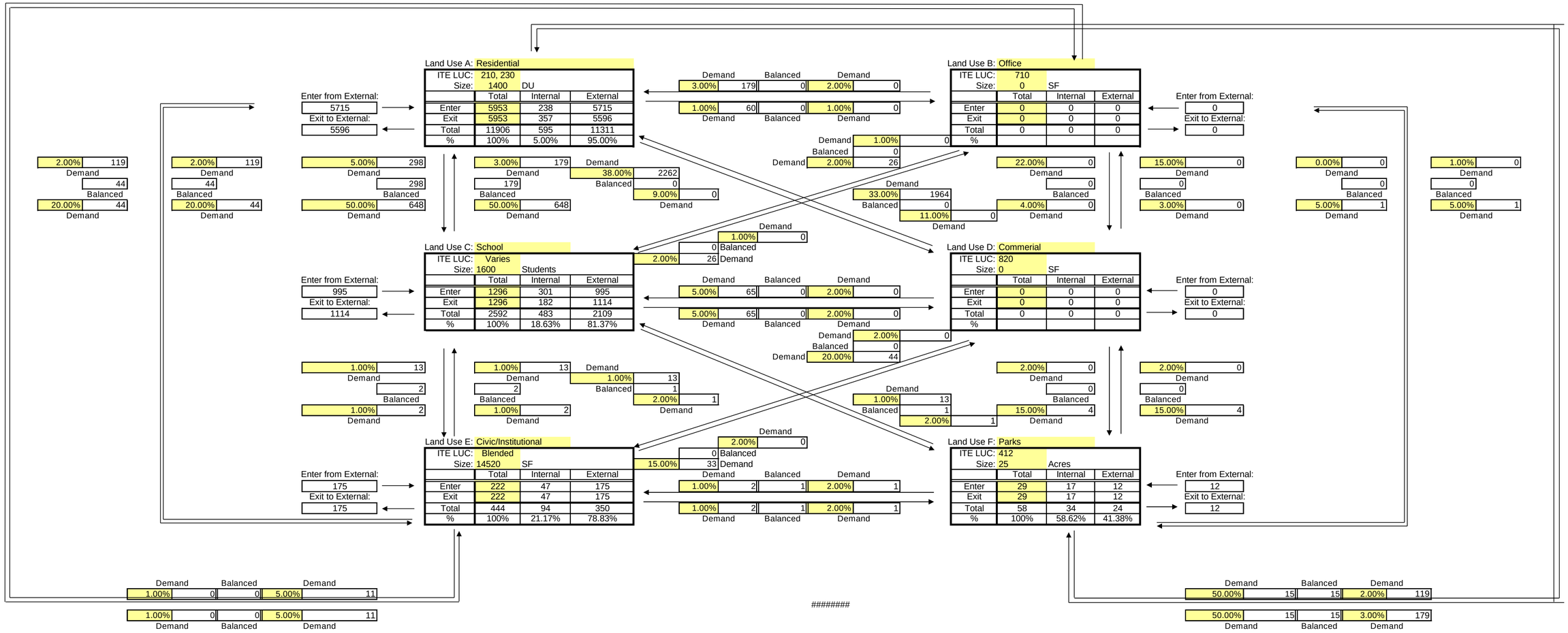
Internal Capture = 11.59%

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%	

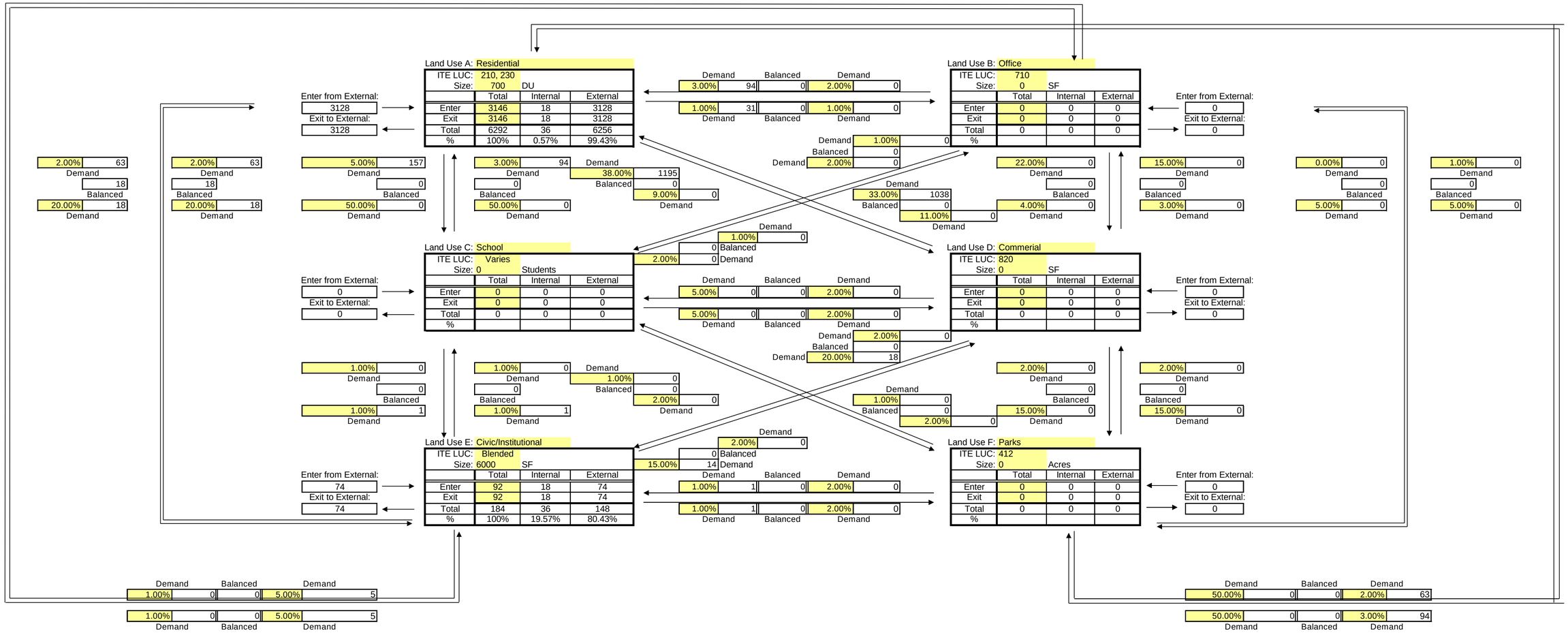
Internal Capture = 8.04%

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%	

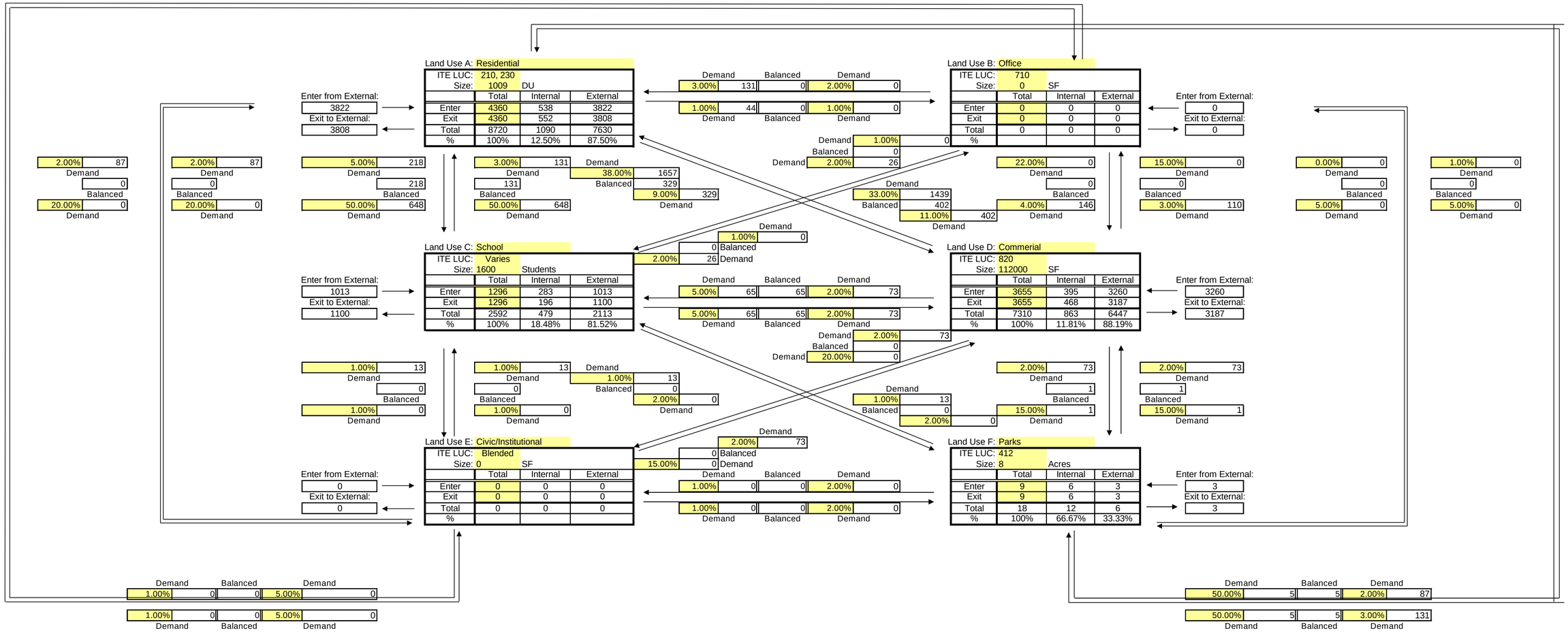
Internal Capture = 1.11%

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%	

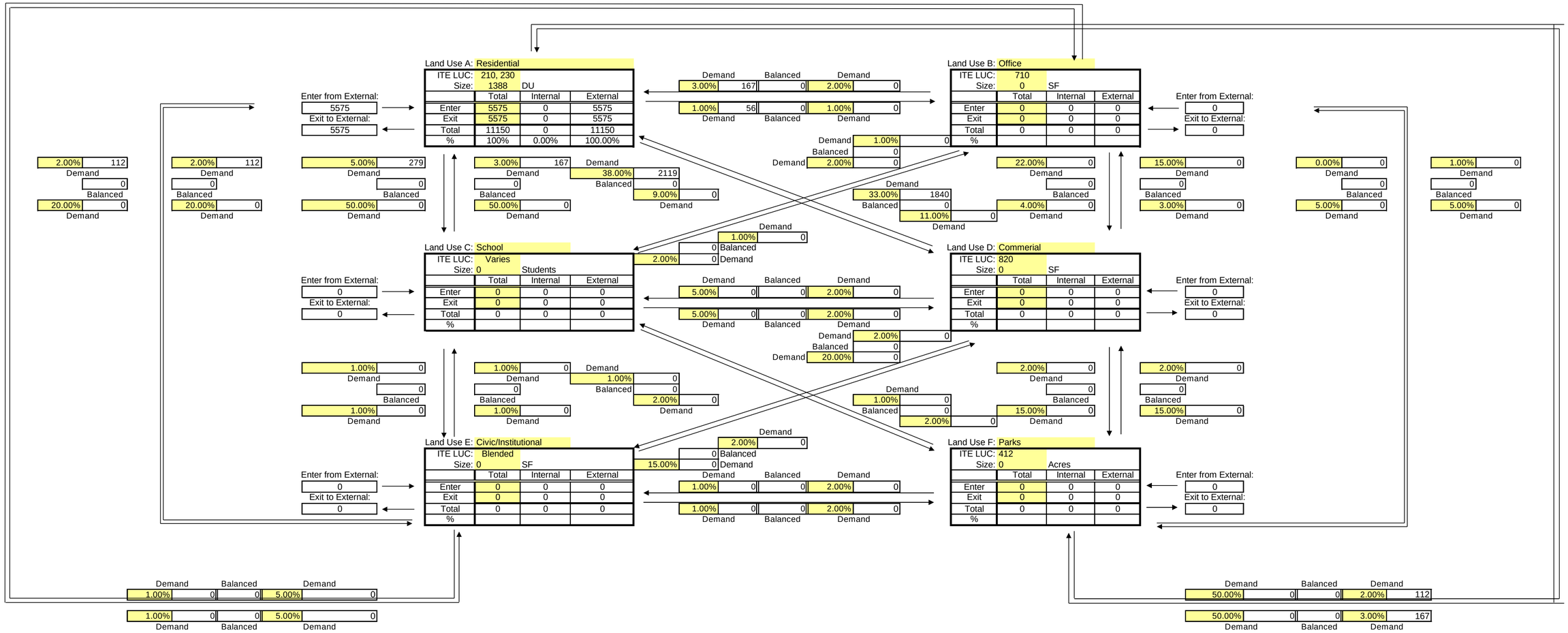
Internal Capture = 13.11%

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%	

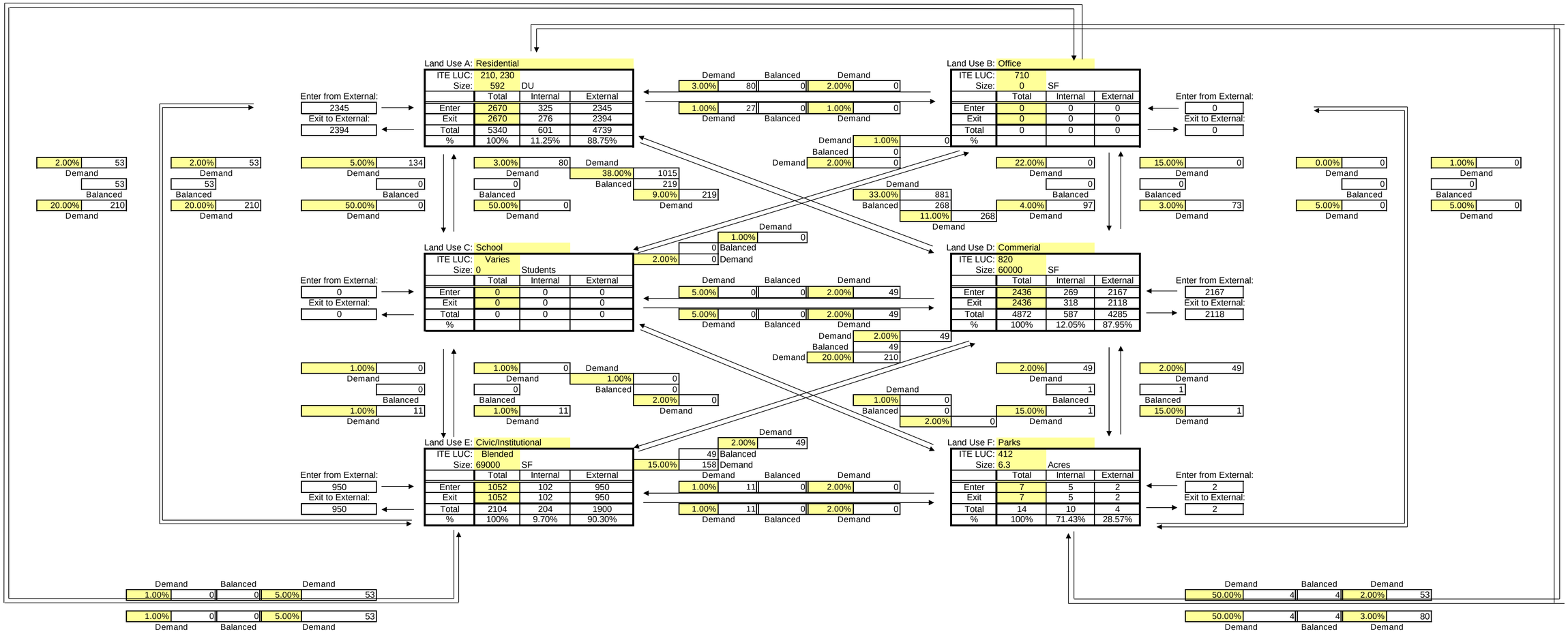
Internal Capture = 0.00%

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%	

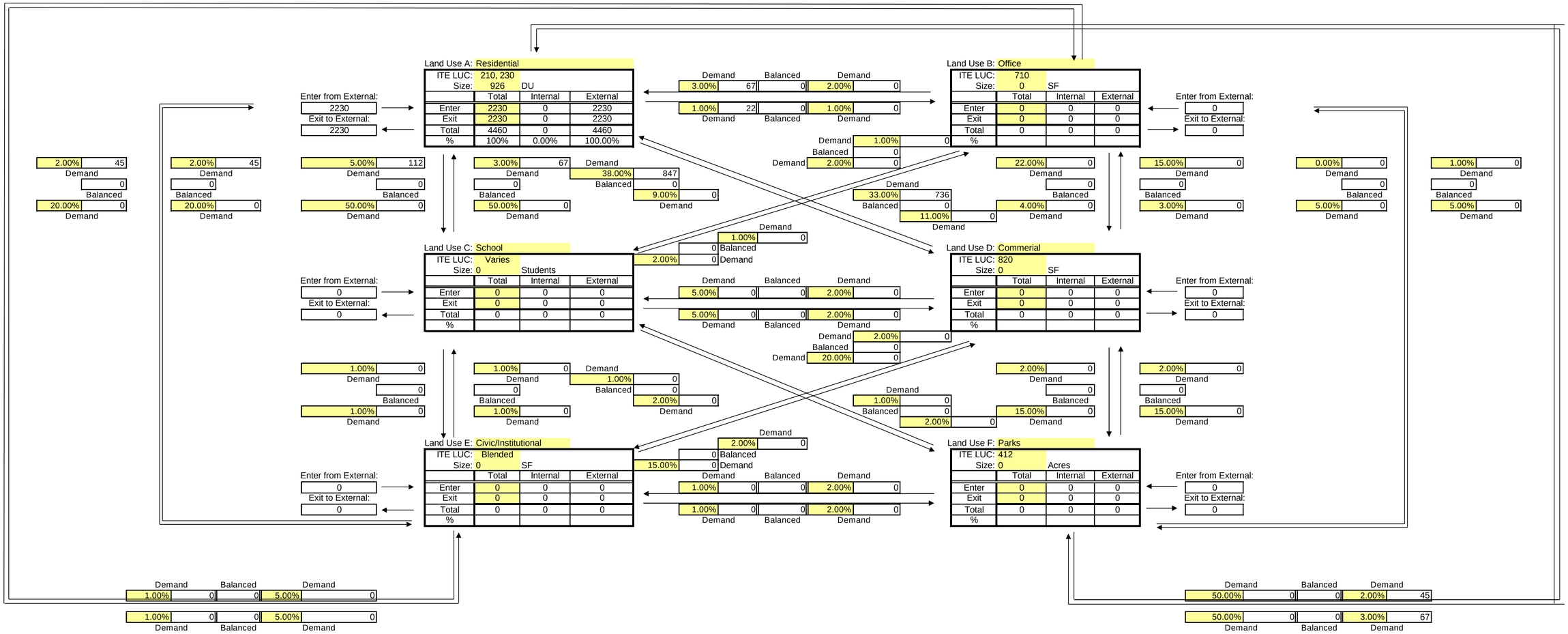
Internal Capture = 11.37%

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%	

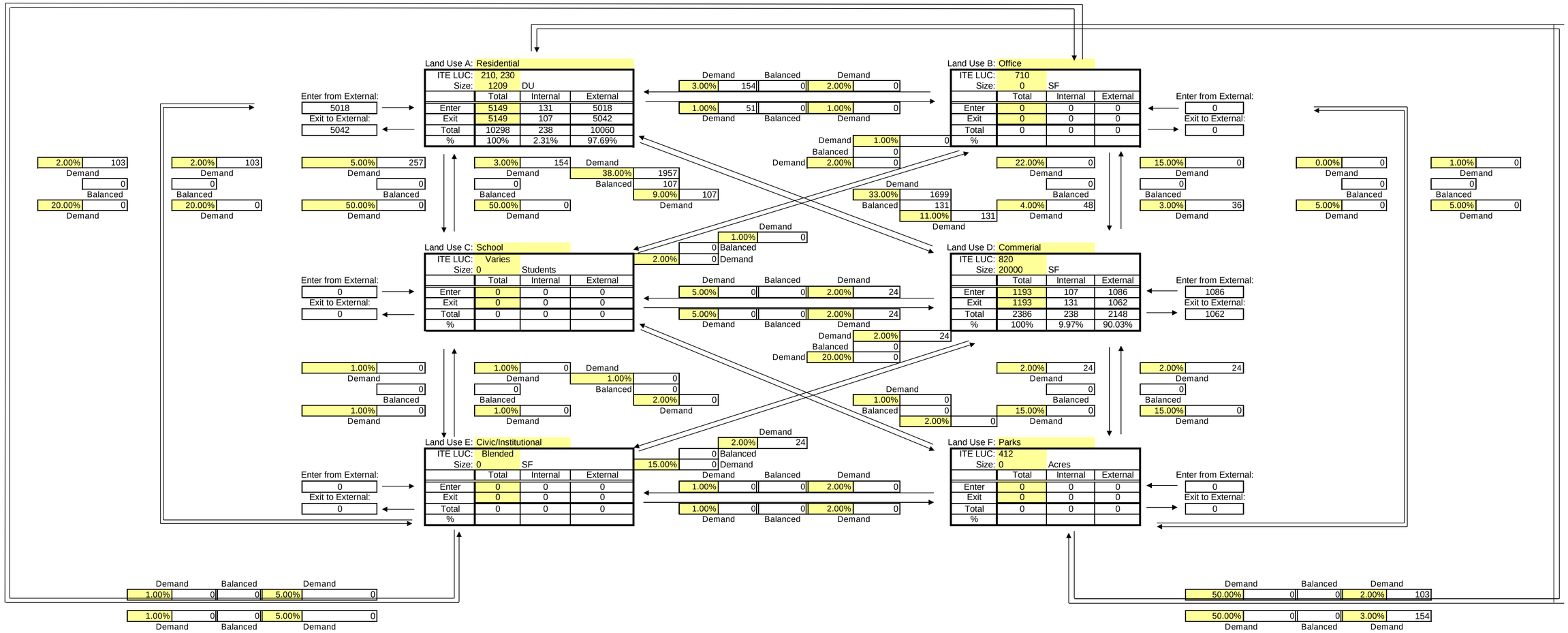
Internal Capture = 0.00%

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%	

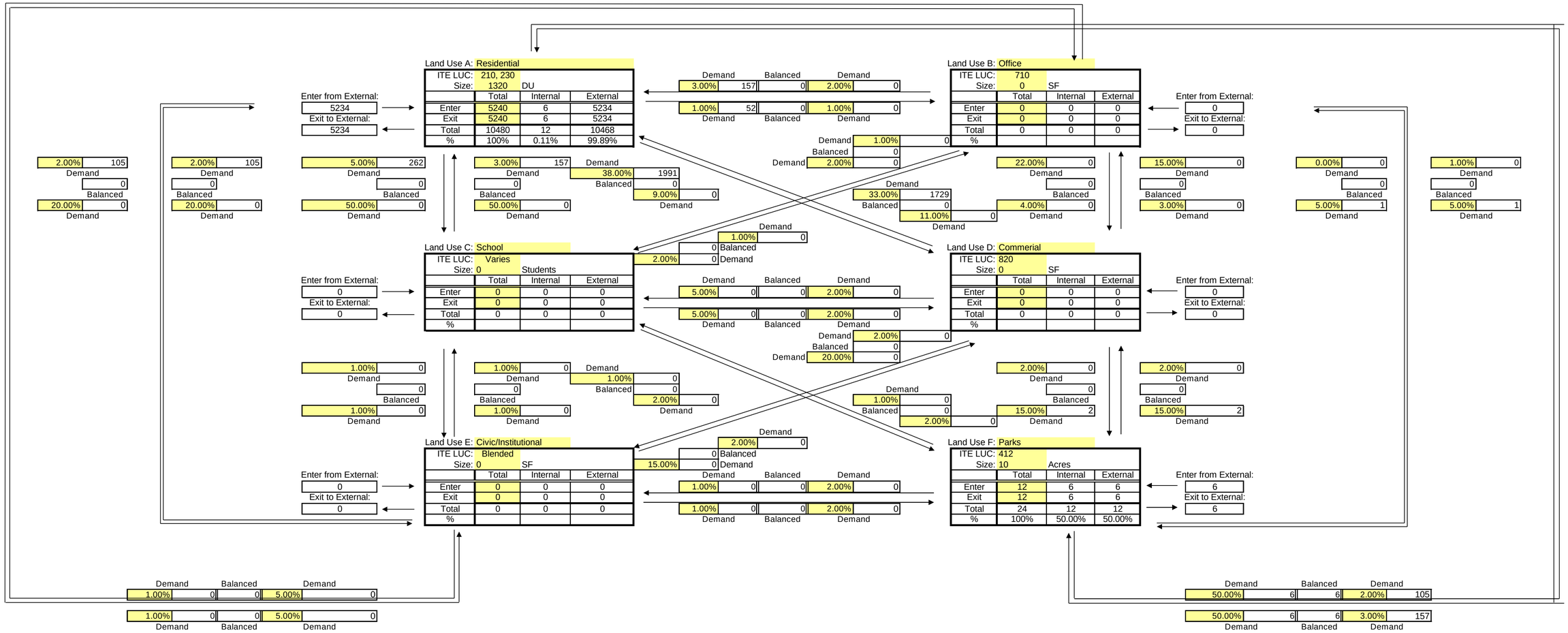
Internal Capture = 3.75%

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%	

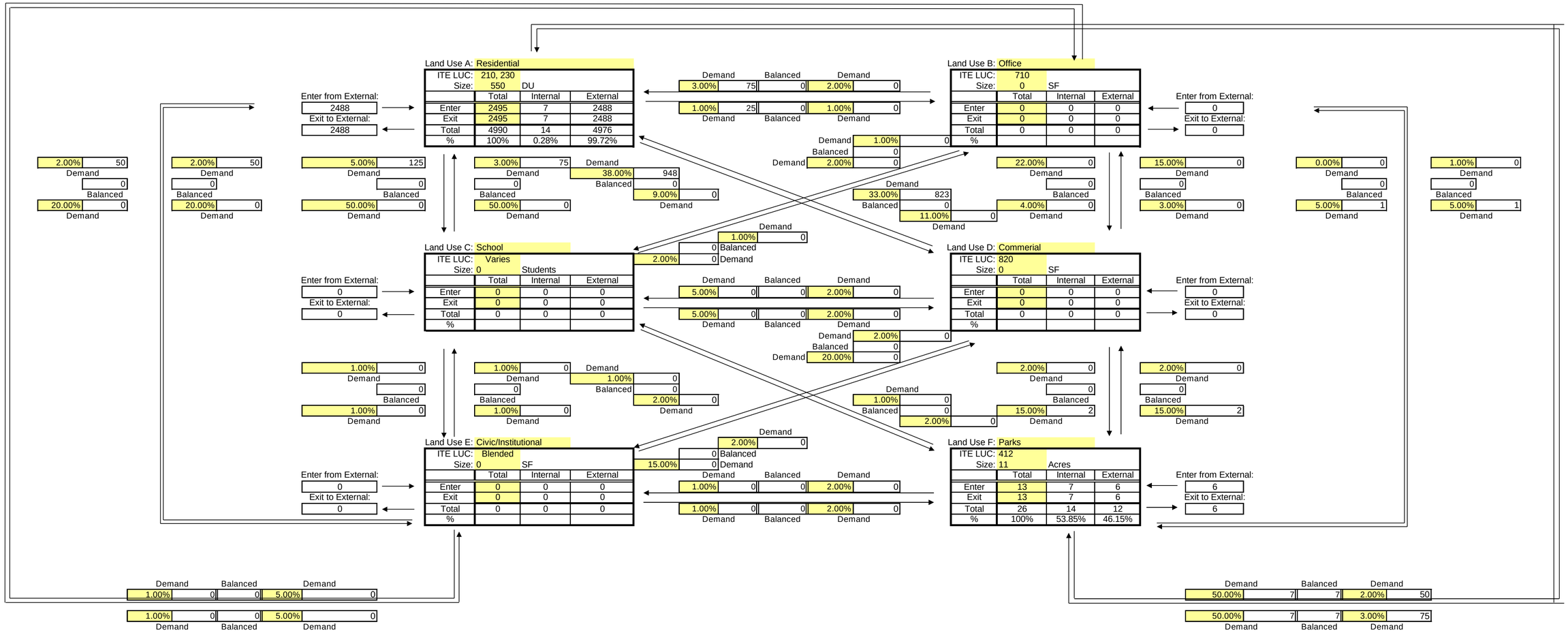
Internal Capture = 0.23%

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%	

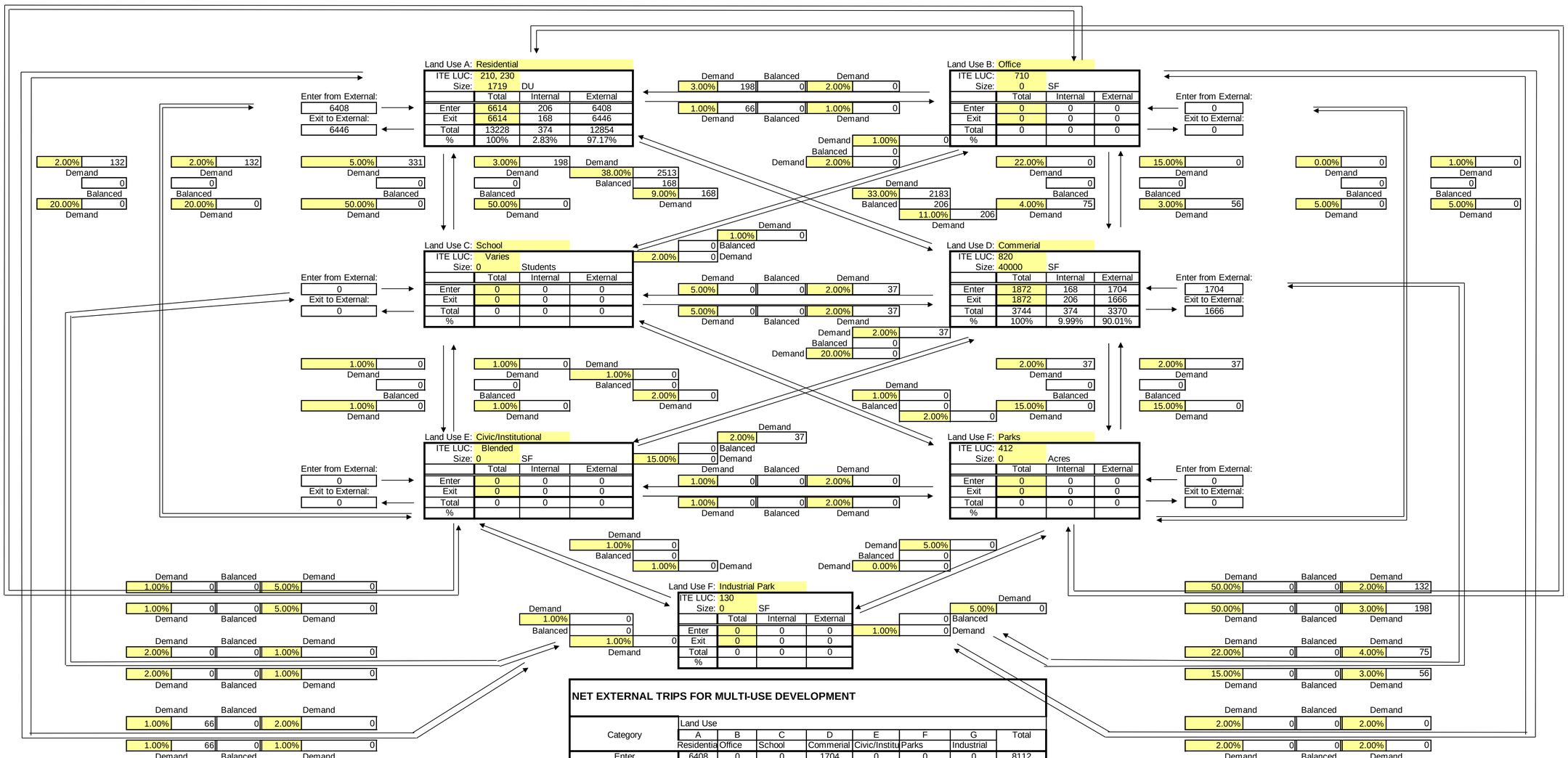
Internal Capture = 0.56%

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%	

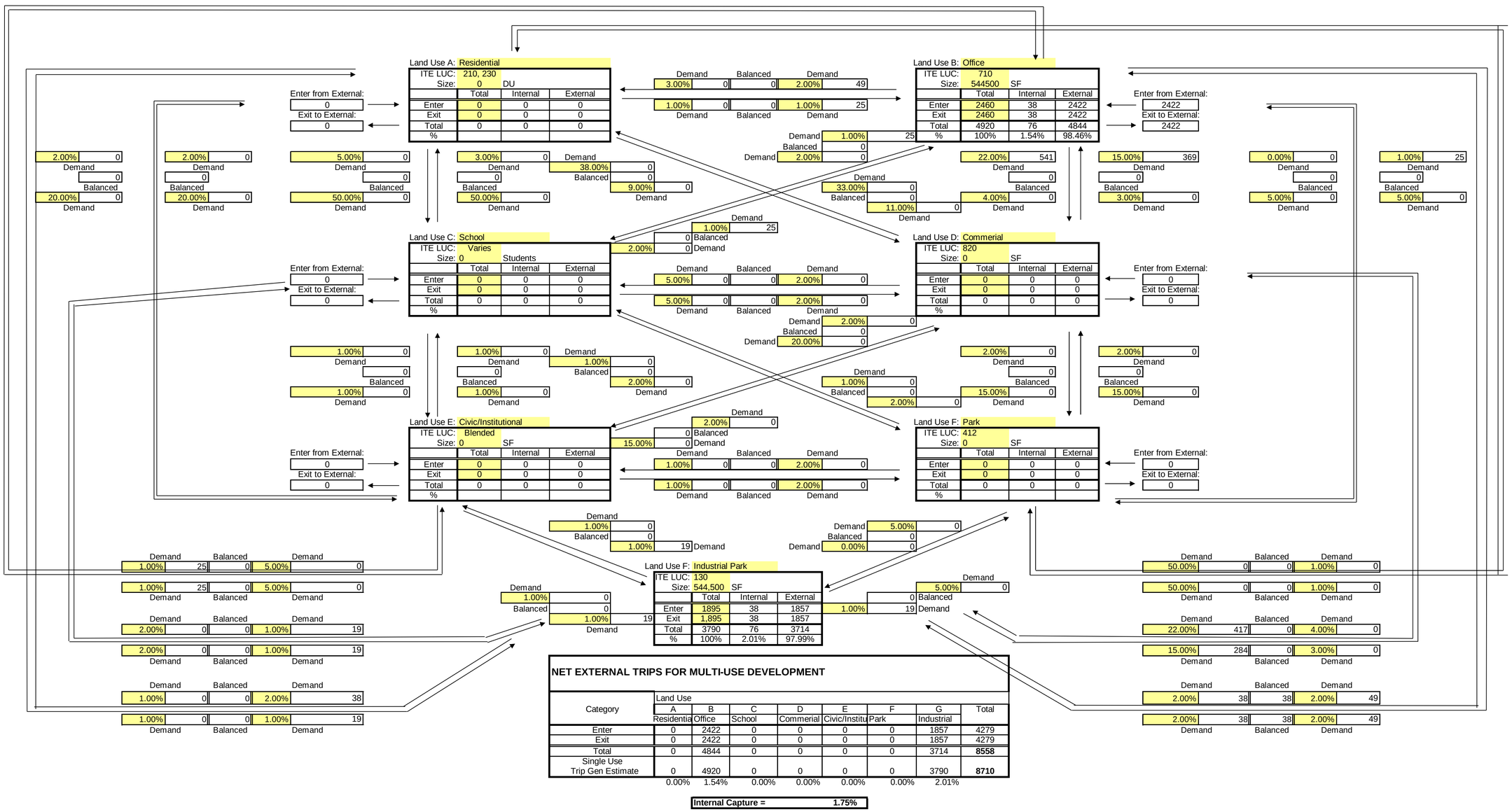
Internal Capture = 4.41%

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%	

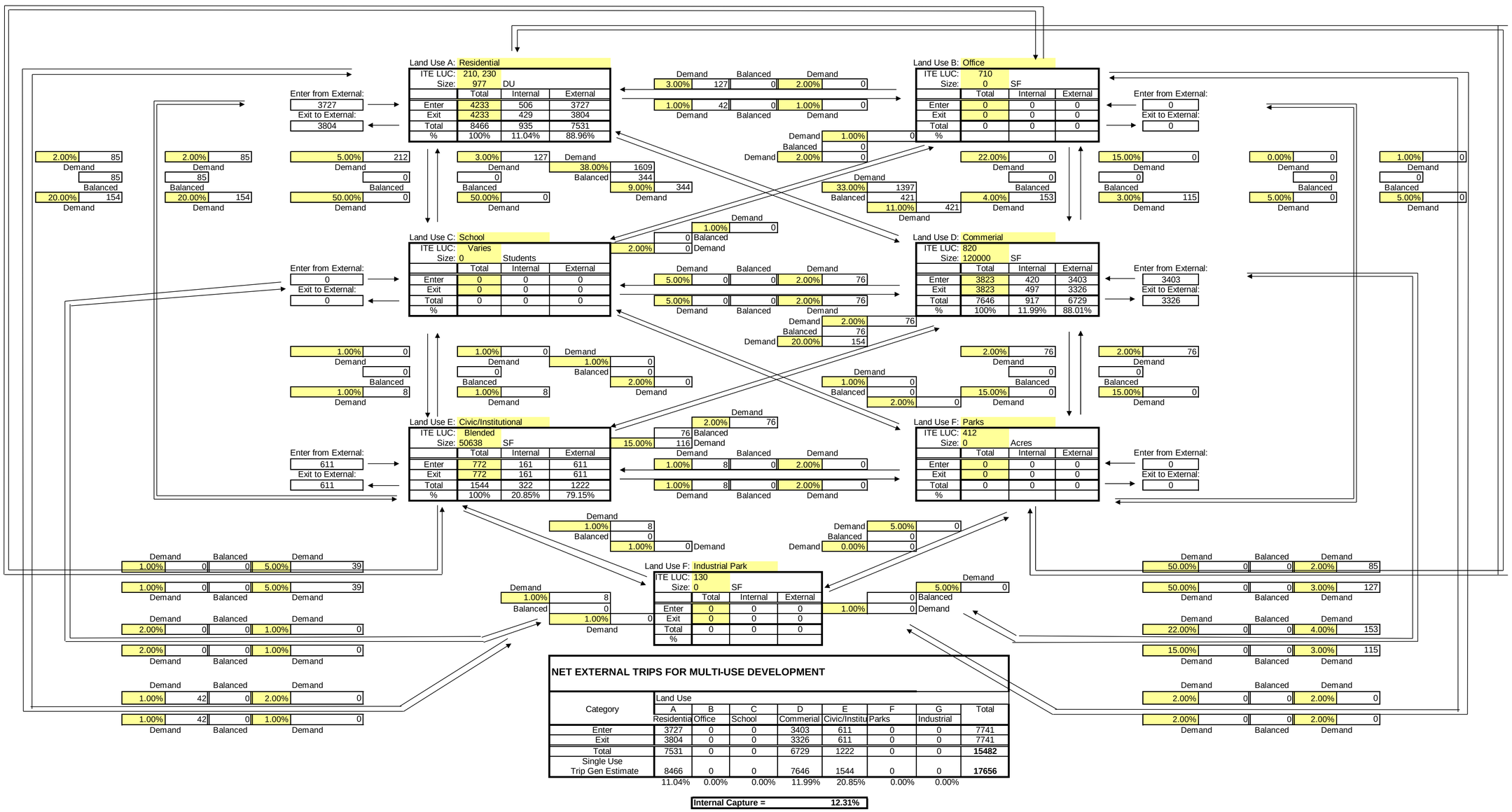
Internal Capture = 1.75%

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%	

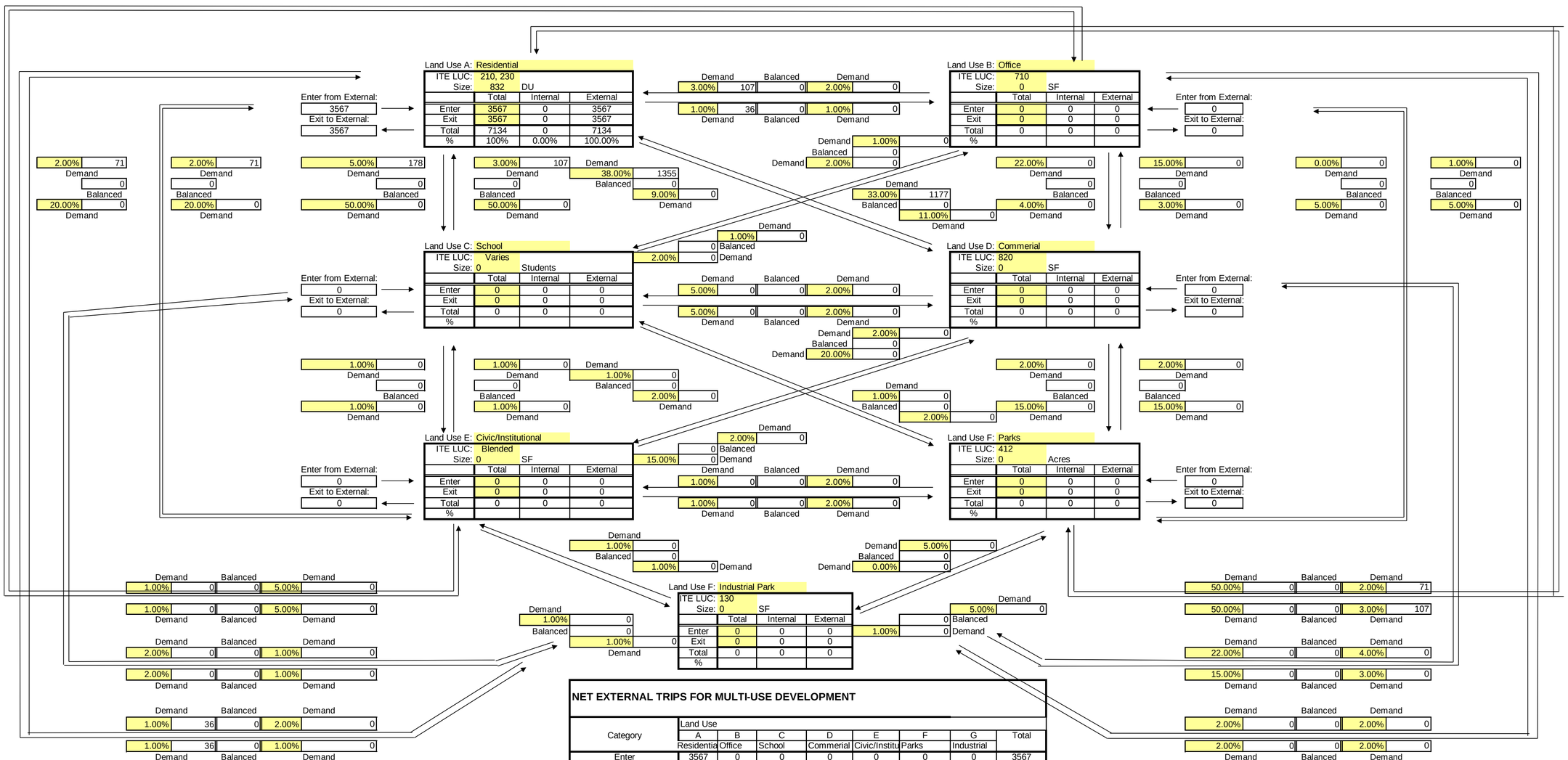
Internal Capture = 12.31%

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%	

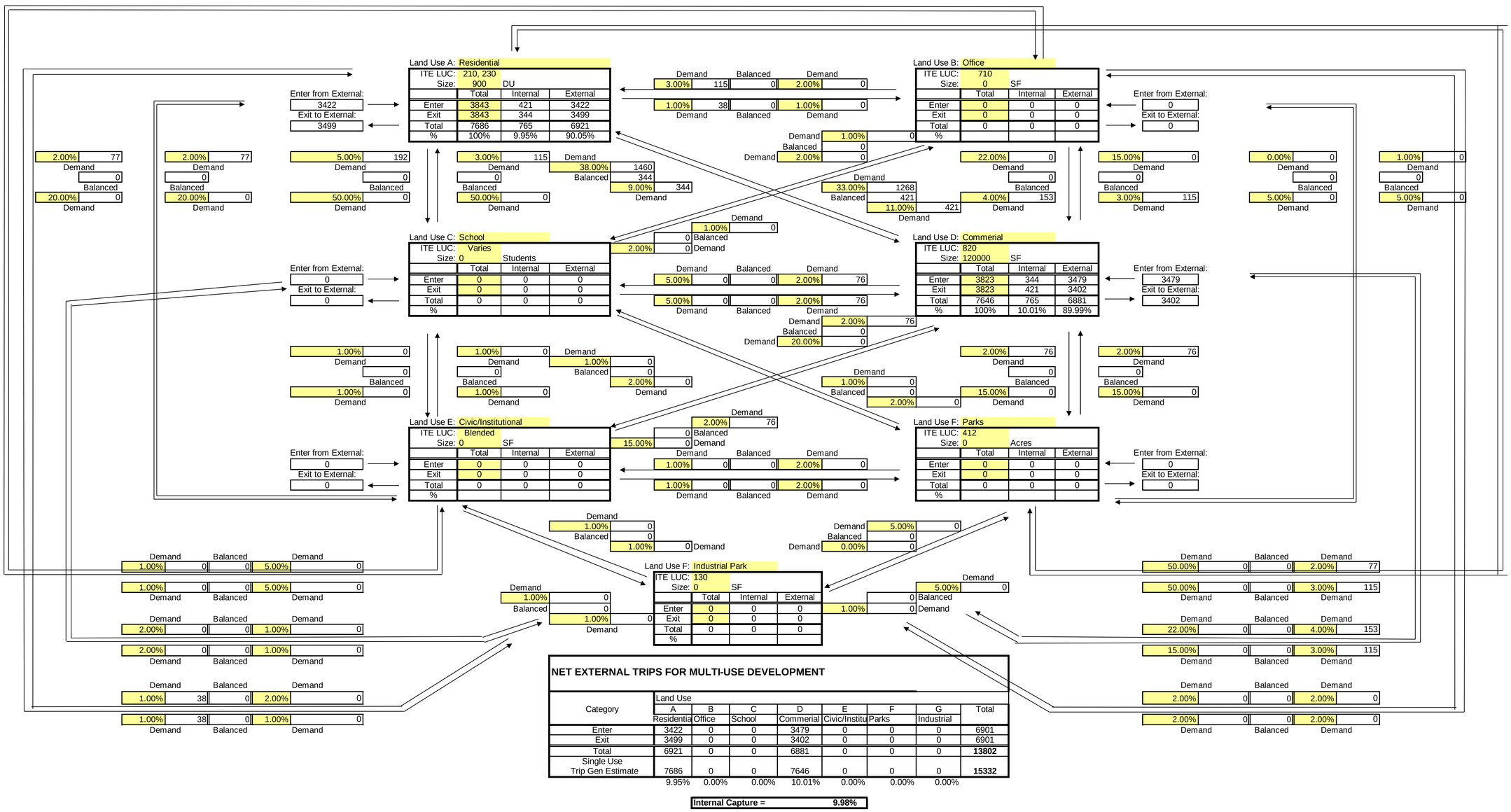
Internal Capture = 0.00%

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%	

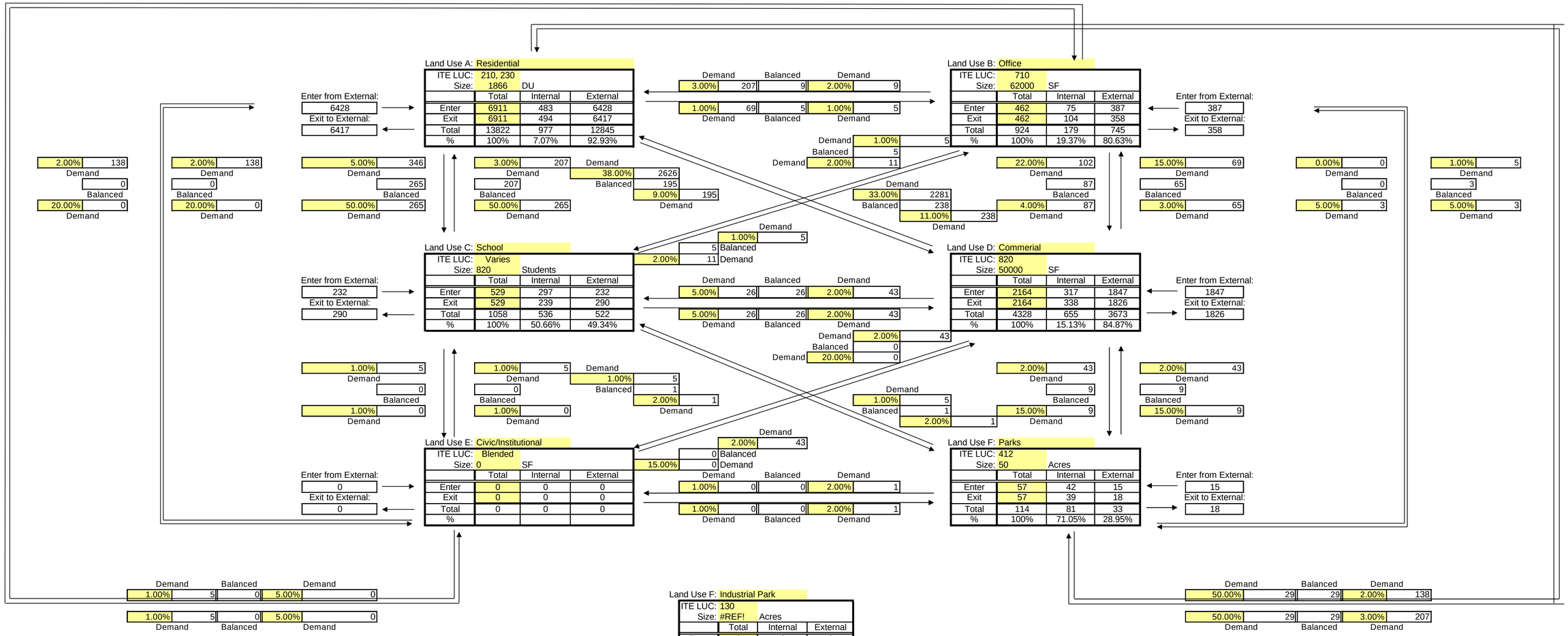
Internal Capture = 9.98%

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%	

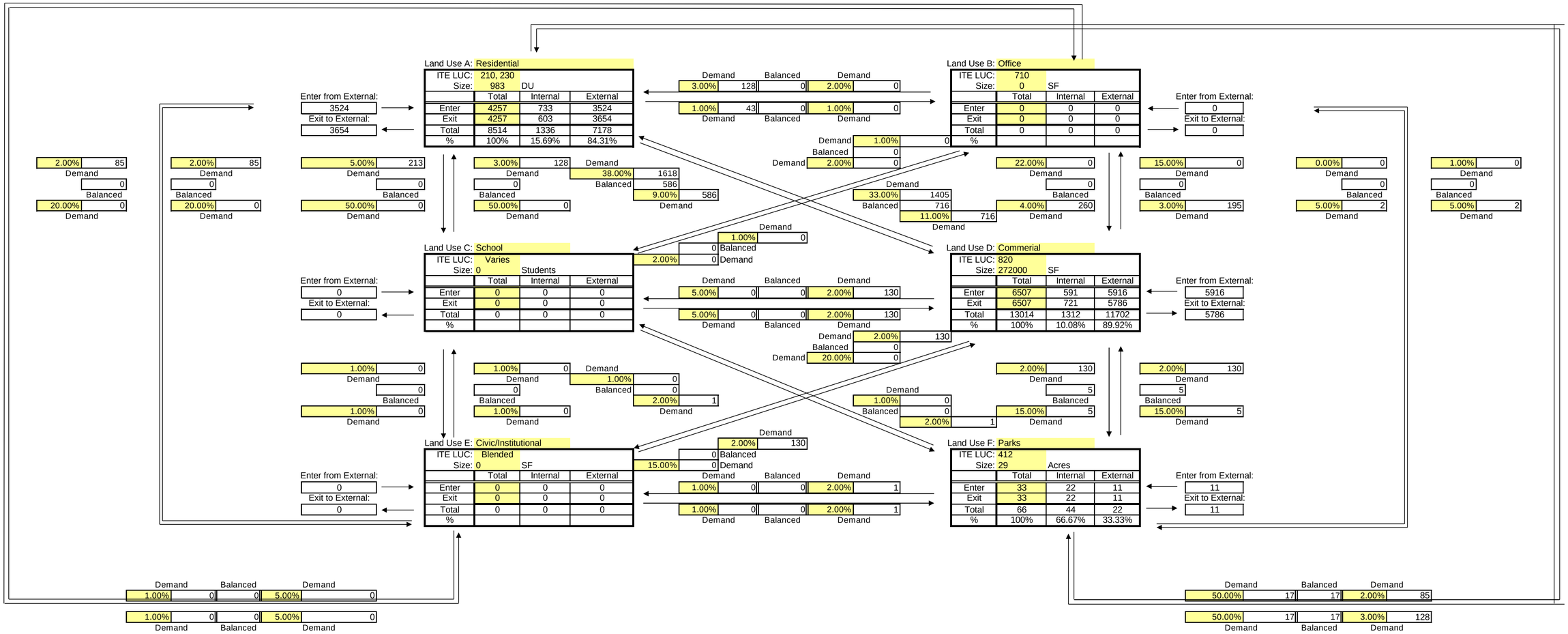
Internal Capture = 11.99%

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%	

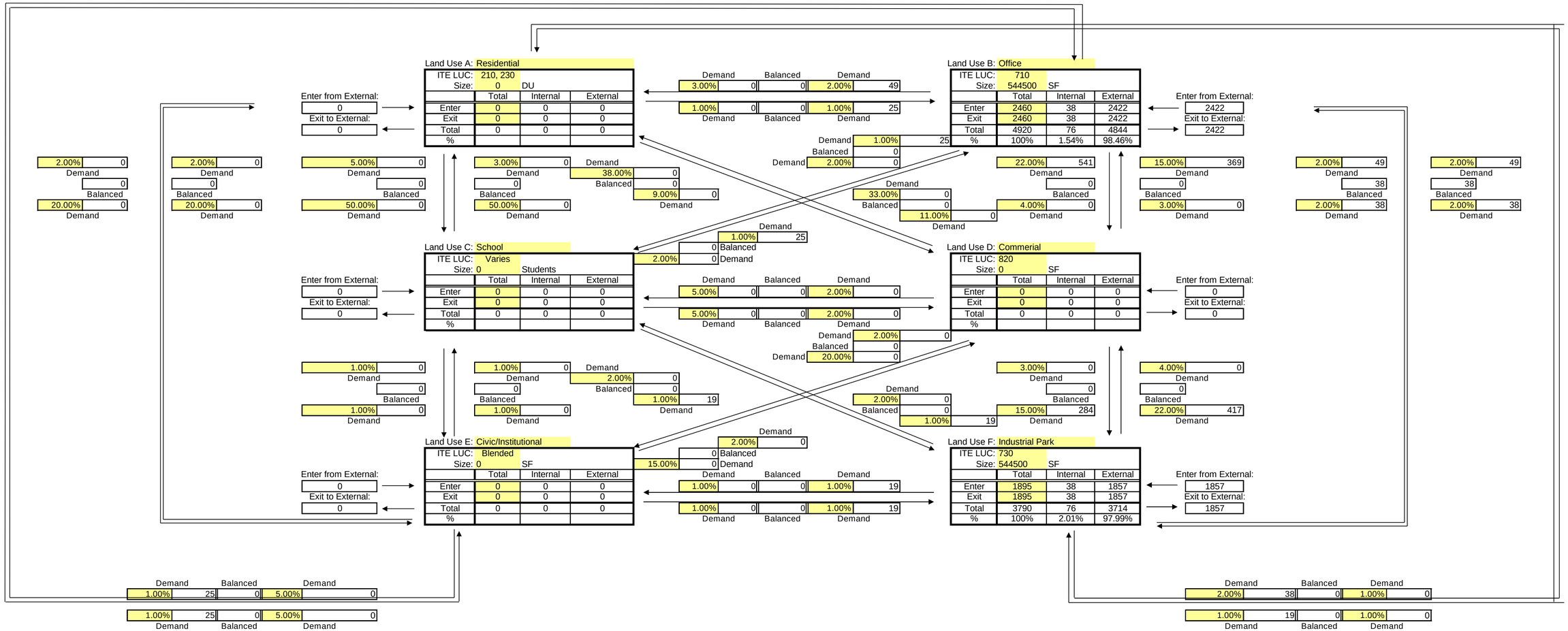
Internal Capture = 12.47%

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%	

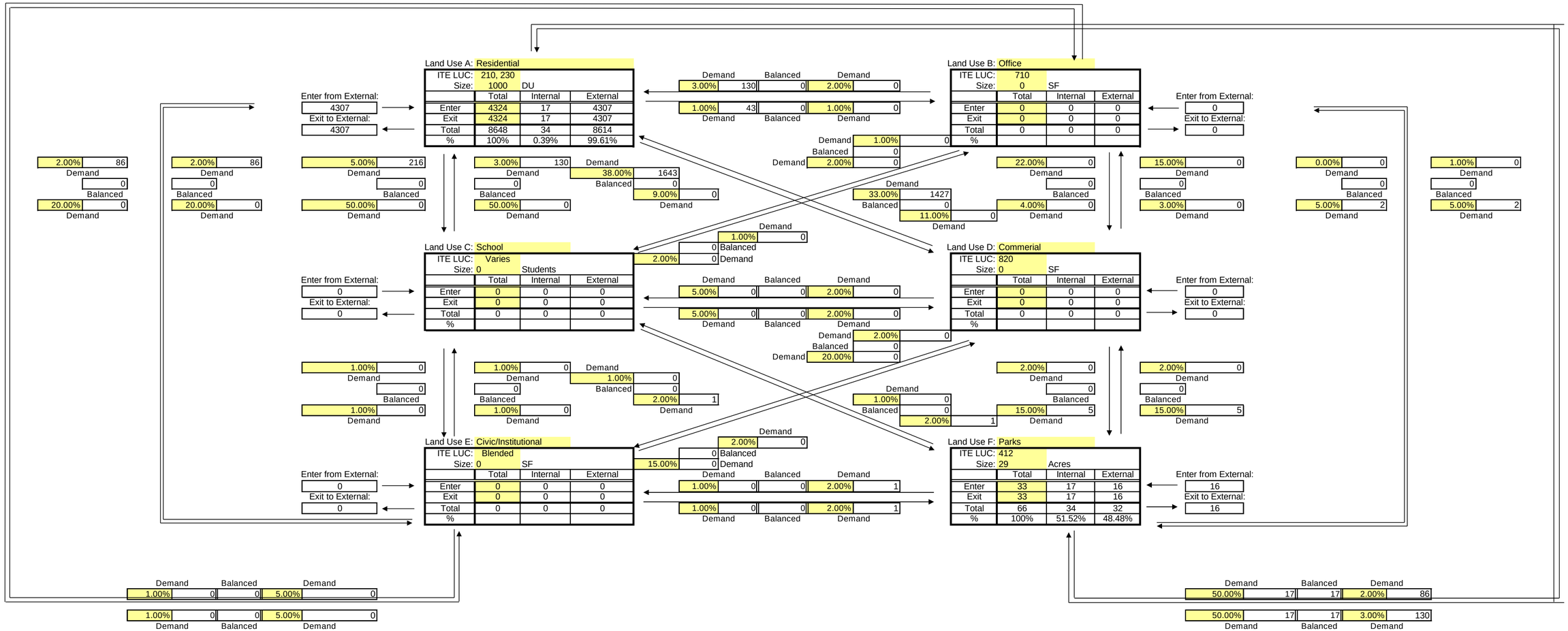
Internal Capture = 1.75%

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%	

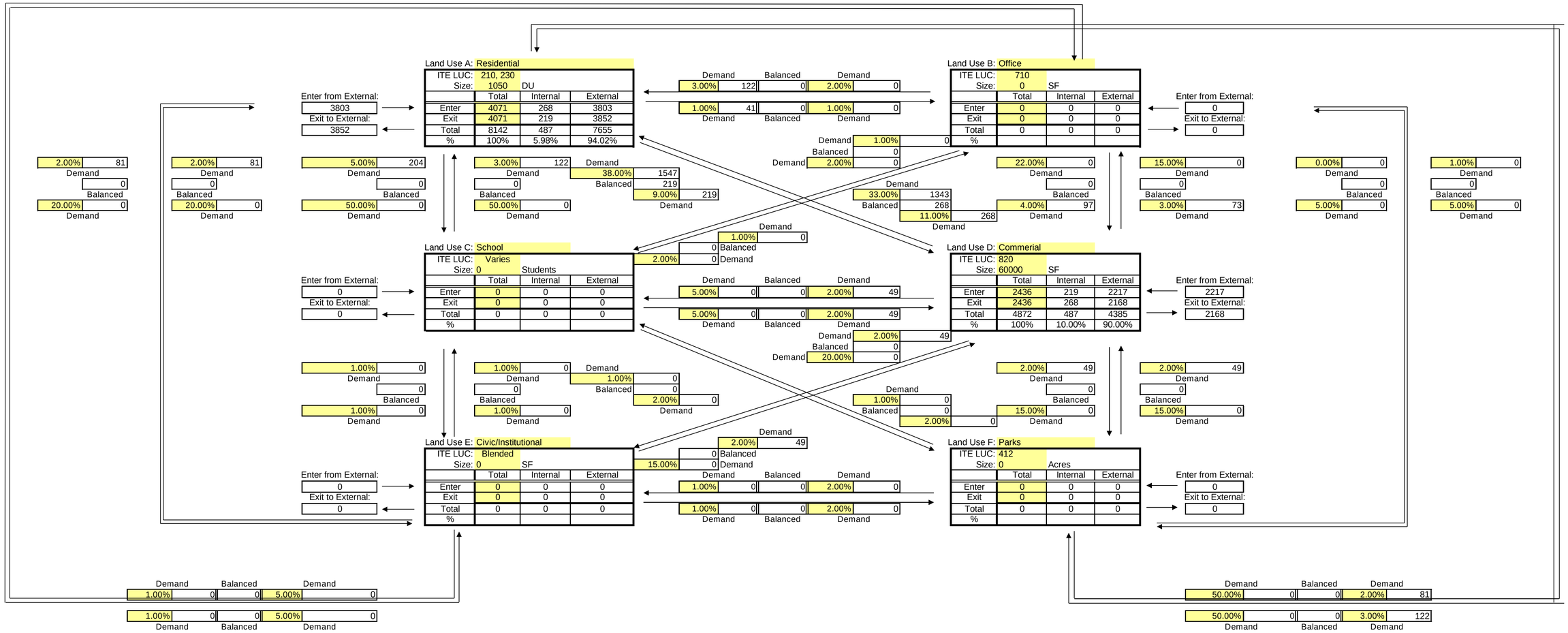
Internal Capture = 0.78%

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%	

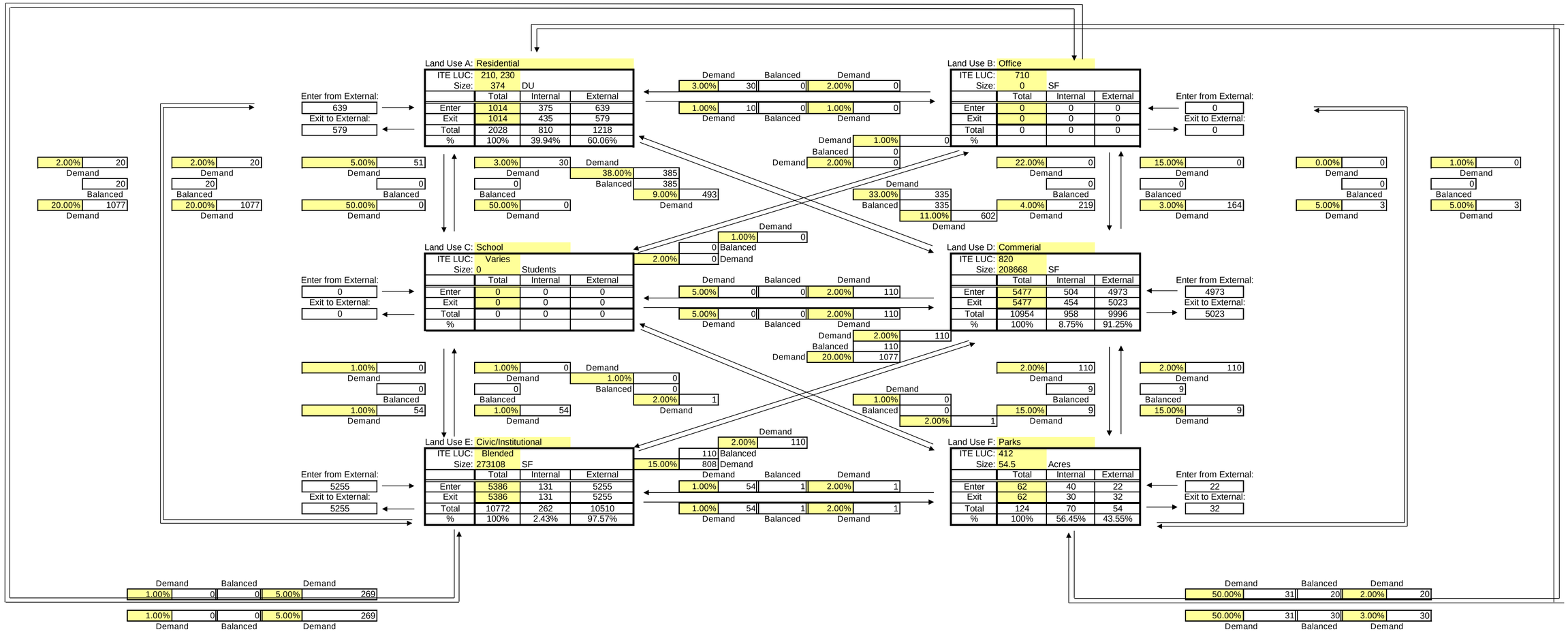
Internal Capture = 7.48%

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

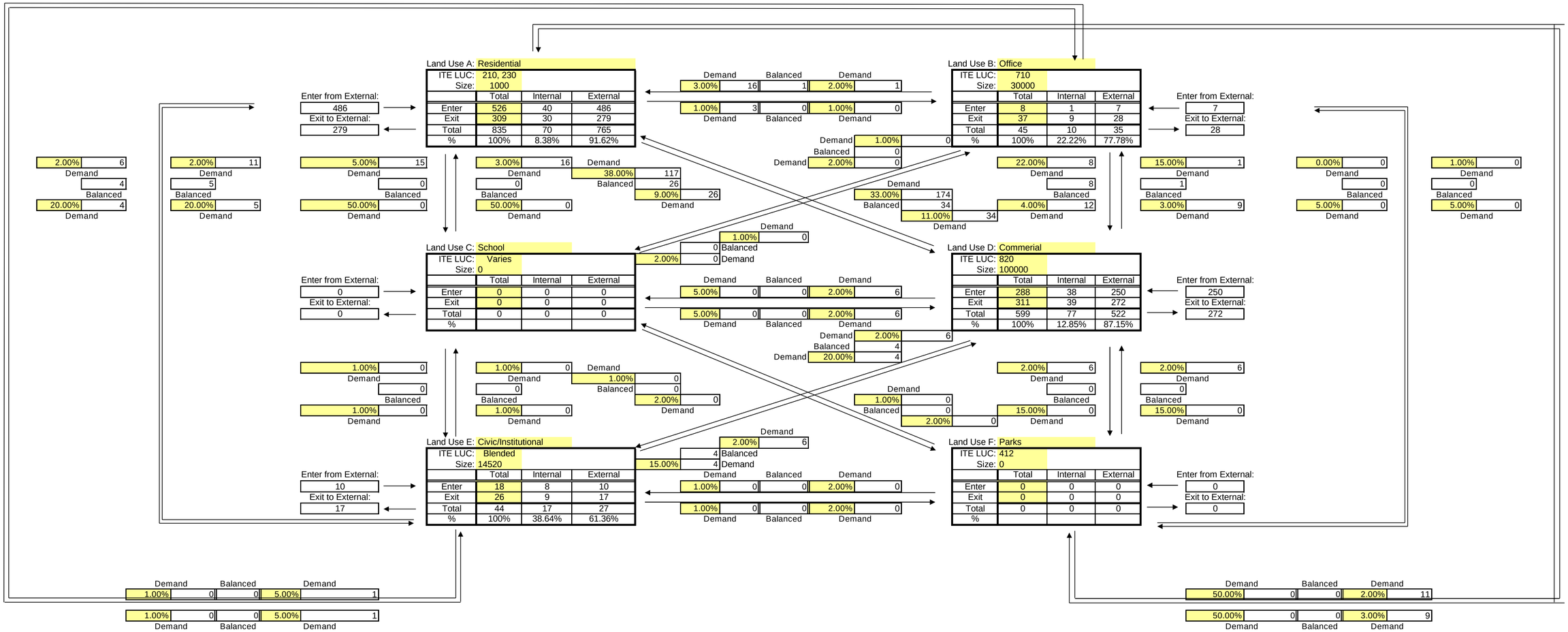
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	639	0	0	4973	5255	22	10889
Exit	579	0	0	5023	5255	32	10889
Total	1218	0	0	9996	10510	54	**21778**
Single Use Trip Gen Estimate	2028	0	0	10954	10772	124	**23878**
	39.94%	0.00%	0.00%	8.75%	2.43%	56.45%	

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

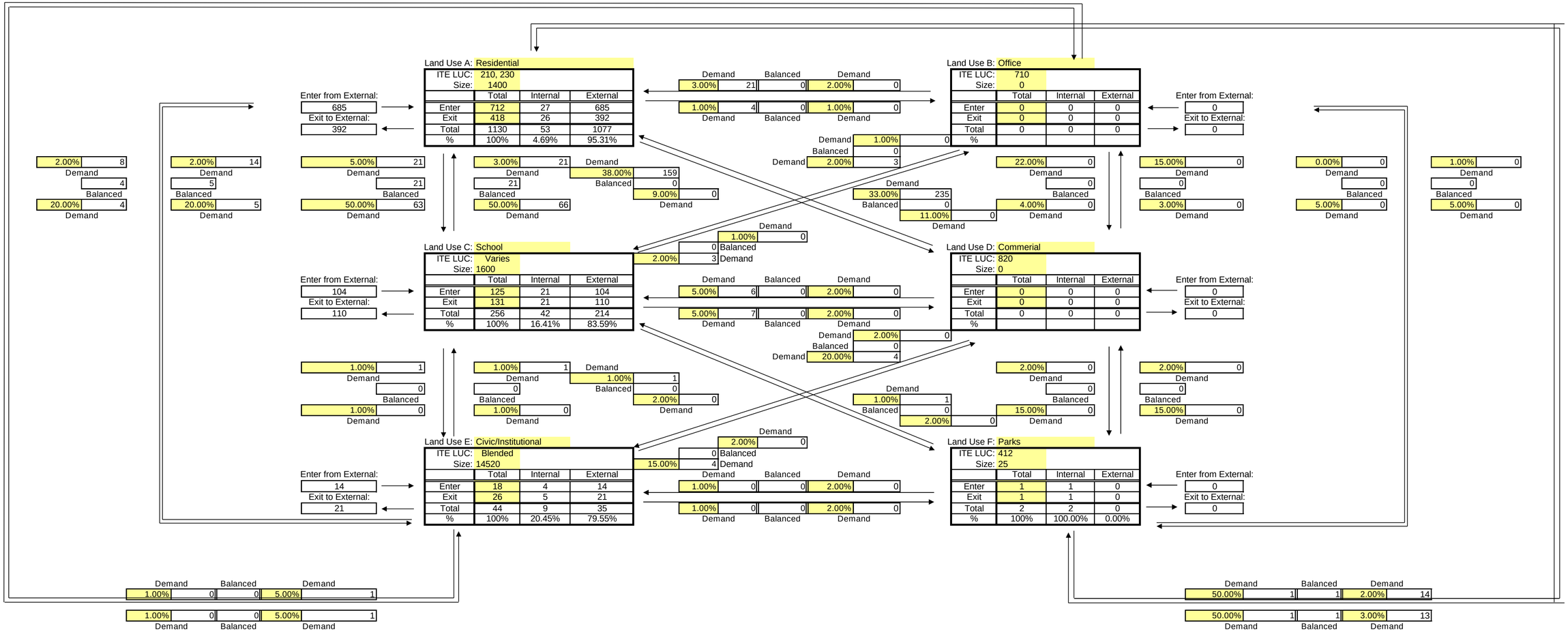
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	486	7	0	250	10	0	753
Exit	279	28	0	272	17	0	596
Total	765	35	0	522	27	0	**1349**
Single Use Trip Gen Estimate	835	45	0	599	44	0	**1523**
	8.38%	22.22%	0.00%	12.85%	38.64%	0.00%	

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

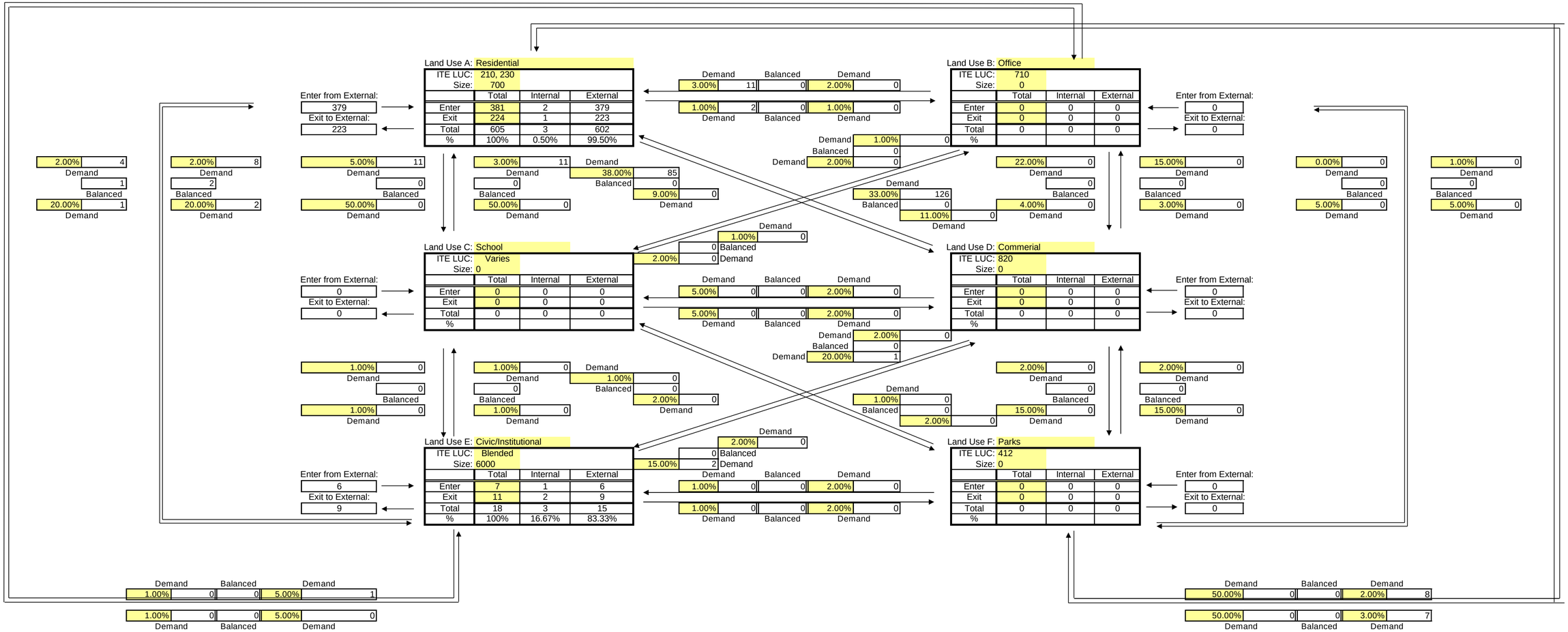
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	685	0	104	0	14	0	803
Exit	392	0	110	0	21	0	523
Total	1077	0	214	0	35	0	**1326**
Single Use Trip Gen Estimate	1130	0	256	0	44	2	**1432**
	4.69%	0.00%	16.41%	0.00%	20.45%	0.00%	

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

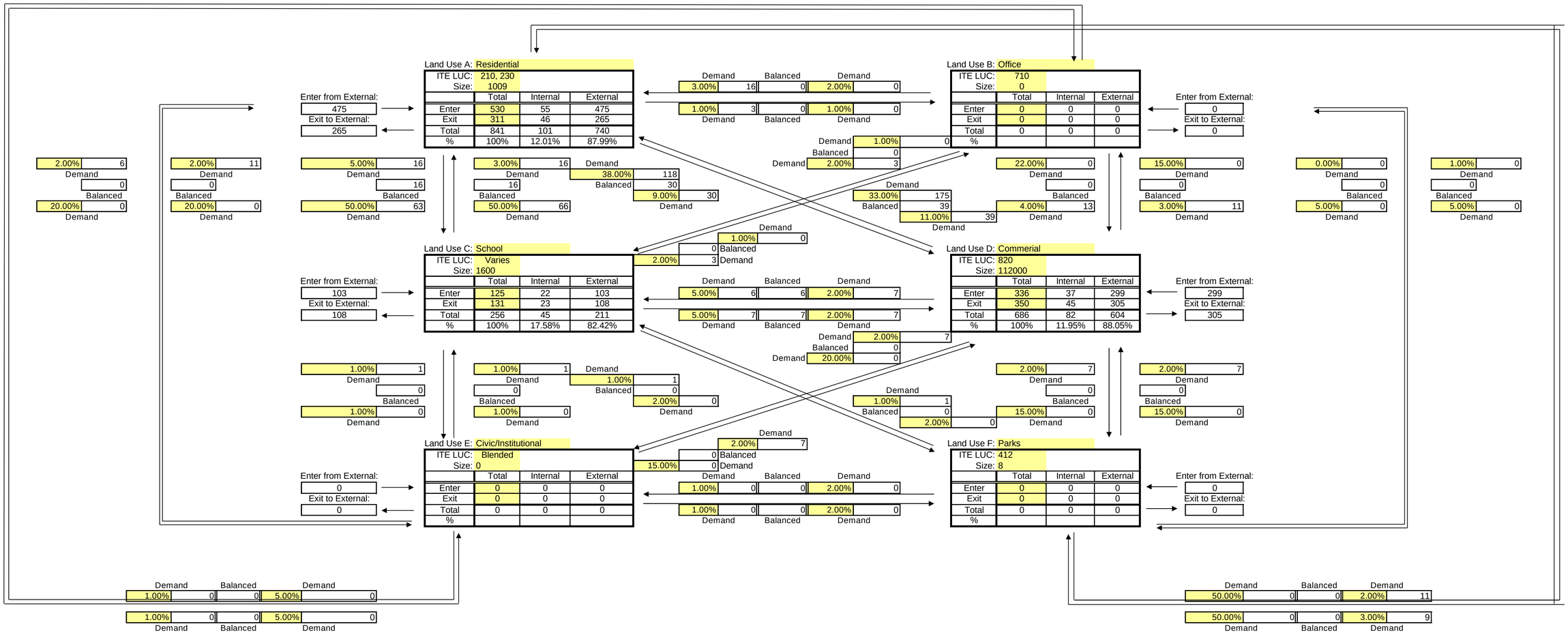
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	379	0	0	0	6	0	385
Exit	223	0	0	0	9	0	232
Total	602	0	0	0	15	0	**617**
Single Use Trip Gen Estimate	605	0	0	0	18	0	**623**
	0.50%	0.00%	0.00%	0.00%	16.67%	0.00%	

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

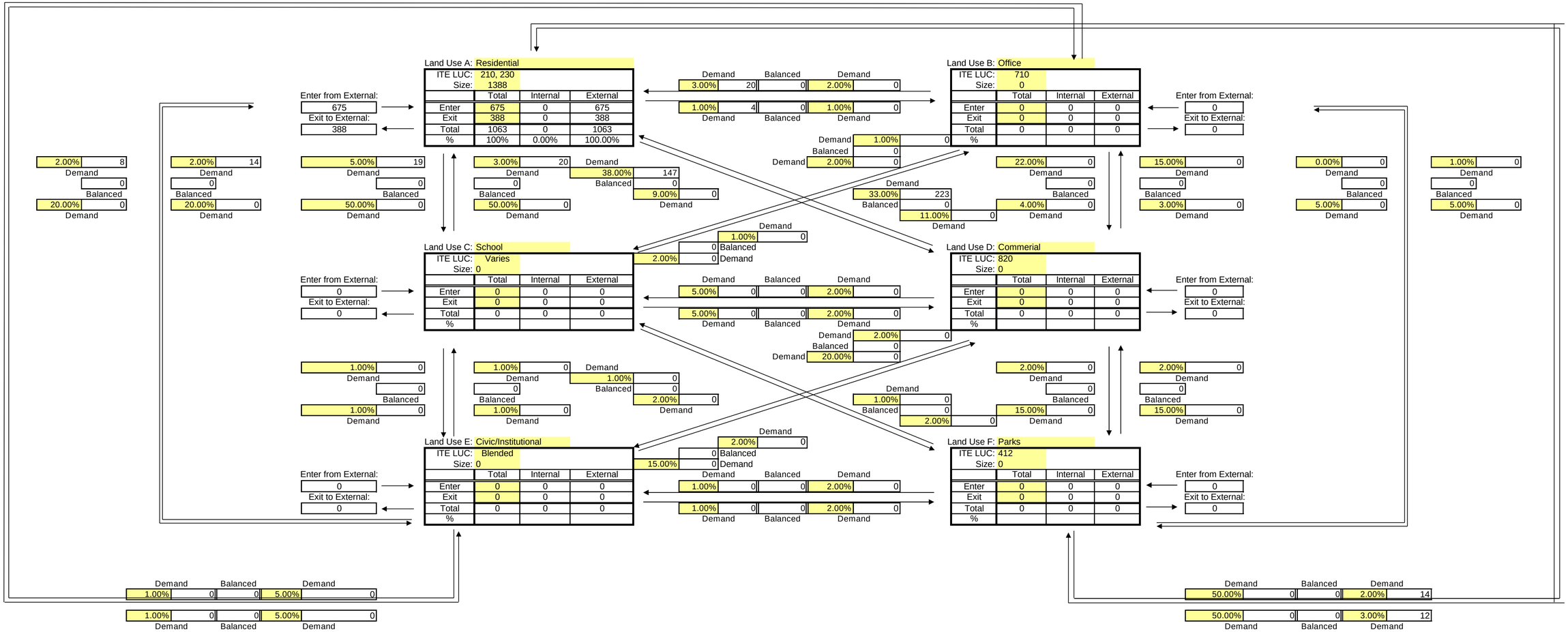
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	475	0	103	299	0	0	877
Exit	265	0	108	305	0	0	678
Total	740	0	211	604	0	0	**1555**
Single Use Trip Gen Estimate	841	0	256	686	0	0	**1783**
	12.01%	0.00%	17.58%	11.95%	0.00%	0.00%	

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

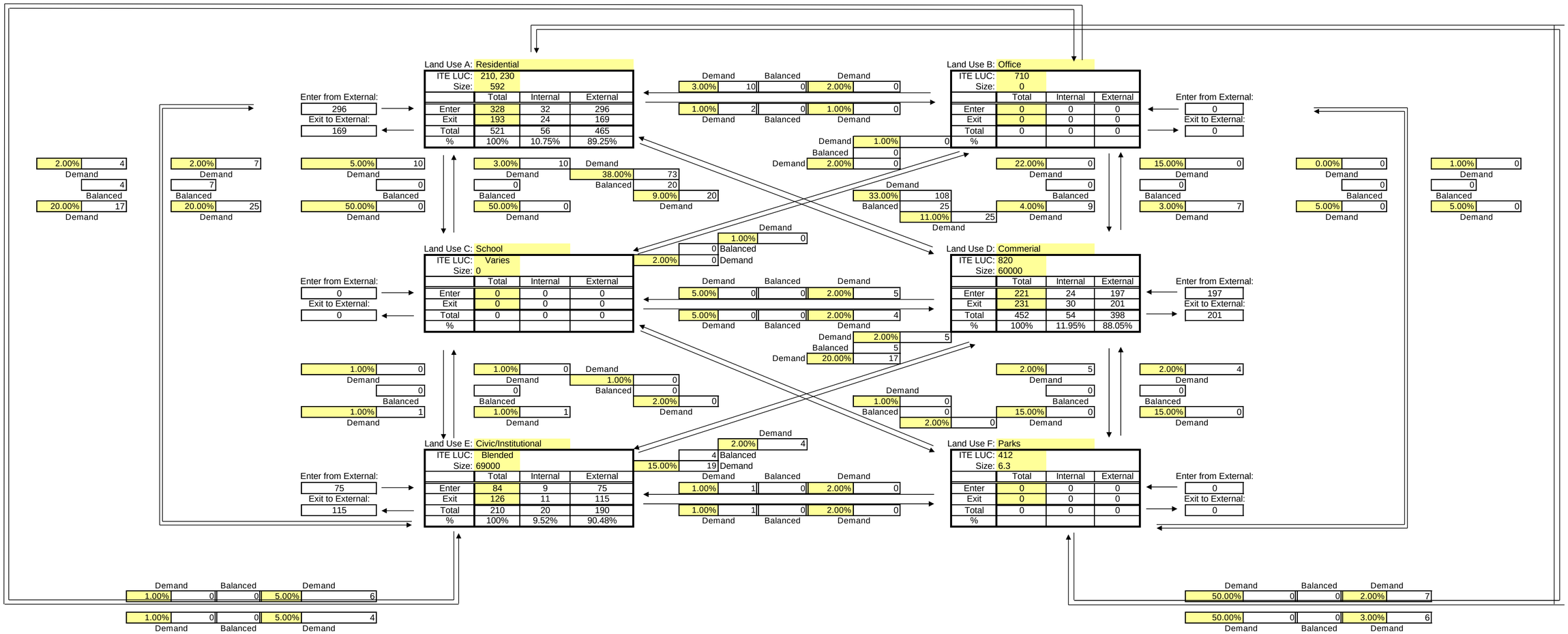
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	675	0	0	0	0	0	675
Exit	388	0	0	0	0	0	388
Total	1063	0	0	0	0	0	**1063**
Single Use Trip Gen Estimate	1063	0	0	0	0	0	**1063**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

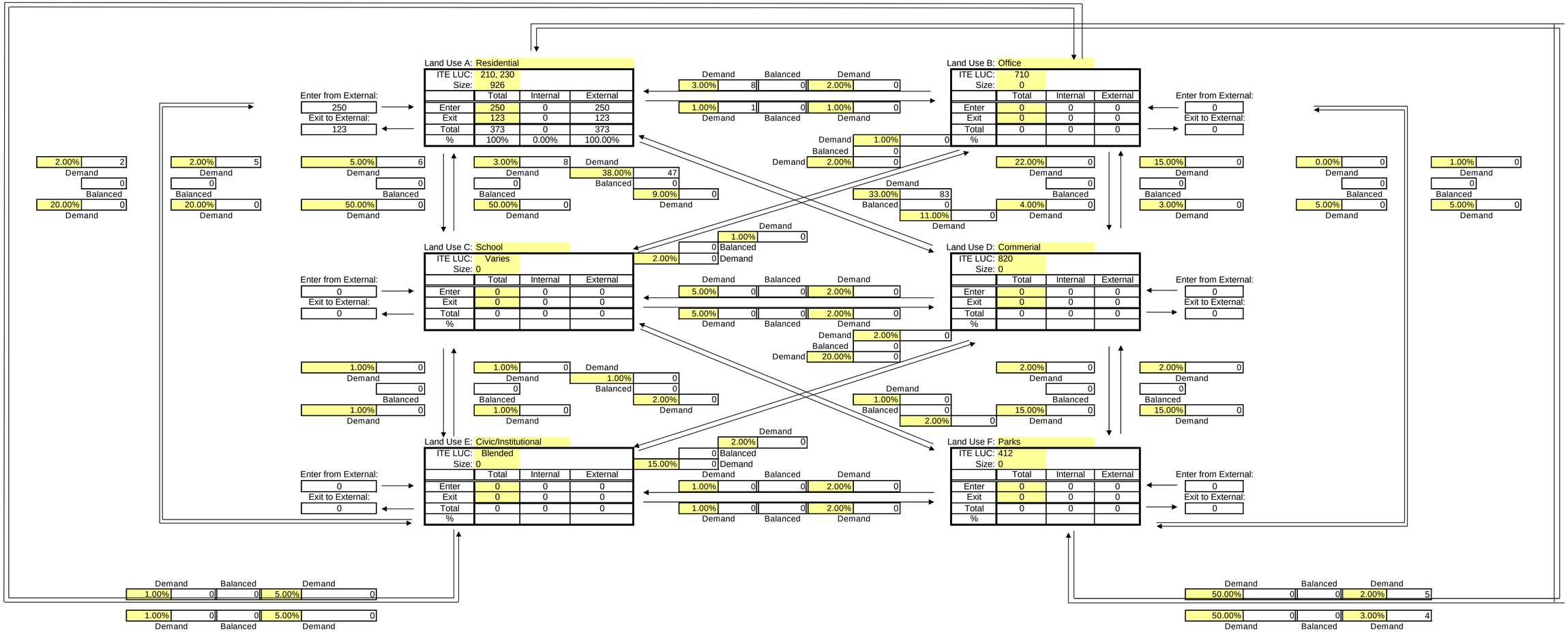
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	296	0	0	197	75	0	568
Exit	169	0	0	201	115	0	485
Total	465	0	0	398	190	0	**1053**
Single Use Trip Gen Estimate	521	0	0	452	210	0	**1183**
	10.75%	0.00%	0.00%	11.95%	9.52%	0.00%	

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

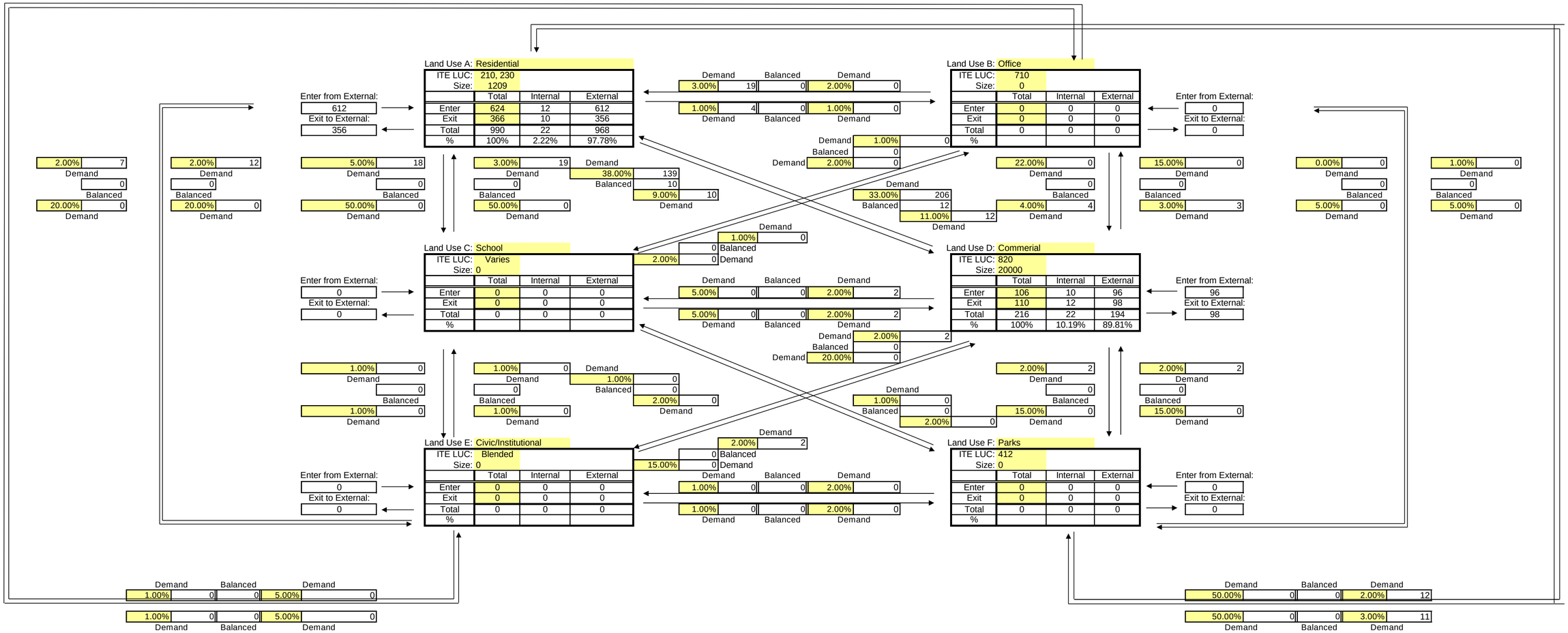
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	250	0	0	0	0	0	250
Exit	123	0	0	0	0	0	123
Total	373	0	0	0	0	0	**373**
Single Use Trip Gen Estimate	373	0	0	0	0	0	**373**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

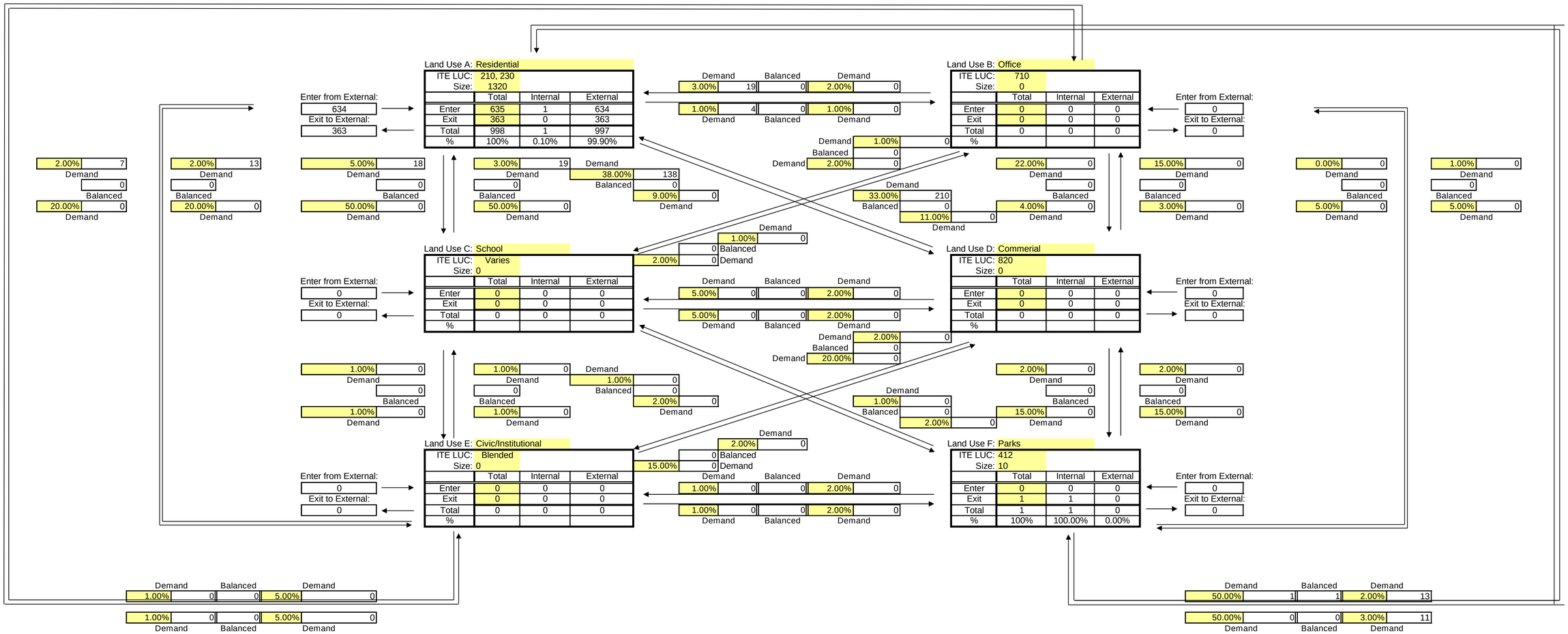
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	612	0	0	96	0	0	708
Exit	356	0	0	98	0	0	454
Total	968	0	0	194	0	0	**1162**
Single Use Trip Gen Estimate	990	0	0	216	0	0	**1206**
	2.22%	0.00%	0.00%	10.19%	0.00%	0.00%	

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

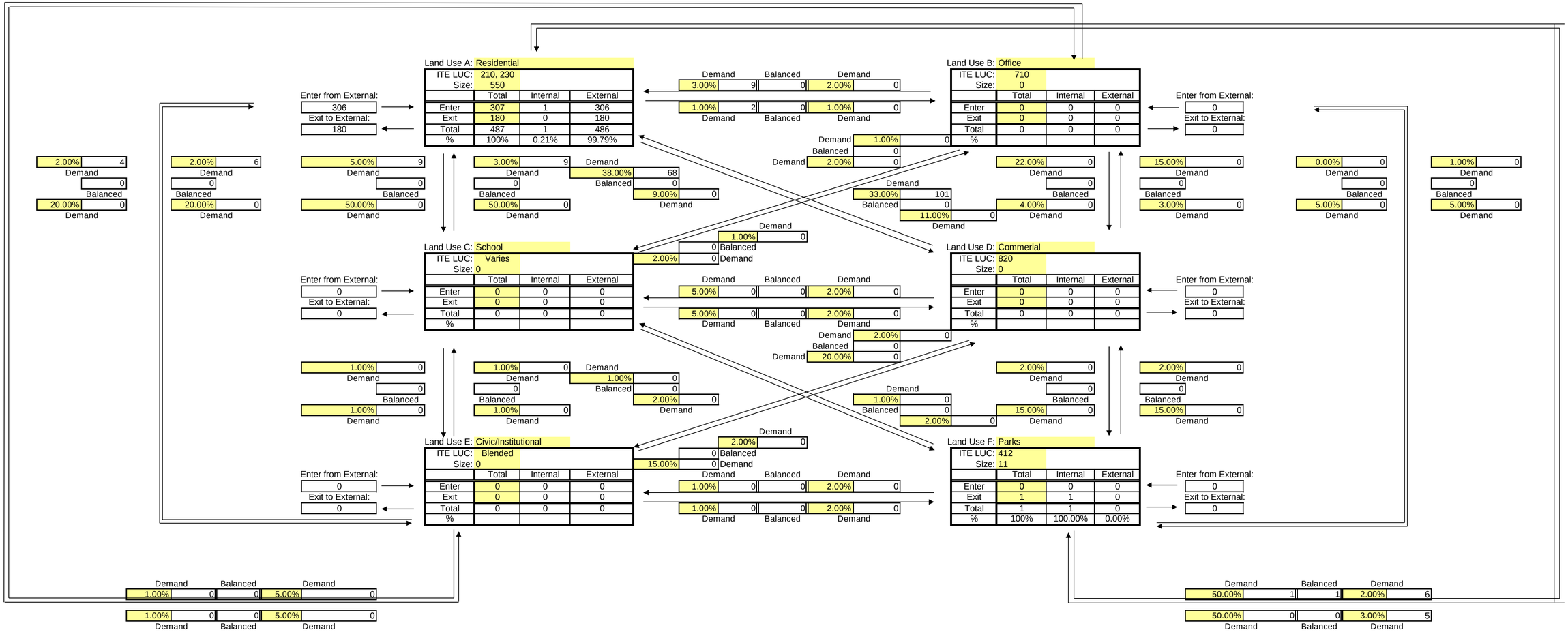
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	634	0	0	0	0	0	634
Exit	363	0	0	0	0	0	363
Total	997	0	0	0	0	0	**997**
Single Use Trip Gen Estimate	998	0	0	0	0	1	**999**
	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

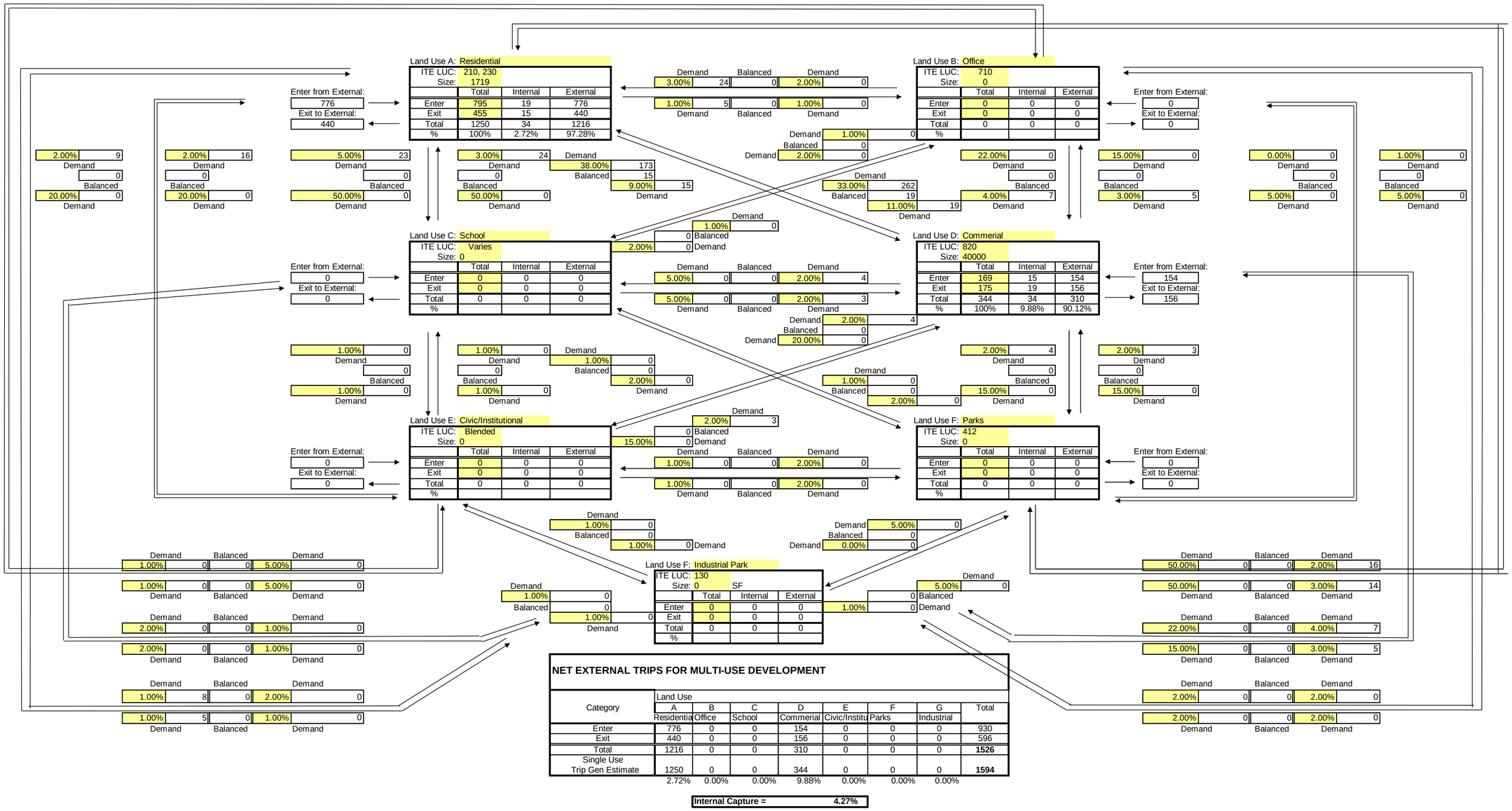
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	306	0	0	0	0	0	306
Exit	180	0	0	0	0	0	180
Total	486	0	0	0	0	0	**486**
Single Use Trip Gen Estimate	487	0	0	0	0	1	**488**
	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

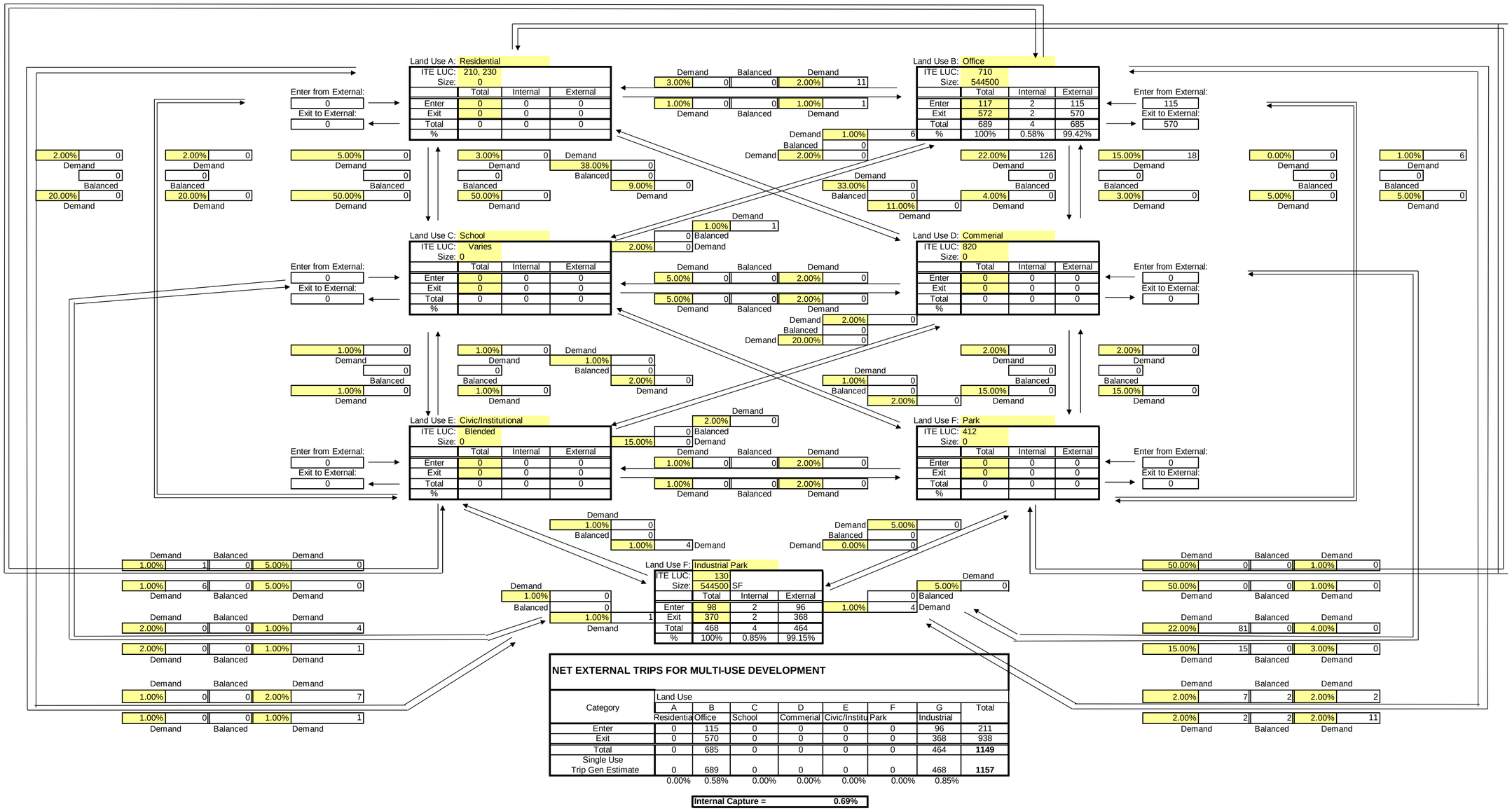
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	776	0	0	154	0	0	0	930
Exit	440	0	0	156	0	0	0	596
Total	1216	0	0	310	0	0	0	**1526**
Single Use Trip Gen Estimate	1250	0	0	344	0	0	0	**1594**
	2.72%	0.00%	0.00%	9.88%	0.00%	0.00%	0.00%	

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

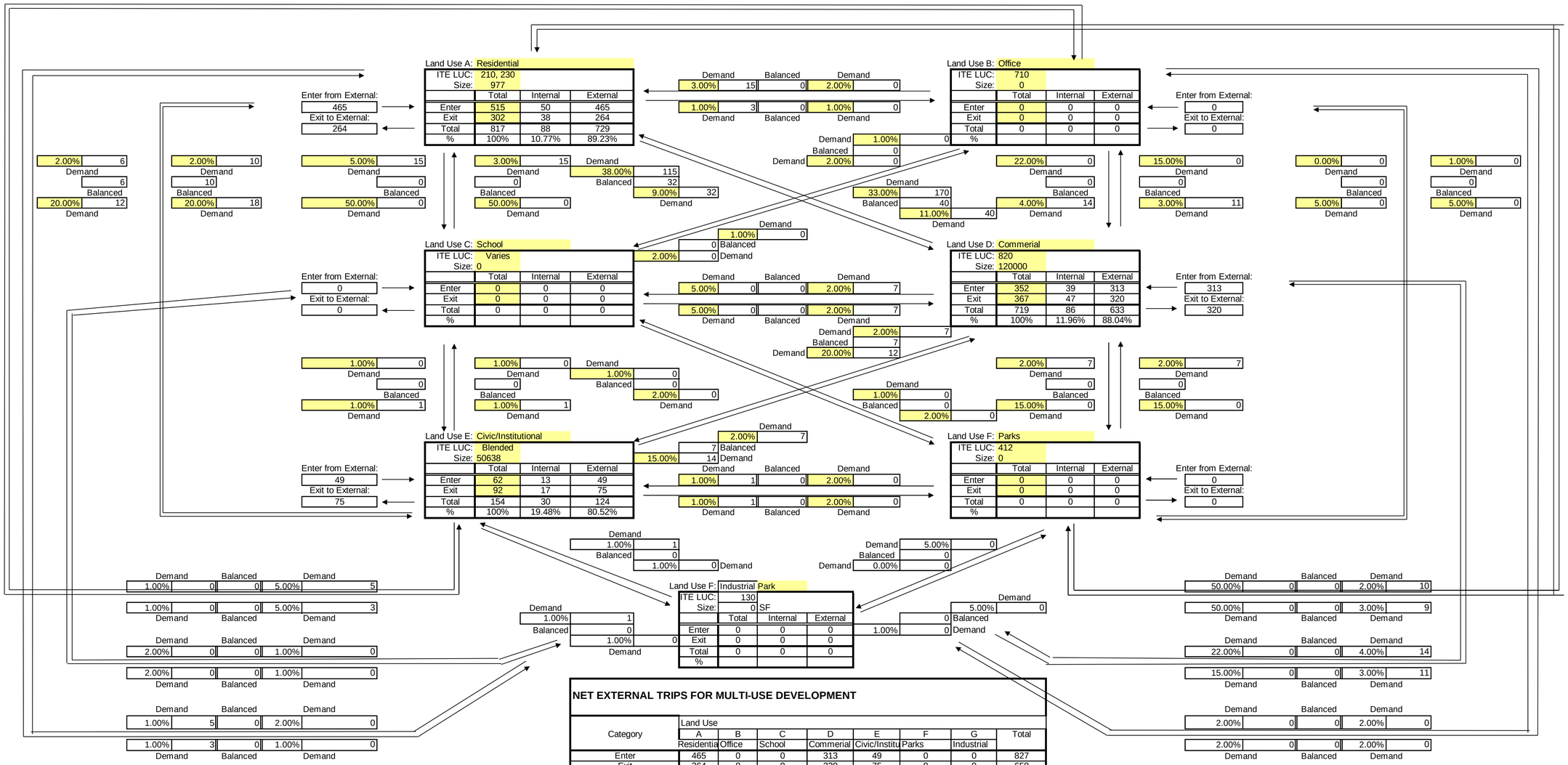
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	115	0	0	0	0	96	211
Exit	0	570	0	0	0	0	368	938
Total	0	685	0	0	0	0	464	**1149**
Single Use Trip Gen Estimate	0	689	0	0	0	0	468	**1157**
	0.00%	0.58%	0.00%	0.00%	0.00%	0.00%	0.85%	

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

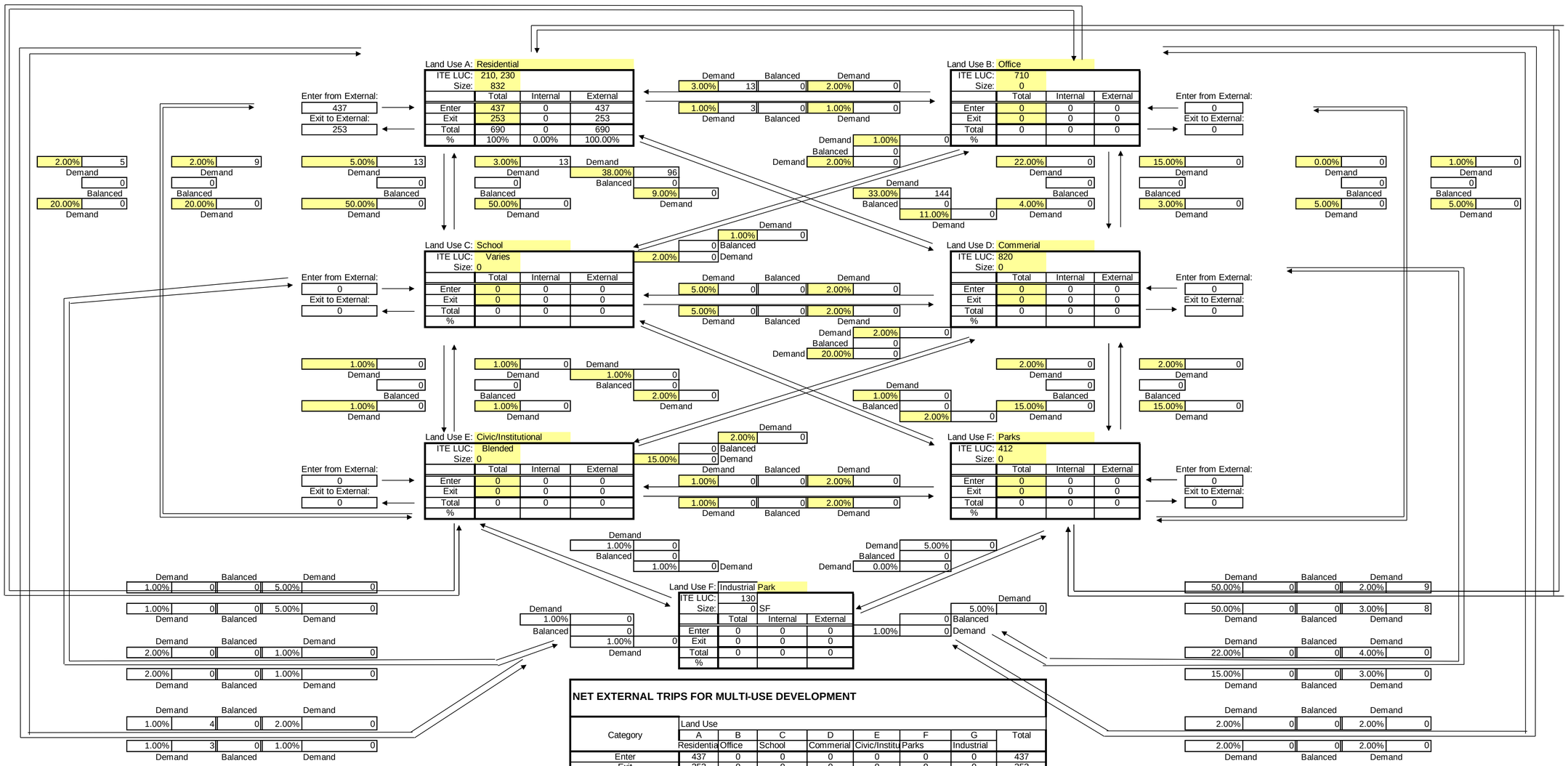
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	465	0	0	313	49	0	0	827
Exit	264	0	0	320	75	0	0	659
Total	729	0	0	633	124	0	0	**1486**
Single Use Trip Gen Estimate	817	0	0	719	154	0	0	**1690**
	10.77%	0.00%	0.00%	11.96%	19.48%	0.00%	0.00%	

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

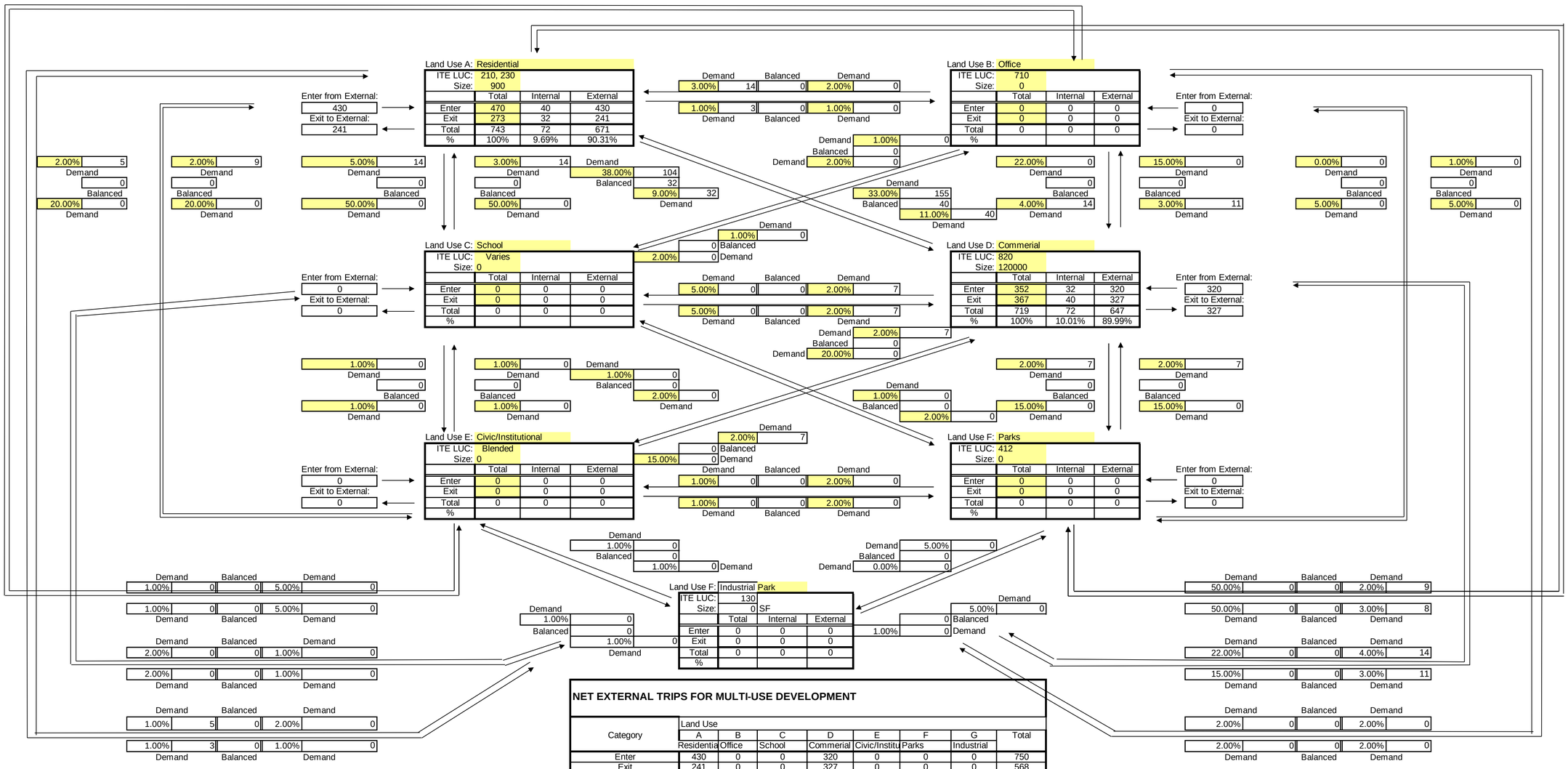
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	437	0	0	0	0	0	0	437
Exit	253	0	0	0	0	0	0	253
Total	690	0	0	0	0	0	0	**690**
Single Use Trip Gen Estimate	690	0	0	0	0	0	0	**690**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

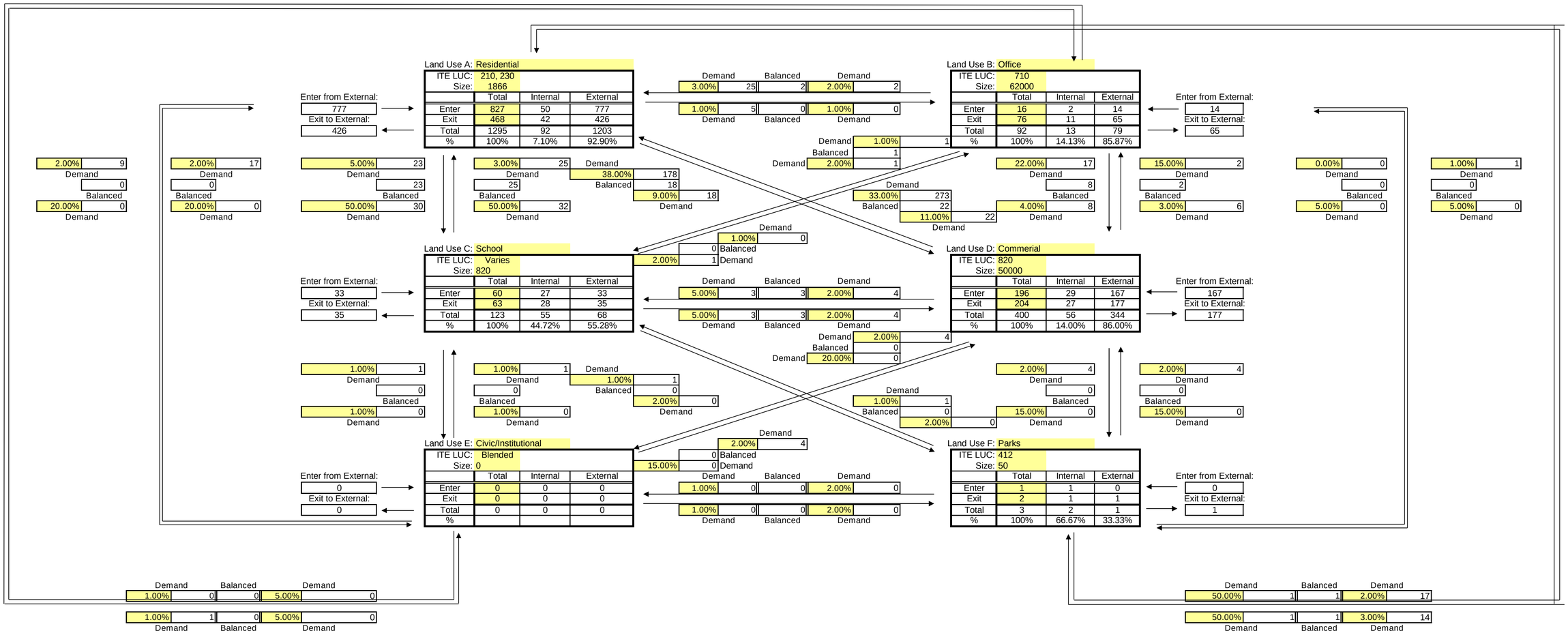
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	430	0	0	320	0	0	0	750
Exit	241	0	0	327	0	0	0	568
Total	671	0	0	647	0	0	0	**1318**
Single Use Trip Gen Estimate	743	0	0	719	0	0	0	**1462**
	9.69%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

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

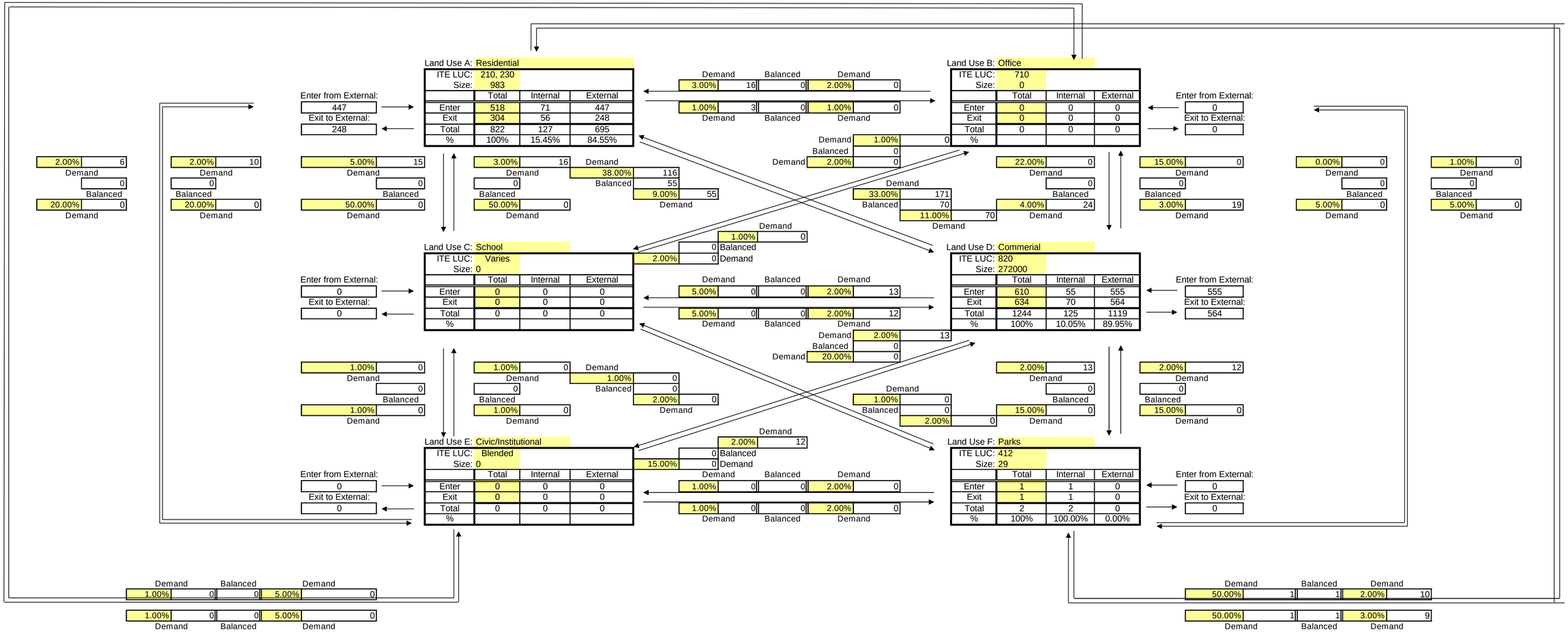
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	777	14	33	167	0	0	991
Exit	426	65	35	177	0	1	704
Total	1203	79	68	344	0	1	**1695**
Single Use Trip Gen Estimate	1295	92	123	400	0	3	**1913**
	7.10%	14.13%	44.72%	14.00%	0.00%	66.67%	

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

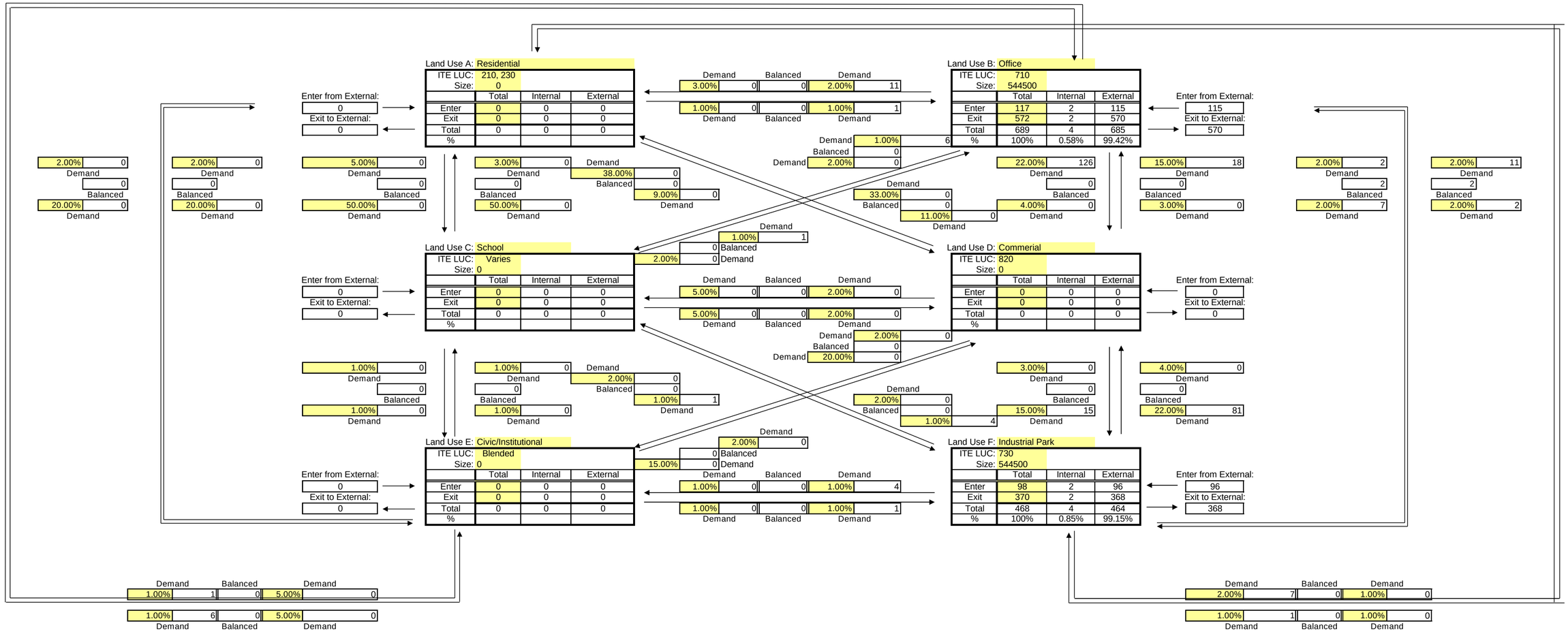
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	447	0	0	555	0	0	1002
Exit	248	0	0	564	0	0	812
Total	695	0	0	1119	0	0	**1814**
Single Use Trip Gen Estimate	822	0	0	1244	0	2	**2068**
	15.45%	0.00%	0.00%	10.05%	0.00%	0.00%	

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

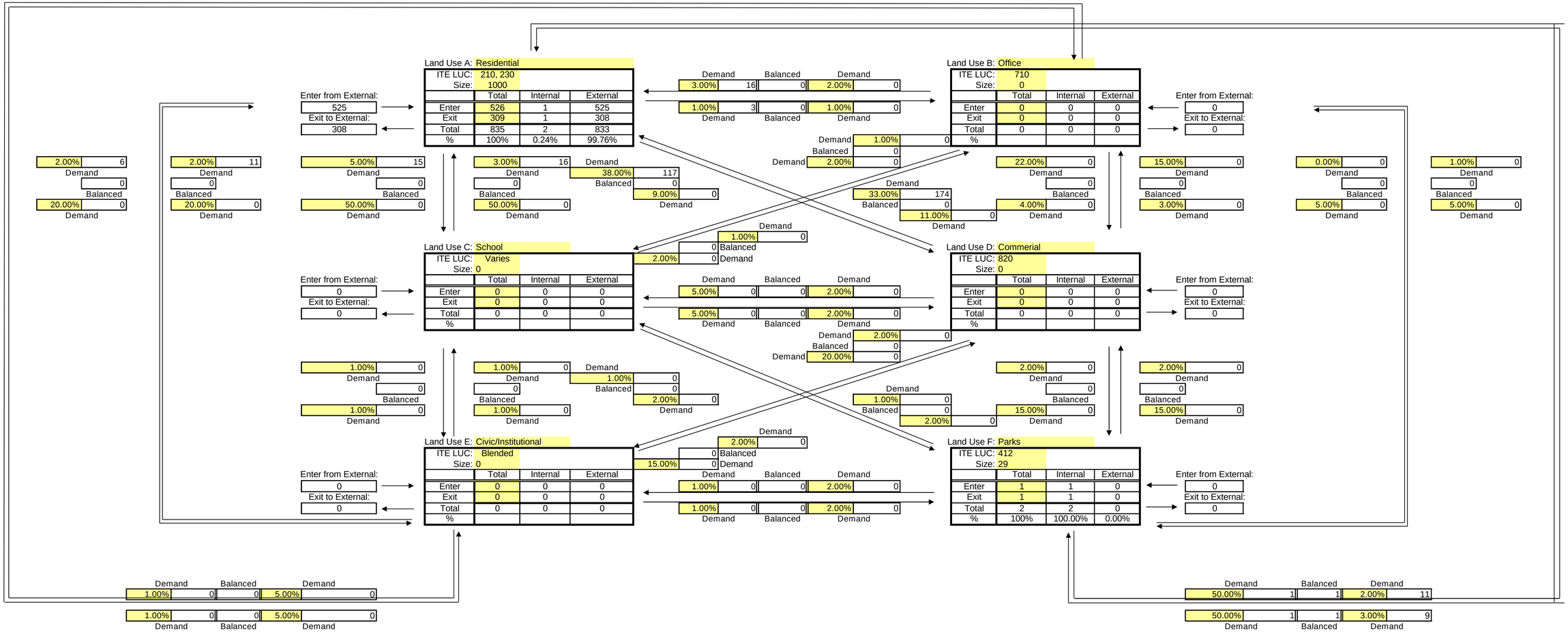
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	115	0	0	0	96	211
Exit	0	570	0	0	0	368	938
Total	0	685	0	0	0	464	**1149**
Single Use Trip Gen Estimate	0	689	0	0	0	468	**1157**
	0.00%	0.58%	0.00%	0.00%	0.00%	0.85%	

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

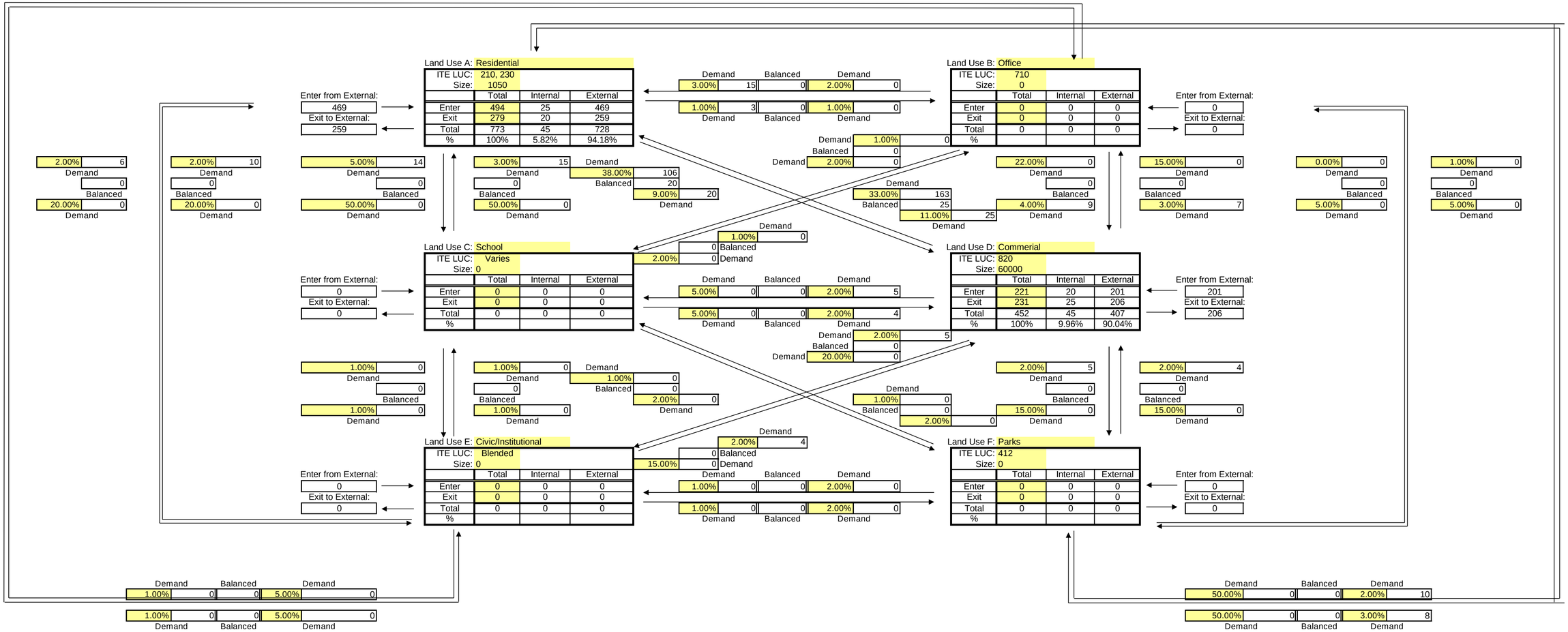
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	525	0	0	0	0	0	525
Exit	308	0	0	0	0	0	308
Total	833	0	0	0	0	0	**833**
Single Use Trip Gen Estimate	835	0	0	0	0	2	**837**
	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

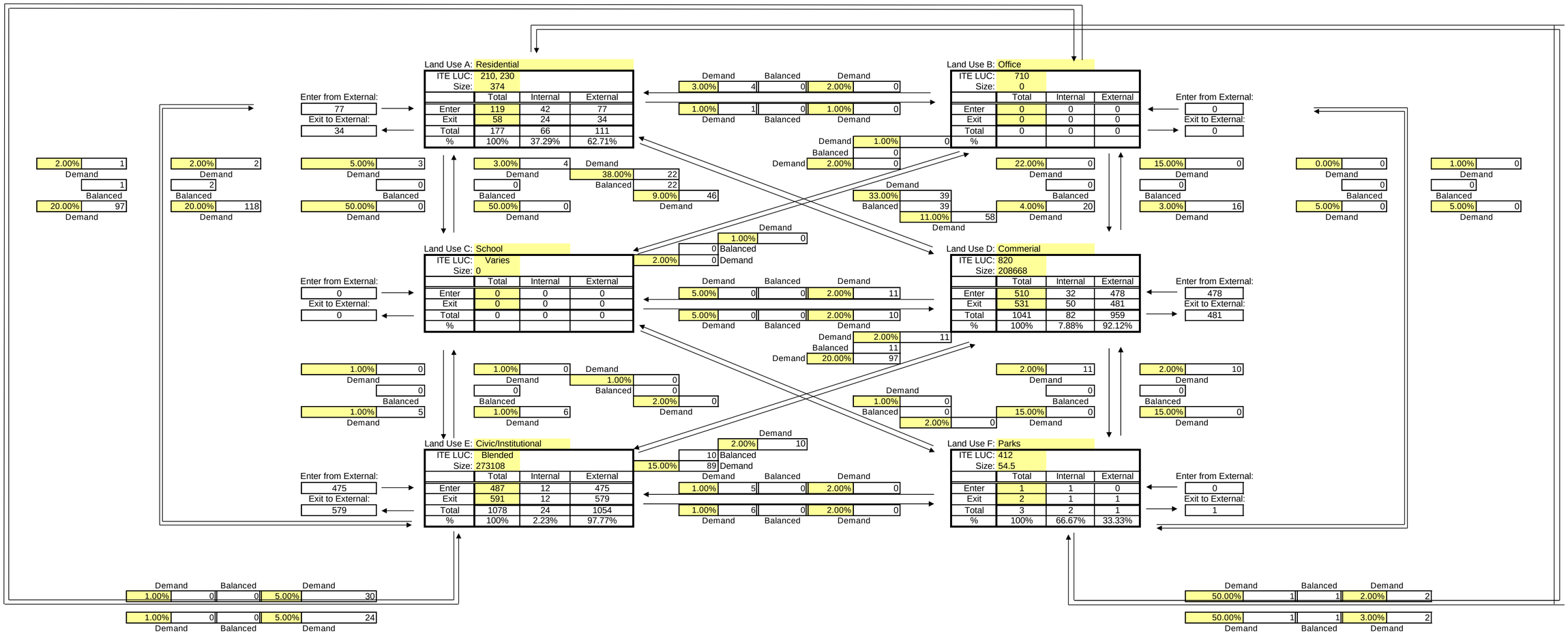
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	469	0	0	201	0	0	670
Exit	259	0	0	206	0	0	465
Total	728	0	0	407	0	0	**1135**
Single Use Trip Gen Estimate	773	0	0	452	0	0	**1225**
	5.82%	0.00%	0.00%	9.96%	0.00%	0.00%	

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%

MacKenzie
Engineering & Planning, Inc.

Appendix G-2

Western Annexation DRI Trip Generation and Internal Capture

Phase 3

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

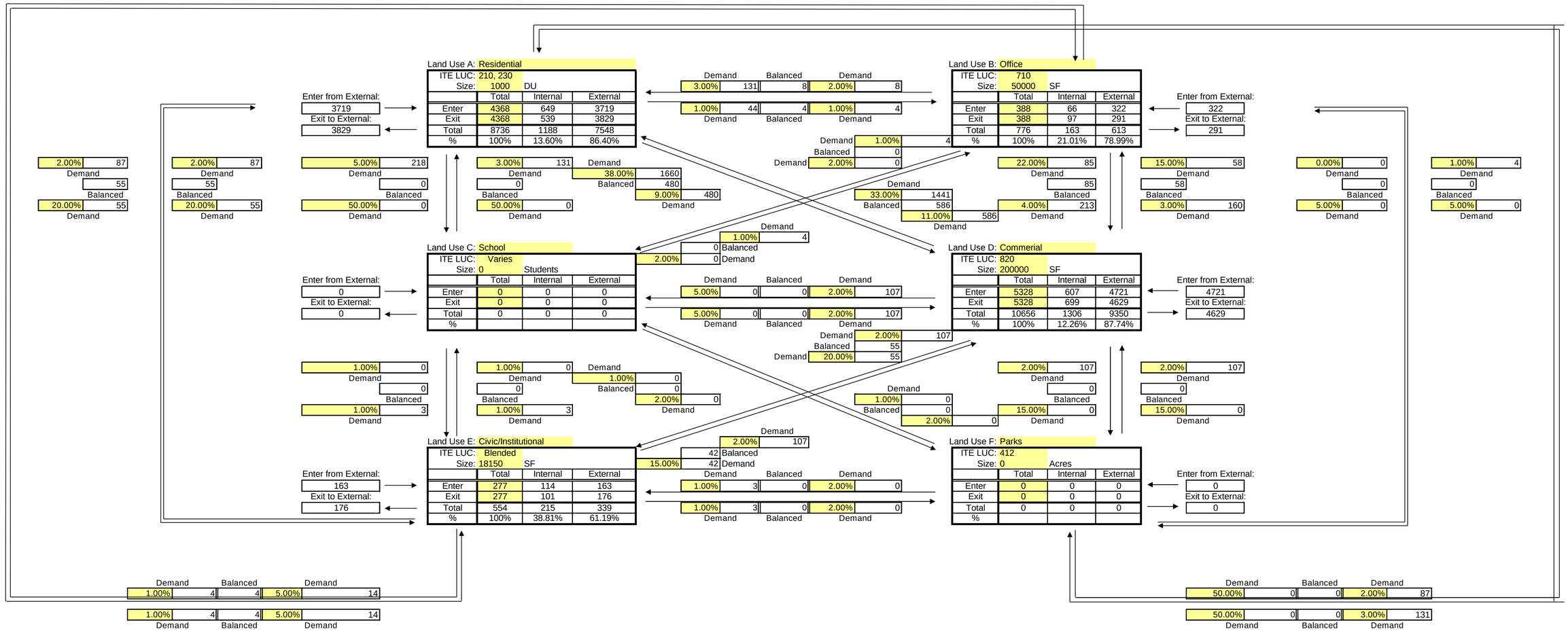
Commercial Retail Pass-By Calculation:		
Intensity =	150,000	s.f.
External Trips from Matrix =	700	trips
Pass-By Percent =	34%	
Pass-By Reduction =	179	trips

	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

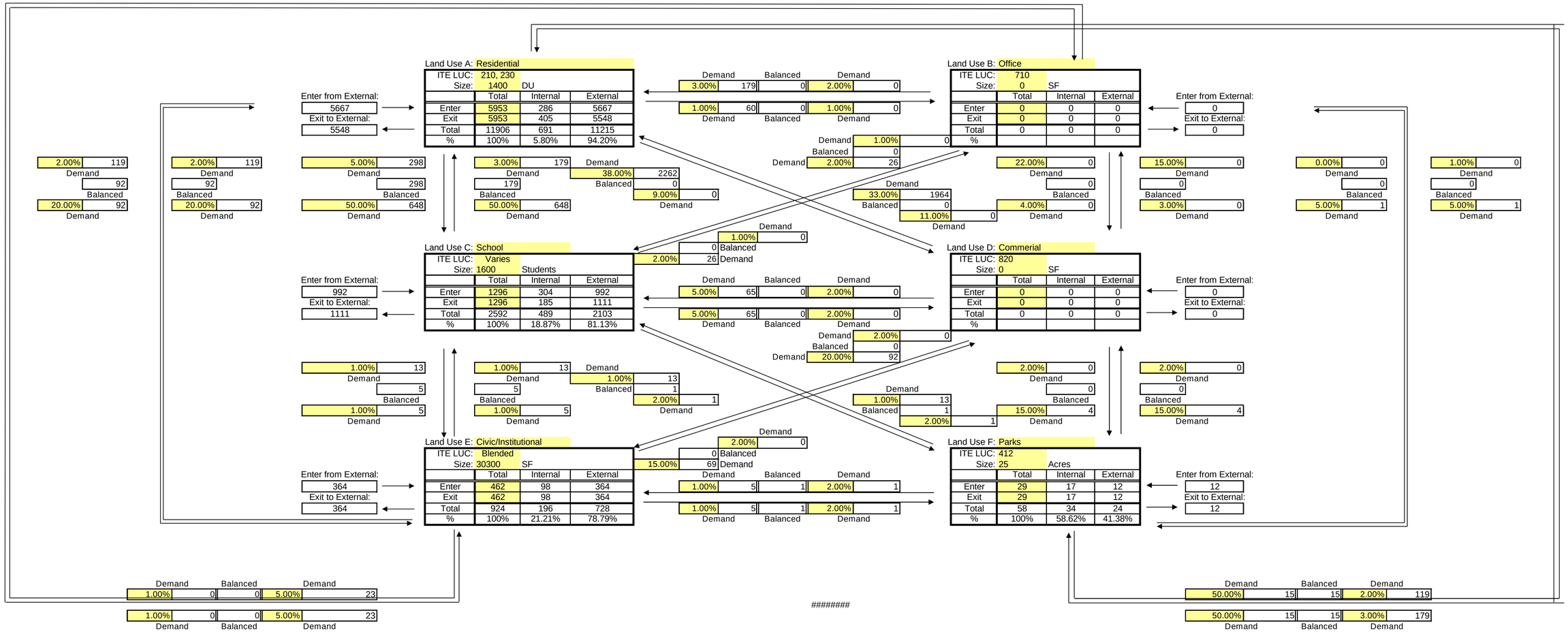
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3719	322	0	4721	163	0	8925
Exit	3829	291	0	4629	176	0	8925
Total	7548	613	0	9350	339	0	**17850**
Single Use Trip Gen Estimate	8736	776	0	10656	554	0	**20722**
	13.60%	21.01%	0.00%	12.26%	38.81%	0.00%	

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

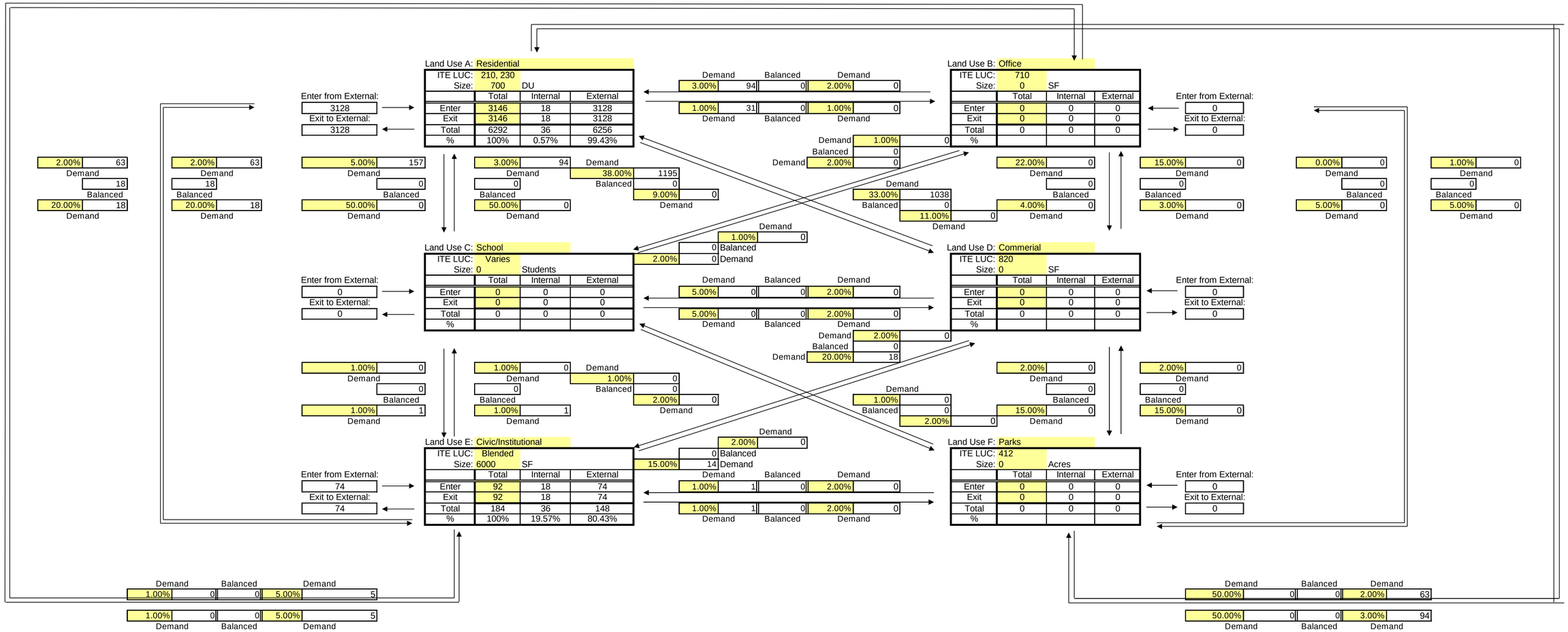
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5667	0	992	0	364	12	7035
Exit	5548	0	1111	0	364	12	7035
Total	11215	0	2103	0	728	24	**14070**
Single Use Trip Gen Estimate	11906	0	2592	0	924	58	**15480**
	5.80%	0.00%	18.87%	0.00%	21.21%	58.62%	

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

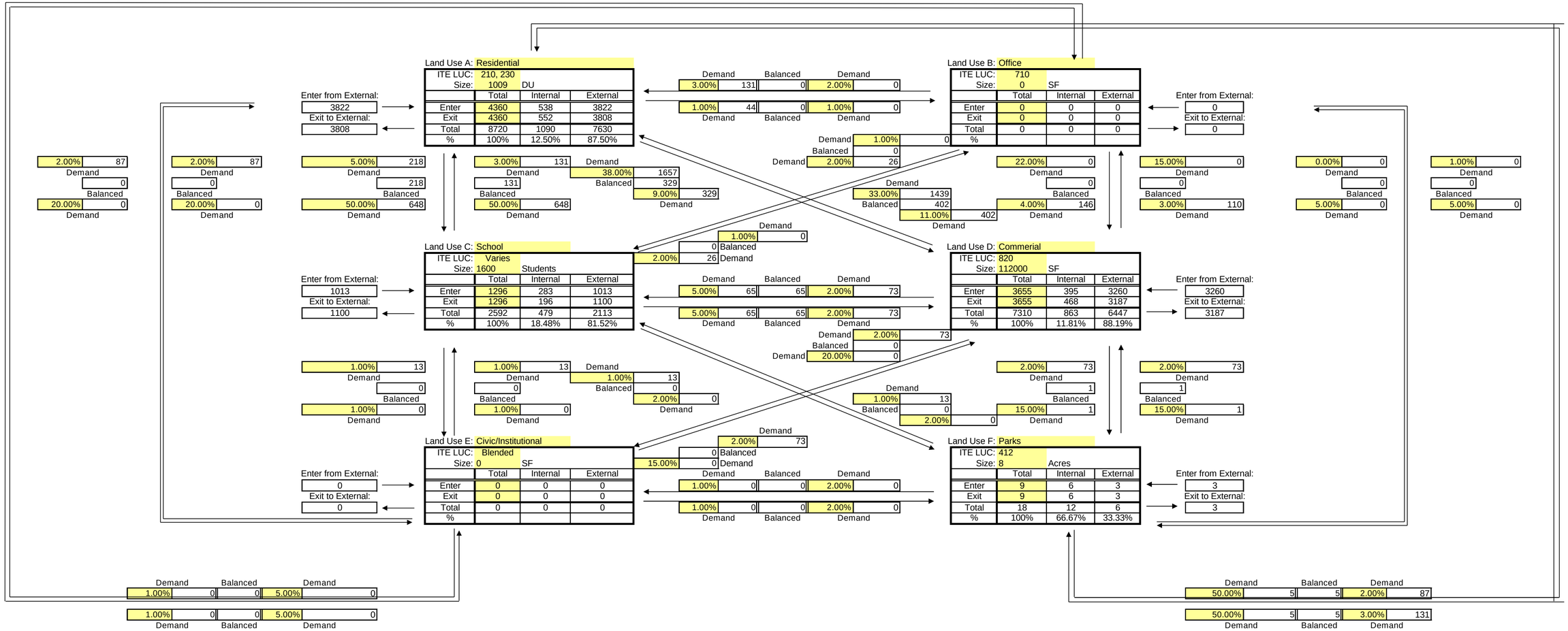
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3128	0	0	0	74	0	3202
Exit	3128	0	0	0	74	0	3202
Total	6256	0	0	0	148	0	**6404**
Single Use Trip Gen Estimate	6292	0	0	0	184	0	**6476**
	0.57%	0.00%	0.00%	0.00%	19.57%	0.00%	

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

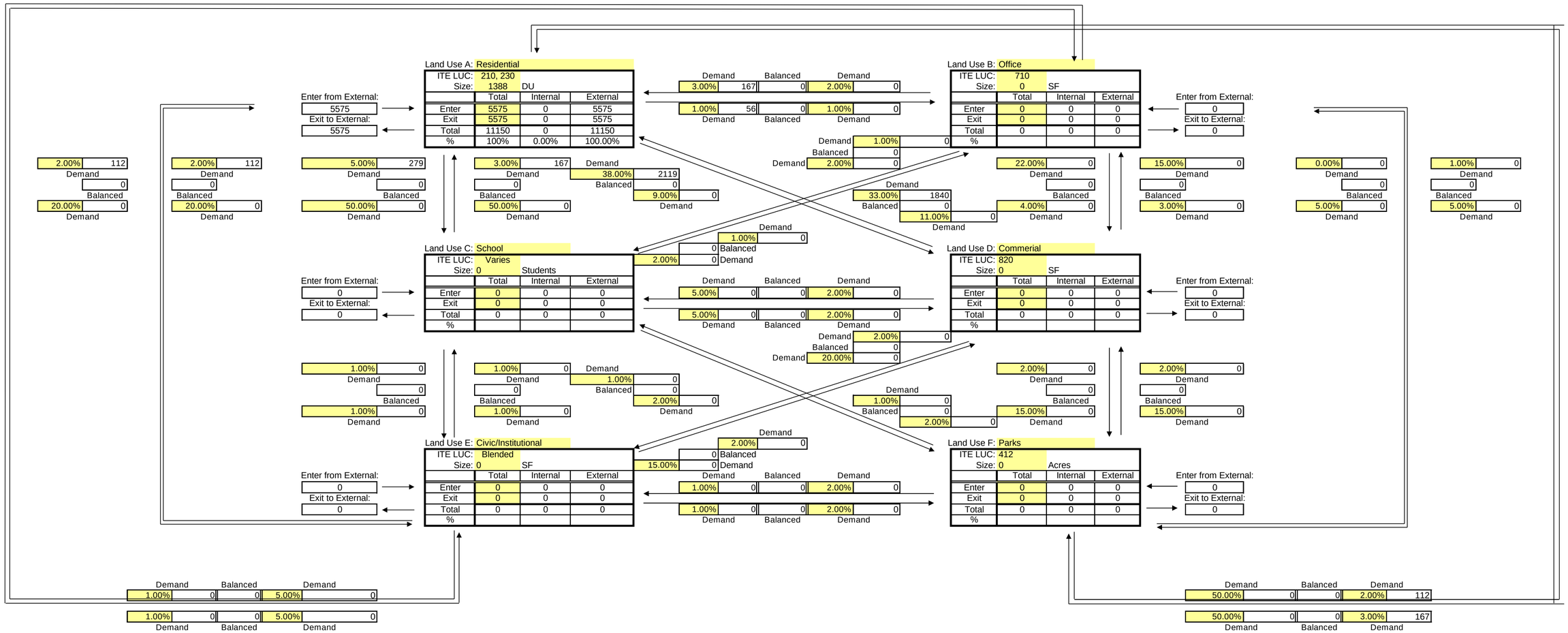
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3822	0	1013	3260	0	3	8098
Exit	3808	0	1100	3187	0	3	8098
Total	7630	0	2113	6447	0	6	**16196**
Single Use Trip Gen Estimate	8720	0	2592	7310	0	18	**18640**
	12.50%	0.00%	18.48%	11.81%	0.00%	66.67%	

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

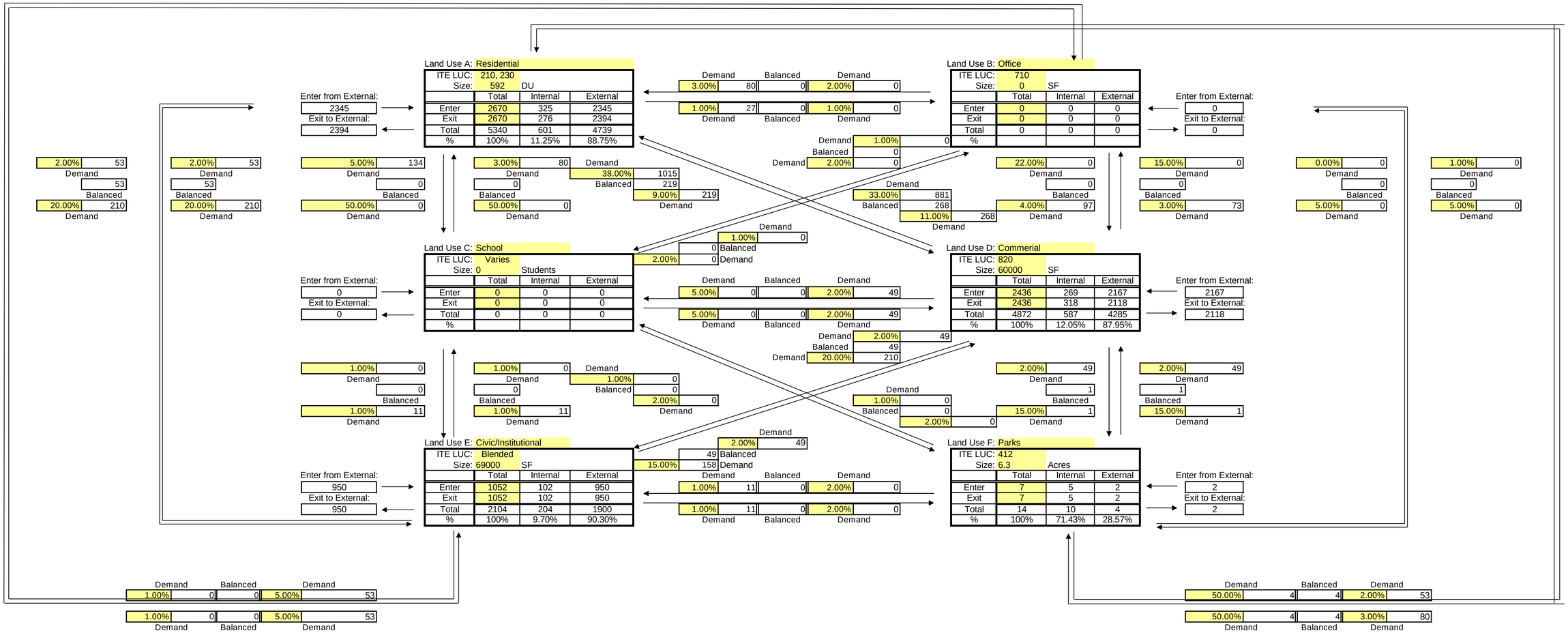
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5575	0	0	0	0	0	5575
Exit	5575	0	0	0	0	0	5575
Total	11150	0	0	0	0	0	**11150**
Single Use Trip Gen Estimate	11150	0	0	0	0	0	**11150**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

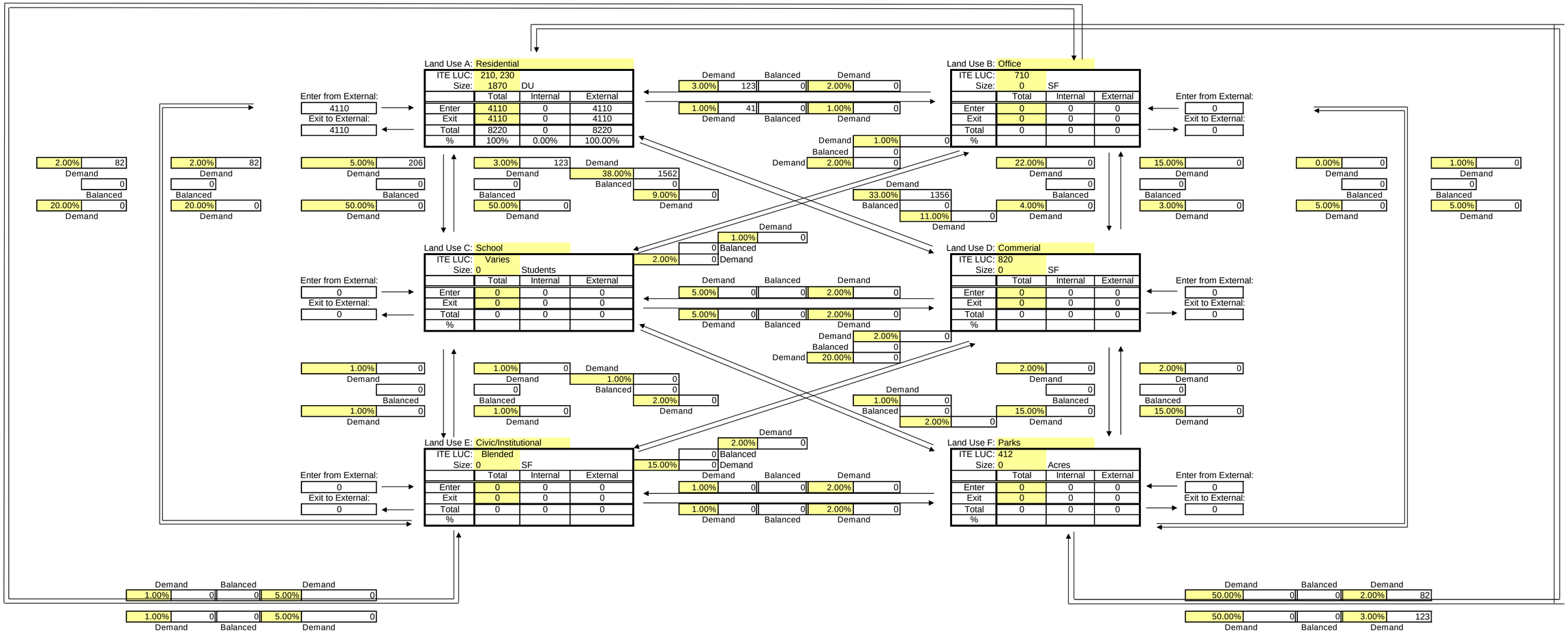
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	2345	0	0	2167	950	2	5464
Exit	2394	0	0	2118	950	2	5464
Total	4739	0	0	4285	1900	4	**10928**
Single Use Trip Gen Estimate	5340	0	0	4872	2104	14	**12330**
	11.25%	0.00%	0.00%	12.05%	9.70%	71.43%	

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

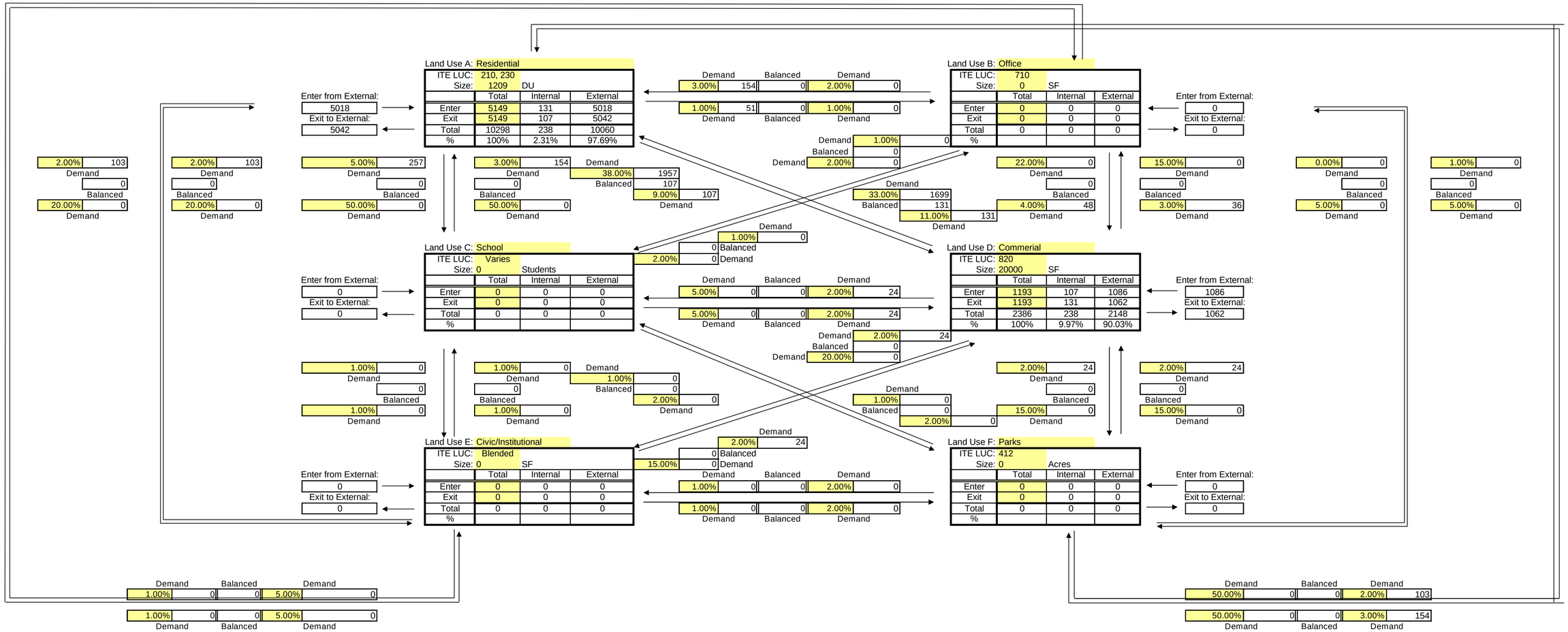
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	4110	0	0	0	0	0	4110
Exit	4110	0	0	0	0	0	4110
Total	8220	0	0	0	0	0	**8220**
Single Use Trip Gen Estimate	8220	0	0	0	0	0	**8220**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

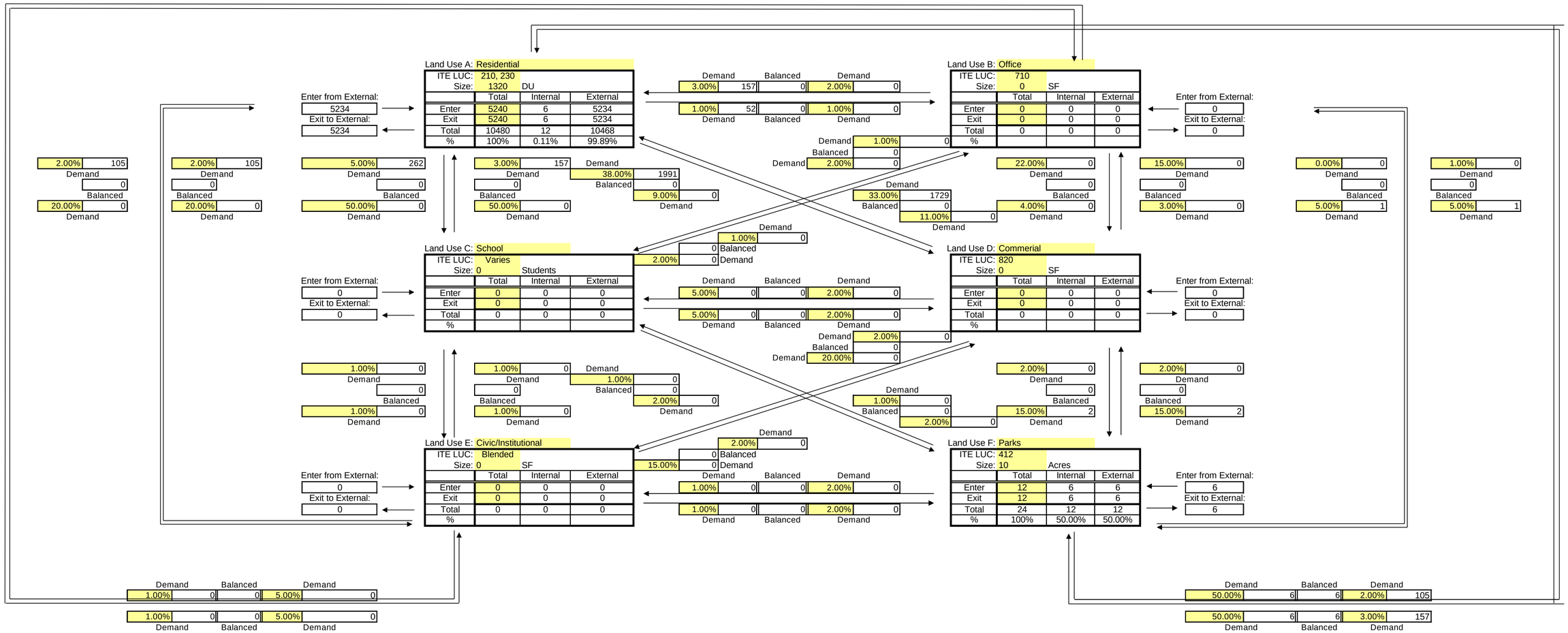
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5018	0	0	1086	0	0	6104
Exit	5042	0	0	1062	0	0	6104
Total	10060	0	0	2148	0	0	**12208**
Single Use Trip Gen Estimate	10298	0	0	2386	0	0	**12684**
	2.31%	0.00%	0.00%	9.97%	0.00%	0.00%	

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

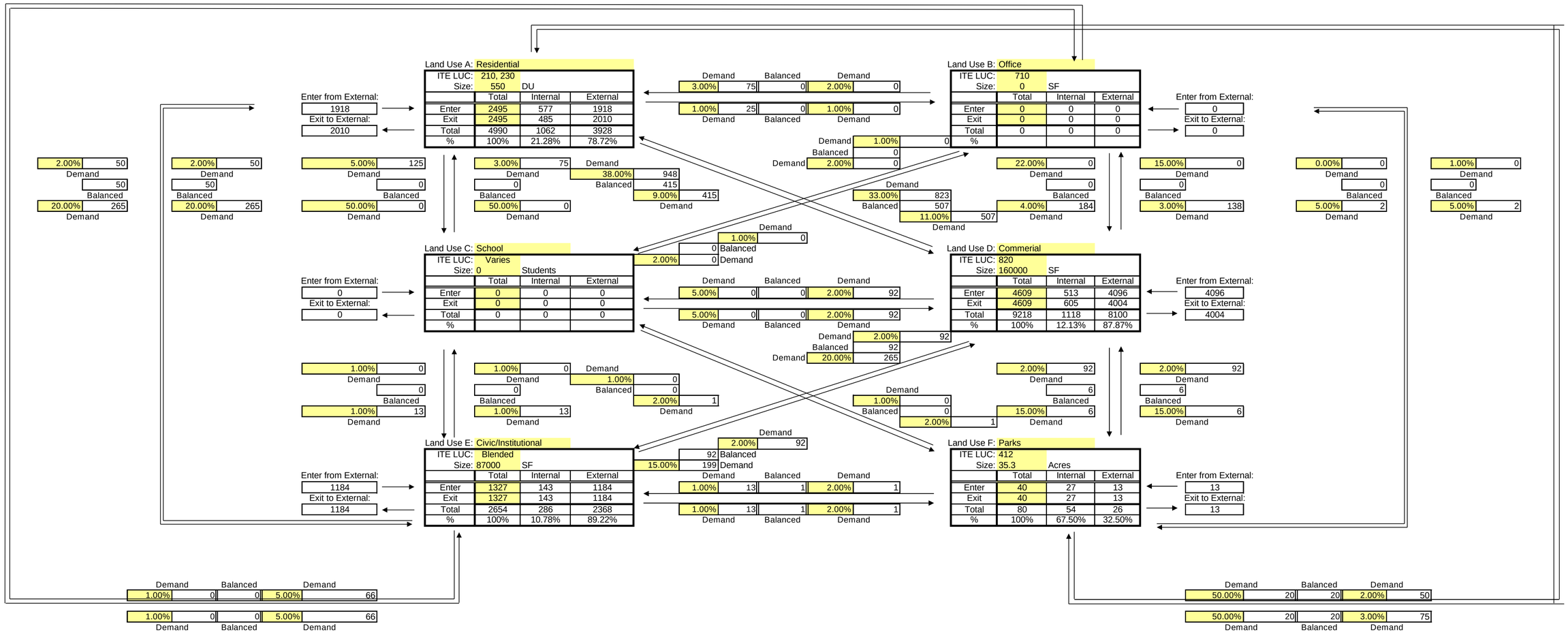
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5234	0	0	0	0	6	5240
Exit	5234	0	0	0	0	6	5240
Total	10468	0	0	0	0	12	**10480**
Single Use Trip Gen Estimate	10480	0	0	0	0	24	**10504**
	0.11%	0.00%	0.00%	0.00%	0.00%	50.00%	

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

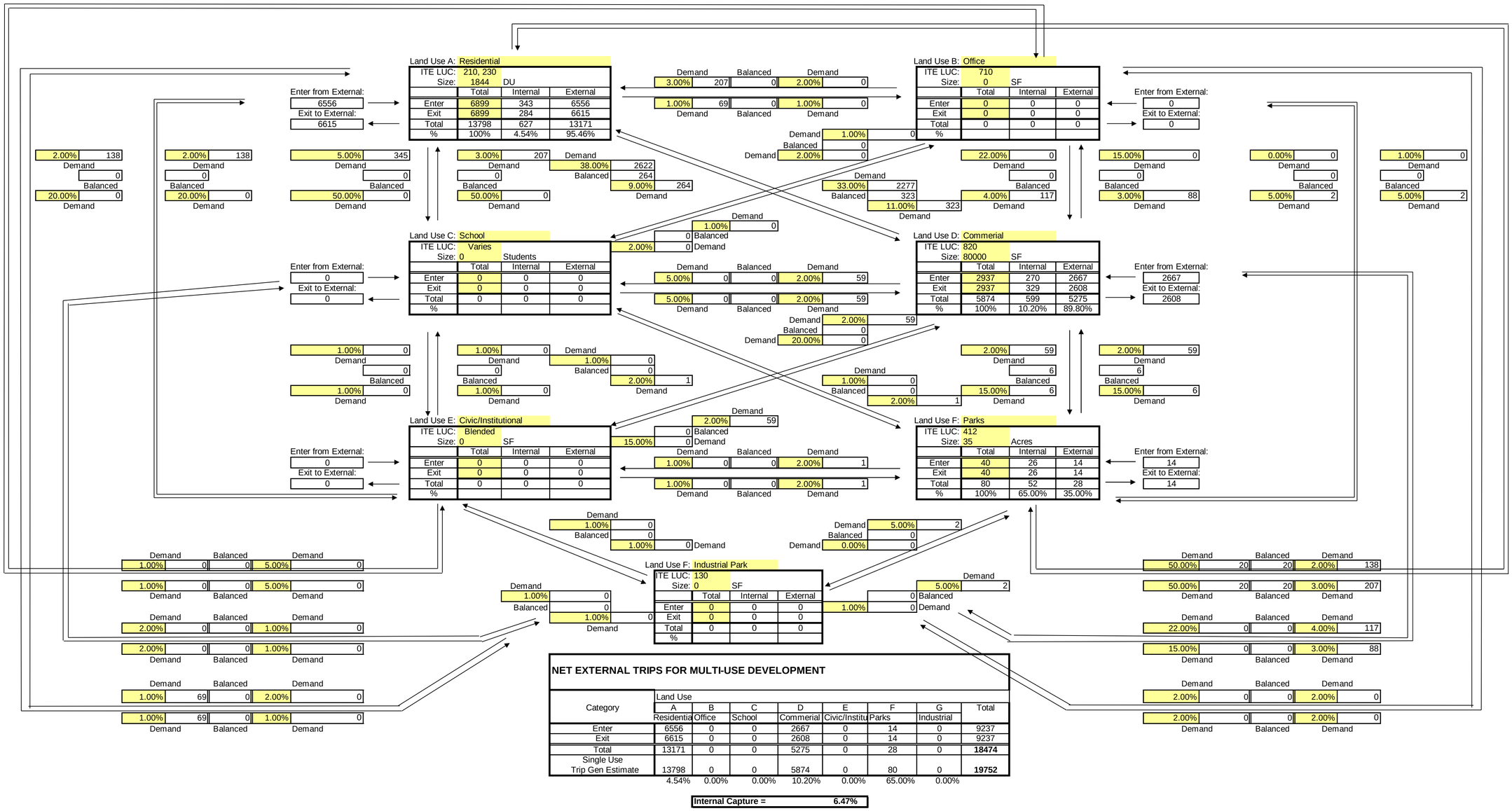
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1918	0	0	4096	1184	13	7211
Exit	2010	0	0	4004	1184	13	7211
Total	3928	0	0	8100	2368	26	**14422**
Single Use Trip Gen Estimate	4990	0	0	9218	2654	80	**16942**
	21.28%	0.00%	0.00%	12.13%	10.78%	67.50%	

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

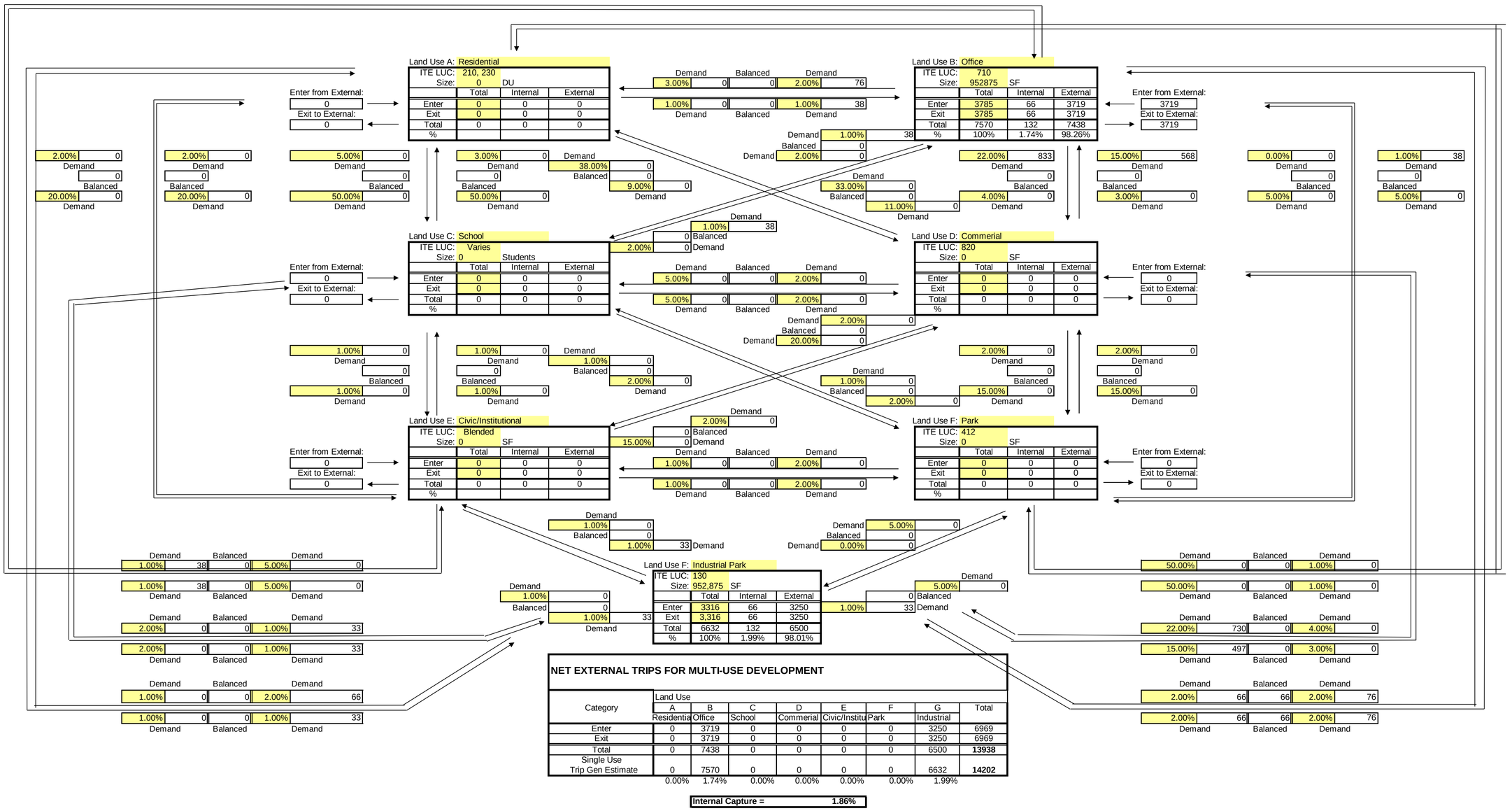
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	6556	0	0	2667	0	14	0	9237
Exit	6615	0	0	2608	0	14	0	9237
Total	13171	0	0	5275	0	28	0	**18474**
Single Use Trip Gen Estimate	13798	0	0	5874	0	80	0	**19752**
	4.54%	0.00%	0.00%	10.20%	0.00%	65.00%	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

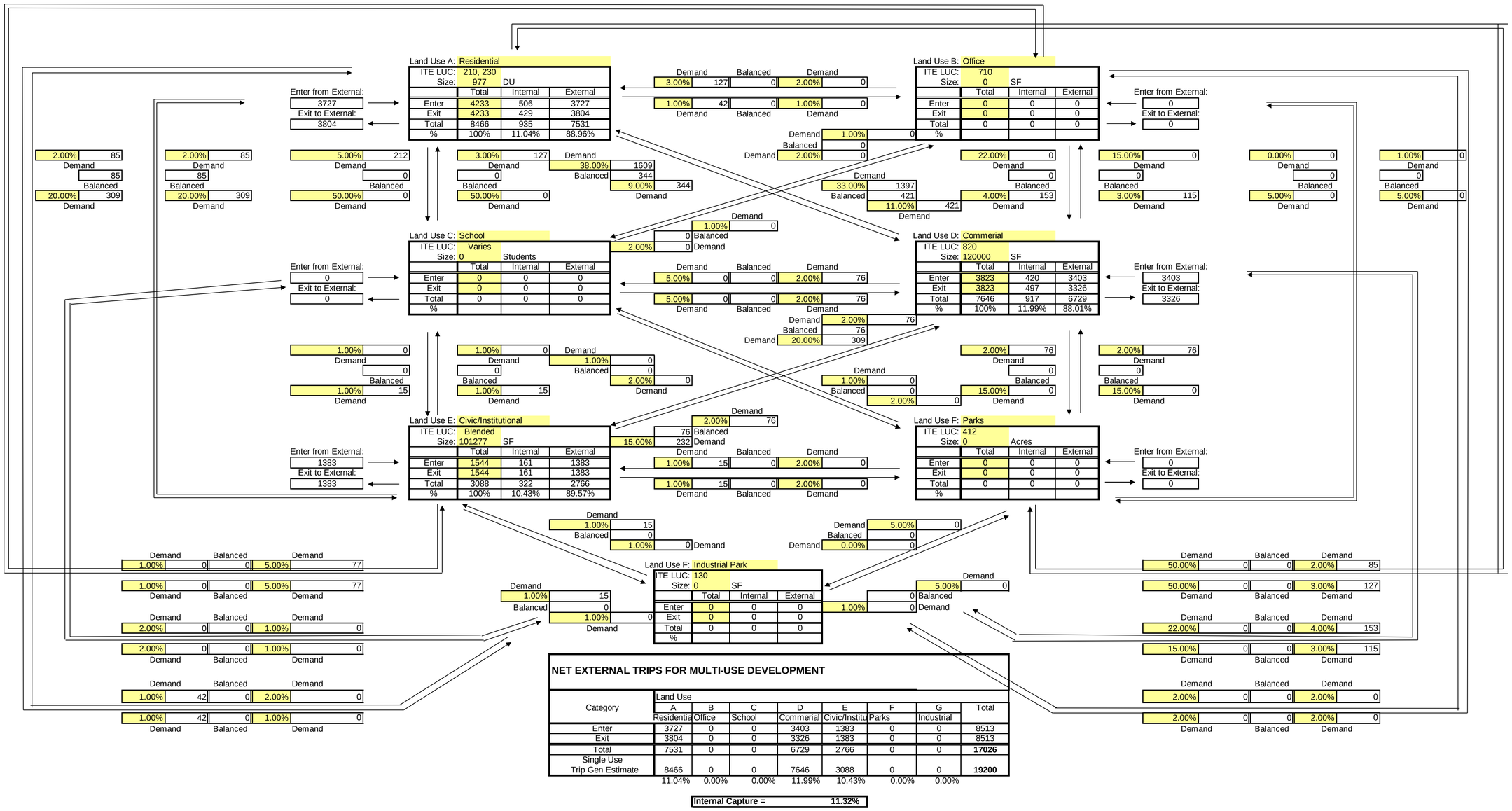
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	3719	0	0	0	0	3250	6969
Exit	0	3719	0	0	0	0	3250	6969
Total	0	7438	0	0	0	0	6500	**13938**
Single Use Trip Gen Estimate	0	7570	0	0	0	0	6632	**14202**
	0.00%	1.74%	0.00%	0.00%	0.00%	0.00%	1.99%	

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

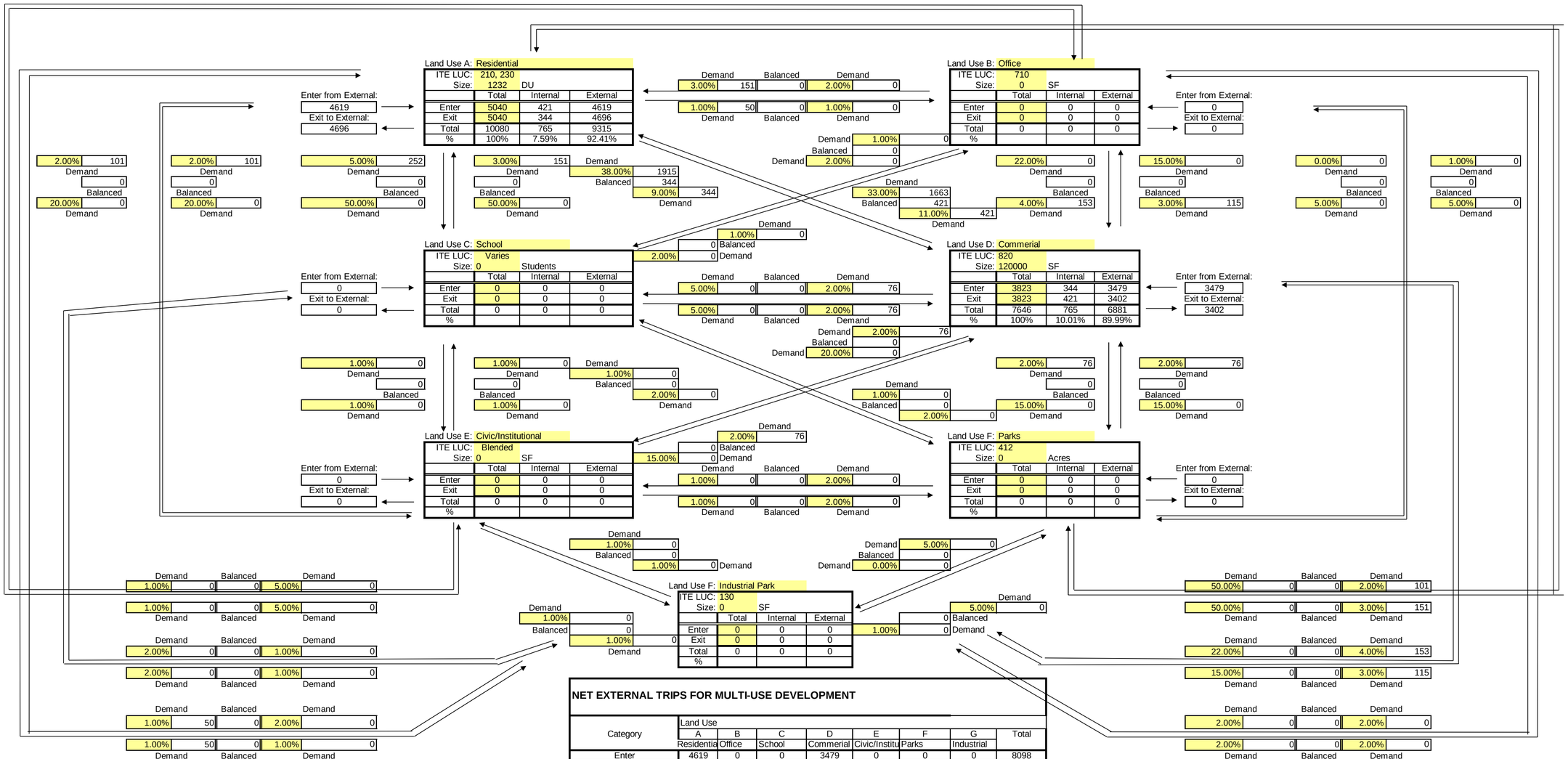
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	3727	0	0	3403	1383	0	0	8513
Exit	3804	0	0	3326	1383	0	0	8513
Total	7531	0	0	6729	2766	0	0	**17026**
Single Use Trip Gen Estimate	8466	0	0	7646	3088	0	0	**19200**
	11.04%	0.00%	0.00%	11.99%	10.43%	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

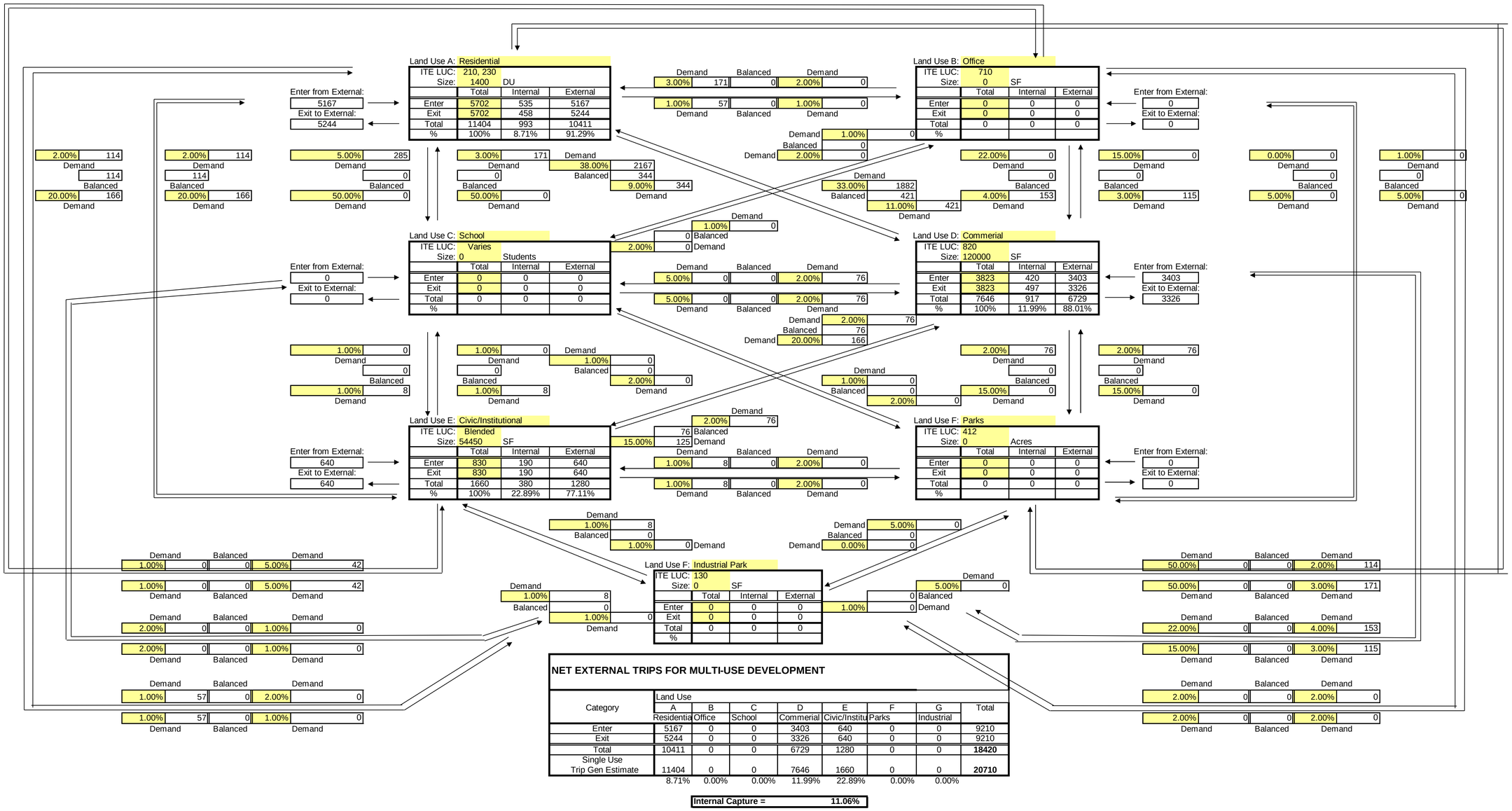
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	4619	0	0	3479	0	0	0	8098
Exit	4696	0	0	3402	0	0	0	8098
Total	9315	0	0	6881	0	0	0	**16196**
Single Use Trip Gen Estimate	10080	0	0	7646	0	0	0	**17726**
	7.59%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

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

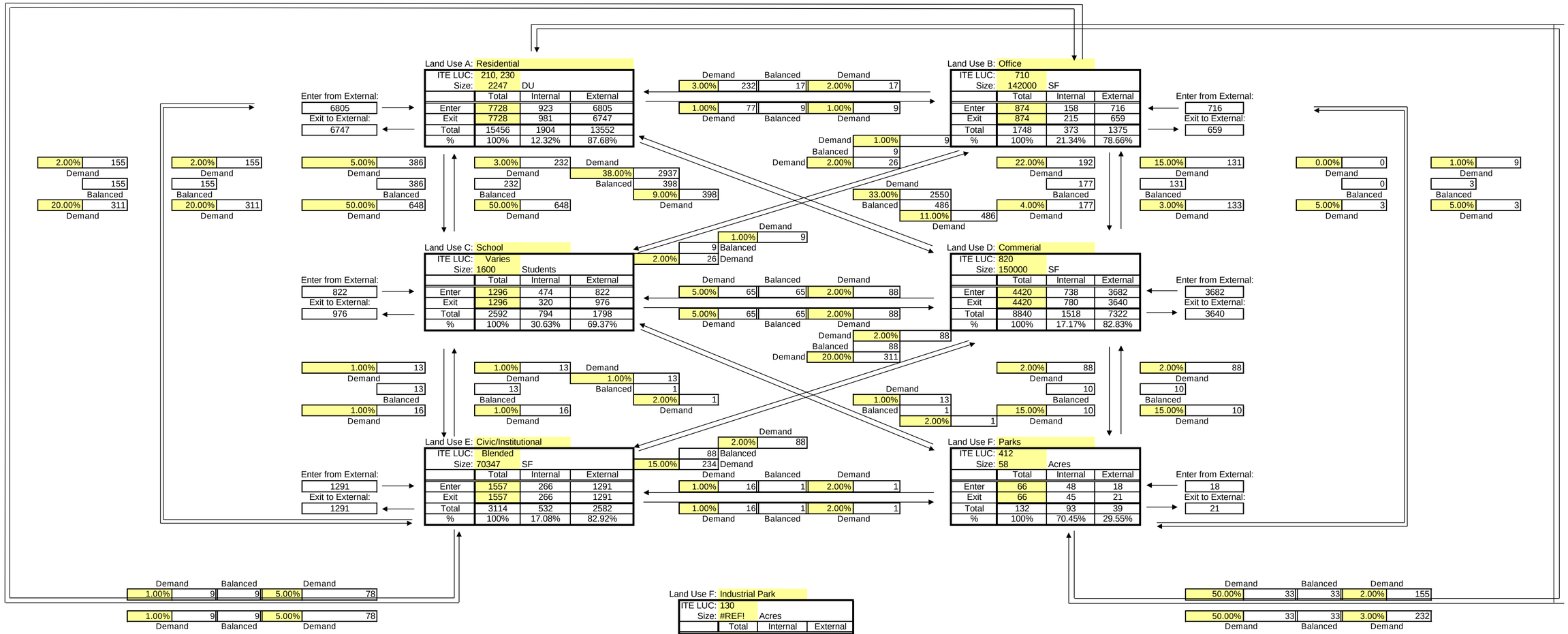
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	5167	0	0	3403	640	0	0	9210
Exit	5244	0	0	3326	640	0	0	9210
Total	10411	0	0	6729	1280	0	0	**18420**
Single Use Trip Gen Estimate	11404	0	0	7646	1660	0	0	**20710**
	8.71%	0.00%	0.00%	11.99%	22.89%	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

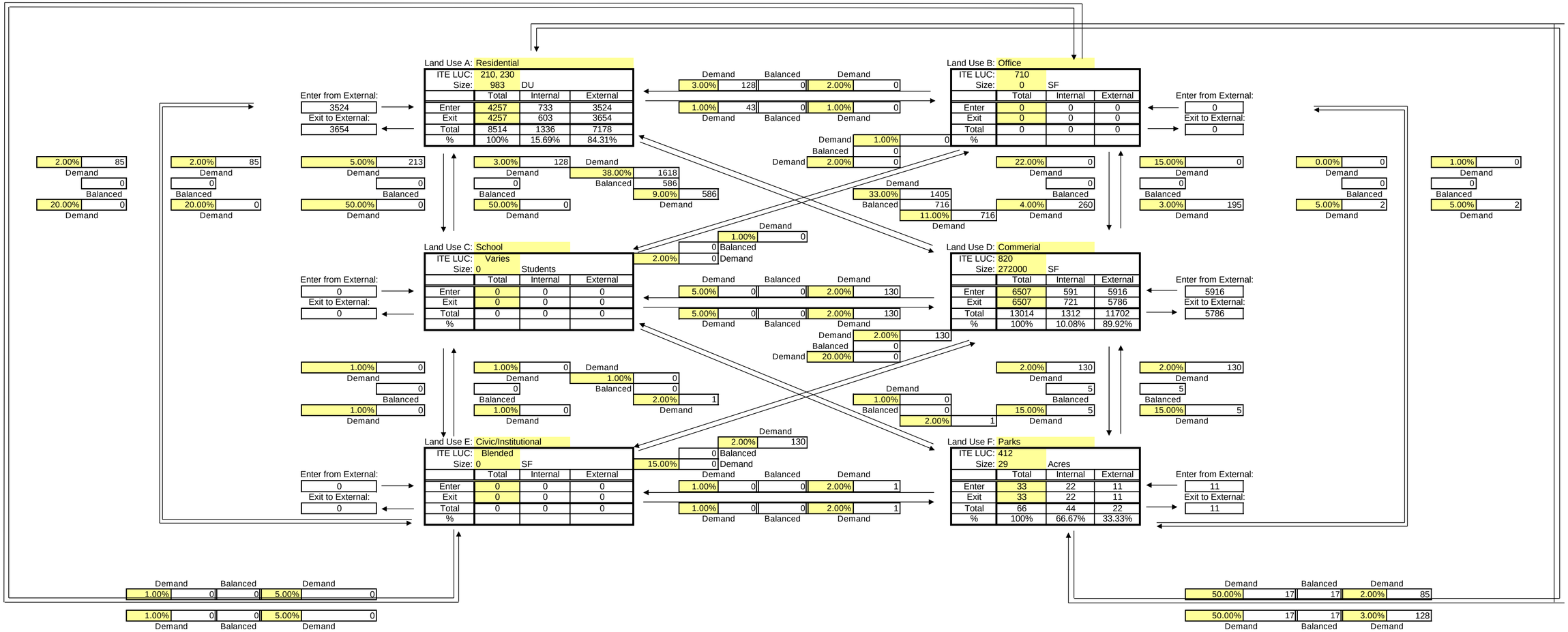
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	6805	716	822	3682	1291	18	13334
Exit	6747	659	976	3640	1291	21	13334
Total	13552	1375	1798	7322	2582	39	**26668**
Single Use Trip Gen Estimate	15456	1748	2592	8840	3114	132	**31882**
	12.32%	21.34%	30.63%	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

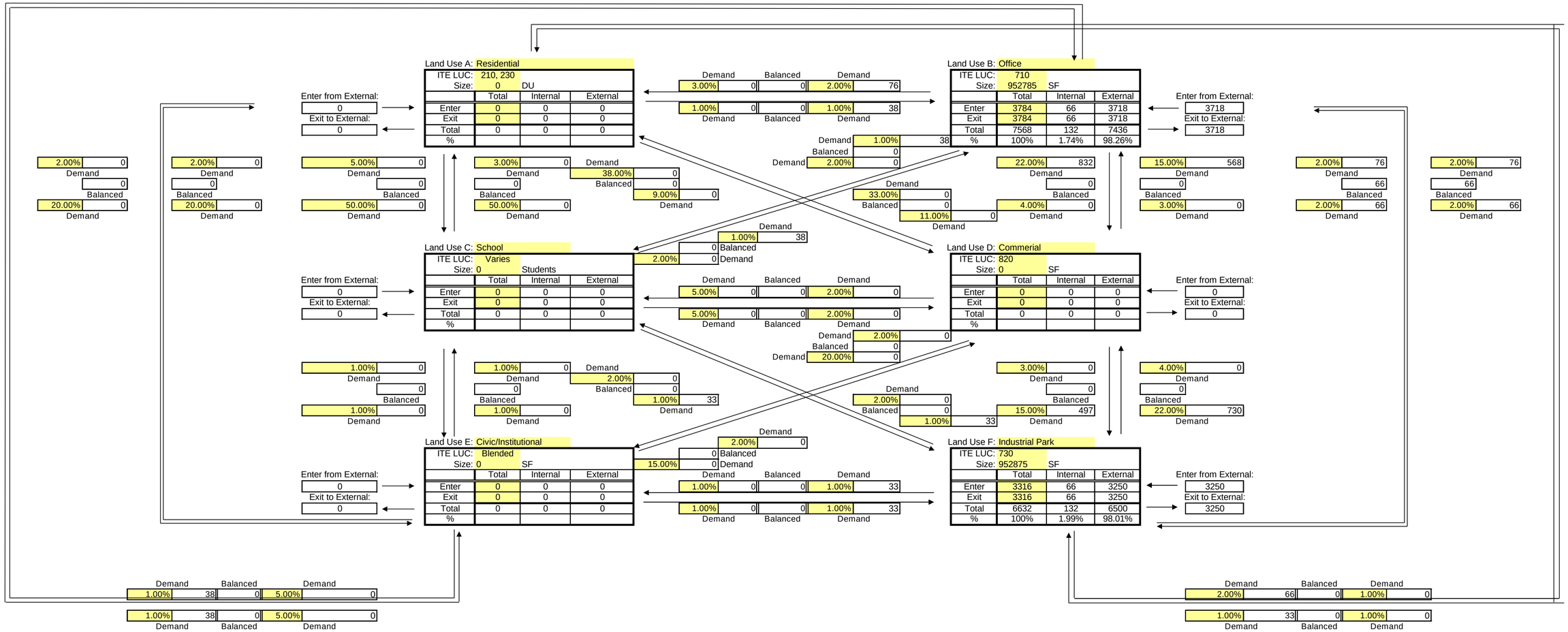
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3524	0	0	5916	0	11	9451
Exit	3654	0	0	5786	0	11	9451
Total	7178	0	0	11702	0	22	**18902**
Single Use Trip Gen Estimate	8514	0	0	13014	0	66	**21594**
	15.69%	0.00%	0.00%	10.08%	0.00%	66.67%	

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

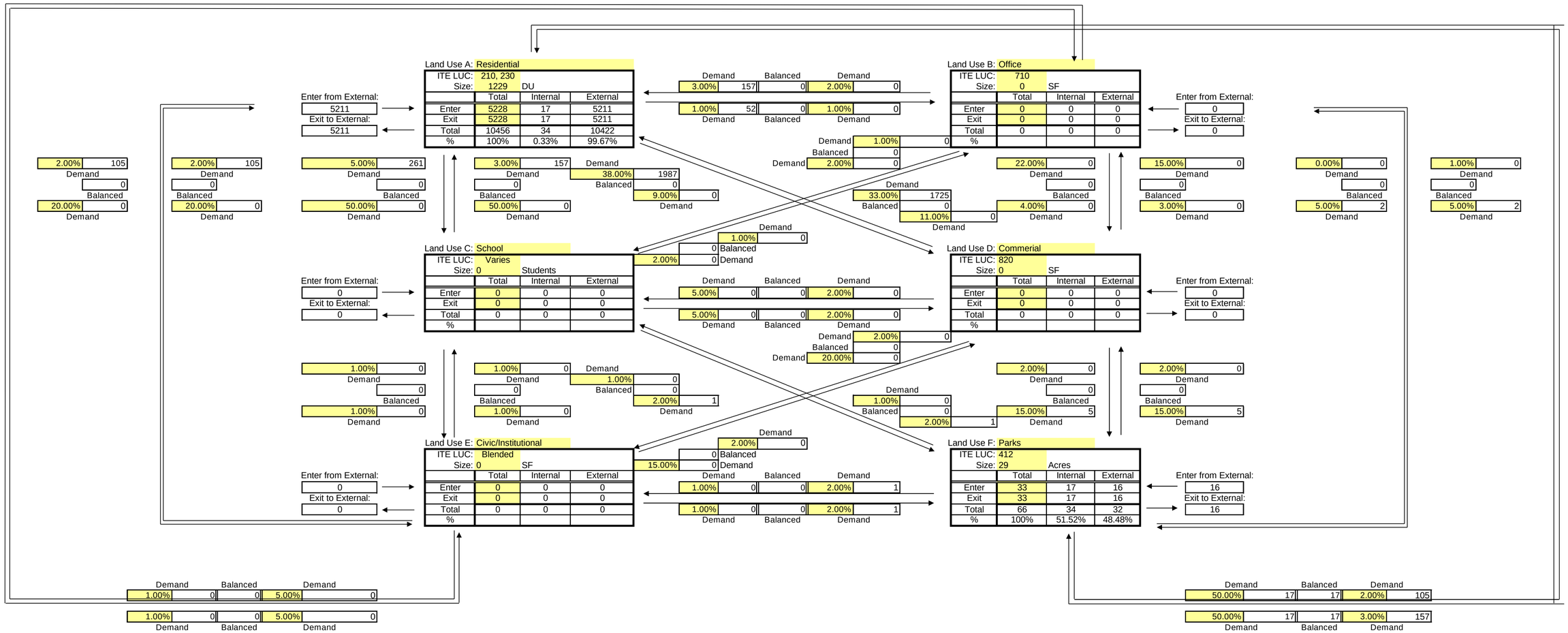
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	3718	0	0	0	3250	6968
Exit	0	3718	0	0	0	3250	6968
Total	0	7436	0	0	0	6500	**13936**
Single Use Trip Gen Estimate	0	7568	0	0	0	6632	**14200**
	0.00%	1.74%	0.00%	0.00%	0.00%	1.99%	

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

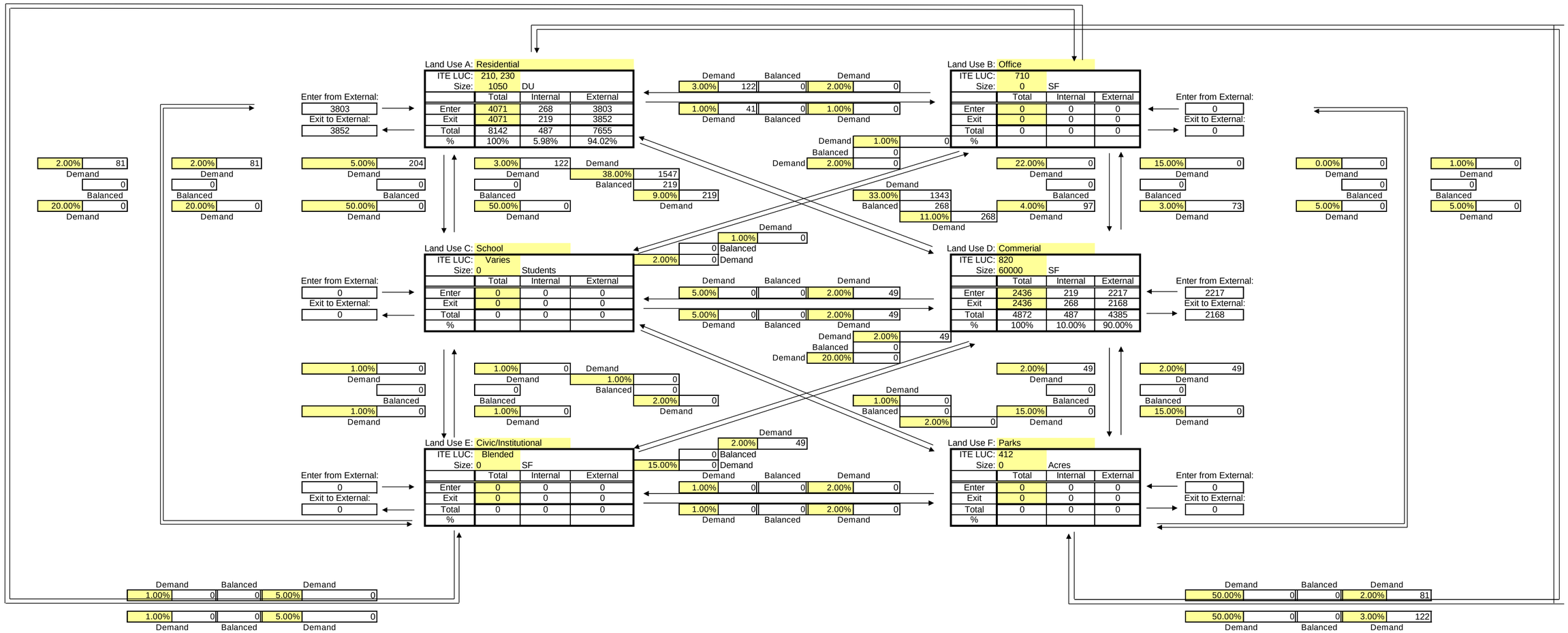
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5211	0	0	0	0	16	5227
Exit	5211	0	0	0	0	16	5227
Total	10422	0	0	0	0	32	**10454**
Single Use Trip Gen Estimate	10456	0	0	0	0	66	**10522**
	0.33%	0.00%	0.00%	0.00%	0.00%	51.52%	

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

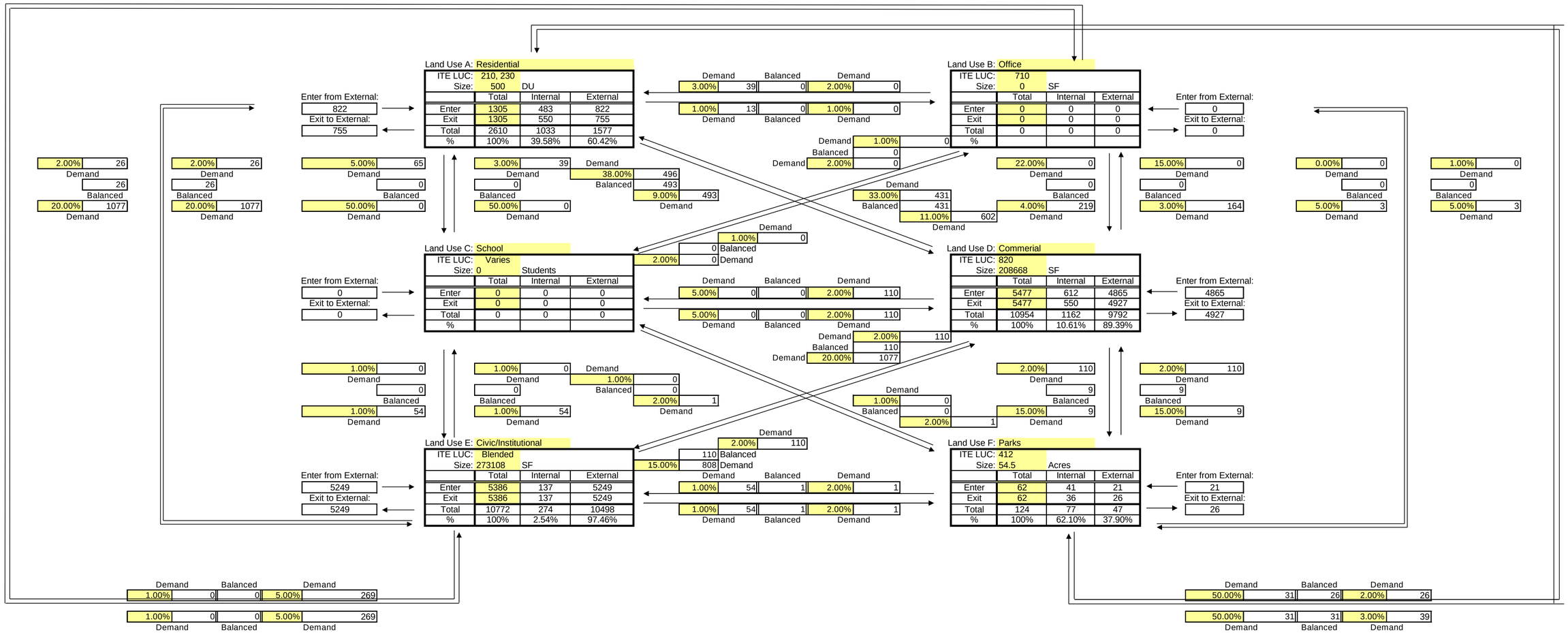
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3803	0	0	2217	0	0	6020
Exit	3852	0	0	2168	0	0	6020
Total	7655	0	0	4385	0	0	**12040**
Single Use Trip Gen Estimate	8142	0	0	4872	0	0	**13014**
	5.98%	0.00%	0.00%	10.00%	0.00%	0.00%	

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

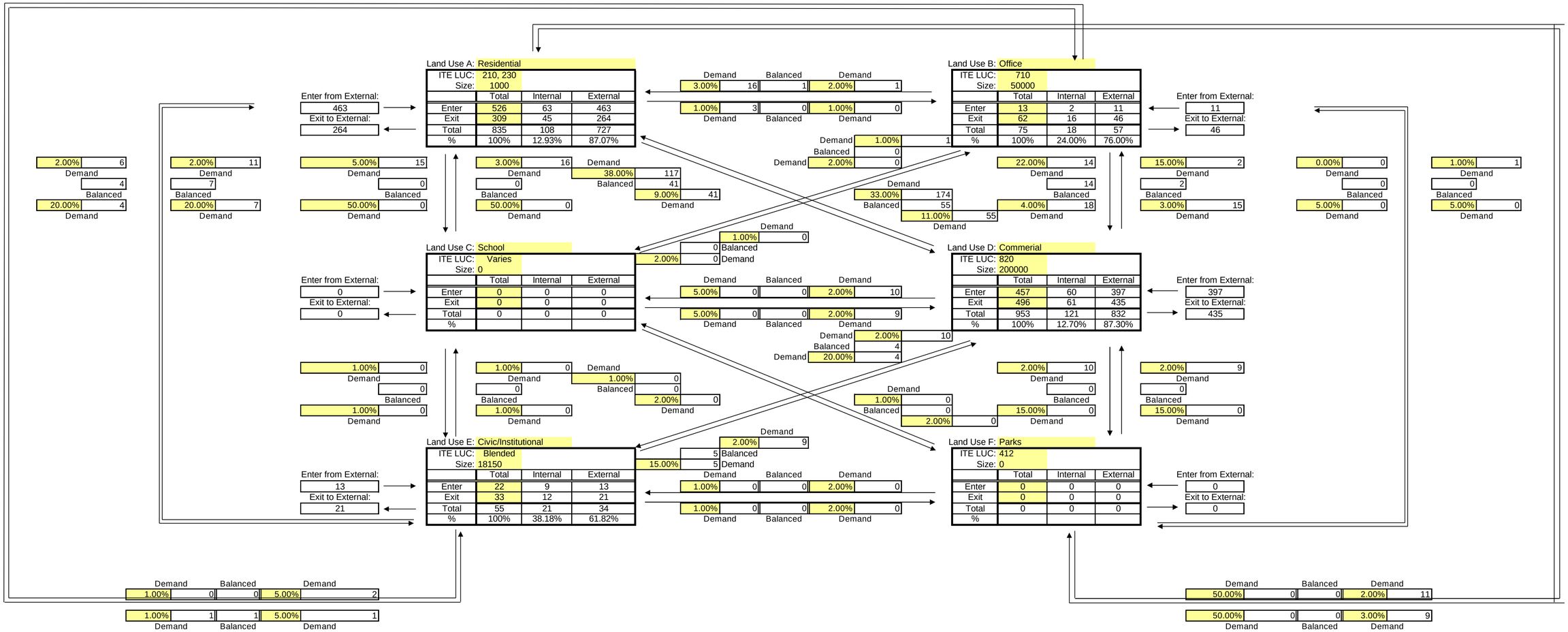
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	822	0	0	4865	5249	21	10957
Exit	755	0	0	4927	5249	26	10957
Total	1577	0	0	9792	10498	47	**21914**
Single Use Trip Gen Estimate	2610	0	0	10954	10772	124	**24460**
	39.58%	0.00%	0.00%	10.61%	2.54%	62.10%	

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

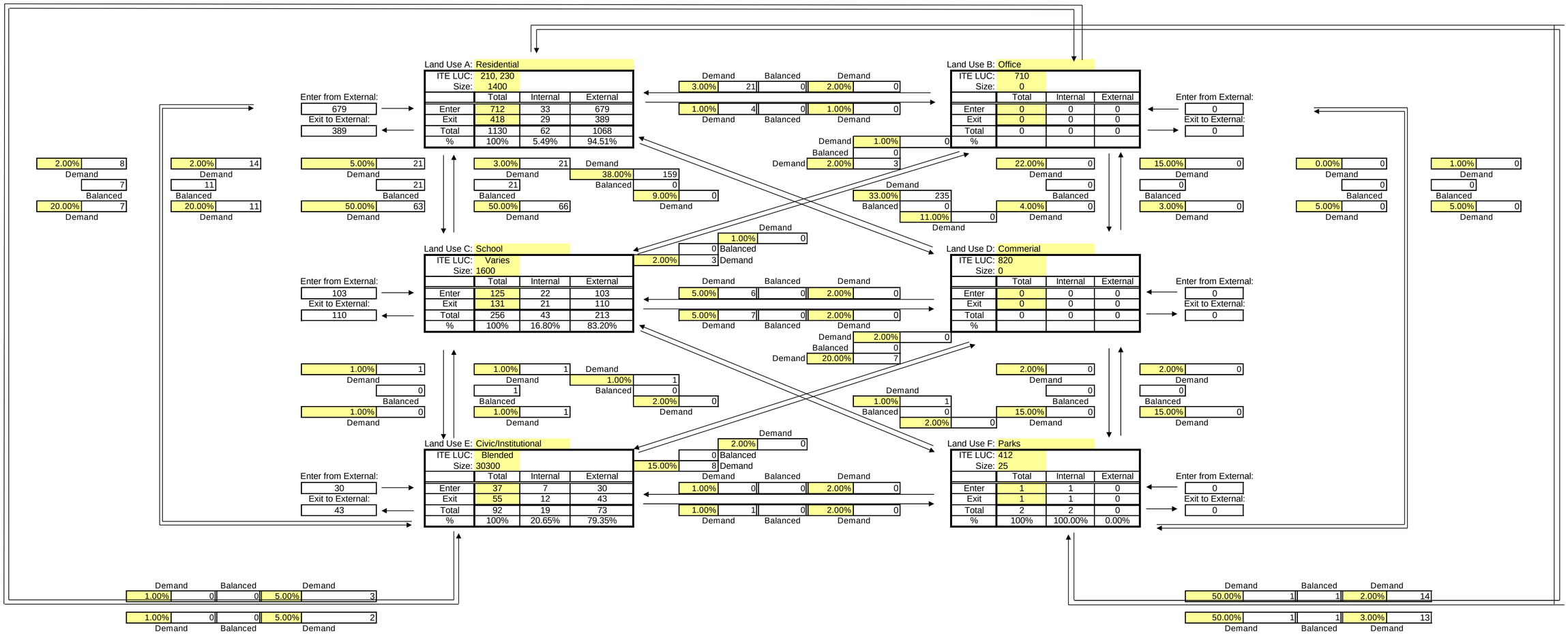
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	463	11	0	397	13	0	884
Exit	264	46	0	435	21	0	766
Total	727	57	0	832	34	0	**1650**
Single Use Trip Gen Estimate	835	75	0	953	55	0	**1918**
	12.93%	24.00%	0.00%	12.70%	38.18%	0.00%	

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

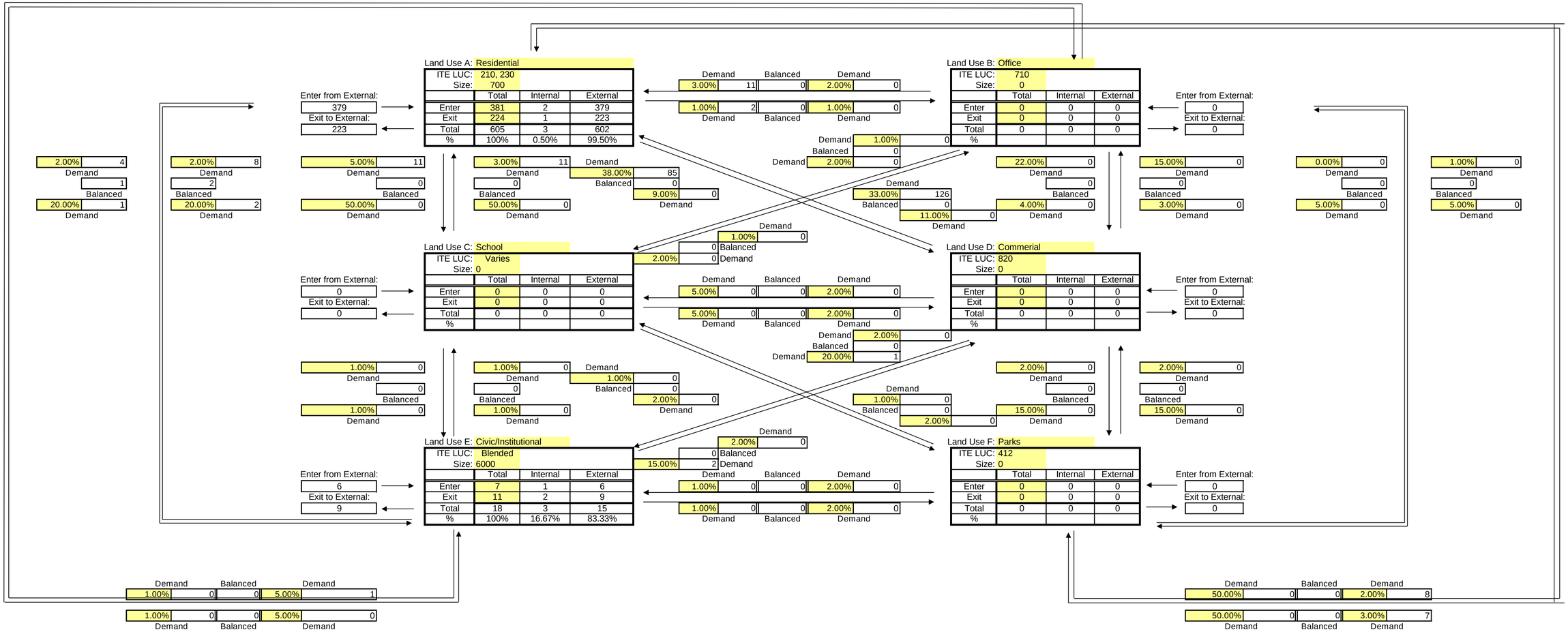
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	679	0	103	0	30	0	812
Exit	389	0	110	0	43	0	542
Total	1068	0	213	0	73	0	**1354**
Single Use Trip Gen Estimate	1130	0	256	0	92	2	**1480**
	5.49%	0.00%	16.80%	0.00%	20.65%	0.00%	

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

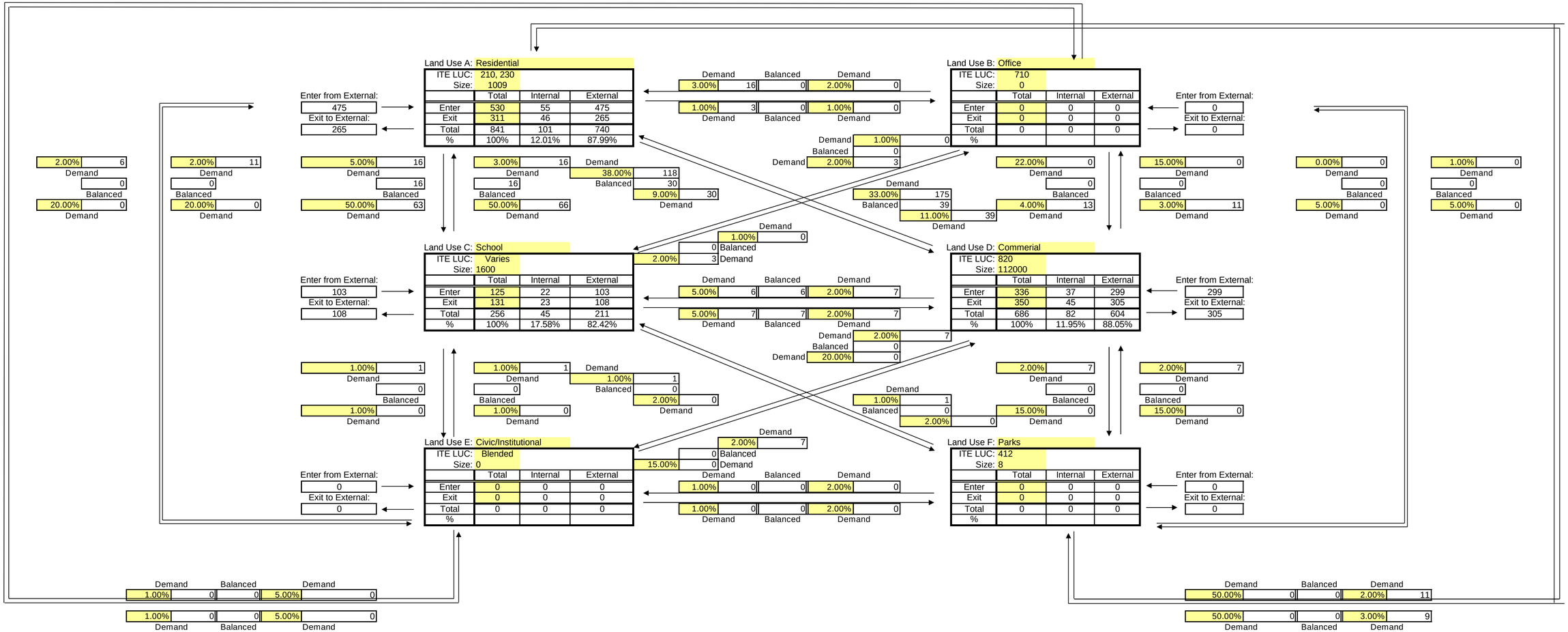
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	379	0	0	0	6	0	385
Exit	223	0	0	0	9	0	232
Total	602	0	0	0	15	0	**617**
Single Use Trip Gen Estimate	605	0	0	0	18	0	**623**
	0.50%	0.00%	0.00%	0.00%	16.67%	0.00%	

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

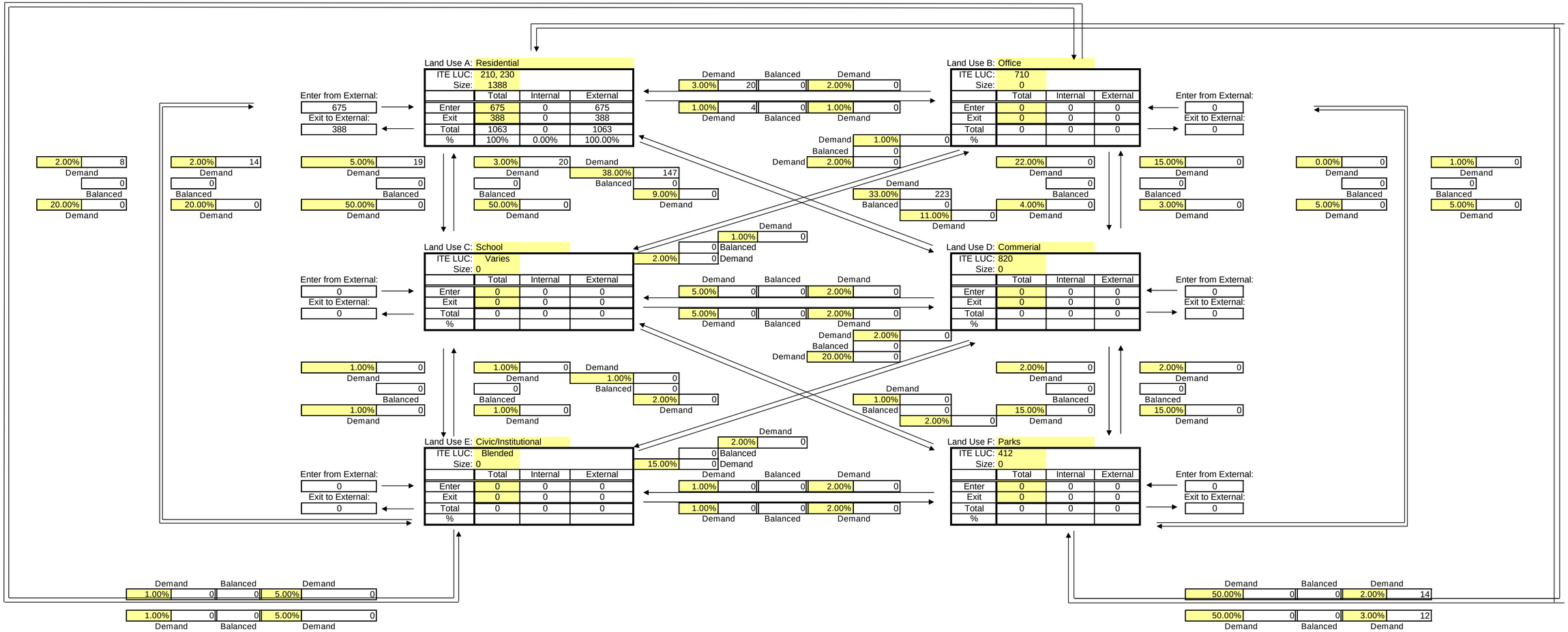
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	475	0	103	299	0	0	877
Exit	265	0	108	305	0	0	678
Total	740	0	211	604	0	0	**1555**
Single Use Trip Gen Estimate	841	0	256	686	0	0	**1783**
	12.01%	0.00%	17.58%	11.95%	0.00%	0.00%	

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

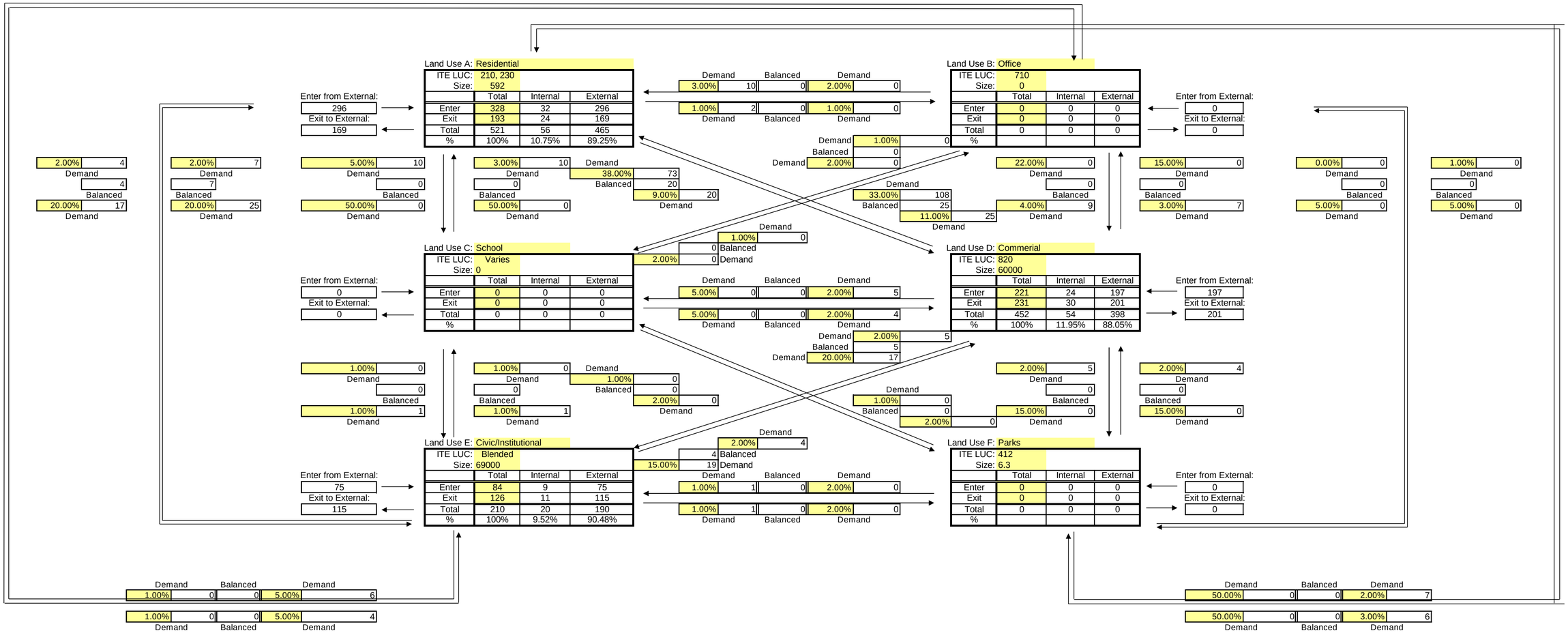
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	675	0	0	0	0	0	675
Exit	388	0	0	0	0	0	388
Total	1063	0	0	0	0	0	**1063**
Single Use Trip Gen Estimate	1063	0	0	0	0	0	**1063**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

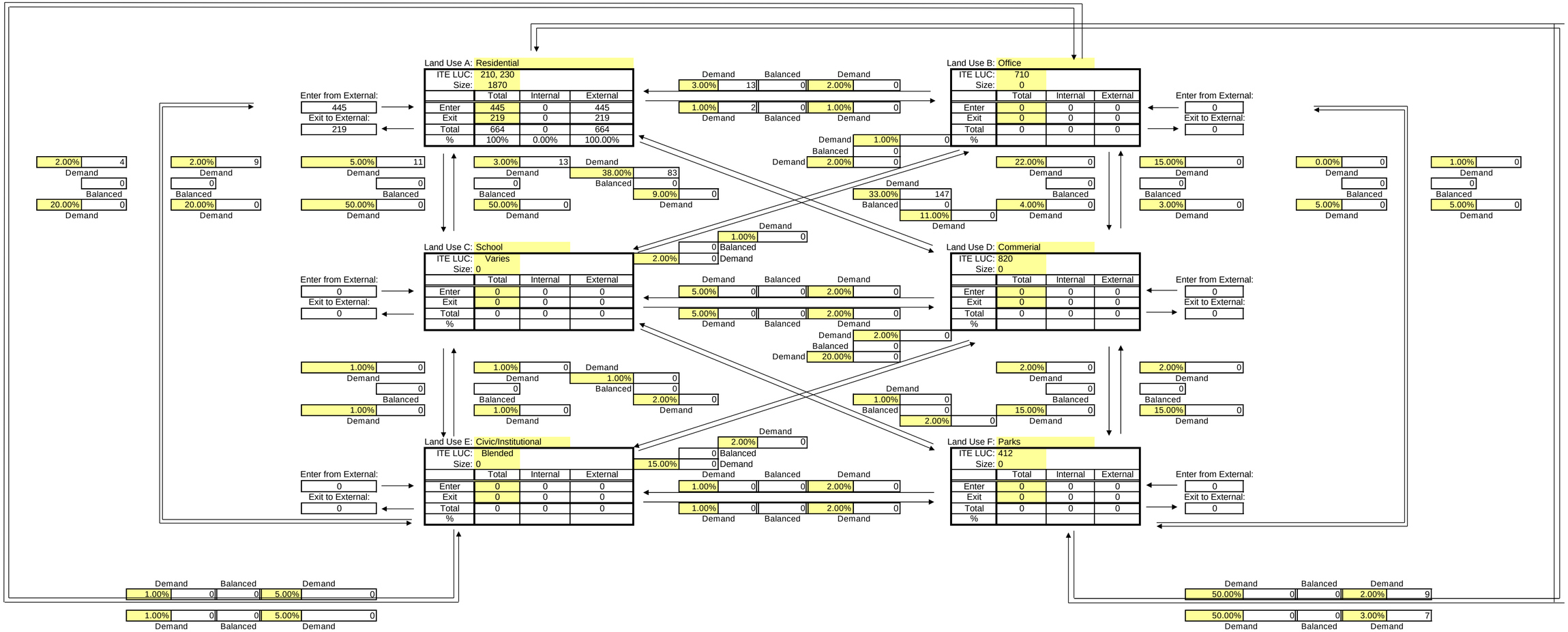
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	296	0	0	197	75	0	568
Exit	169	0	0	201	115	0	485
Total	465	0	0	398	190	0	**1053**
Single Use Trip Gen Estimate	521	0	0	452	210	0	**1183**
	10.75%	0.00%	0.00%	11.95%	9.52%	0.00%	

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

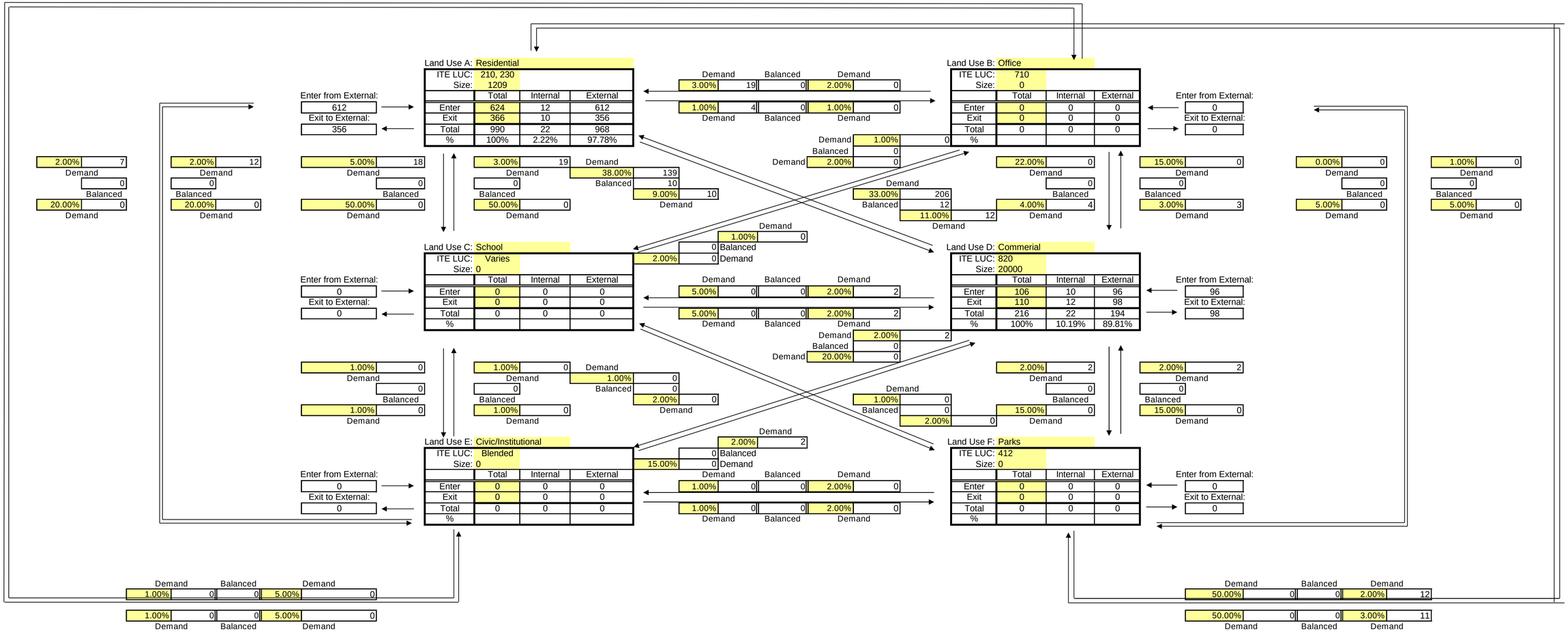
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	445	0	0	0	0	0	445
Exit	219	0	0	0	0	0	219
Total	664	0	0	0	0	0	**664**
Single Use Trip Gen Estimate	664	0	0	0	0	0	**664**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

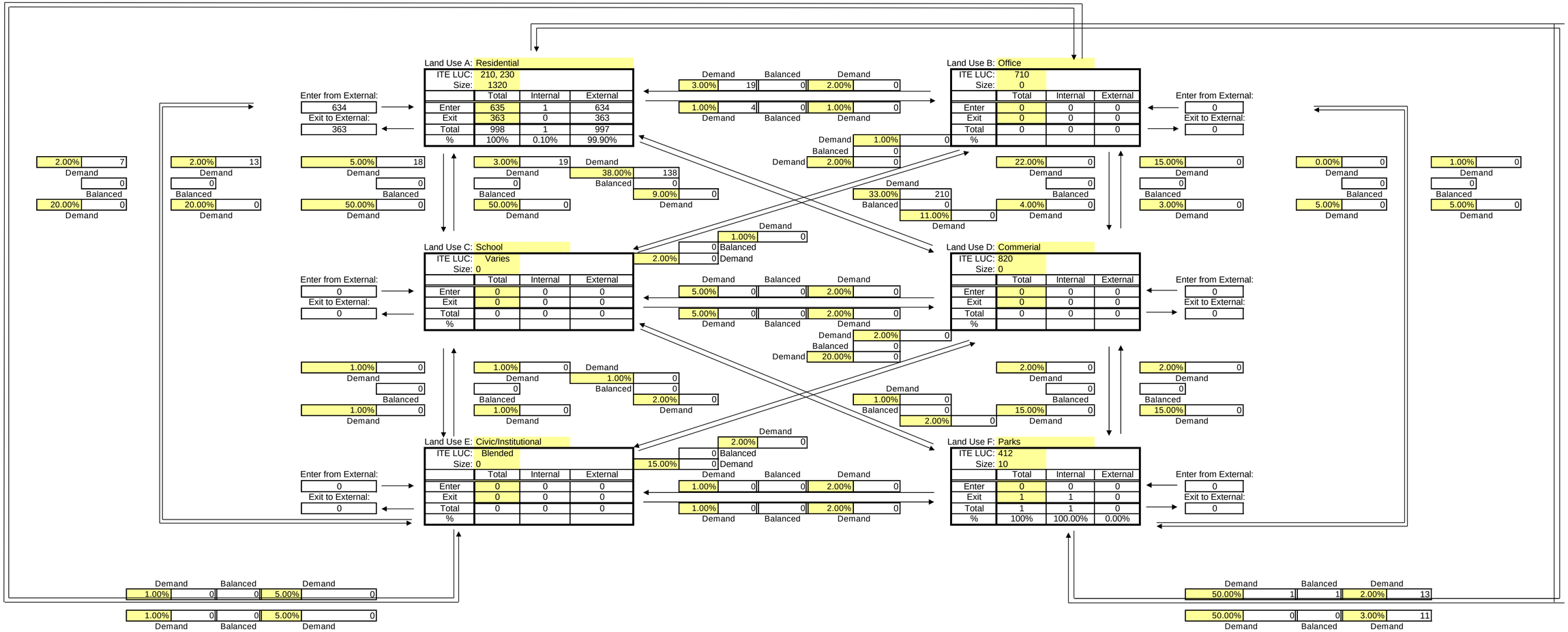
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	612	0	0	96	0	0	708
Exit	356	0	0	98	0	0	454
Total	968	0	0	194	0	0	**1162**
Single Use Trip Gen Estimate	990	0	0	216	0	0	**1206**
	2.22%	0.00%	0.00%	10.19%	0.00%	0.00%	

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

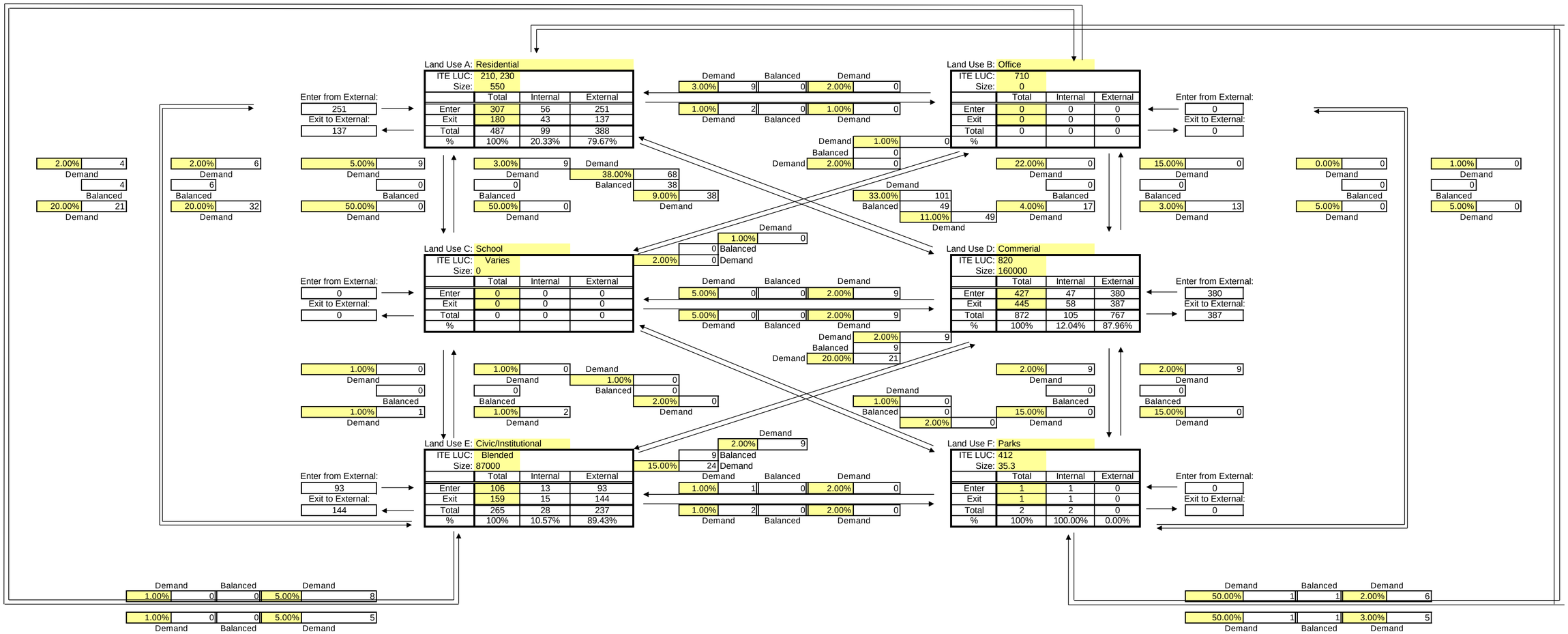
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	634	0	0	0	0	0	634
Exit	363	0	0	0	0	0	363
Total	997	0	0	0	0	0	**997**
Single Use Trip Gen Estimate	998	0	0	0	0	1	**999**
	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

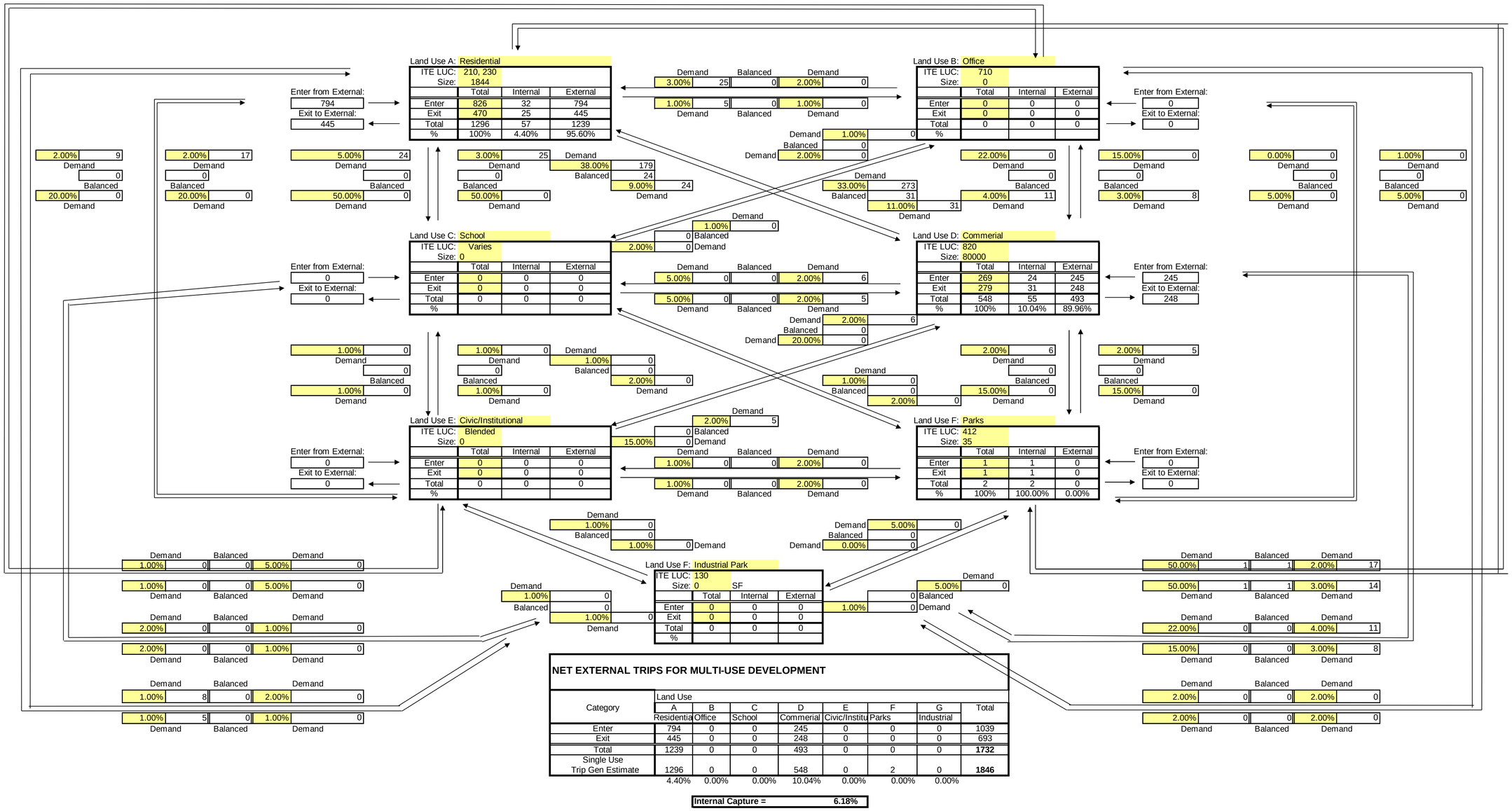
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	251	0	0	380	93	0	724
Exit	137	0	0	387	144	0	668
Total	388	0	0	767	237	0	**1392**
Single Use Trip Gen Estimate	487	0	0	872	265	2	**1626**
	20.33%	0.00%	0.00%	12.04%	10.57%	0.00%	

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

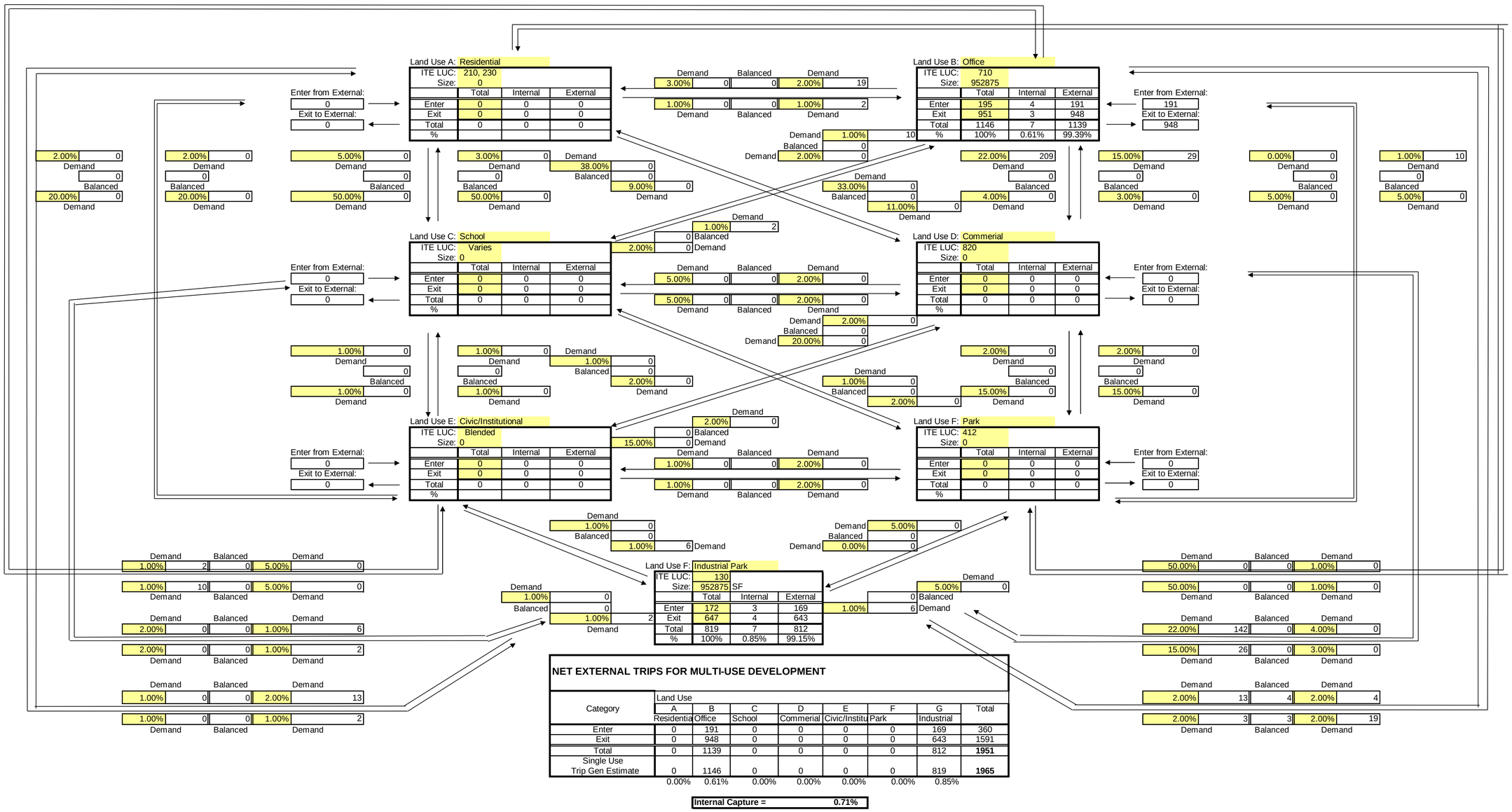
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	794	0	0	245	0	0	0	1039
Exit	445	0	0	248	0	0	0	693
Total	1239	0	0	493	0	0	0	**1732**
Single Use Trip Gen Estimate	1296	0	0	548	0	2	0	**1846**
	4.40%	0.00%	0.00%	10.04%	0.00%	0.00%	0.00%	

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

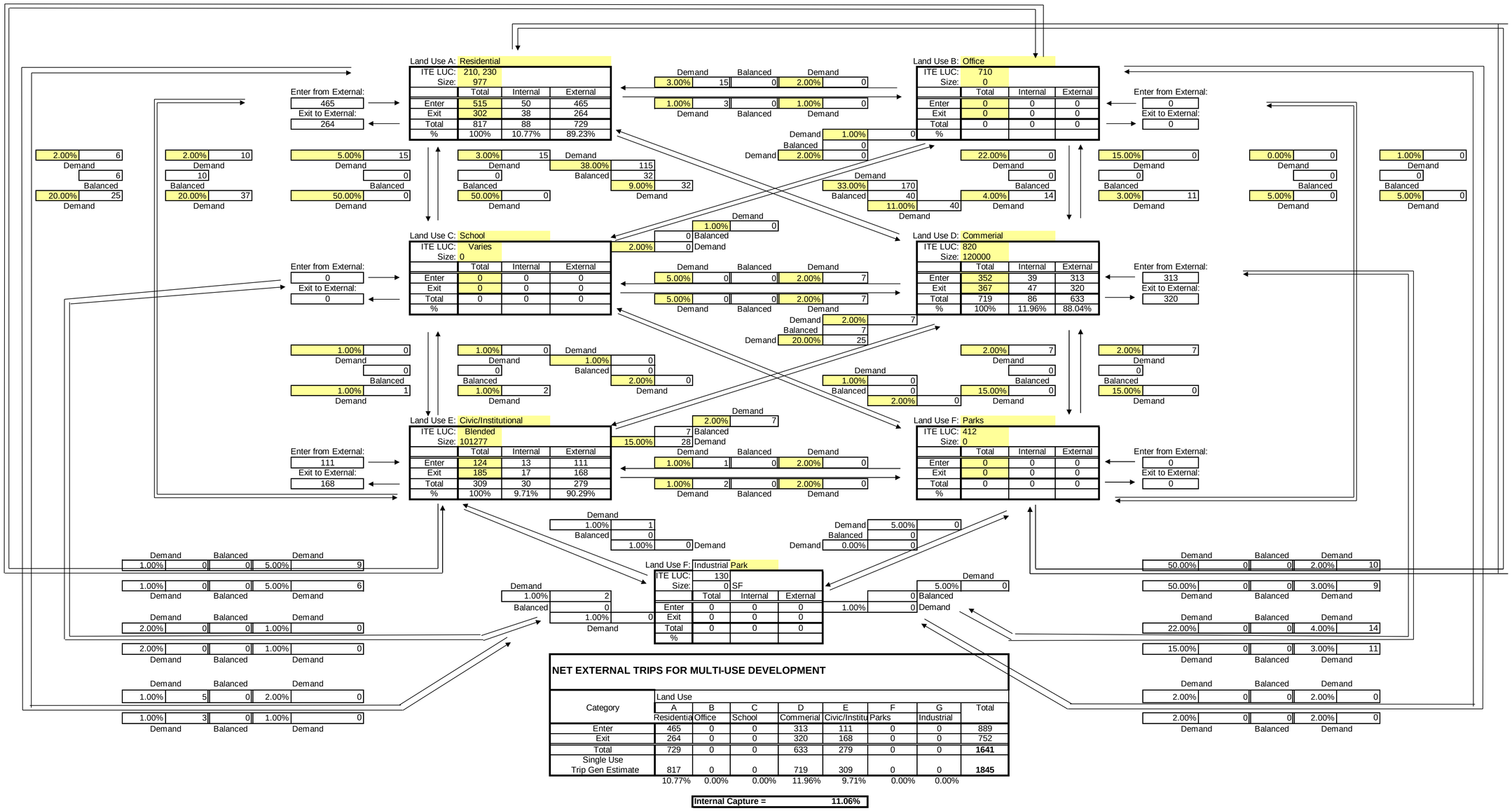
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	191	0	0	0	0	169	360
Exit	0	948	0	0	0	0	643	1591
Total	0	1139	0	0	0	0	812	**1951**
Single Use Trip Gen Estimate	0	1146	0	0	0	0	819	**1965**
	0.00%	0.61%	0.00%	0.00%	0.00%	0.00%	0.85%	

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

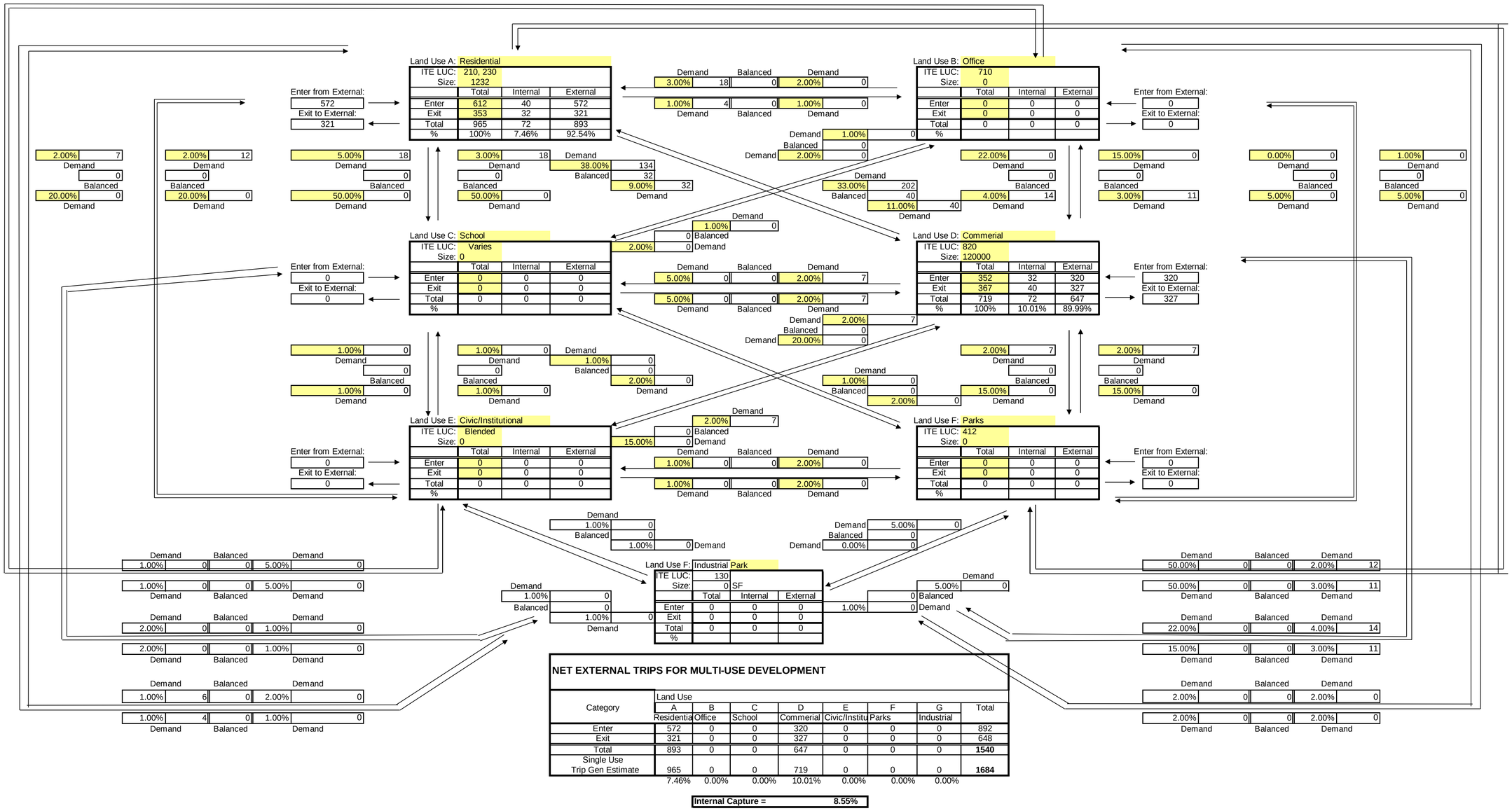
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	465	0	0	313	111	0	0	889
Exit	264	0	0	320	168	0	0	752
Total	729	0	0	633	279	0	0	**1641**
Single Use Trip Gen Estimate	817	0	0	719	309	0	0	**1845**
	10.77%	0.00%	0.00%	11.96%	9.71%	0.00%	0.00%	

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

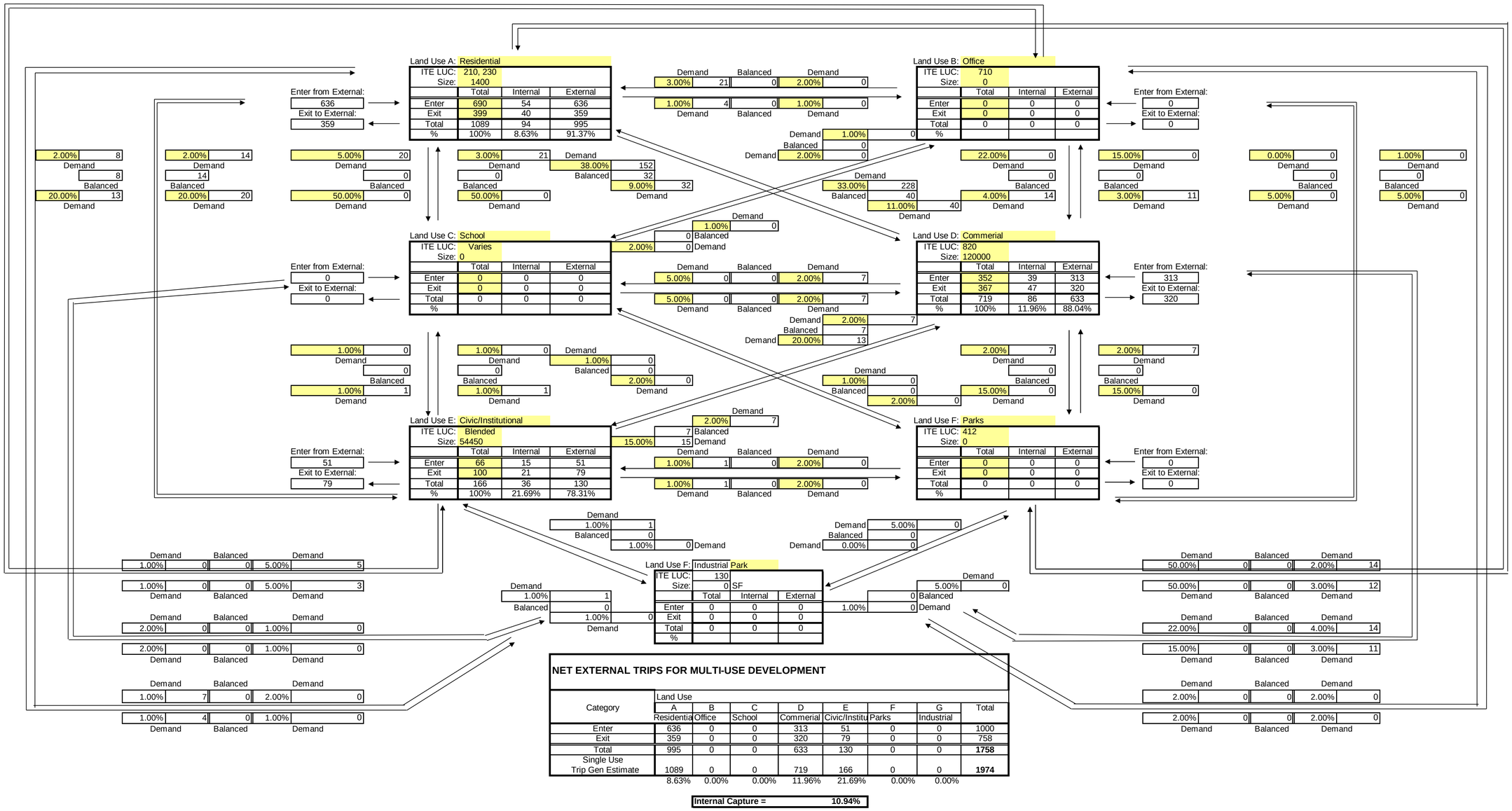
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	572	0	0	320	0	0	0	892
Exit	321	0	0	327	0	0	0	648
Total	893	0	0	647	0	0	0	**1540**
Single Use Trip Gen Estimate	965	0	0	719	0	0	0	**1684**
	7.46%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

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

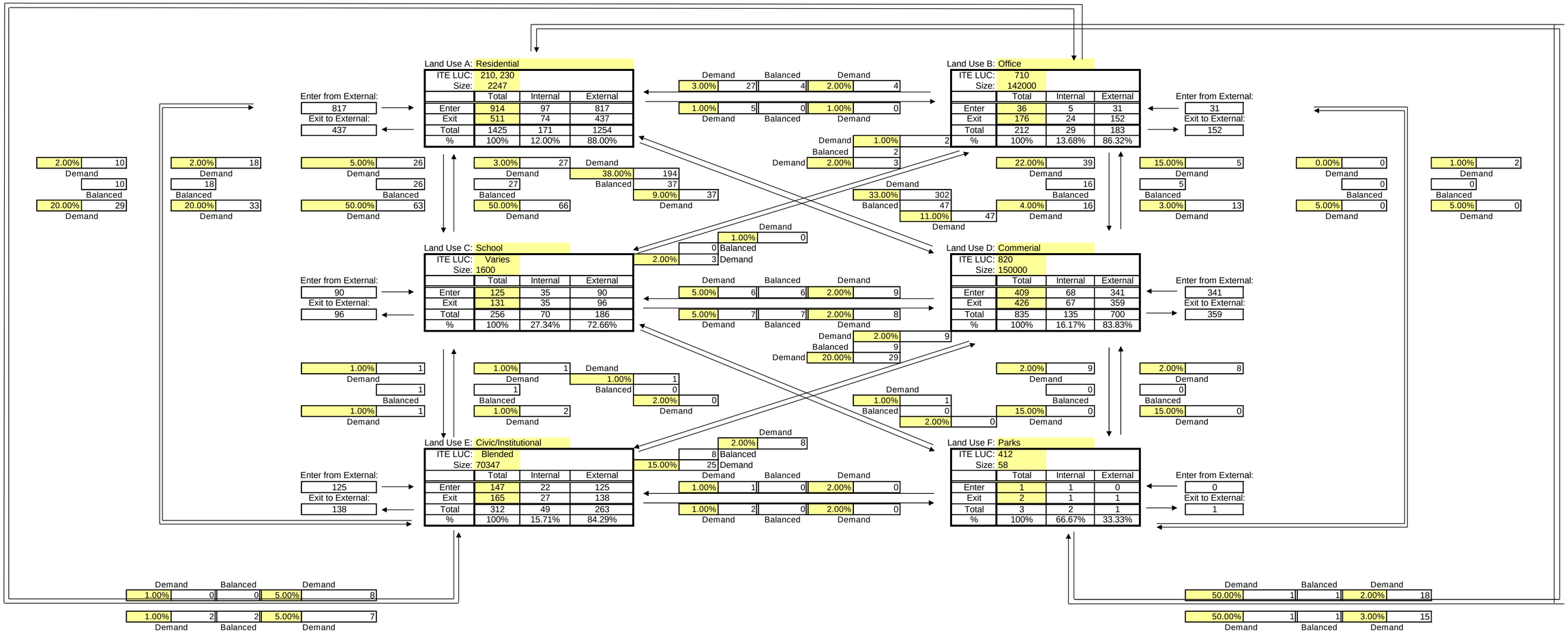
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	636	0	0	313	51	0	0	1000
Exit	359	0	0	320	79	0	0	758
Total	995	0	0	633	130	0	0	**1758**
Single Use Trip Gen Estimate	1089	0	0	719	166	0	0	**1974**
	8.63%	0.00%	0.00%	11.96%	21.69%	0.00%	0.00%	

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

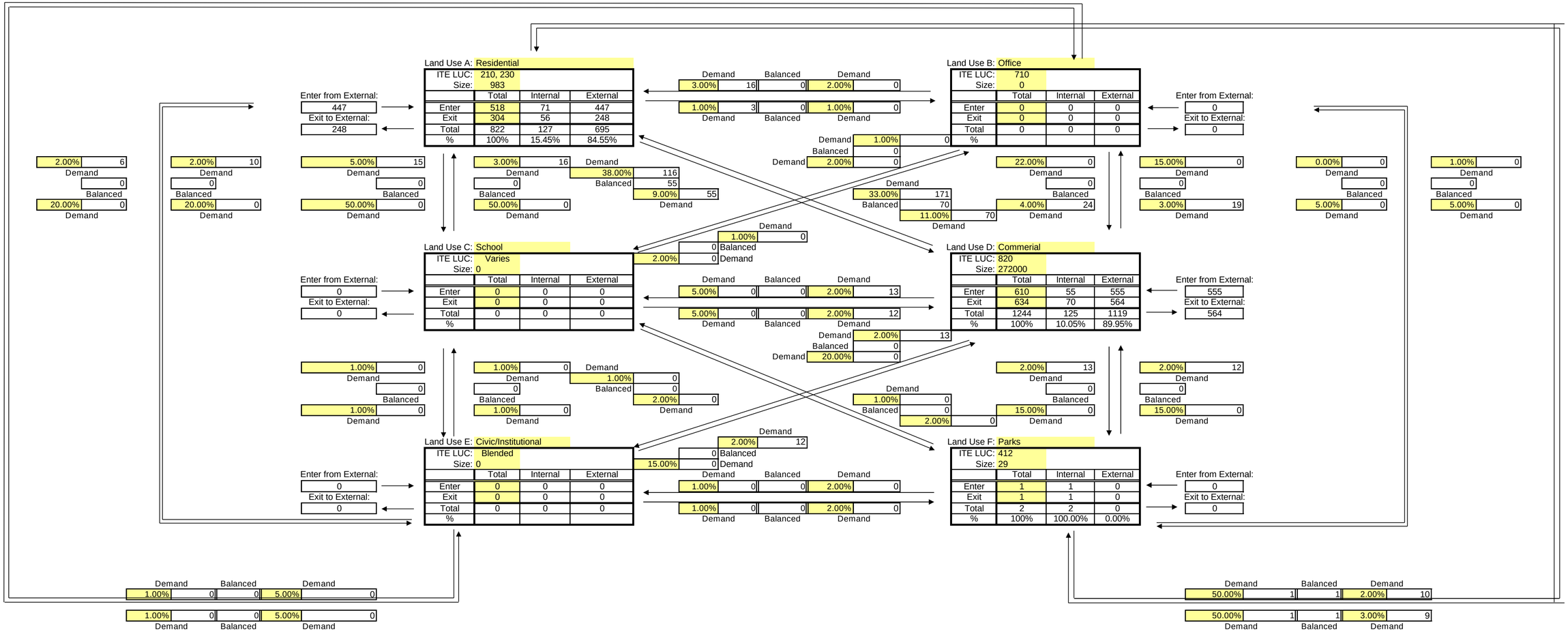
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	817	31	90	341	125	0	1404
Exit	437	152	96	359	138	1	1183
Total	1254	183	186	700	263	1	**2587**
Single Use Trip Gen Estimate	1425	212	256	835	312	3	**3043**
	12.00%	13.68%	27.34%	16.17%	15.71%	66.67%	

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

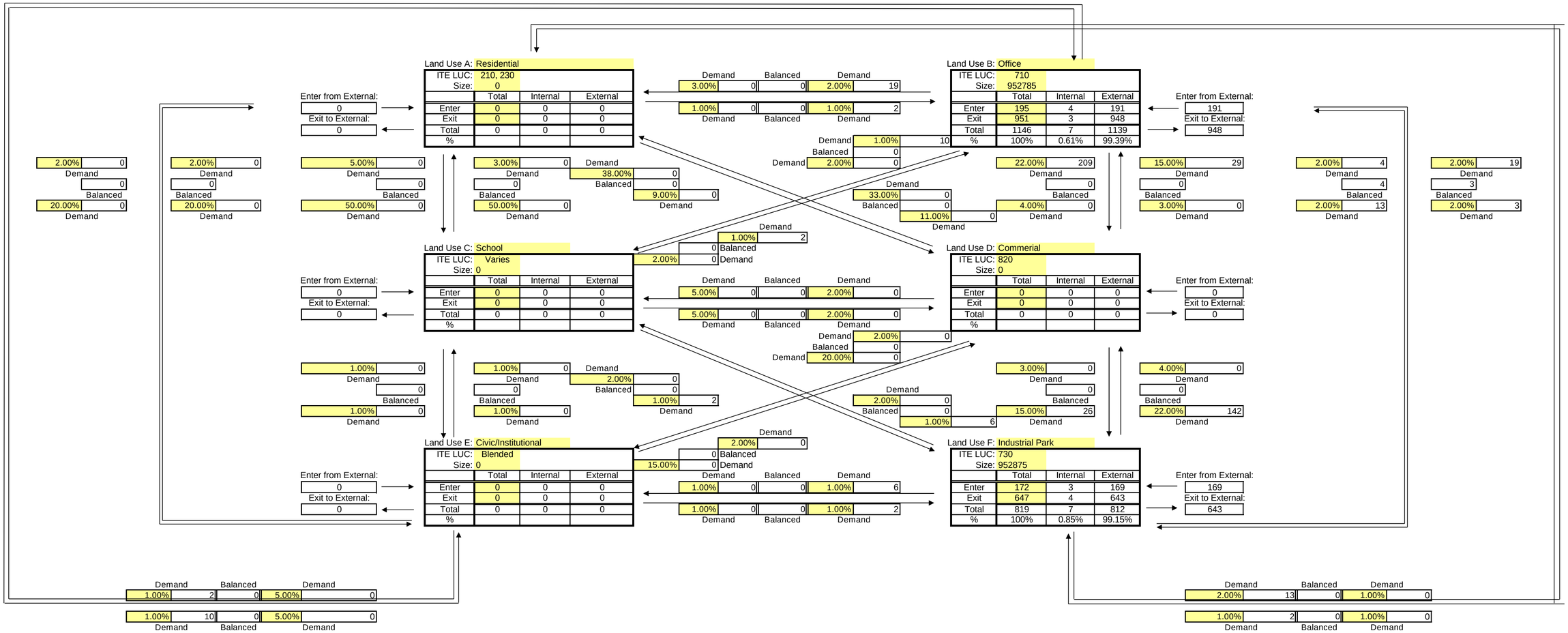
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	447	0	0	555	0	0	1002
Exit	248	0	0	564	0	0	812
Total	695	0	0	1119	0	0	**1814**
Single Use Trip Gen Estimate	822	0	0	1244	0	2	**2068**
	15.45%	0.00%	0.00%	10.05%	0.00%	0.00%	

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

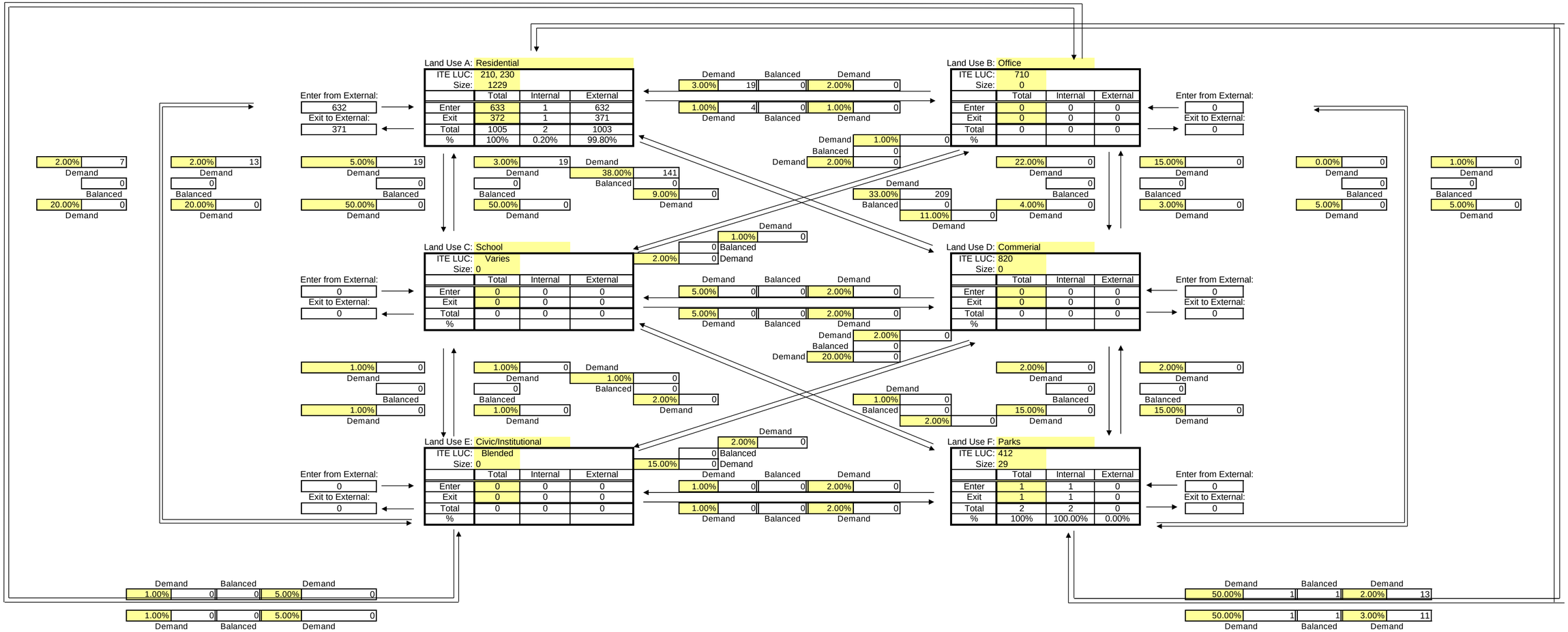
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	191	0	0	0	169	360
Exit	0	948	0	0	0	643	1591
Total	0	1139	0	0	0	812	**1951**
Single Use Trip Gen Estimate	0	1146	0	0	0	819	**1965**
	0.00%	0.61%	0.00%	0.00%	0.00%	0.85%	

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

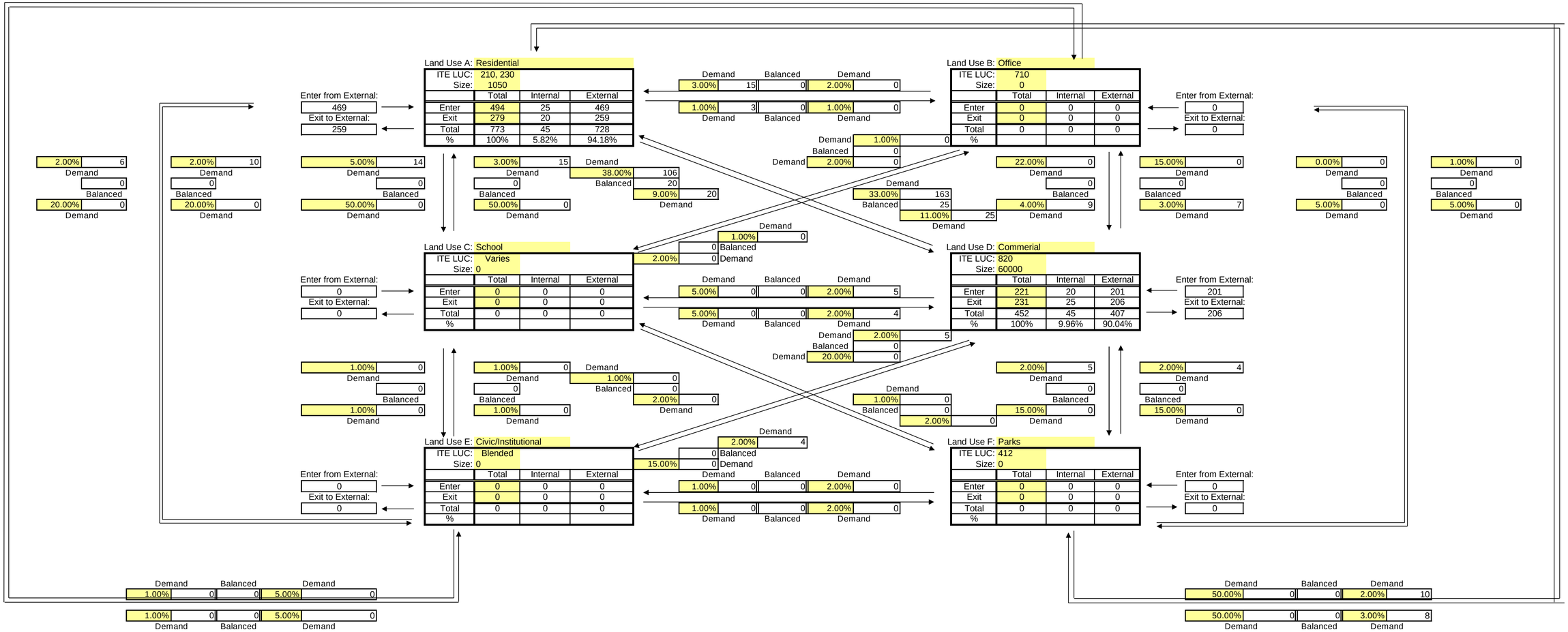
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	632	0	0	0	0	0	632
Exit	371	0	0	0	0	0	371
Total	1003	0	0	0	0	0	**1003**
Single Use Trip Gen Estimate	1005	0	0	0	0	2	**1007**
	0.20%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

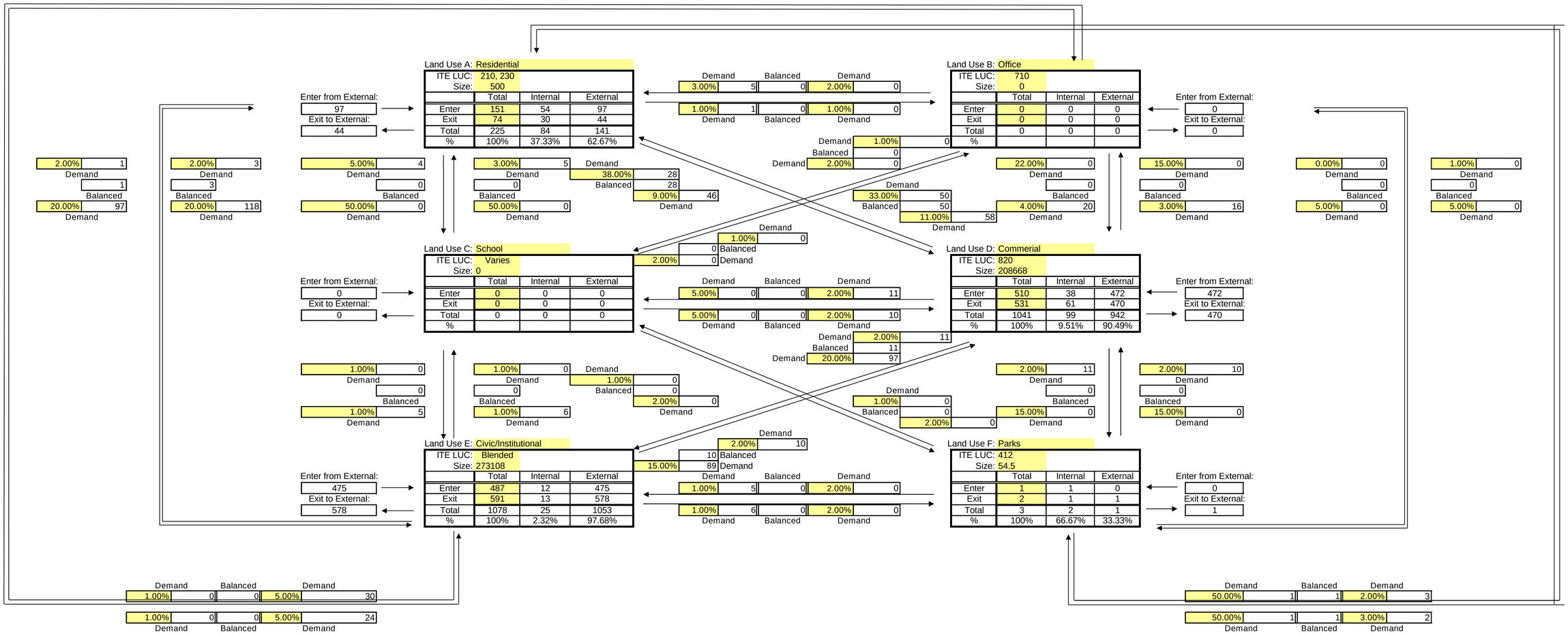
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	469	0	0	201	0	0	670
Exit	259	0	0	206	0	0	465
Total	728	0	0	407	0	0	**1135**
Single Use Trip Gen Estimate	773	0	0	452	0	0	**1225**
	5.82%	0.00%	0.00%	9.96%	0.00%	0.00%	

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-3

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

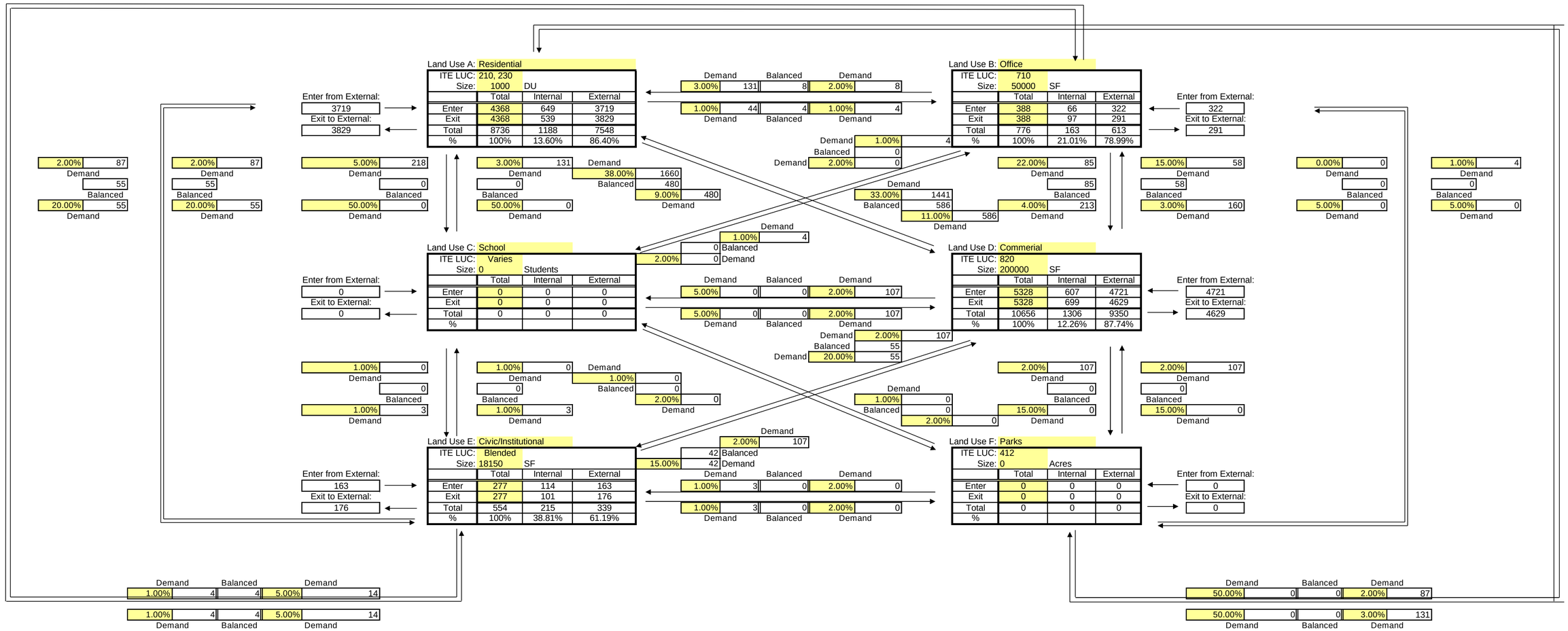
Commercial Retail Pass-By Calculation:		
Intensity =	150,000	s.f.
External Trips from Matrix =	696	trips
Pass-By Percent =	34%	
Pass-By Reduction =	177	trips

	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

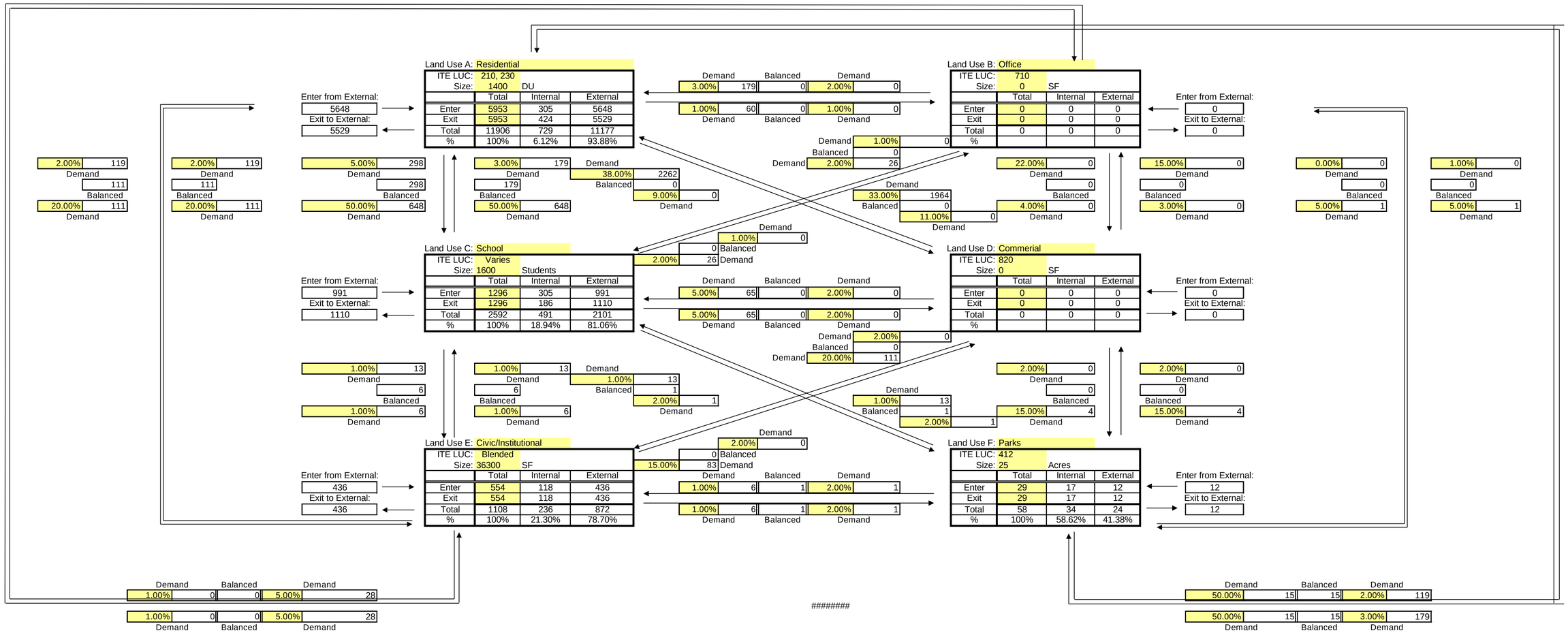
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3719	322	0	4721	163	0	8925
Exit	3829	291	0	4629	176	0	8925
Total	7548	613	0	9350	339	0	**17850**
Single Use Trip Gen Estimate	8736	776	0	10656	554	0	**20722**
	13.60%	21.01%	0.00%	12.26%	38.81%	0.00%	

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

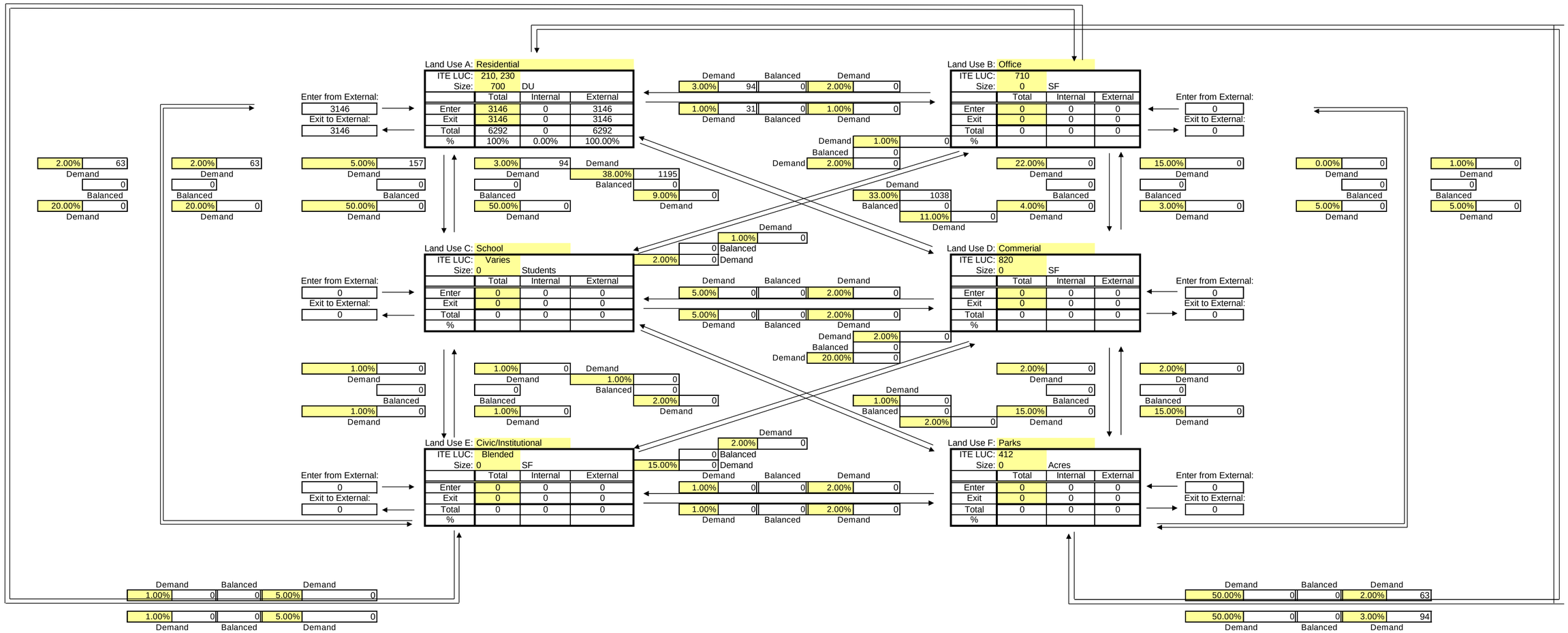
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5648	0	991	0	436	12	7087
Exit	5529	0	1110	0	436	12	7087
Total	11177	0	2101	0	872	24	**14174**
Single Use Trip Gen Estimate	11906	0	2592	0	1108	58	**15664**
	6.12%	0.00%	18.94%	0.00%	21.30%	58.62%	

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

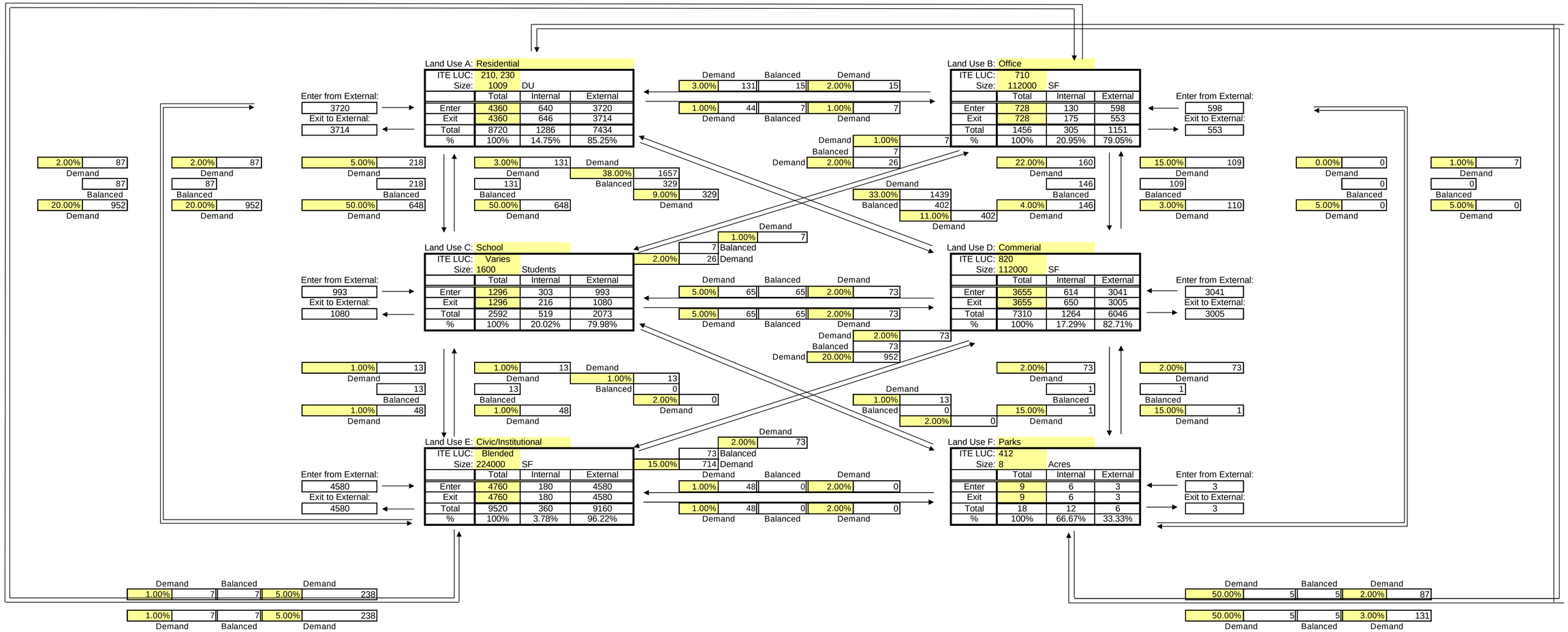
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3146	0	0	0	0	0	3146
Exit	3146	0	0	0	0	0	3146
Total	6292	0	0	0	0	0	**6292**
Single Use Trip Gen Estimate	6292	0	0	0	0	0	**6292**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

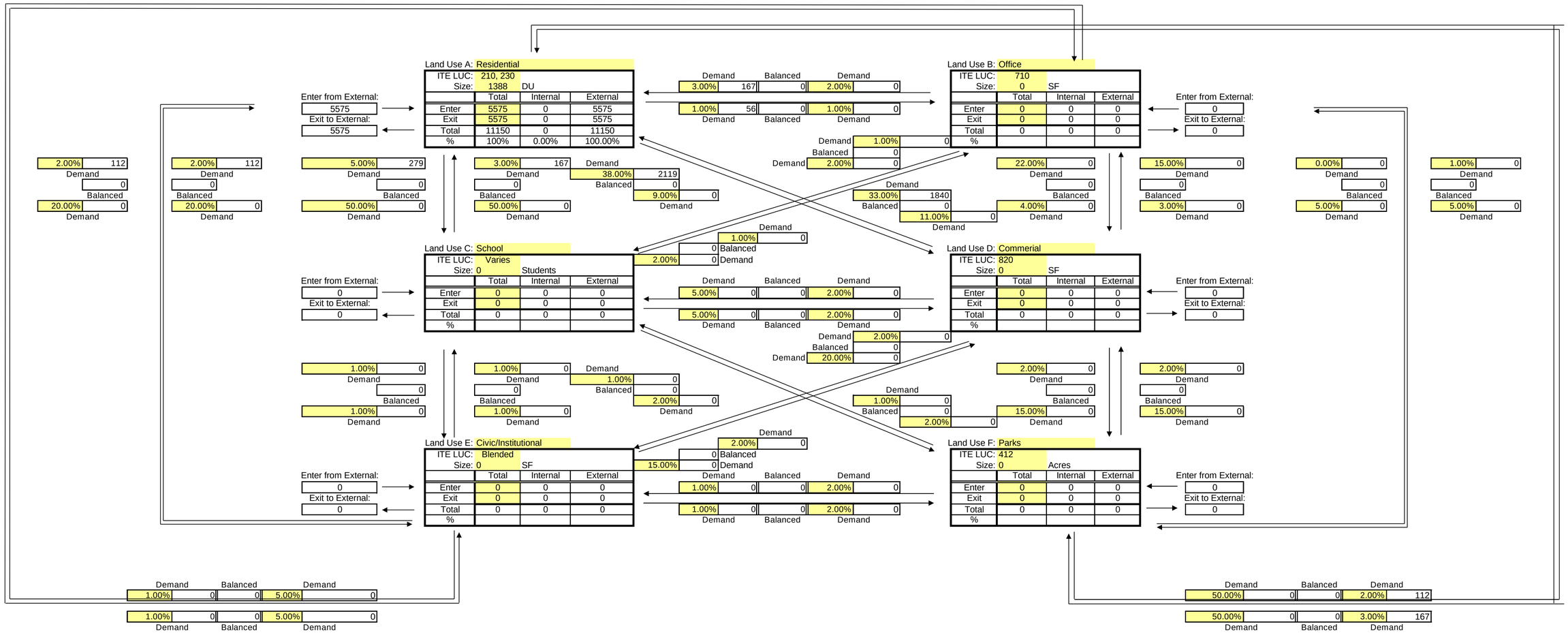
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3720	598	993	3041	4580	3	12935
Exit	3714	553	1080	3005	4580	3	12935
Total	7434	1151	2073	6046	9160	6	**25870**
Single Use Trip Gen Estimate	8720	1456	2592	7310	9520	18	**29616**
	14.75%	20.95%	20.02%	17.29%	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

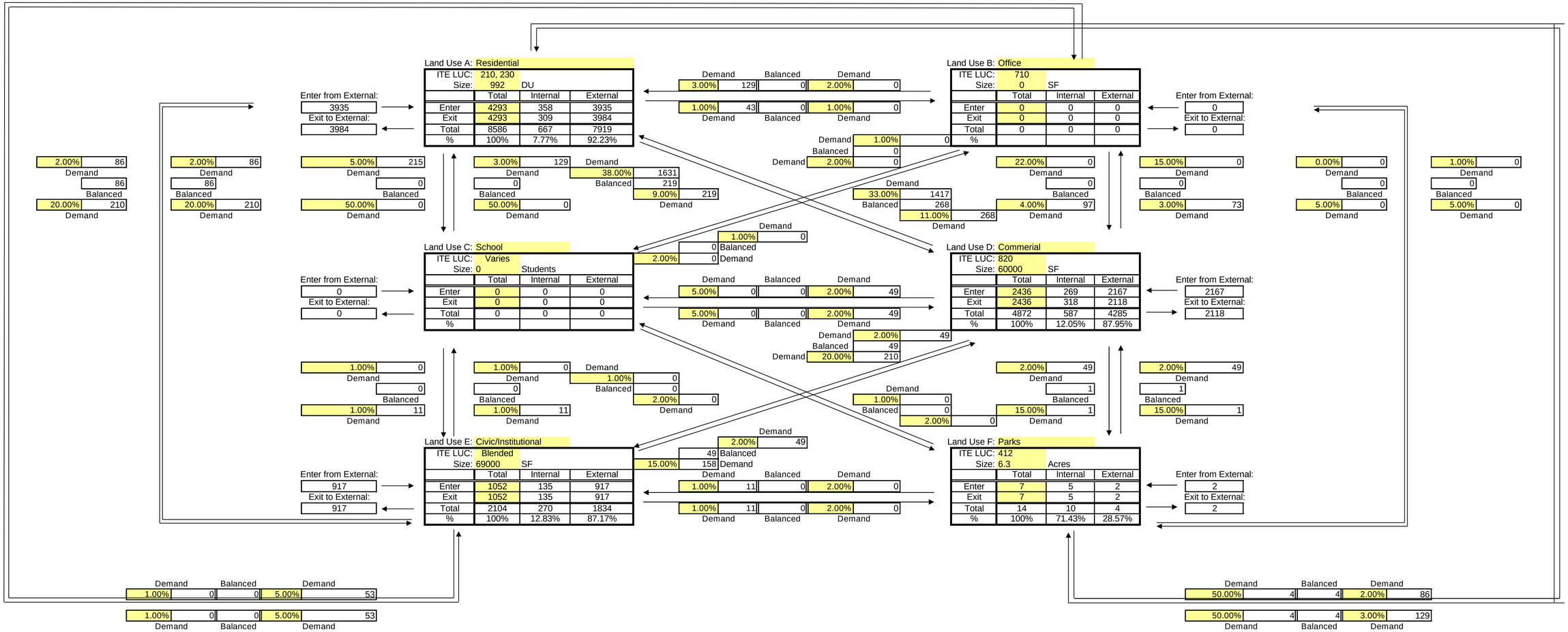
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5575	0	0	0	0	0	5575
Exit	5575	0	0	0	0	0	5575
Total	11150	0	0	0	0	0	**11150**
Single Use Trip Gen Estimate	11150	0	0	0	0	0	**11150**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

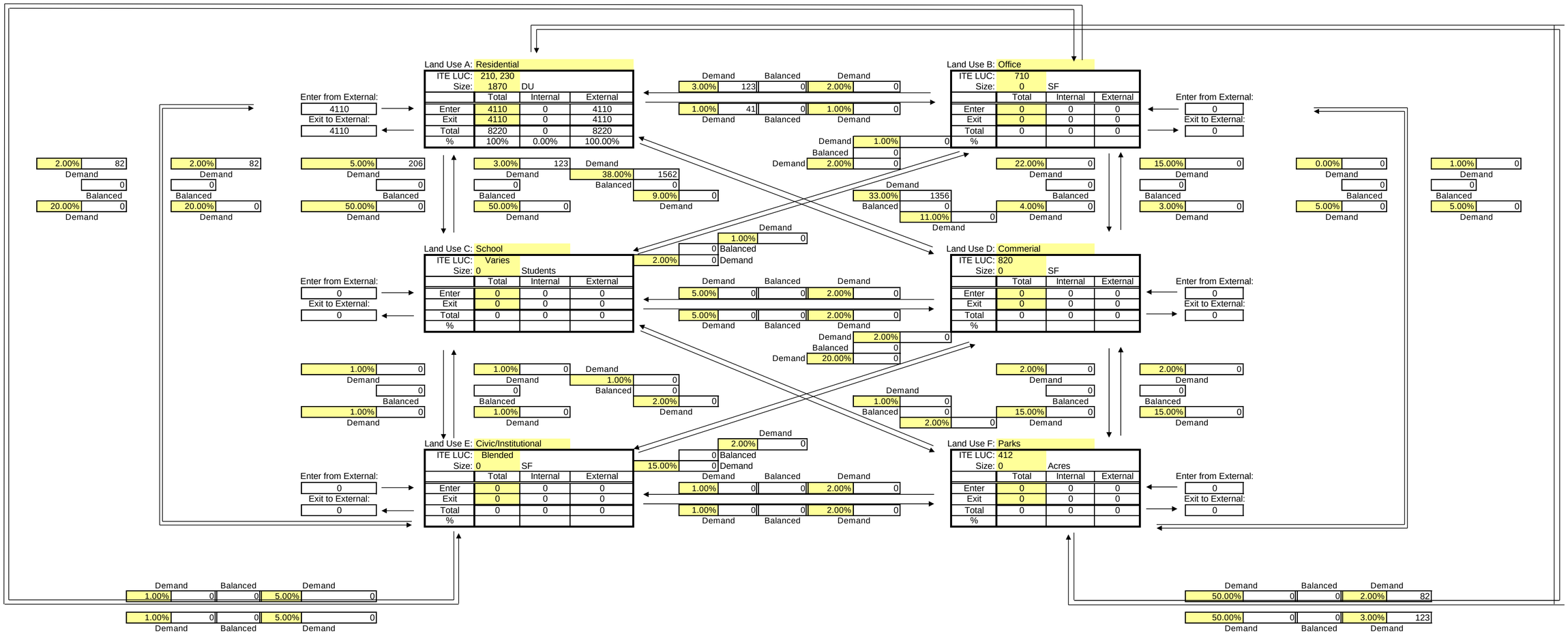
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3935	0	0	2167	917	2	7021
Exit	3984	0	0	2118	917	2	7021
Total	7919	0	0	4285	1834	4	**14042**
Single Use Trip Gen Estimate	8586	0	0	4872	2104	14	**15576**
	7.77%	0.00%	0.00%	12.05%	12.83%	71.43%	

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

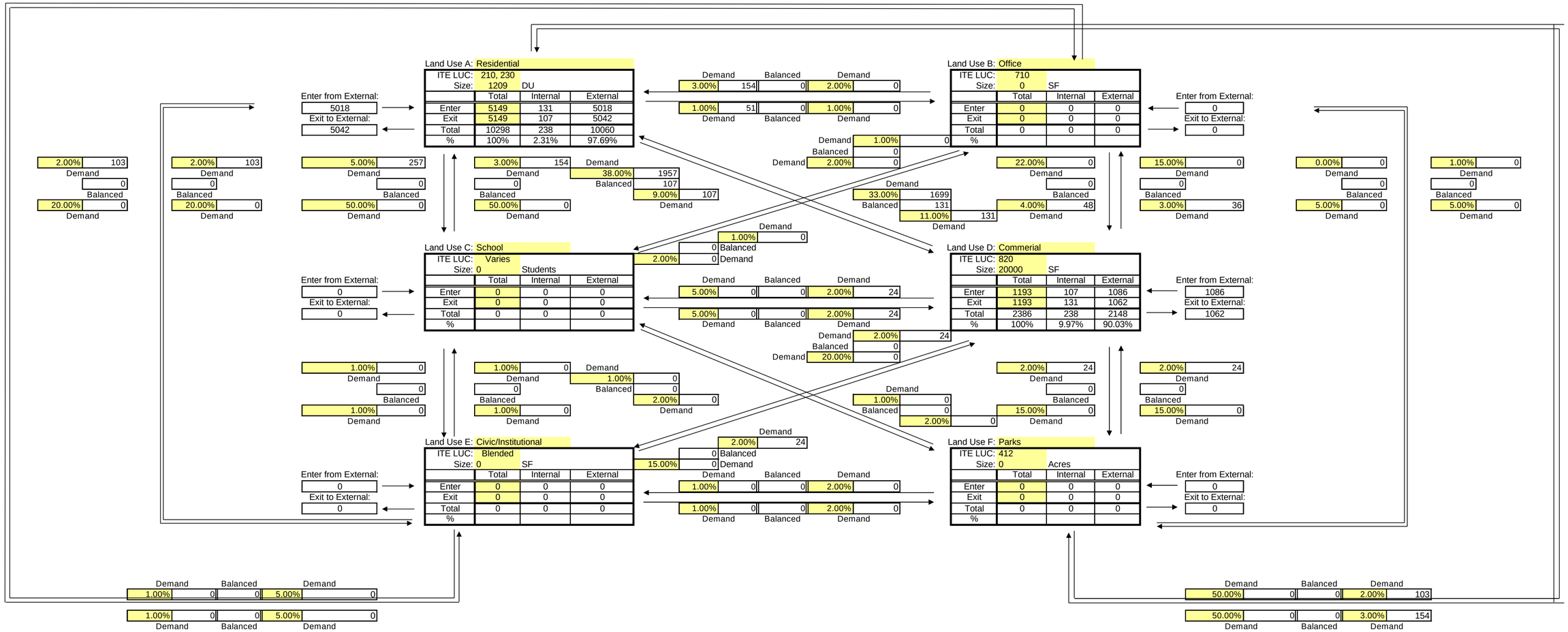
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	4110	0	0	0	0	0	4110
Exit	4110	0	0	0	0	0	4110
Total	8220	0	0	0	0	0	**8220**
Single Use Trip Gen Estimate	8220	0	0	0	0	0	**8220**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

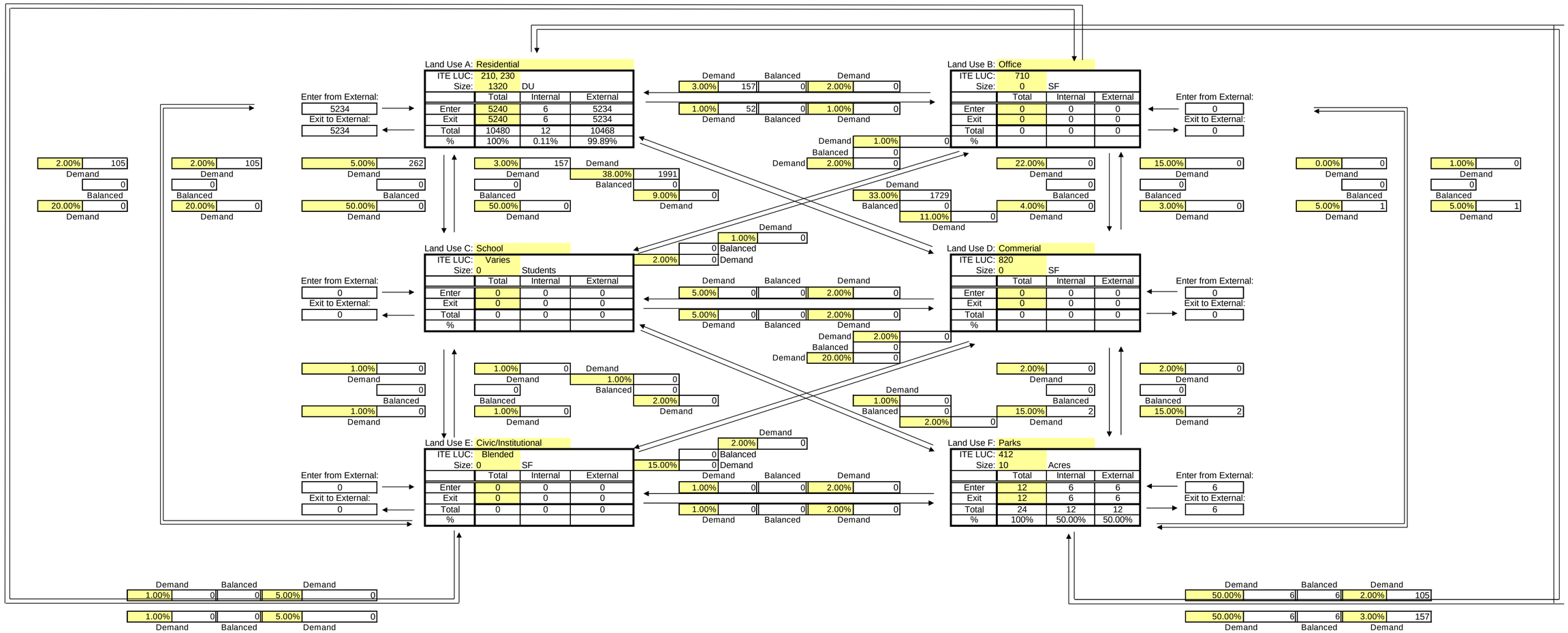
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5018	0	0	1086	0	0	6104
Exit	5042	0	0	1062	0	0	6104
Total	10060	0	0	2148	0	0	**12208**
Single Use Trip Gen Estimate	10298	0	0	2386	0	0	**12684**
	2.31%	0.00%	0.00%	9.97%	0.00%	0.00%	

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

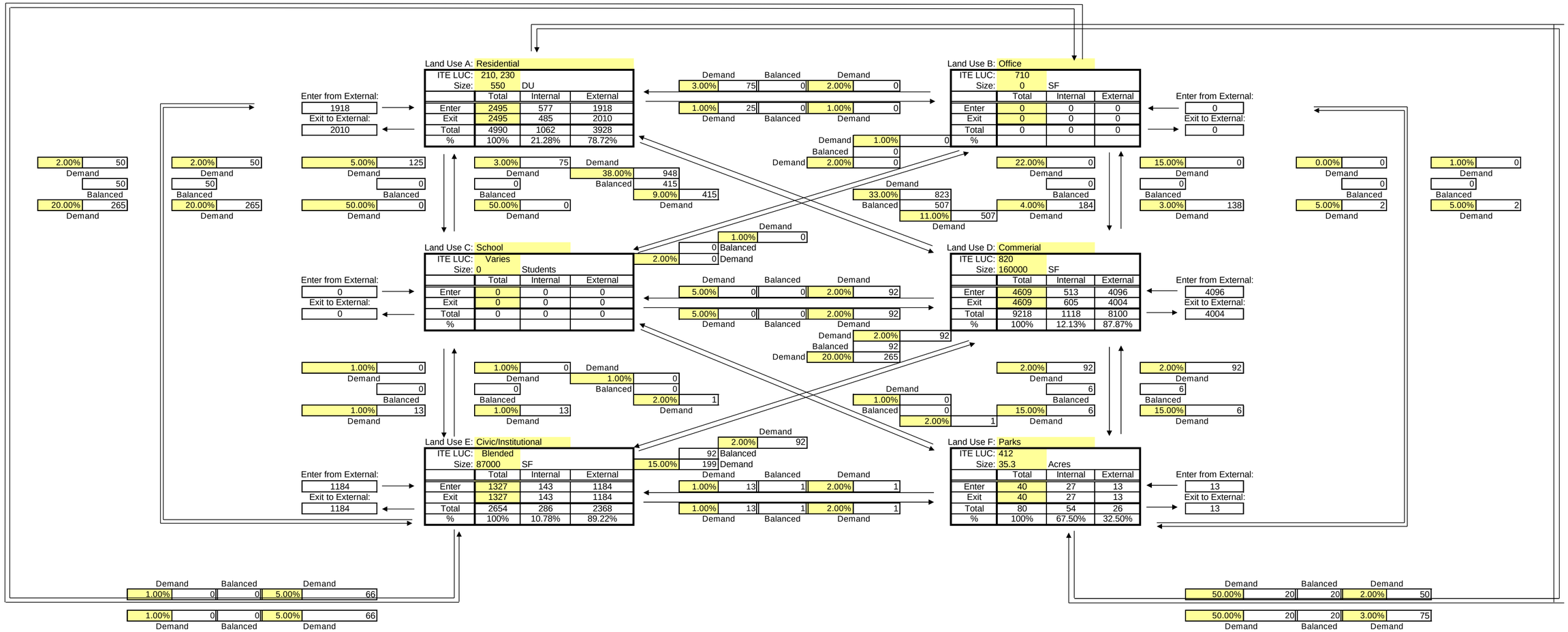
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	5234	0	0	0	0	6	5240
Exit	5234	0	0	0	0	6	5240
Total	10468	0	0	0	0	12	**10480**
Single Use Trip Gen Estimate	10480	0	0	0	0	24	**10504**
	0.11%	0.00%	0.00%	0.00%	0.00%	50.00%	

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

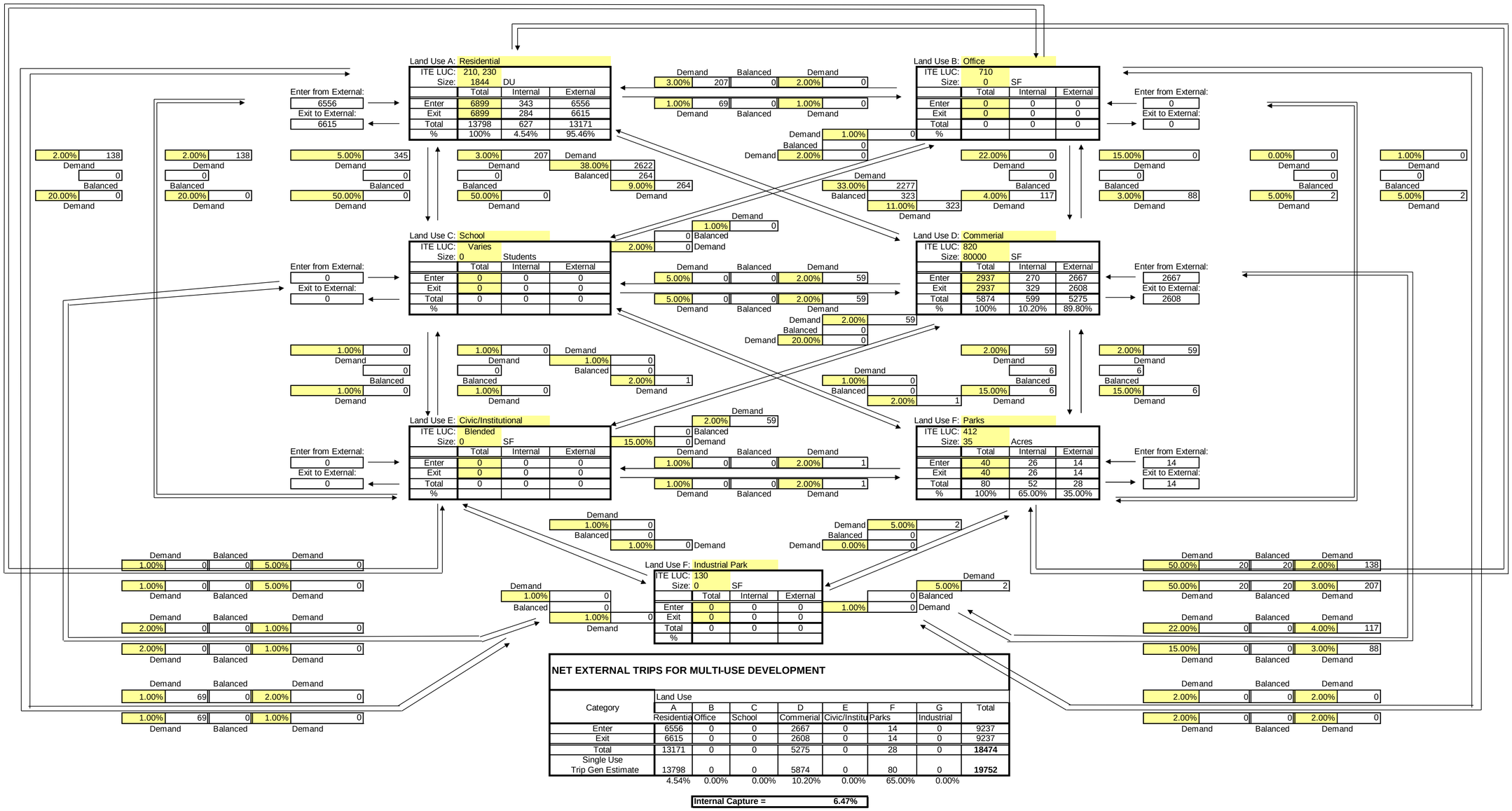
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	1918	0	0	4096	1184	13	7211
Exit	2010	0	0	4004	1184	13	7211
Total	3928	0	0	8100	2368	26	**14422**
Single Use Trip Gen Estimate	4990	0	0	9218	2654	80	**16942**
	21.28%	0.00%	0.00%	12.13%	10.78%	67.50%	

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

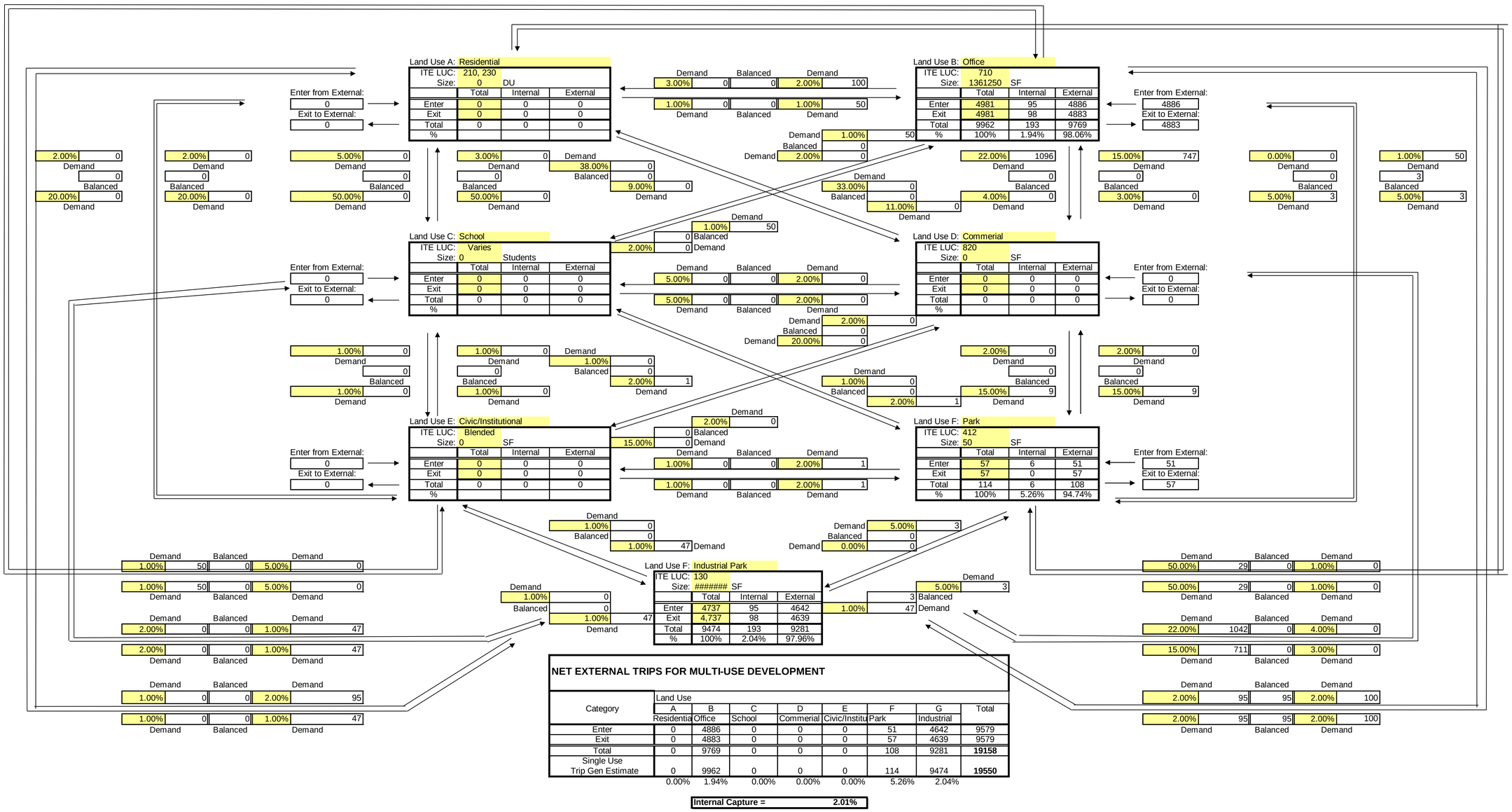
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	6556	0	0	2667	0	14	0	9237
Exit	6615	0	0	2608	0	14	0	9237
Total	13171	0	0	5275	0	28	0	**18474**
Single Use Trip Gen Estimate	13798	0	0	5874	0	80	0	**19752**
	4.54%	0.00%	0.00%	10.20%	0.00%	65.00%	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

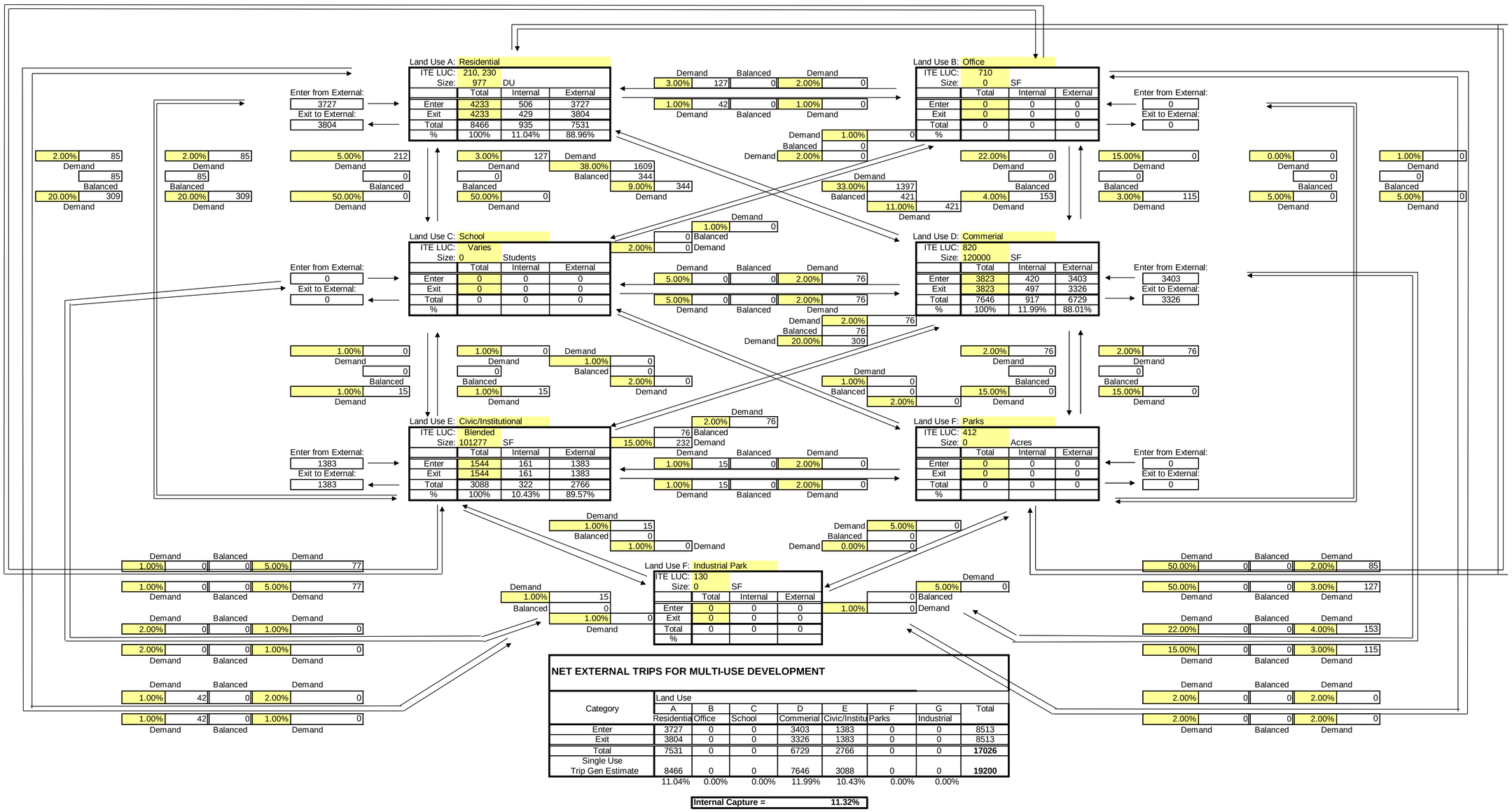
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	4886	0	0	0	51	4642	9579
Exit	0	4883	0	0	0	57	4639	9579
Total	0	9769	0	0	0	108	9281	**19158**
Single Use Trip Gen Estimate	0	9962	0	0	0	114	9474	**19550**
	0.00%	1.94%	0.00%	0.00%	0.00%	5.26%	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

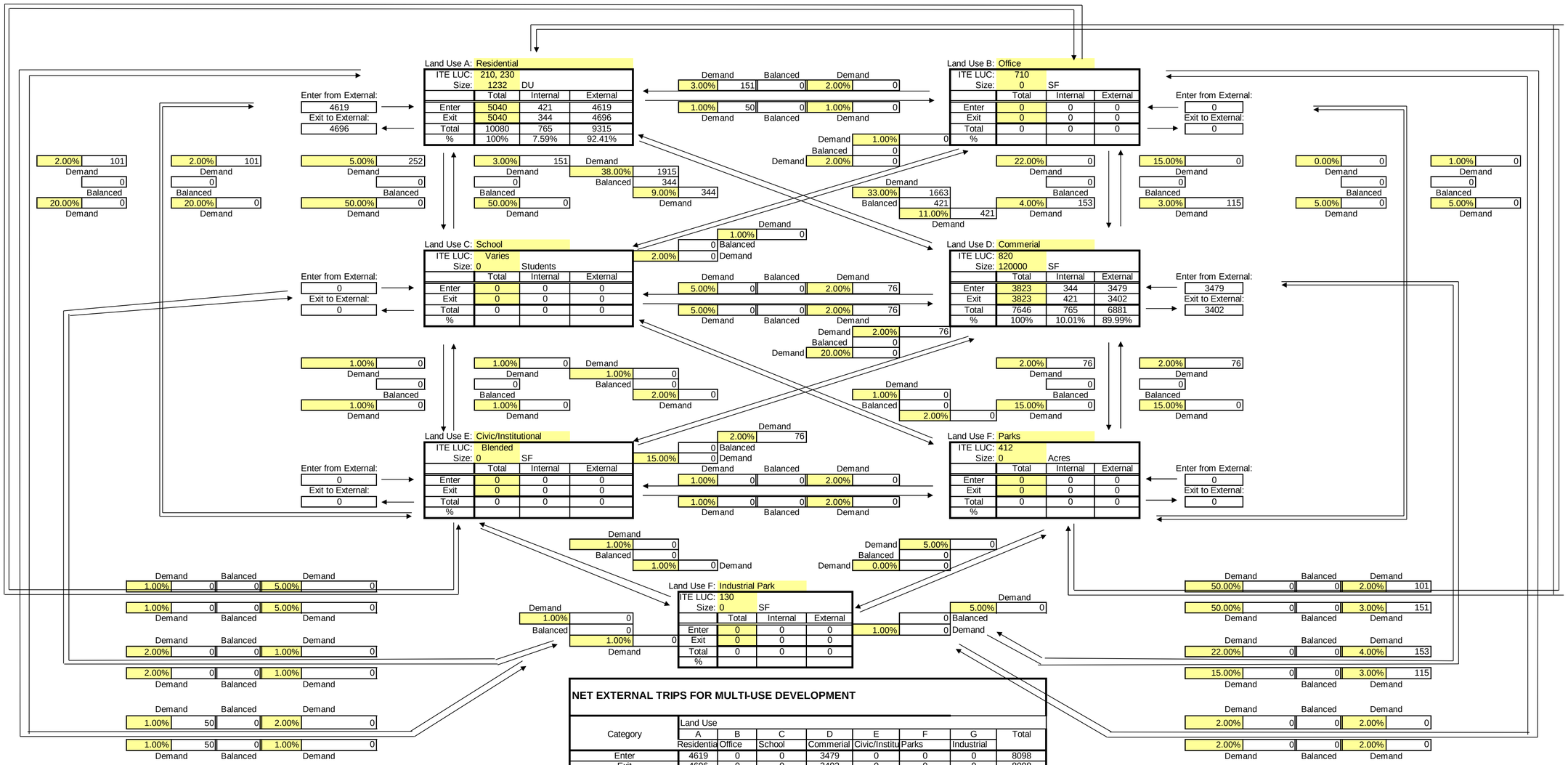
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	3727	0	0	3403	1383	0	0	8513
Exit	3804	0	0	3326	1383	0	0	8513
Total	7531	0	0	6729	2766	0	0	**17026**
Single Use Trip Gen Estimate	8466	0	0	7646	3088	0	0	**19200**
	11.04%	0.00%	0.00%	11.99%	10.43%	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

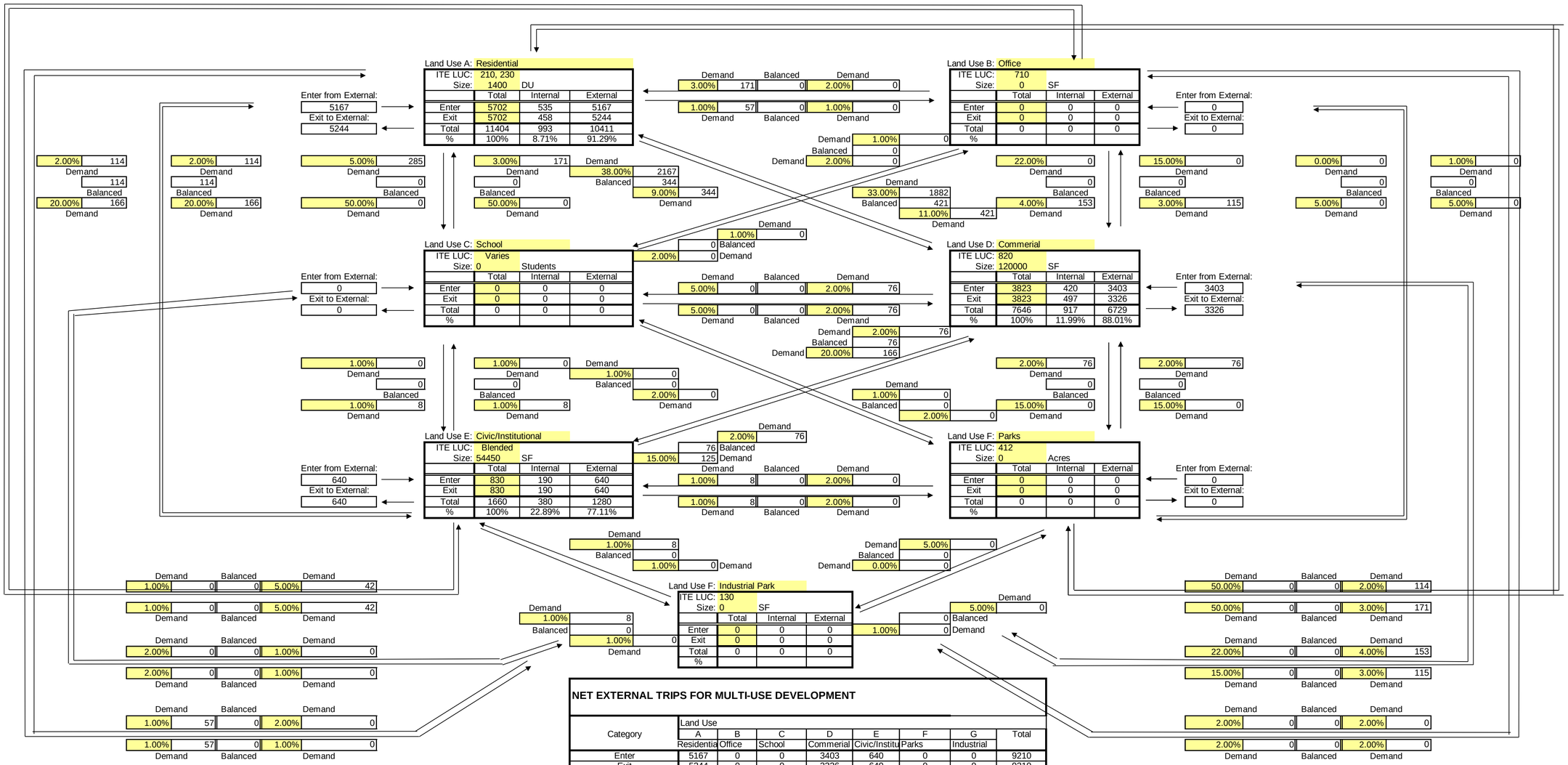
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	4619	0	0	3479	0	0	0	8098
Exit	4696	0	0	3402	0	0	0	8098
Total	9315	0	0	6881	0	0	0	**16196**
Single Use Trip Gen Estimate	10080	0	0	7646	0	0	0	**17726**
	7.59%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

Internal Capture = 8.63%

ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET

Analysis Period: 2040 DAILY
Analyst: MacKenzie Engineering and Planning
Date: 5/19/2020

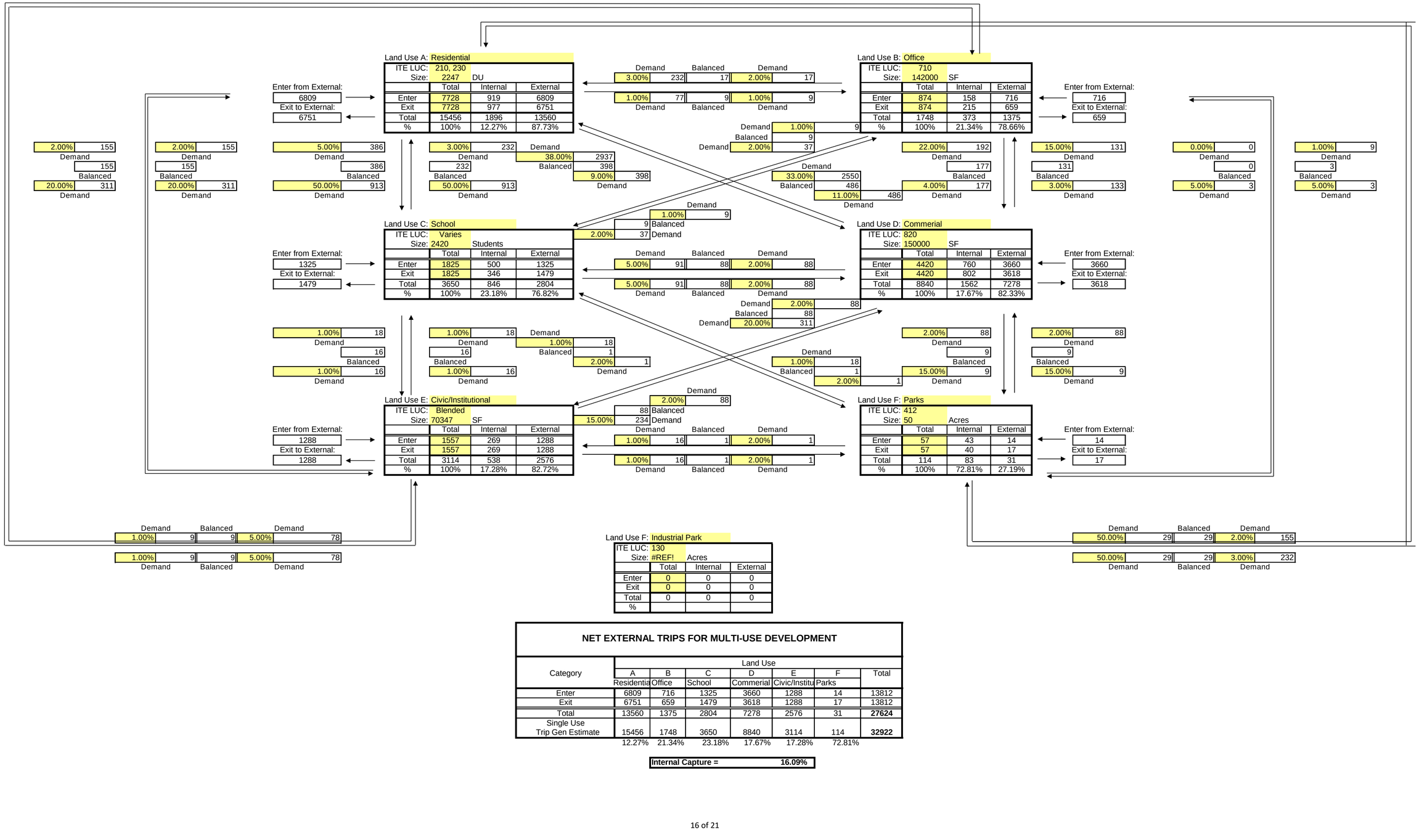
Project Number: **Task Number:**
Project Name: Southern Grove
Scenario: TAZ 653 POD E



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

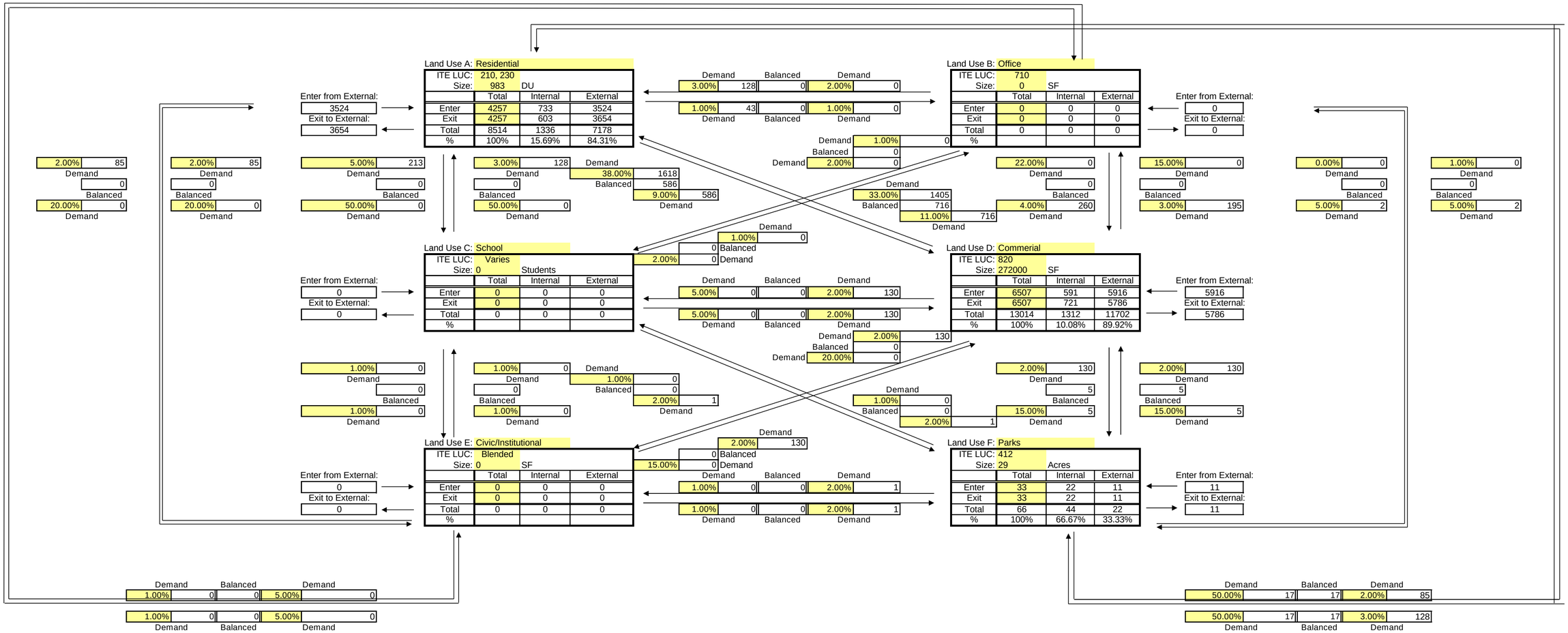
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	6809	716	1325	3660	1288	14	13812
Exit	6751	659	1479	3618	1288	17	13812
Total	13560	1375	2804	7278	2576	31	**27624**
Single Use Trip Gen Estimate	15456	1748	3650	8840	3114	114	**32922**
	12.27%	21.34%	23.18%	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

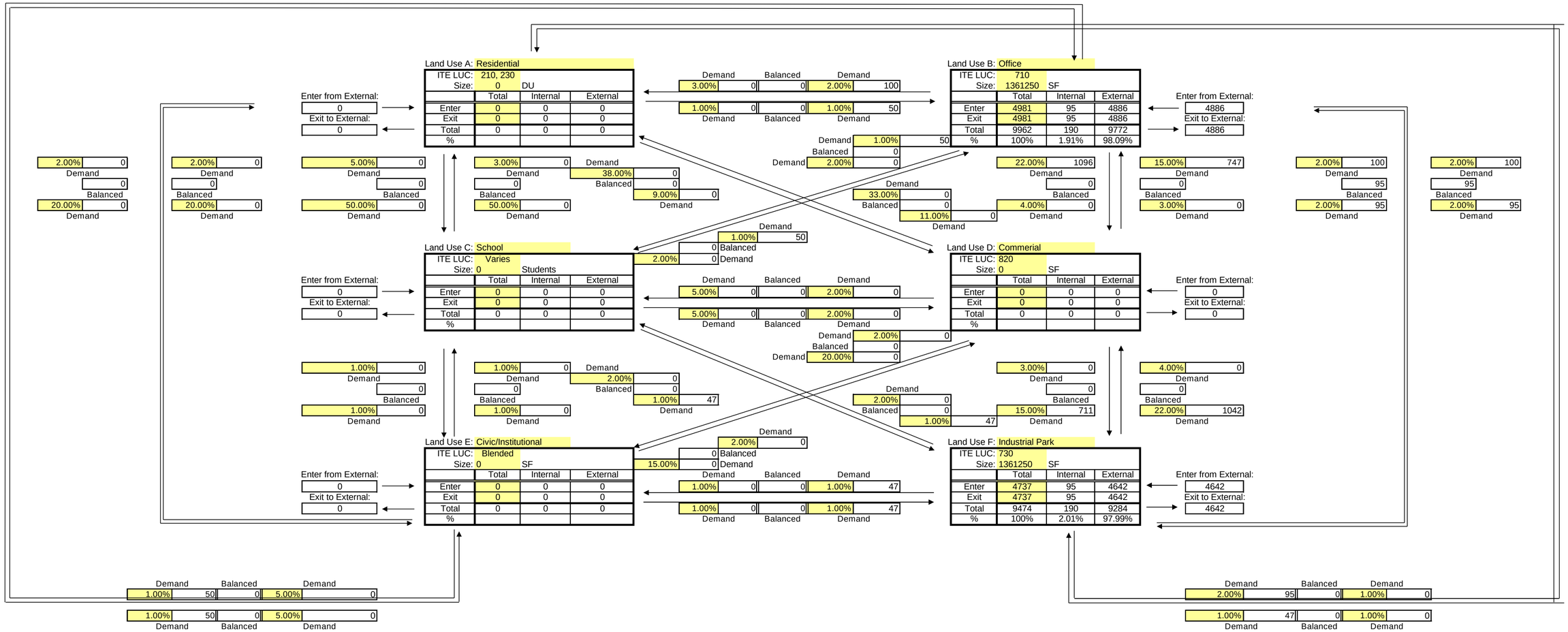
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3524	0	0	5916	0	11	9451
Exit	3654	0	0	5786	0	11	9451
Total	7178	0	0	11702	0	22	**18902**
Single Use Trip Gen Estimate	8514	0	0	13014	0	66	**21594**
	15.69%	0.00%	0.00%	10.08%	0.00%	66.67%	

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

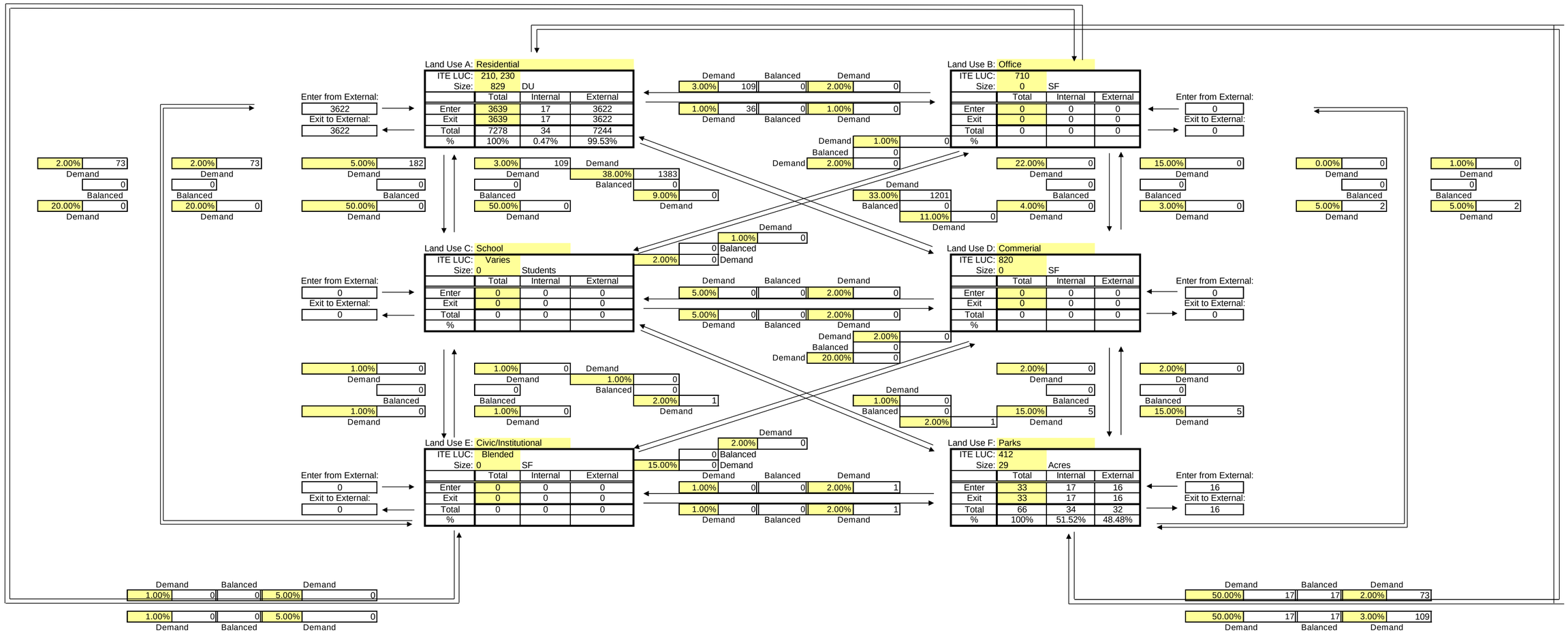
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	4886	0	0	0	4642	9528
Exit	0	4886	0	0	0	4642	9528
Total	0	9772	0	0	0	9284	**19056**
Single Use Trip Gen Estimate	0	9962	0	0	0	9474	**19436**
	0.00%	1.91%	0.00%	0.00%	0.00%	2.01%	

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

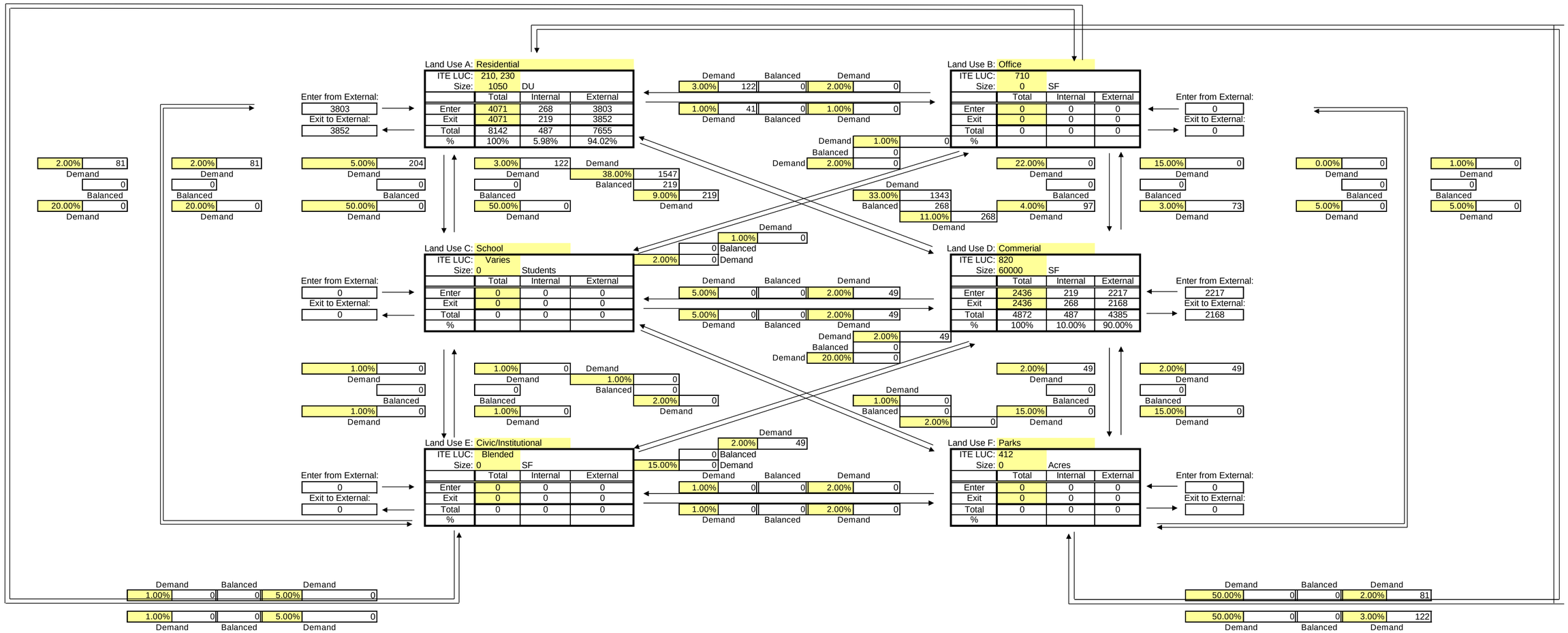
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3622	0	0	0	0	16	3638
Exit	3622	0	0	0	0	16	3638
Total	7244	0	0	0	0	32	**7276**
Single Use Trip Gen Estimate	7278	0	0	0	0	66	**7344**
	0.47%	0.00%	0.00%	0.00%	0.00%	51.52%	

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

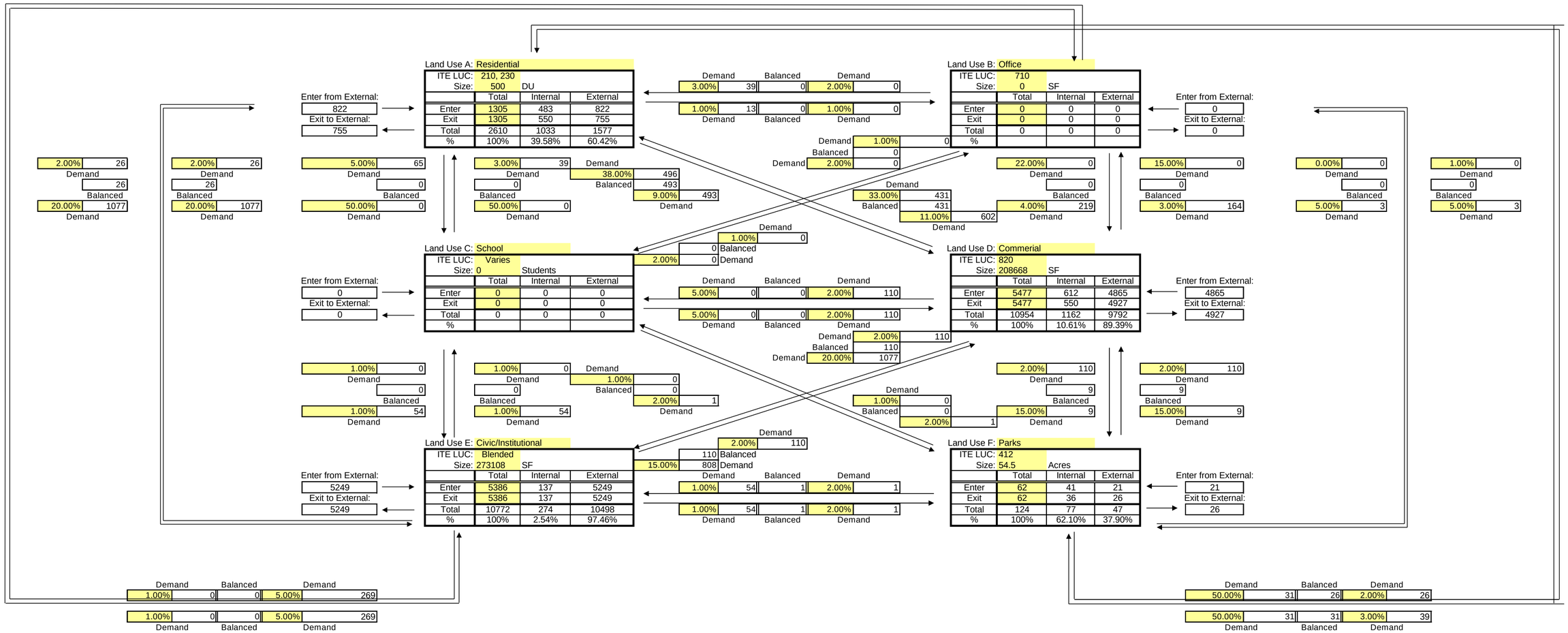
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	3803	0	0	2217	0	0	6020
Exit	3852	0	0	2168	0	0	6020
Total	7655	0	0	4385	0	0	**12040**
Single Use Trip Gen Estimate	8142	0	0	4872	0	0	**13014**
	5.98%	0.00%	0.00%	10.00%	0.00%	0.00%	

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

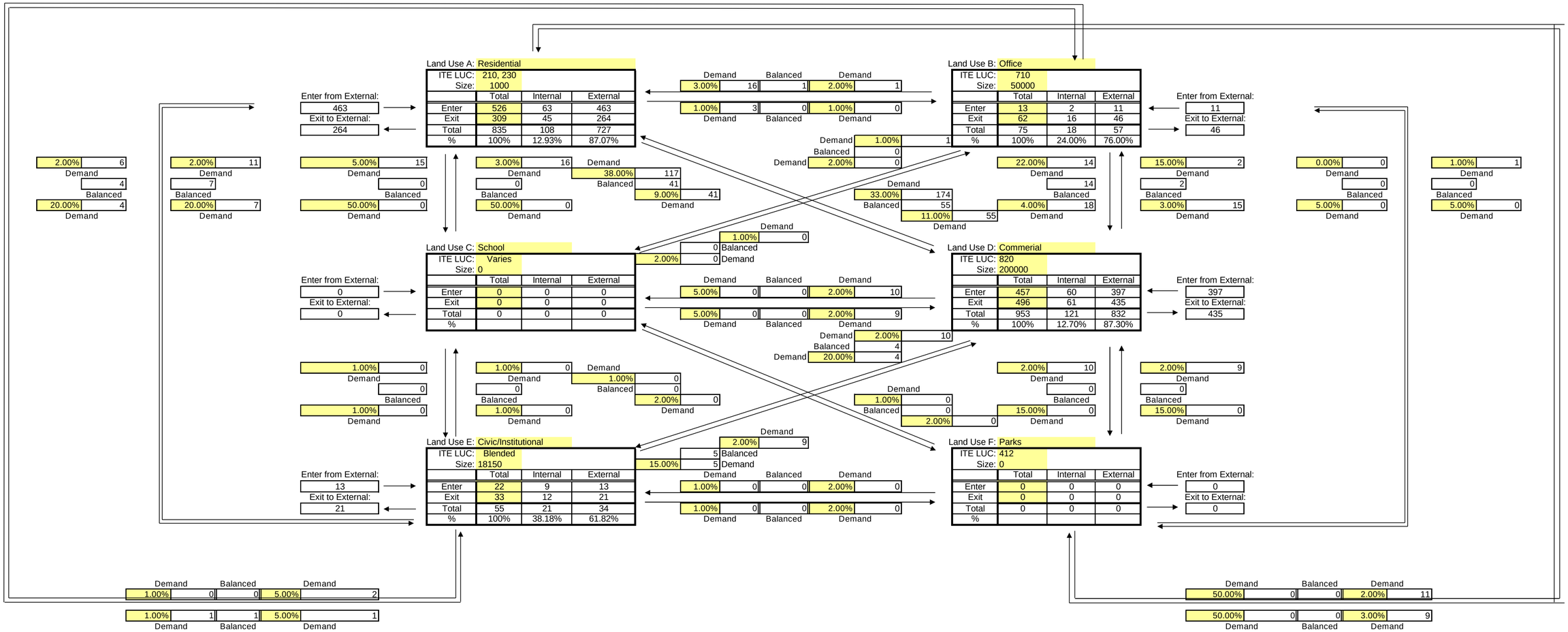
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	822	0	0	4865	5249	21	10957
Exit	755	0	0	4927	5249	26	10957
Total	1577	0	0	9792	10498	47	**21914**
Single Use Trip Gen Estimate	2610	0	0	10954	10772	124	**24460**
	39.58%	0.00%	0.00%	10.61%	2.54%	62.10%	

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

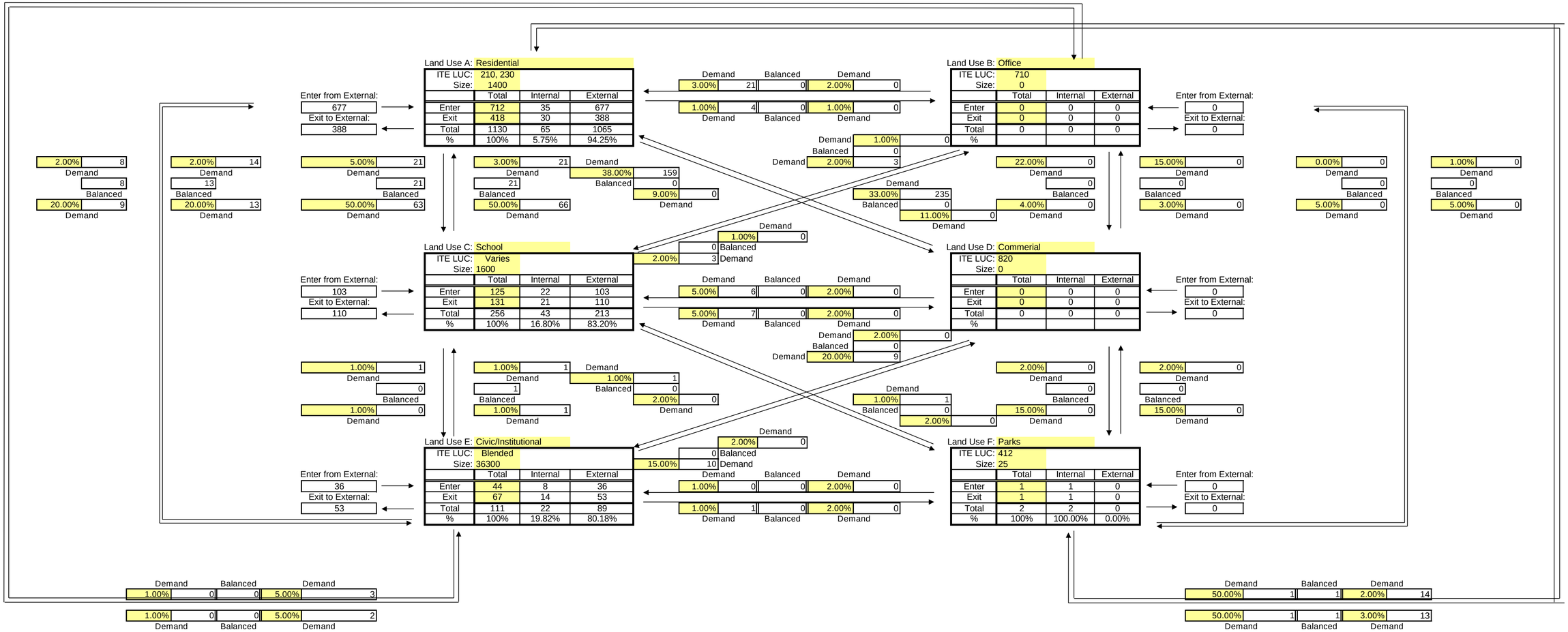
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	463	11	0	397	13	0	884
Exit	264	46	0	435	21	0	766
Total	727	57	0	832	34	0	**1650**
Single Use Trip Gen Estimate	835	75	0	953	55	0	**1918**
	12.93%	24.00%	0.00%	12.70%	38.18%	0.00%	

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

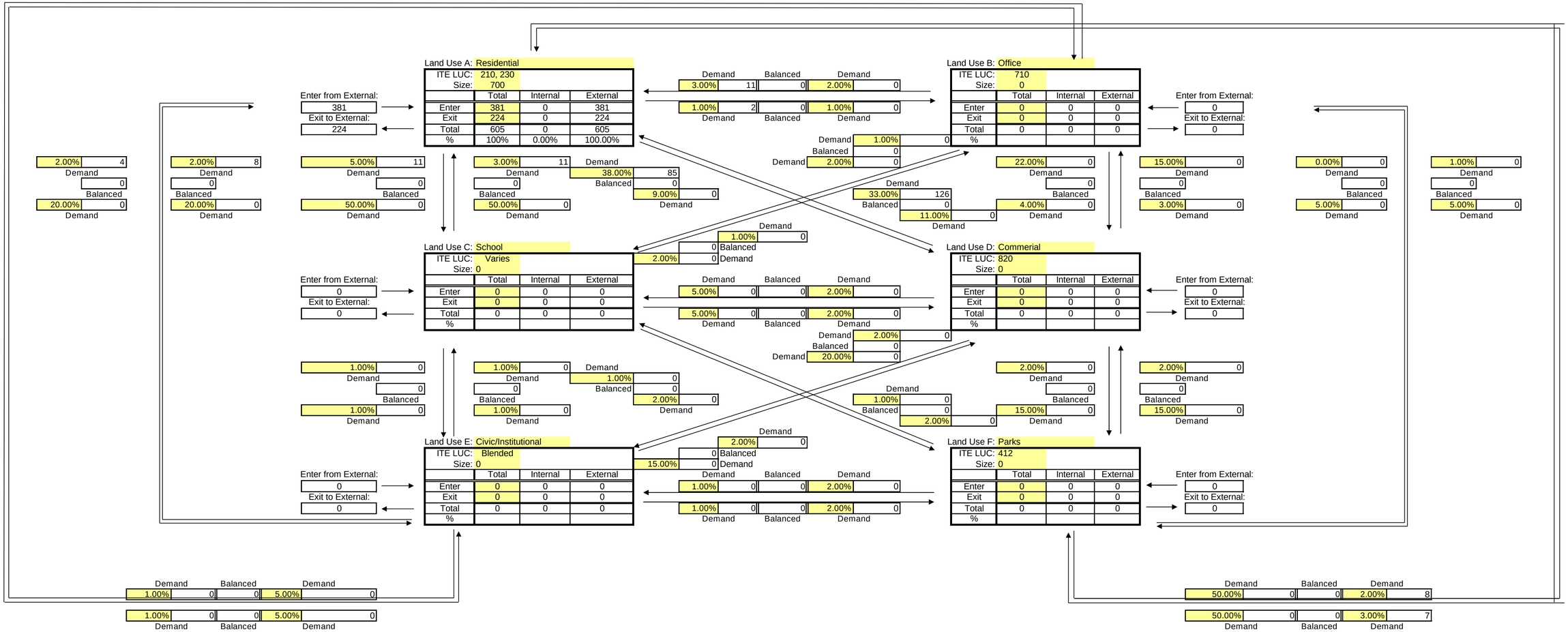
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	677	0	103	0	36	0	816
Exit	388	0	110	0	53	0	551
Total	1065	0	213	0	89	0	**1367**
Single Use Trip Gen Estimate	1130	0	256	0	111	2	**1499**
	5.75%	0.00%	16.80%	0.00%	19.82%	0.00%	

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

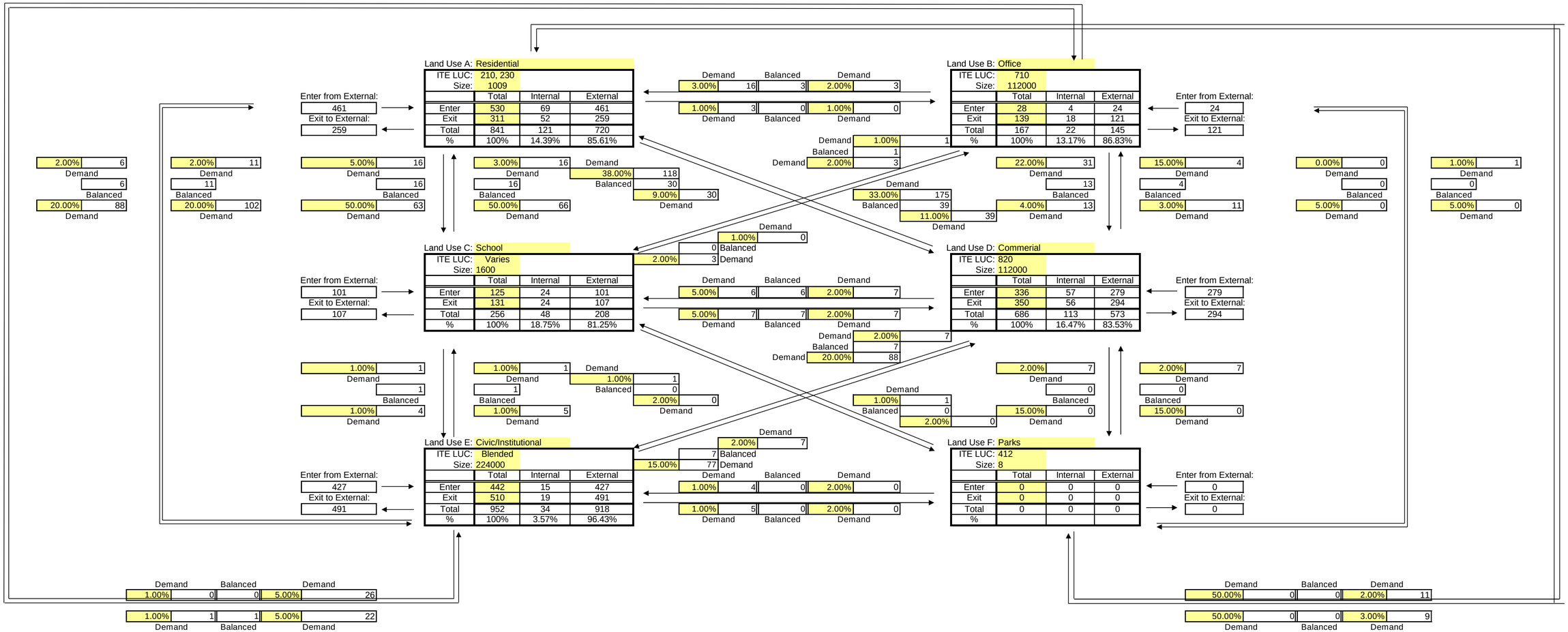
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	381	0	0	0	0	0	381
Exit	224	0	0	0	0	0	224
Total	605	0	0	0	0	0	**605**
Single Use Trip Gen Estimate	605	0	0	0	0	0	**605**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

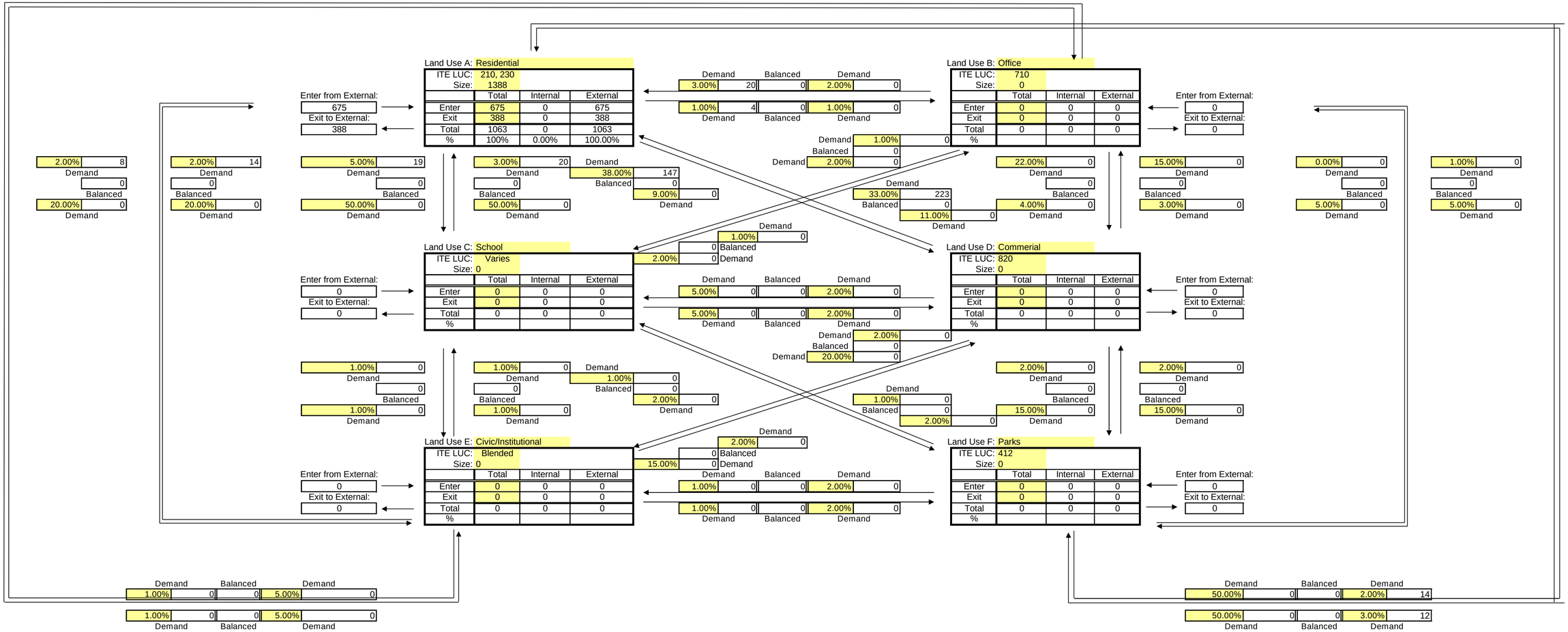
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	461	24	101	279	427	0	1292
Exit	259	121	107	294	491	0	1272
Total	720	145	208	573	918	0	**2564**
Single Use Trip Gen Estimate	841	167	256	686	952	0	**2902**
	14.39%	13.17%	18.75%	16.47%	3.57%	0.00%	

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

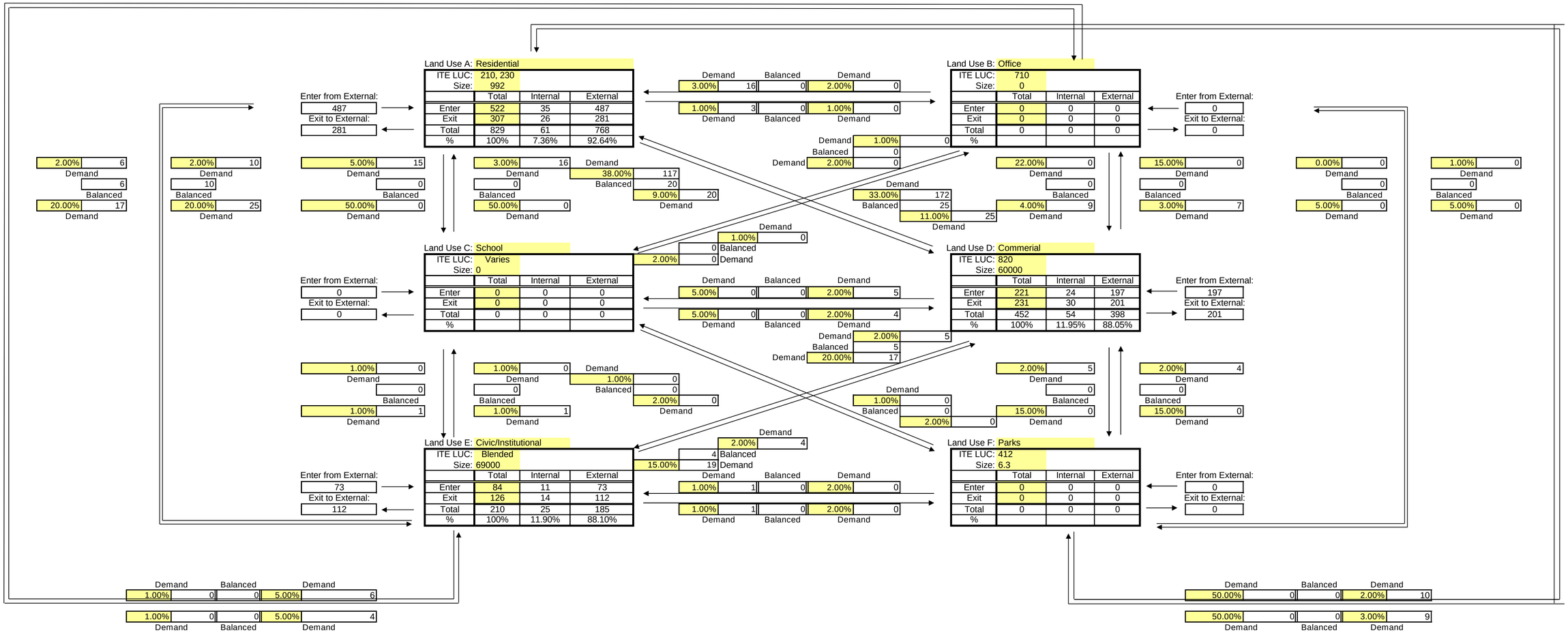
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	675	0	0	0	0	0	675
Exit	388	0	0	0	0	0	388
Total	1063	0	0	0	0	0	**1063**
Single Use Trip Gen Estimate	1063	0	0	0	0	0	**1063**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

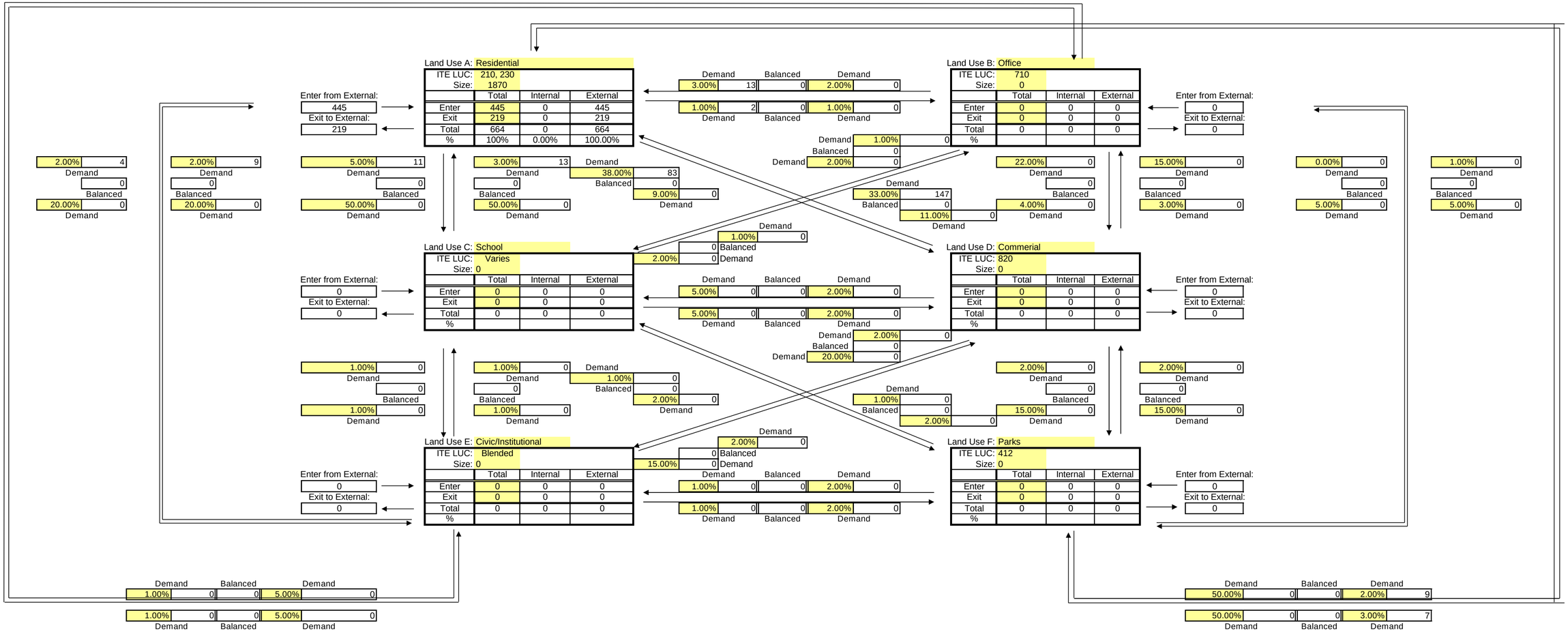
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	487	0	0	197	73	0	757
Exit	281	0	0	201	112	0	594
Total	768	0	0	398	185	0	**1351**
Single Use Trip Gen Estimate	829	0	0	452	210	0	**1491**
	7.36%	0.00%	0.00%	11.95%	11.90%	0.00%	

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

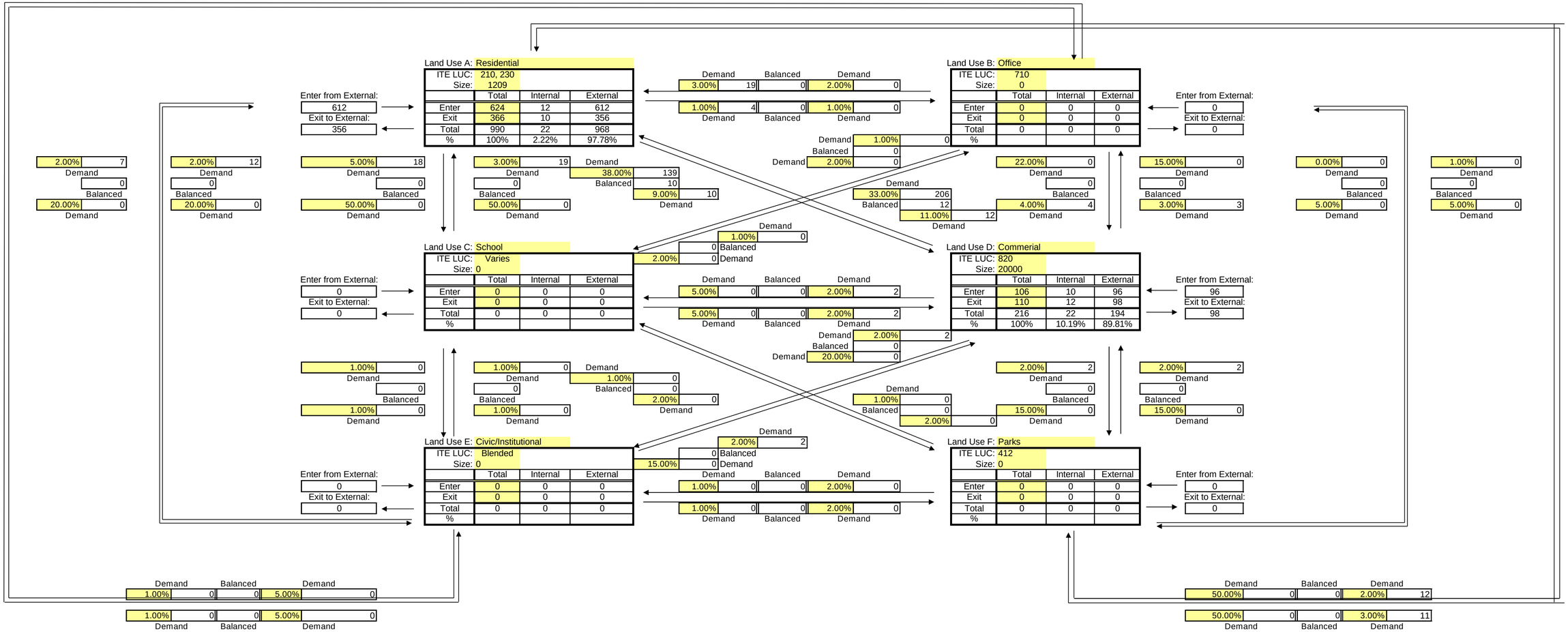
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	445	0	0	0	0	0	445
Exit	219	0	0	0	0	0	219
Total	664	0	0	0	0	0	**664**
Single Use Trip Gen Estimate	664	0	0	0	0	0	**664**
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

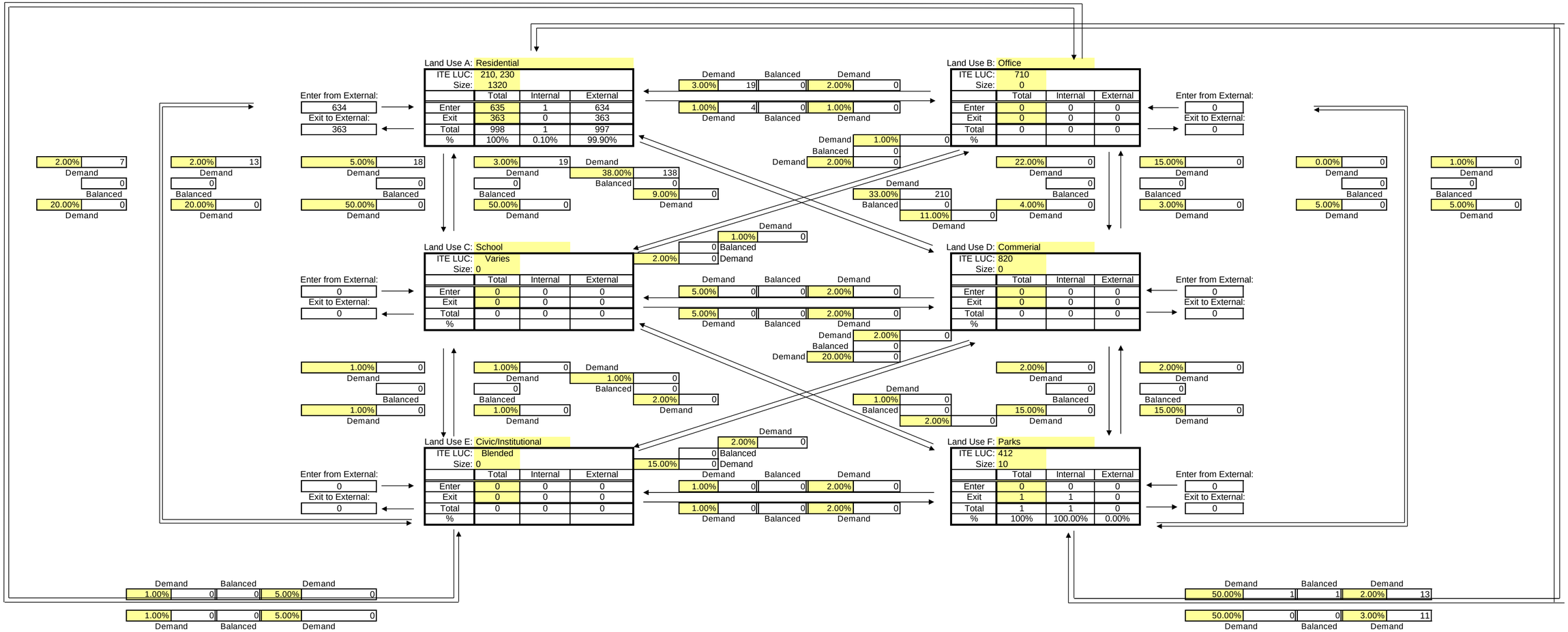
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	612	0	0	96	0	0	708
Exit	356	0	0	98	0	0	454
Total	968	0	0	194	0	0	**1162**
Single Use Trip Gen Estimate	990	0	0	216	0	0	**1206**
	2.22%	0.00%	0.00%	10.19%	0.00%	0.00%	

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

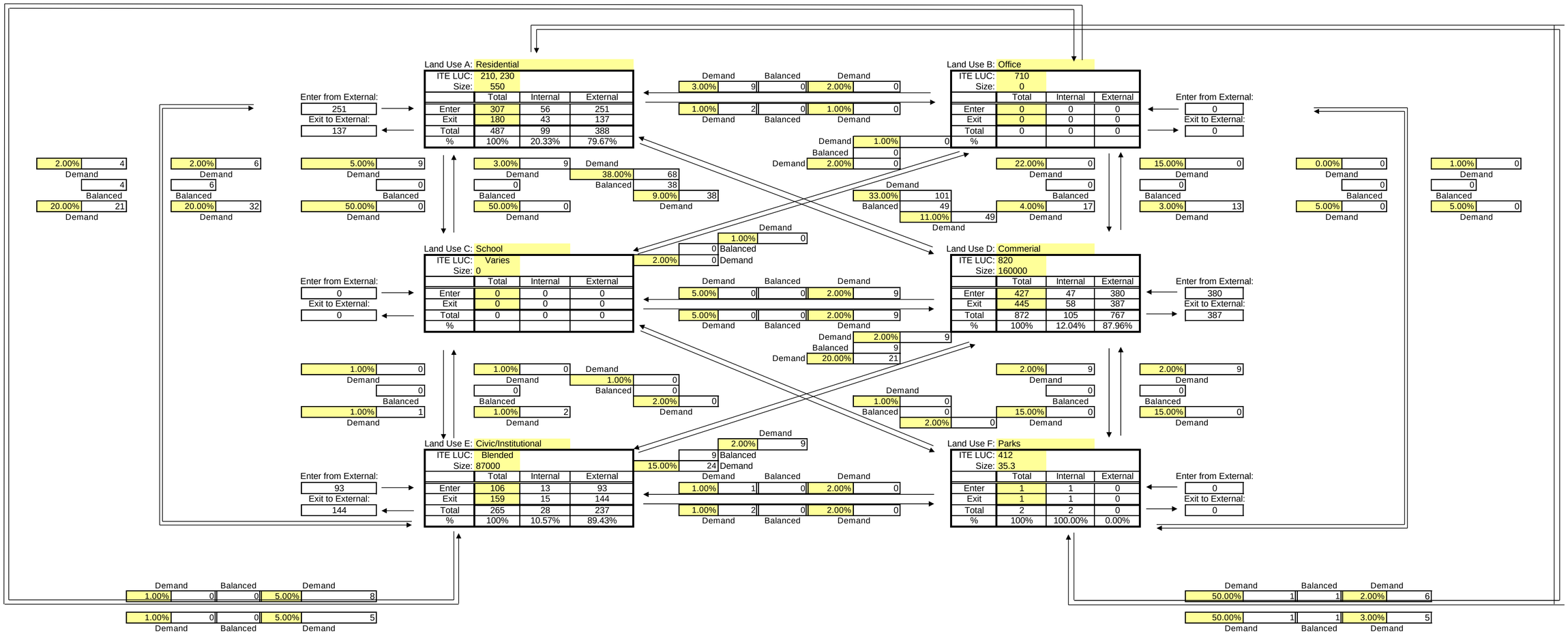
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	634	0	0	0	0	0	634
Exit	363	0	0	0	0	0	363
Total	997	0	0	0	0	0	**997**
Single Use Trip Gen Estimate	998	0	0	0	0	1	**999**
	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

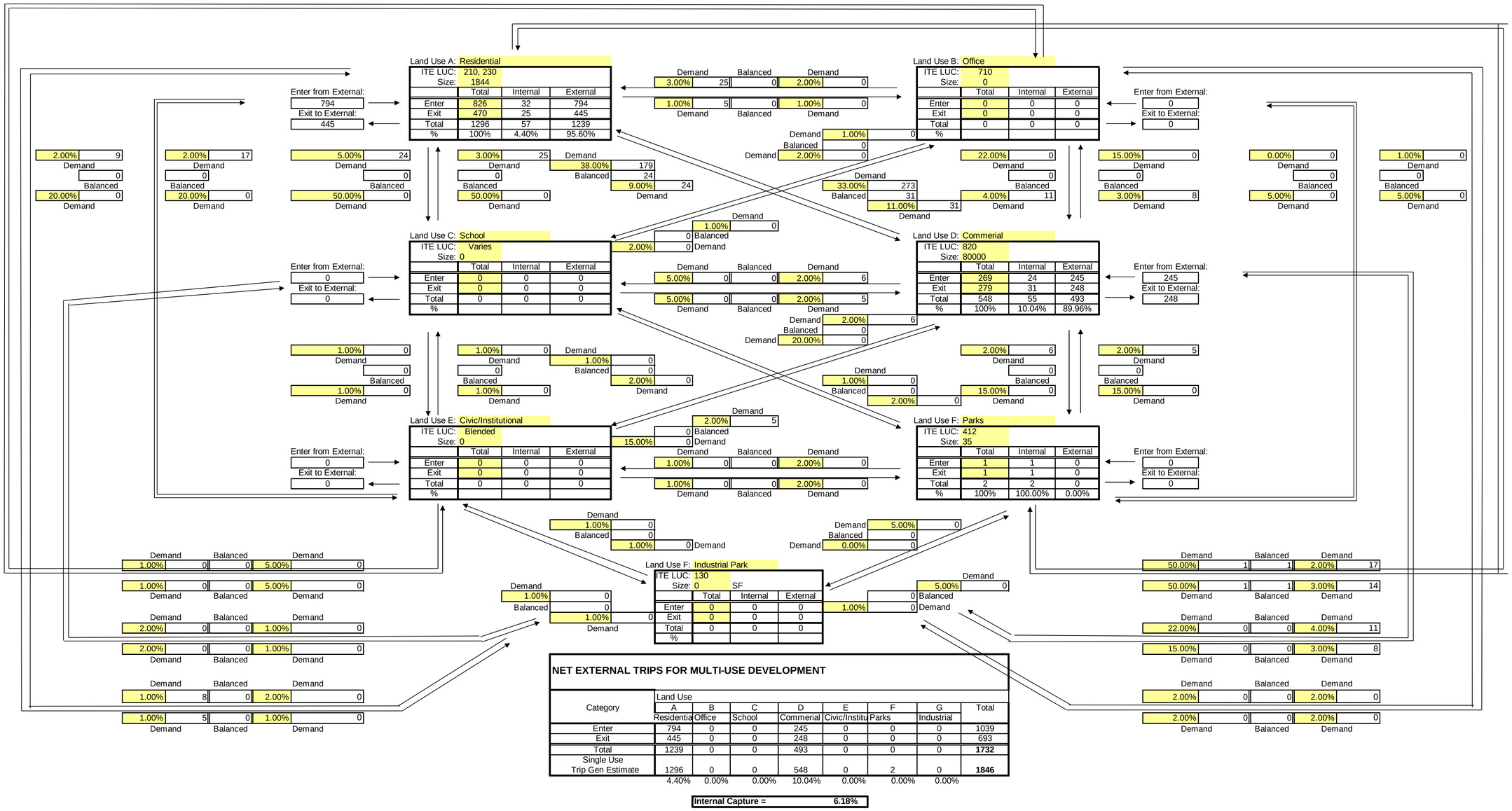
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	251	0	0	380	93	0	724
Exit	137	0	0	387	144	0	668
Total	388	0	0	767	237	0	**1392**
Single Use Trip Gen Estimate	487	0	0	872	265	2	**1626**
	20.33%	0.00%	0.00%	12.04%	10.57%	0.00%	

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

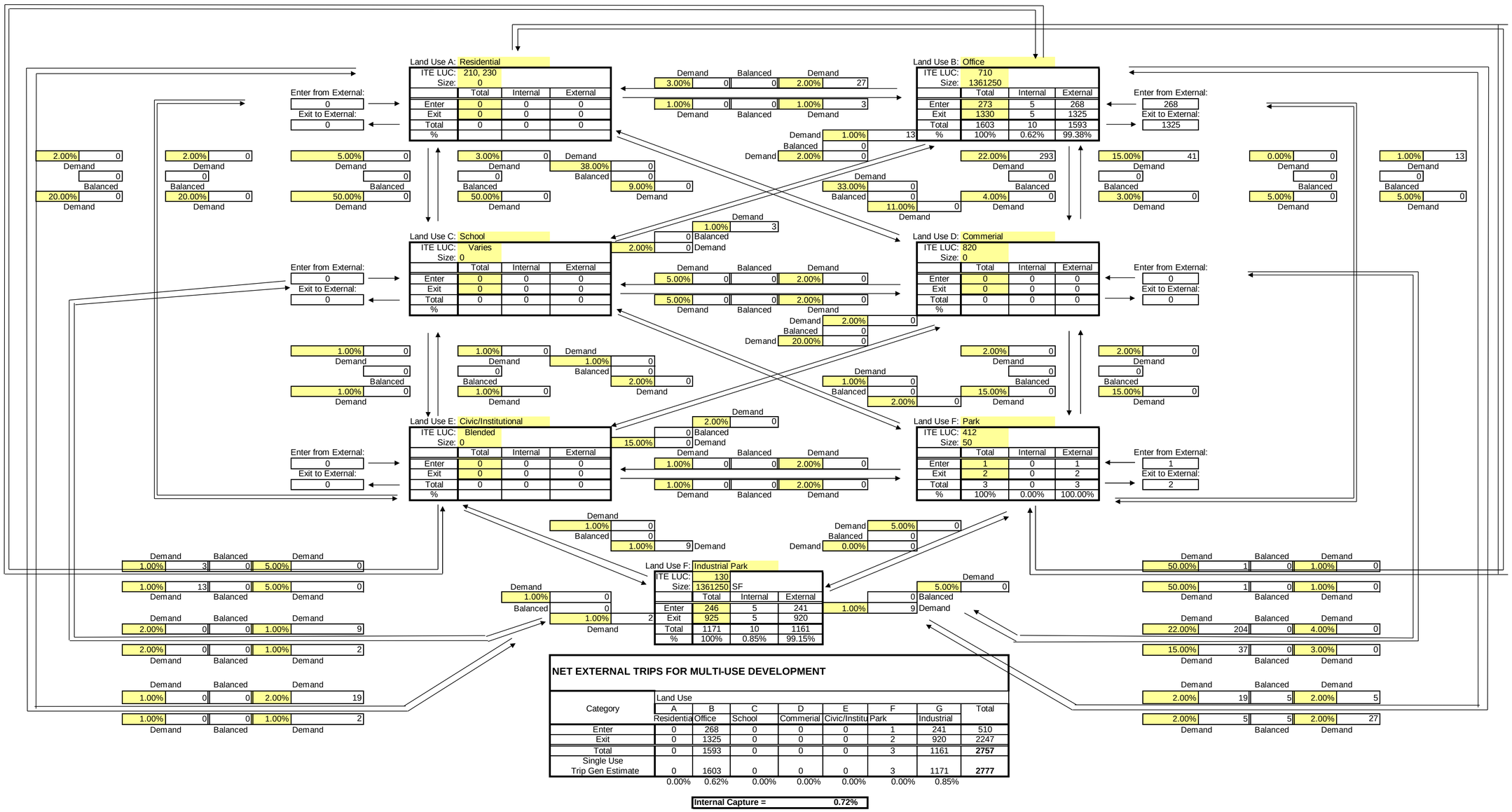
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	794	0	0	245	0	0	0	1039
Exit	445	0	0	248	0	0	0	693
Total	1239	0	0	493	0	0	0	**1732**
Single Use Trip Gen Estimate	1296	0	0	548	0	2	0	**1846**
	4.40%	0.00%	0.00%	10.04%	0.00%	0.00%	0.00%	

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

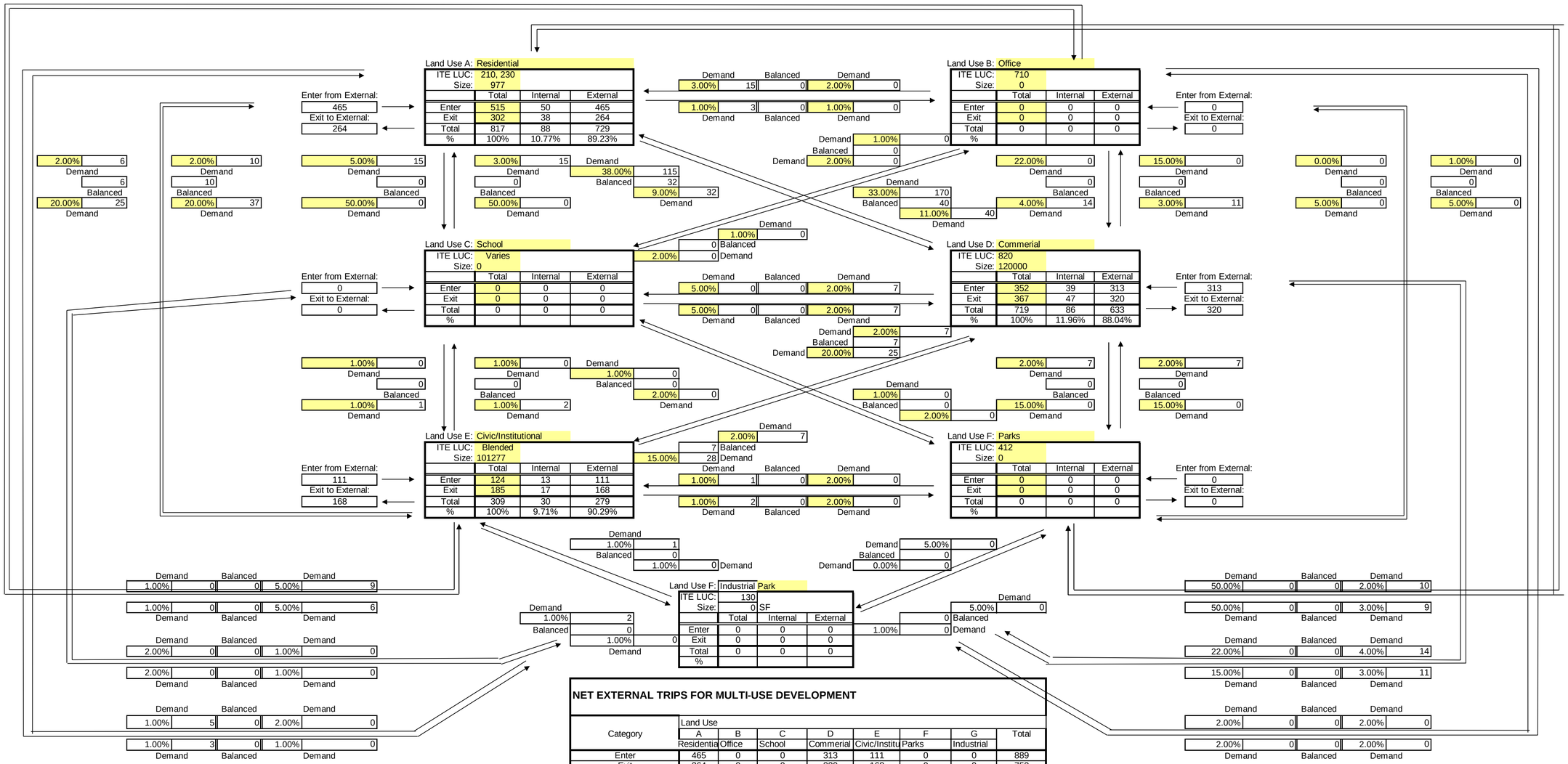
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Park	G Industrial	Total
Enter	0	268	0	0	0	1	241	510
Exit	0	1325	0	0	0	2	920	2247
Total	0	1593	0	0	0	3	1161	**2757**
Single Use Trip Gen Estimate	0	1603	0	0	0	3	1171	**2777**
	0.00%	0.62%	0.00%	0.00%	0.00%	0.00%	0.85%	

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

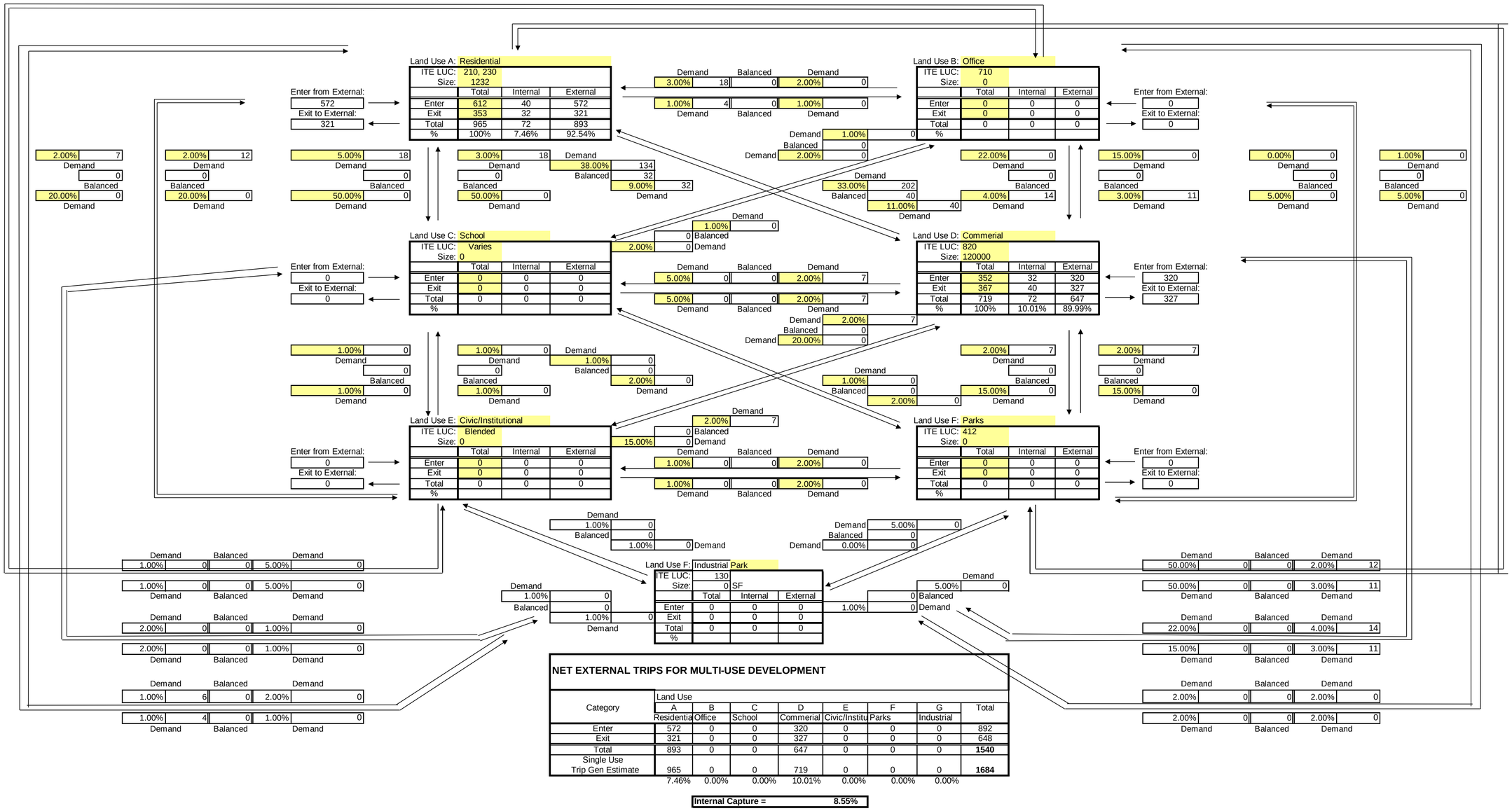
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	465	0	0	313	111	0	0	889
Exit	264	0	0	320	168	0	0	752
Total	729	0	0	633	279	0	0	**1641**
Single Use Trip Gen Estimate	817	0	0	719	309	0	0	**1845**
	10.77%	0.00%	0.00%	11.96%	9.71%	0.00%	0.00%	

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

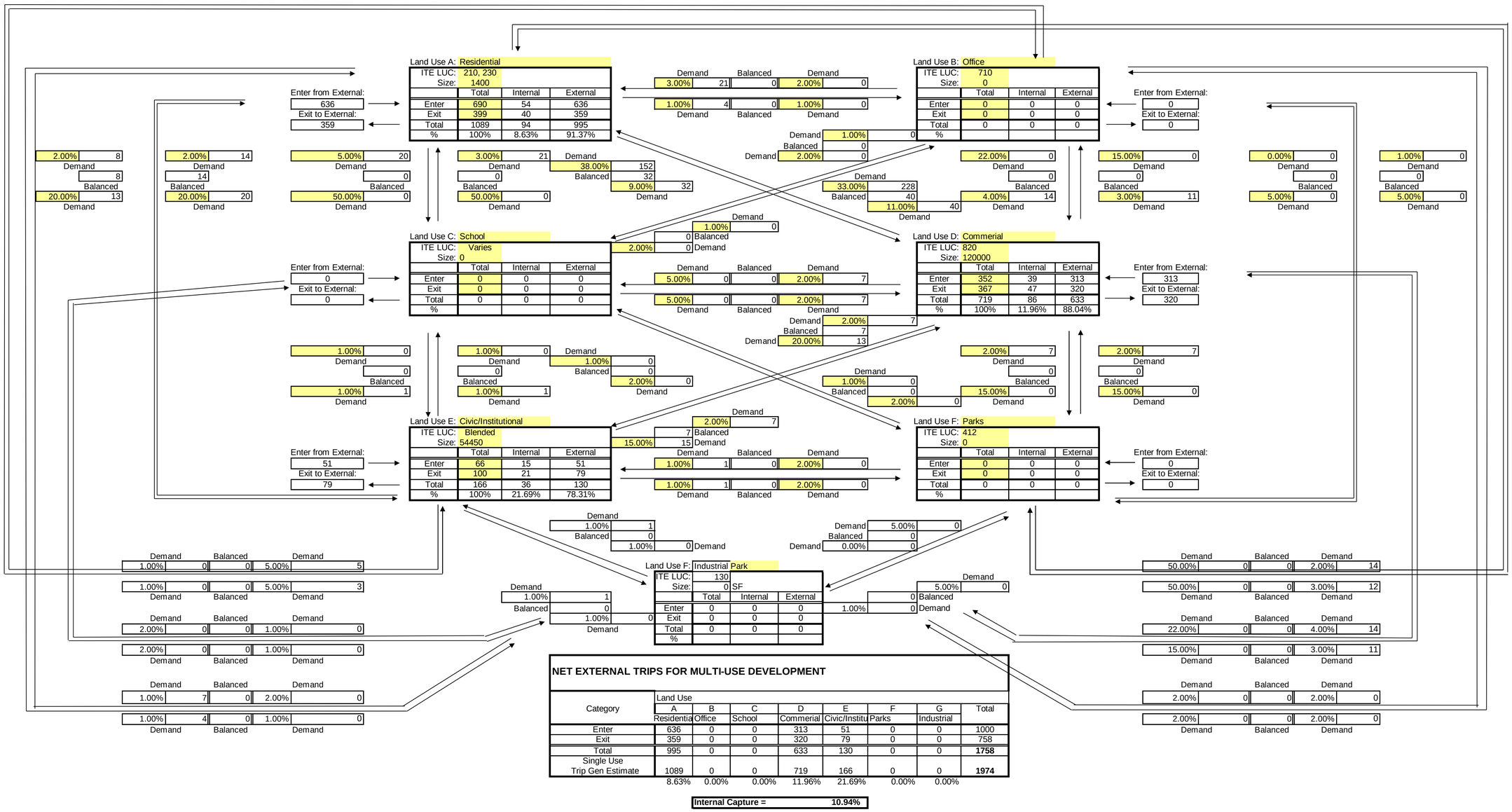
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	572	0	0	320	0	0	0	892
Exit	321	0	0	327	0	0	0	648
Total	893	0	0	647	0	0	0	**1540**
Single Use Trip Gen Estimate	965	0	0	719	0	0	0	**1684**
	7.46%	0.00%	0.00%	10.01%	0.00%	0.00%	0.00%	

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

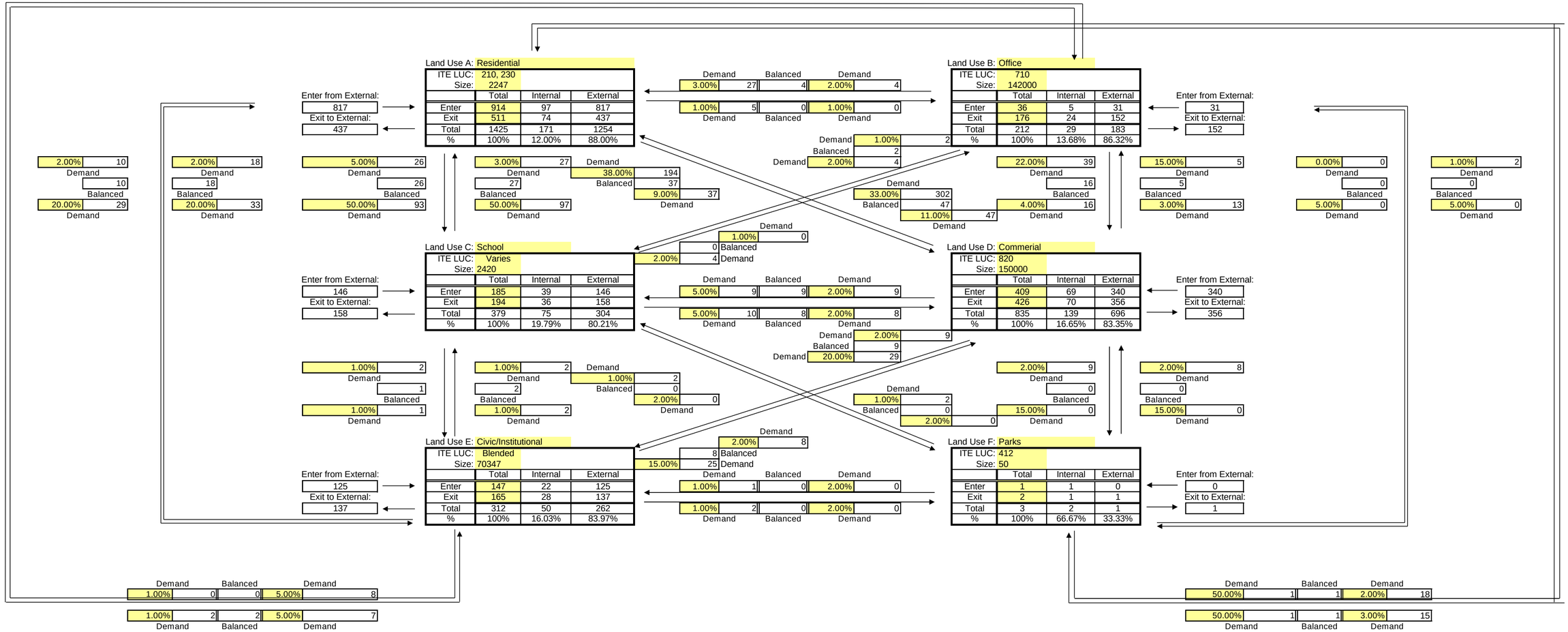
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	G Industrial	Total
Enter	636	0	0	313	51	0	0	1000
Exit	359	0	0	320	79	0	0	758
Total	995	0	0	633	130	0	0	**1758**
Single Use Trip Gen Estimate	1089	0	0	719	166	0	0	**1974**
	8.63%	0.00%	0.00%	11.96%	21.69%	0.00%	0.00%	

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

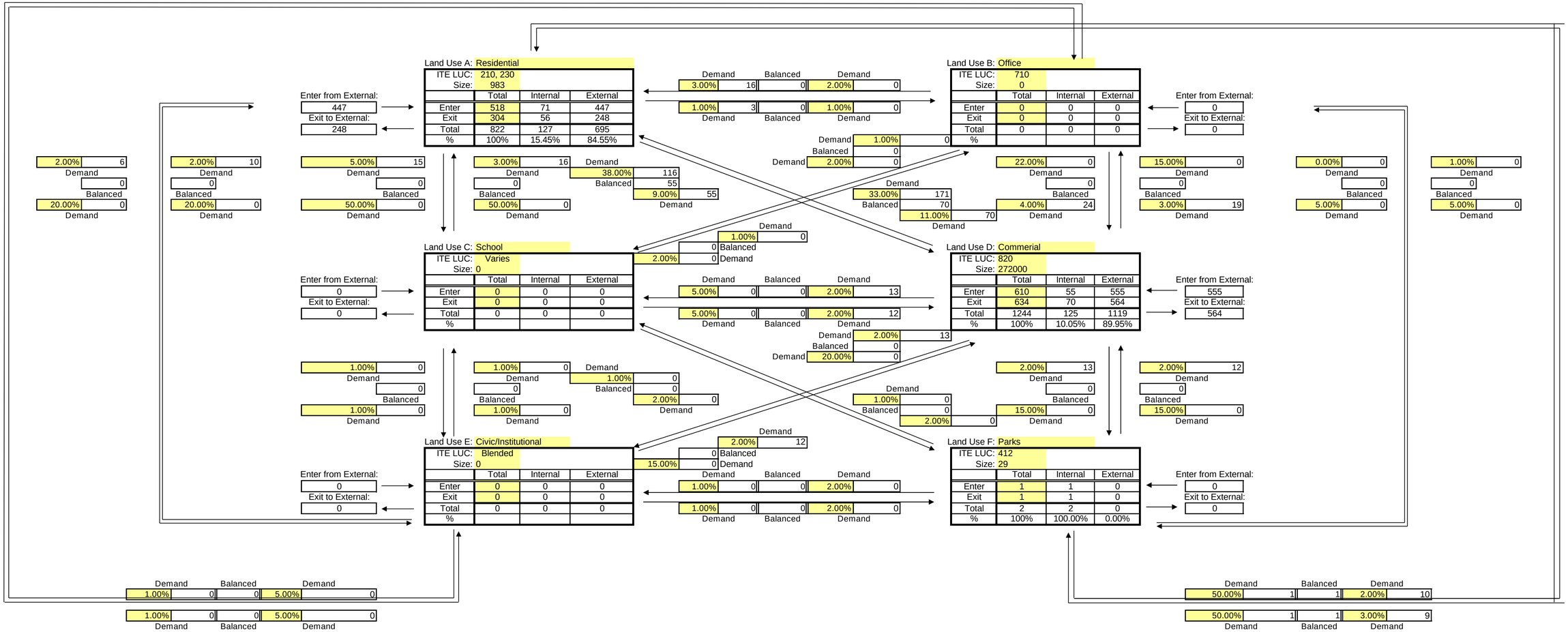
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	817	31	146	340	125	0	1459
Exit	437	152	158	356	137	1	1241
Total	1254	183	304	696	262	1	**2700**
Single Use Trip Gen Estimate	1425	212	379	835	312	3	**3166**
	12.00%	13.68%	19.79%	16.65%	16.03%	66.67%	

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

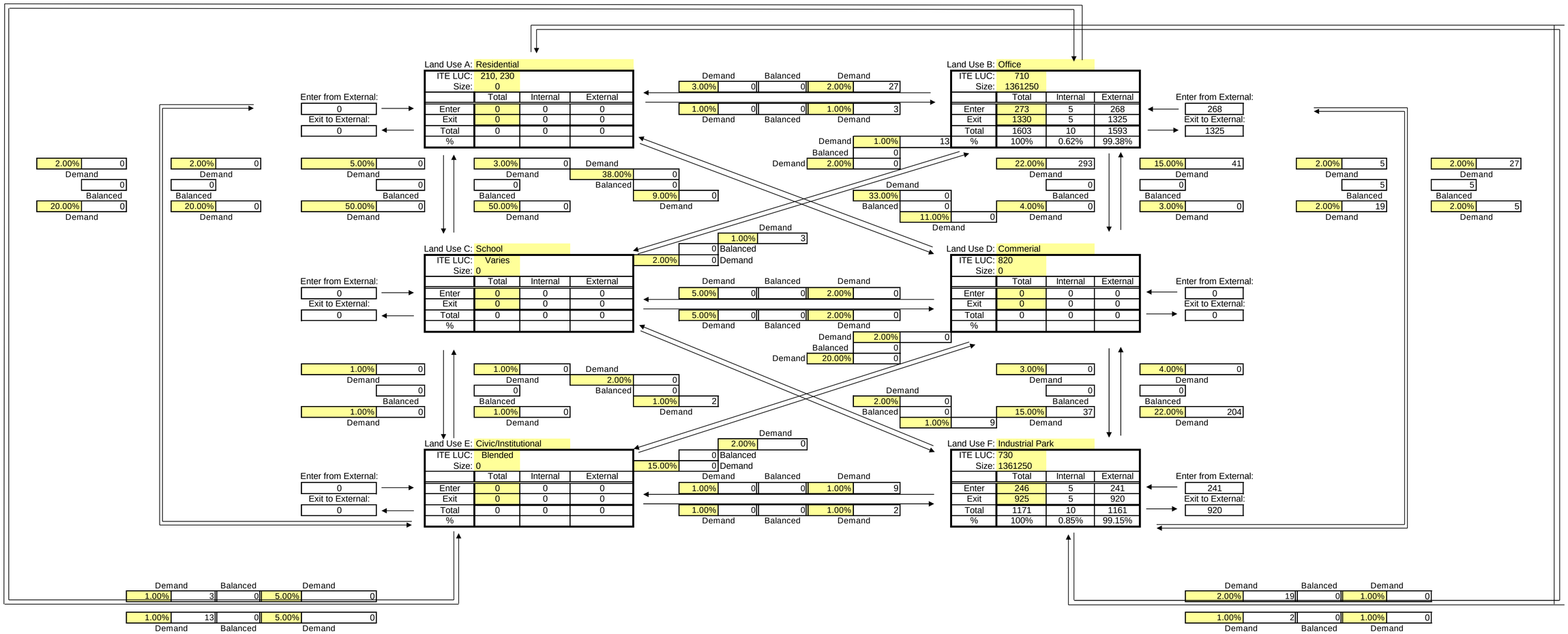
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	447	0	0	555	0	0	1002
Exit	248	0	0	564	0	0	812
Total	695	0	0	1119	0	0	**1814**
Single Use Trip Gen Estimate	822	0	0	1244	0	2	**2068**
	15.45%	0.00%	0.00%	10.05%	0.00%	0.00%	

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

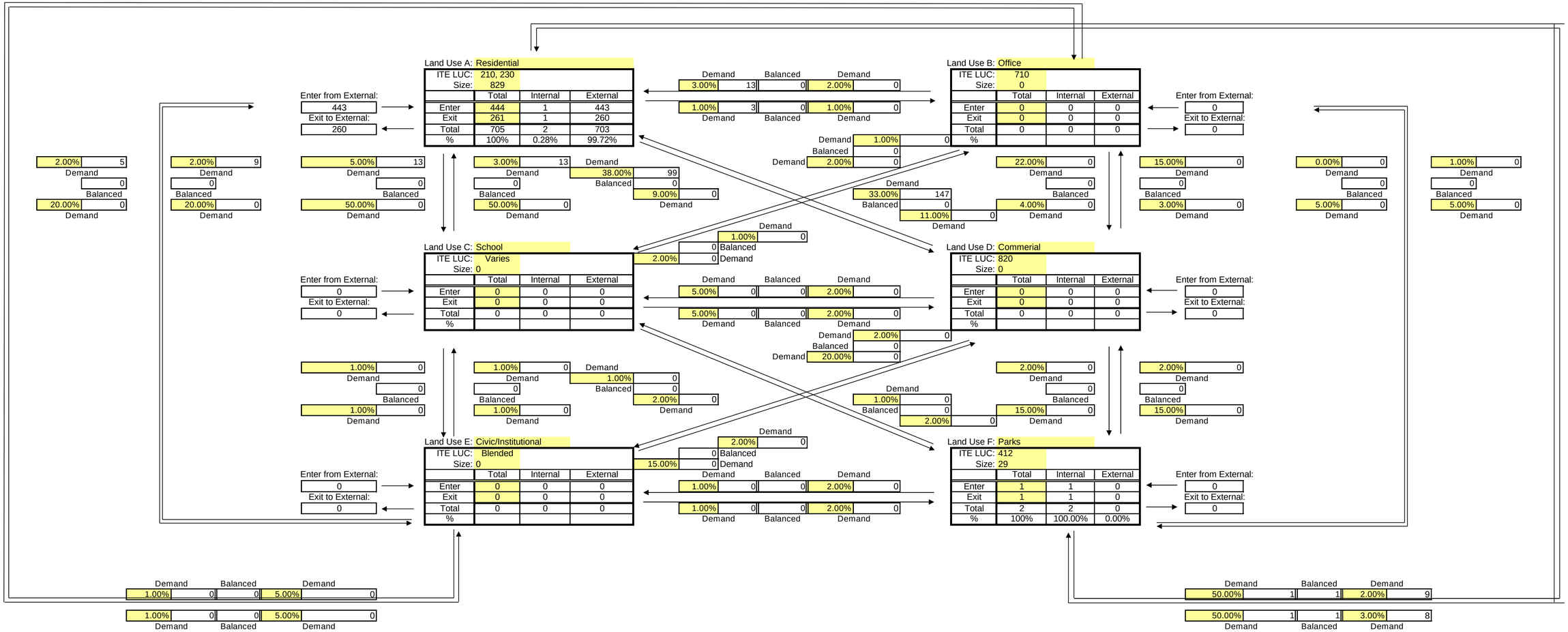
Category	Land Use A Residentia	B Office	C School	D Commerial	E Civic/Institu	F Industrial Pa	Total
Enter	0	268	0	0	0	241	509
Exit	0	1325	0	0	0	920	2245
Total	0	1593	0	0	0	1161	**2754**
Single Use Trip Gen Estimate	0	1603	0	0	0	1171	**2774**
	0.00%	0.62%	0.00%	0.00%	0.00%	0.85%	

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

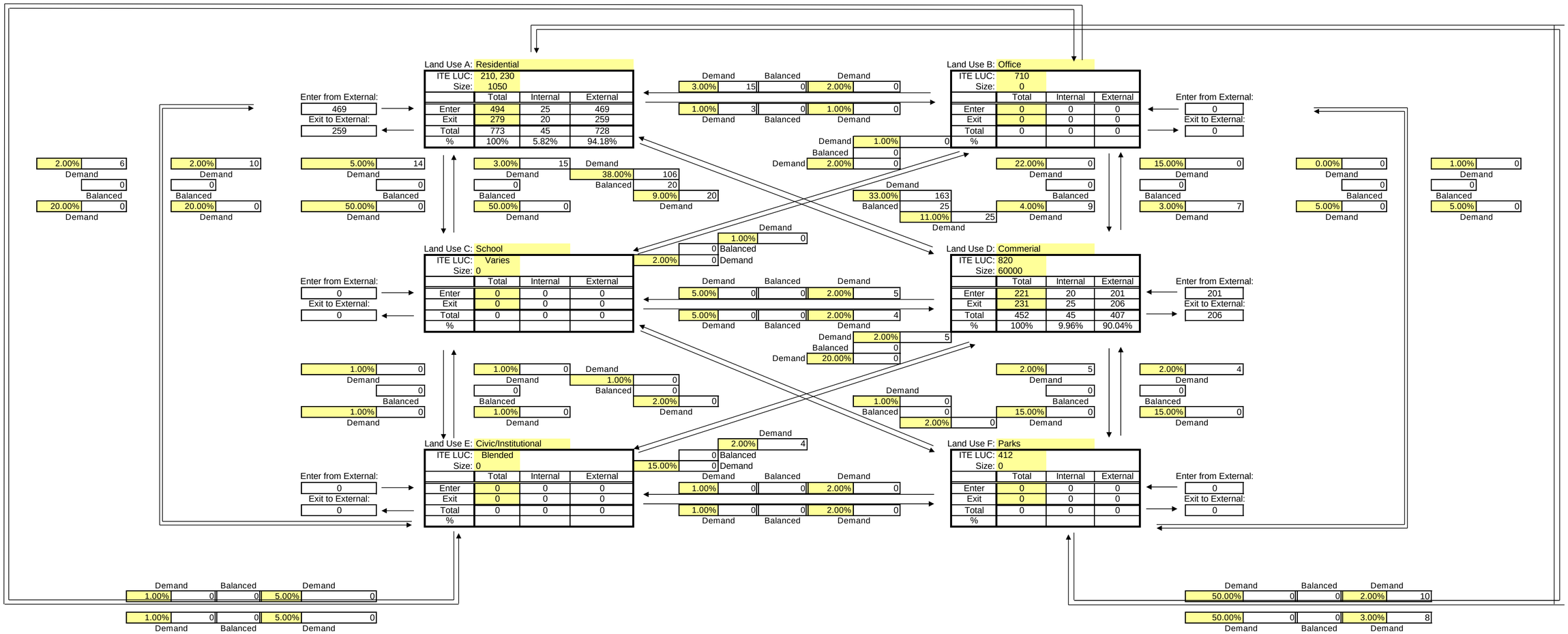
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	443	0	0	0	0	0	443
Exit	260	0	0	0	0	0	260
Total	703	0	0	0	0	0	**703**
Single Use Trip Gen Estimate	705	0	0	0	0	2	**707**
	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	

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

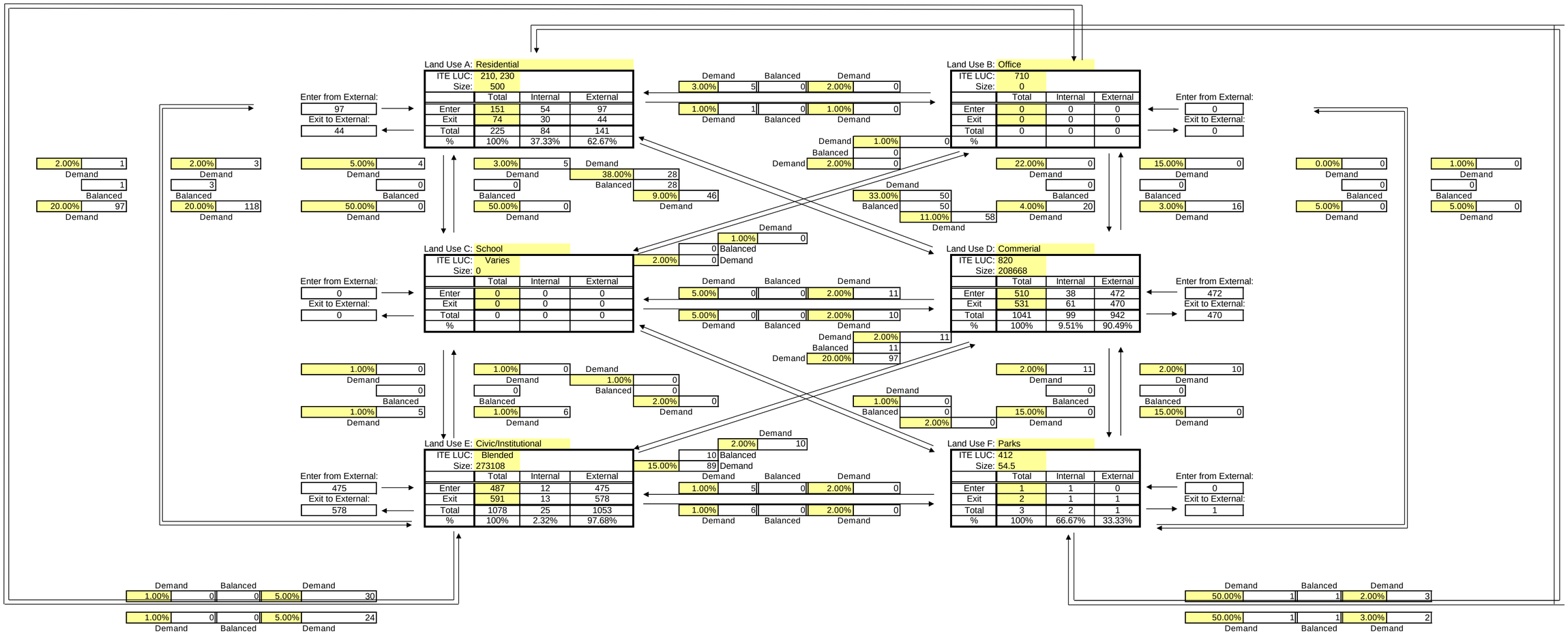
Category	Land Use A Residential	B Office	C School	D Commerial	E Civic/Institu	F Parks	Total
Enter	469	0	0	201	0	0	670
Exit	259	0	0	206	0	0	465
Total	728	0	0	407	0	0	**1135**
Single Use Trip Gen Estimate	773	0	0	452	0	0	**1225**
	5.82%	0.00%	0.00%	9.96%	0.00%	0.00%	

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%

MacKenzie
Engineering & Planning, Inc.

Appendix H

Model Daily Traffic Volume

2030 Model Daily Traffic Volume

Crosstown Pkwy

Westclyffe Lane

Tradition Pkwy

Gatlin Blvd

Range Line Road

E/W 1 (Discovery Way)

N/S A

N/S B

Community Blvd

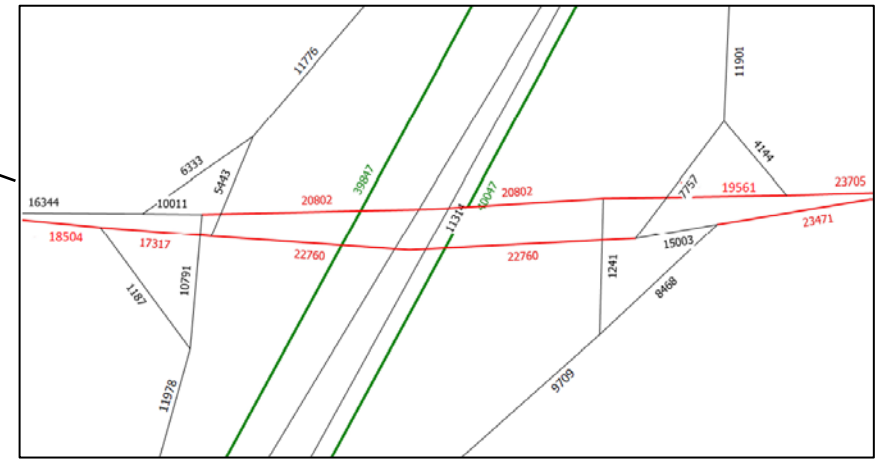
I-95

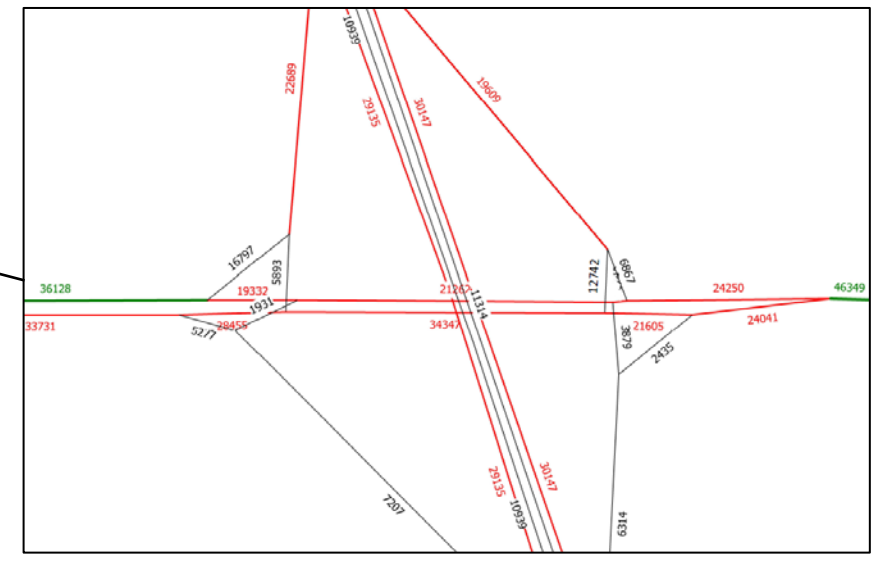
Village Pkwy

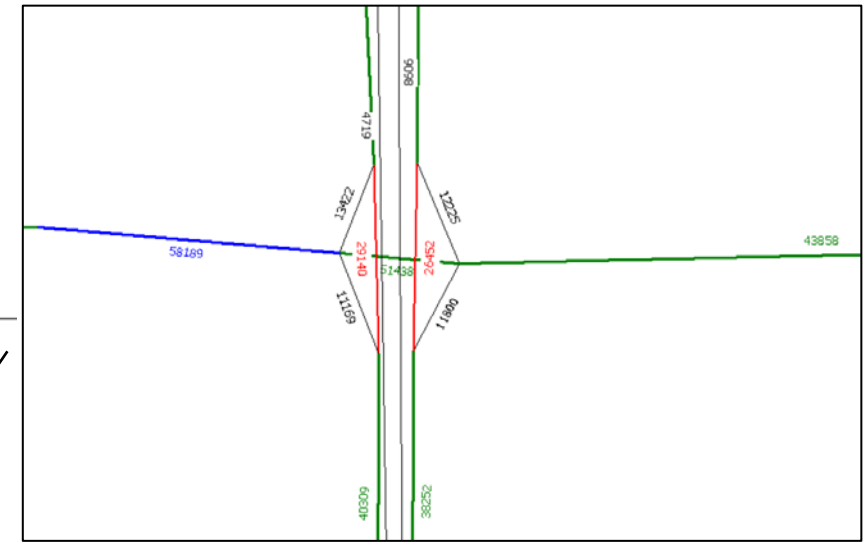
Rosser Blvd

E/W 3 (Marshall Parkway)

Becker Road

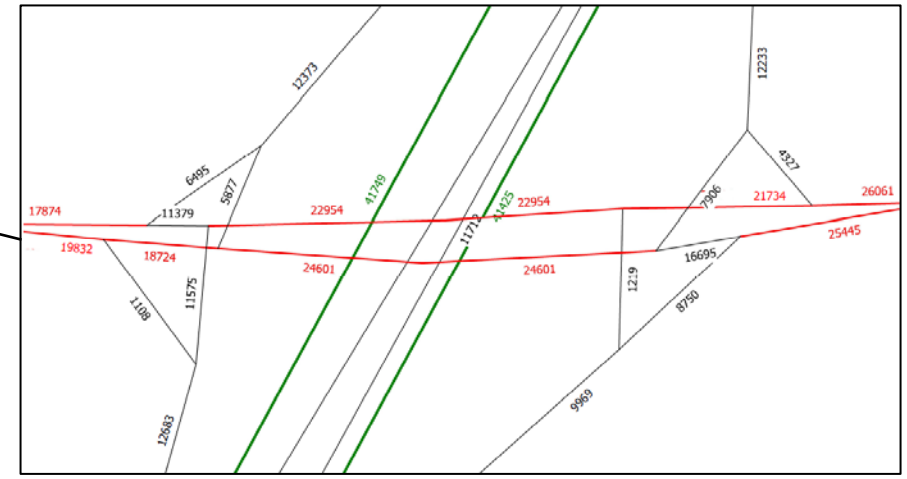


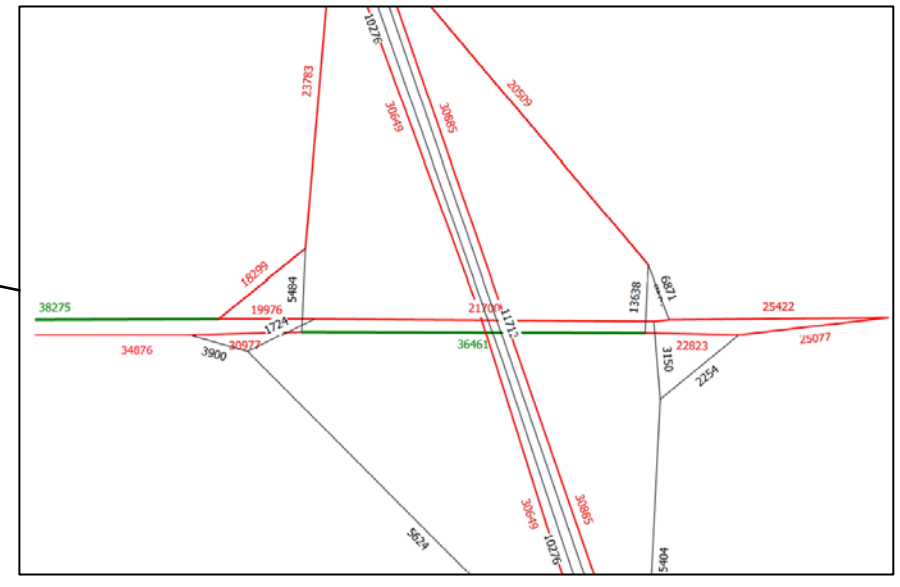


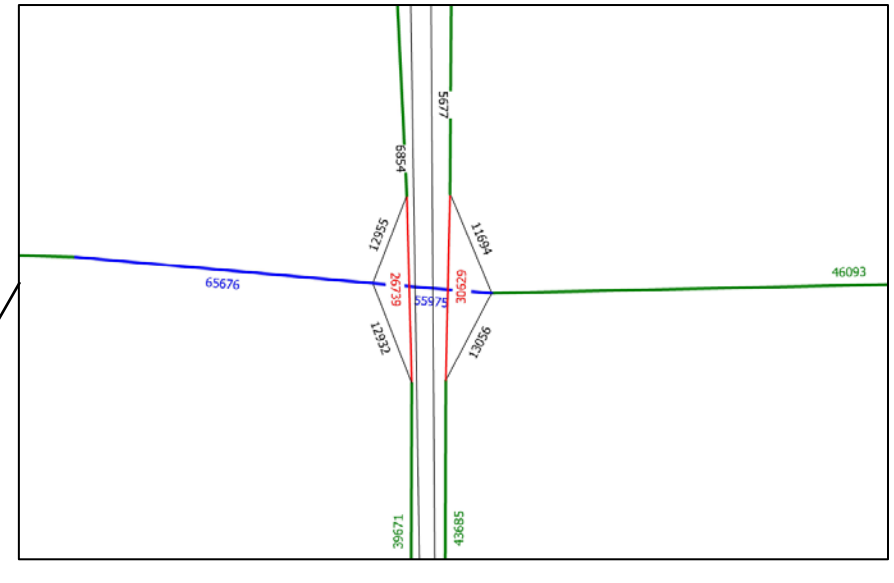


2035 Model Daily Traffic Volume

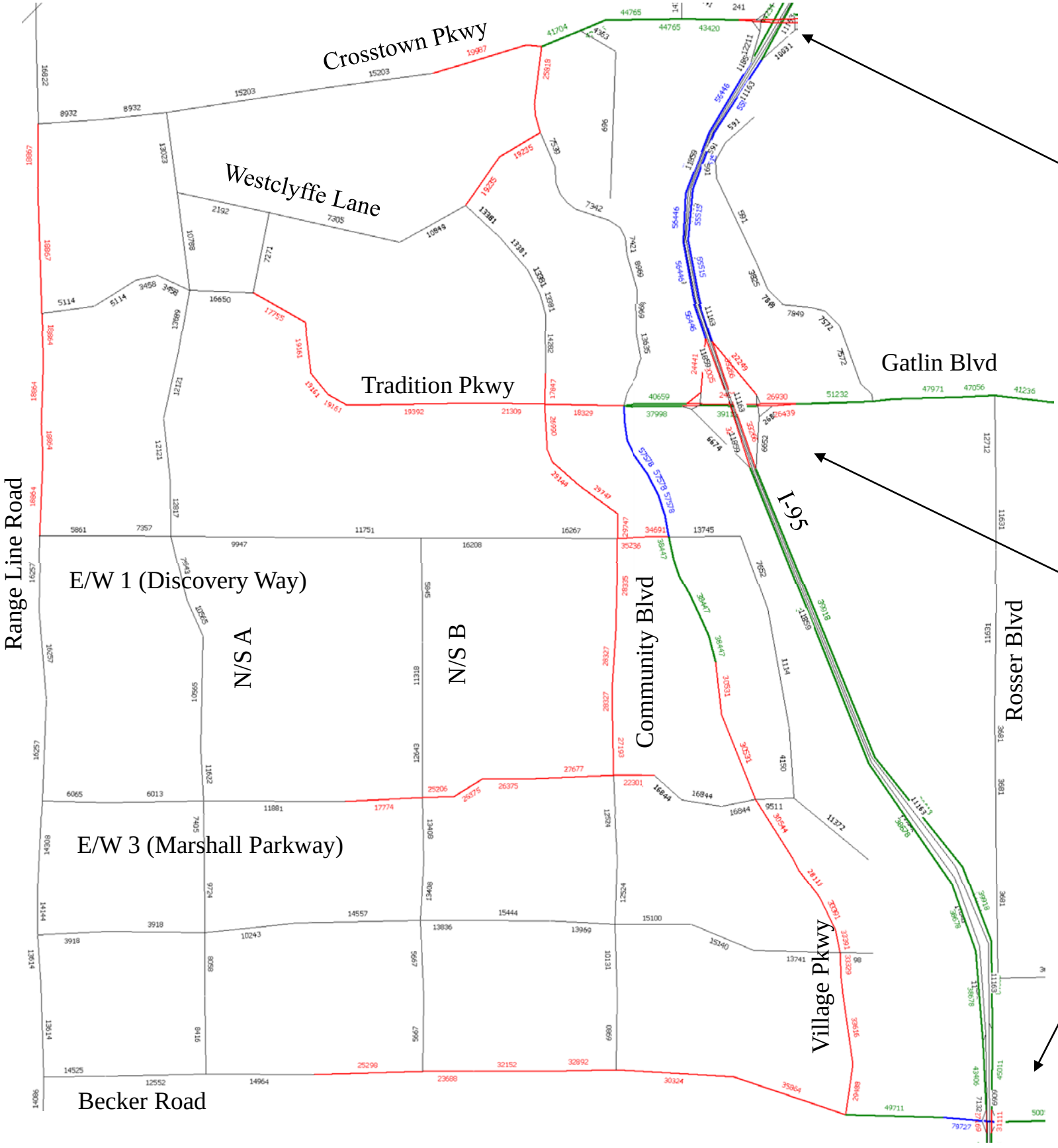
Glades Cut-Off Road
Crosstown Pkwy
Westclyffe Lane
Tradition Pkwy
Gatlin Blvd
Range Line Road
E/W 1 (Discovery Way)
N/S A
N/S B
Community Blvd
I-95
Village Pkwy
Rosser Blvd
E/W 3 (Marshall Parkway)
E/W 2 (Paar Drive)
Becker Road

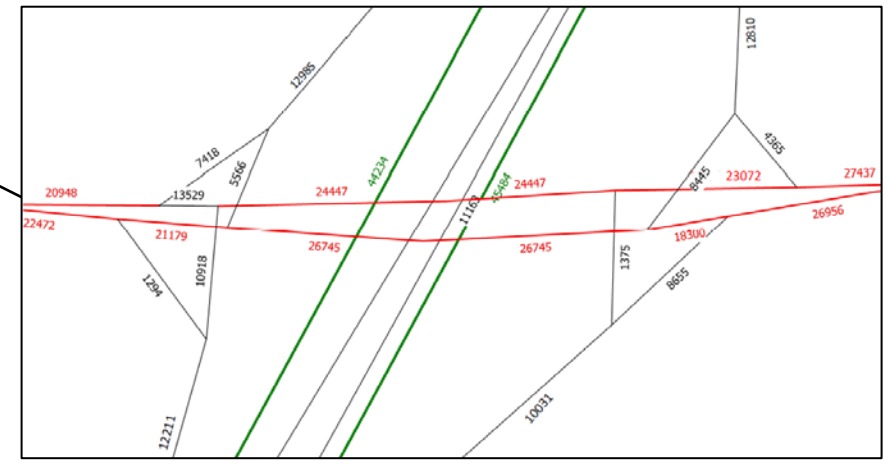


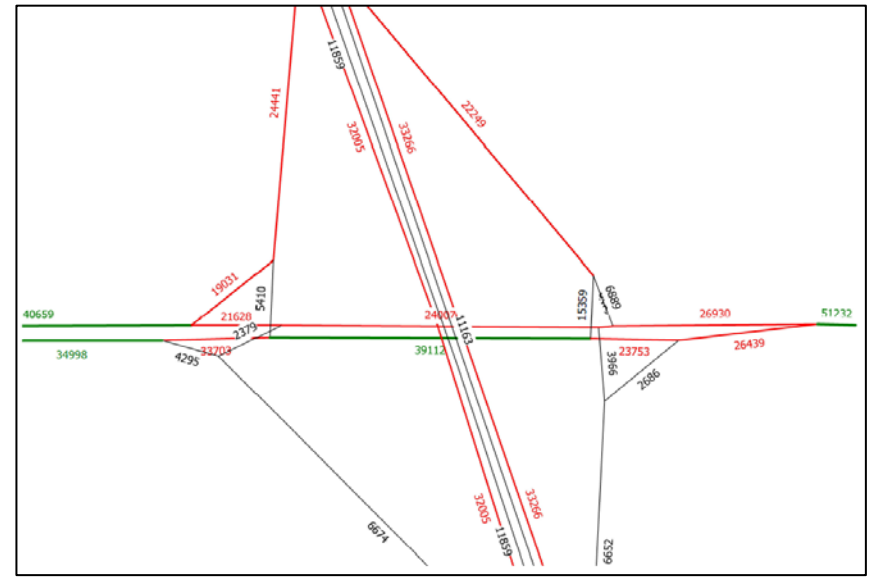


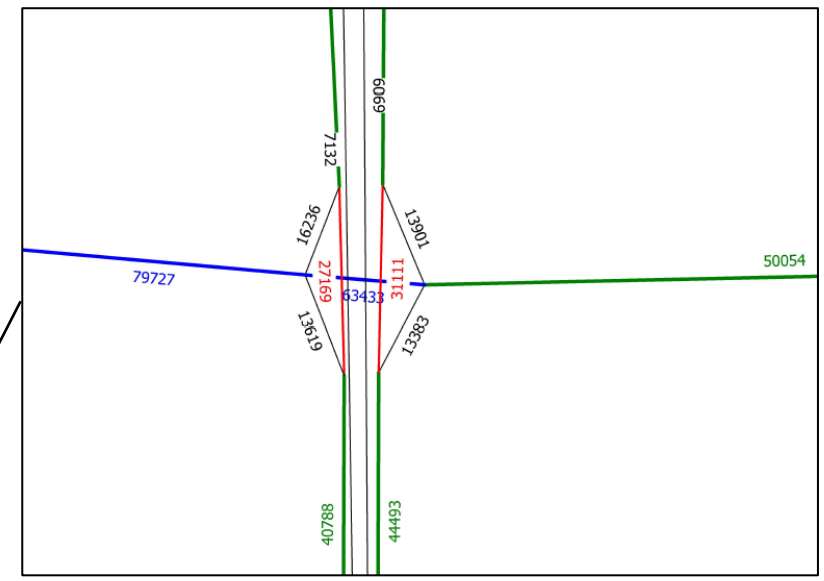


2040 Model Daily Traffic Volume









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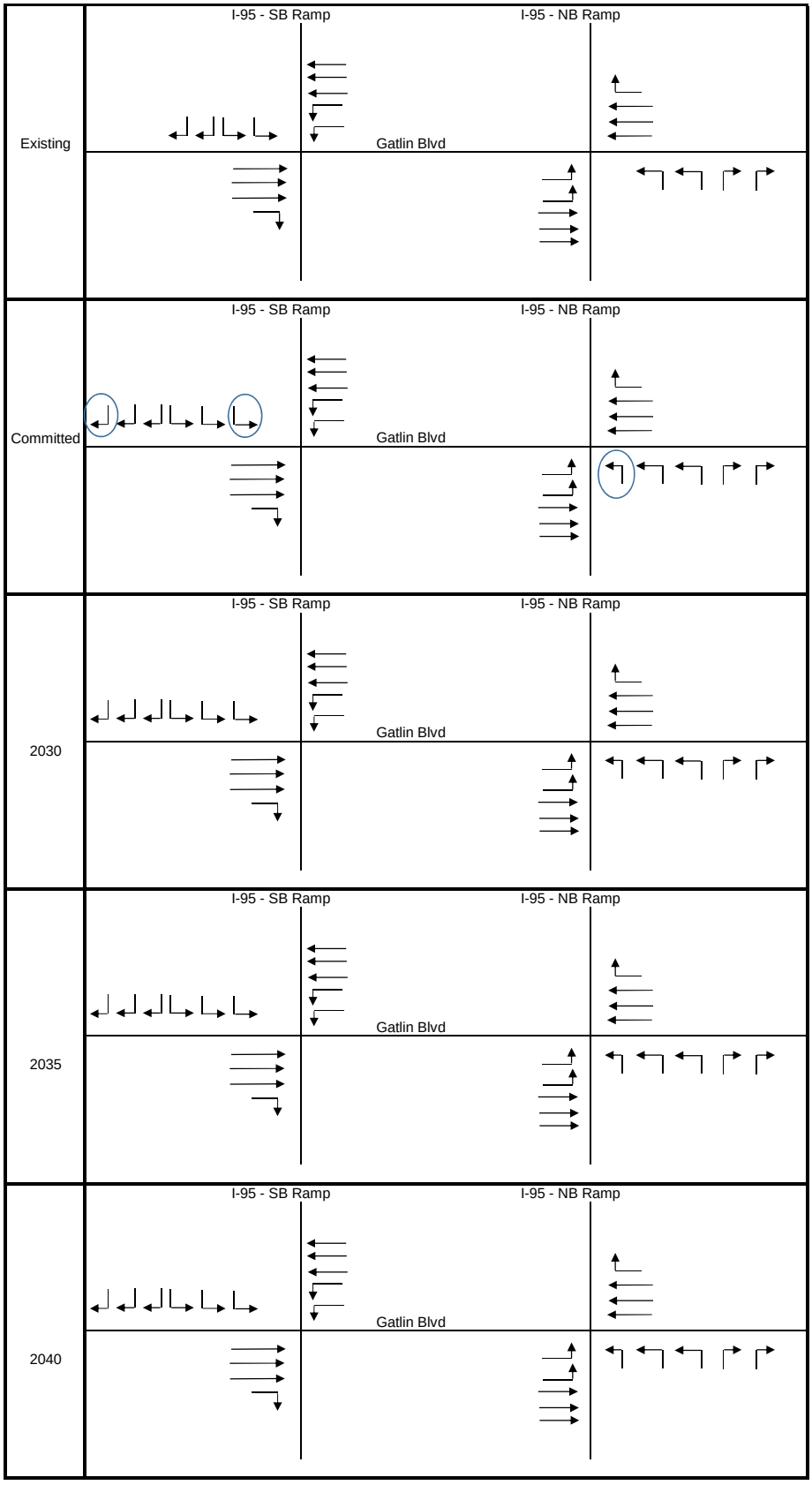
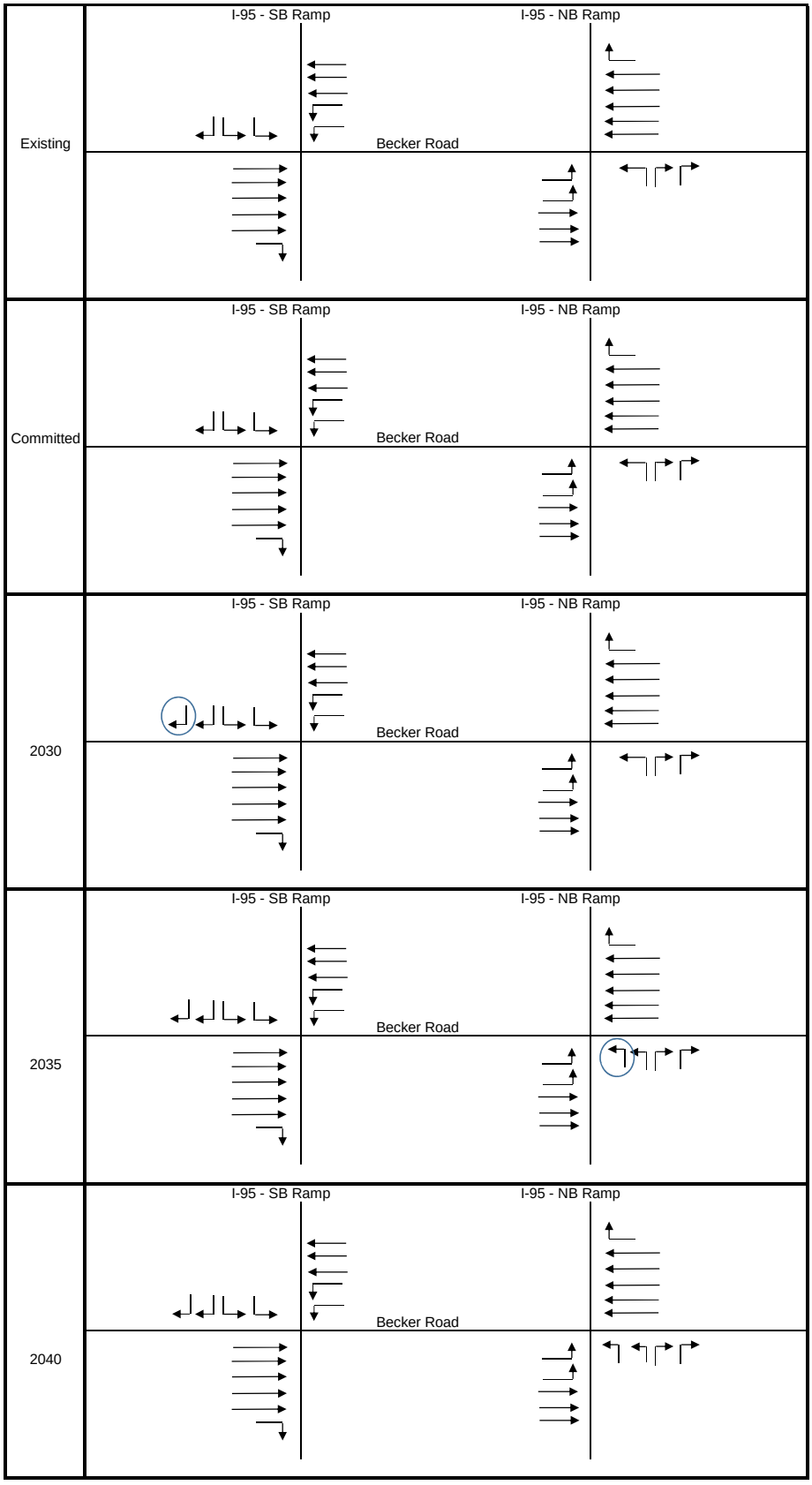
Appendix I

Interchange Analysis



LEGEND
Lane Change



LEGEND
Lane Change

Southern Groves DRI
PEAK HOUR TURNING MOVEMENTS
EXHIBIT 1
I-95 & Gatlin Blvd

2030 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
	1131	1884	443		266	1100	679		391	0	157		599	0	1494	8144

2035 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
	1242	1948	431		231	1149	665		377	0	133		572	0	1620	8368

2040 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
0	1375	2040	479		224	1210	641		414	0	126		538	0	1773	8820

2030	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			1884	443		266	1100							599		1494
from nbl/ebl			1131				391									
SB Ramp	0	**0**	**3015**	**443**	**0**	**266**	**1491**	**0**	**0**	**0**	**0**	**0**	**0**	**599**	**0**	**1494**
NB Ramp	0	1131	1884		0		1100	679	0	391	0	157				
from sbl/wbl			599				266									
NB Ramp	0	**1131**	**2483**	**0**	**0**	**0**	**1366**	**679**	**0**	**391**	**0**	**157**	**0**	**0**	**0**	**0**

2035	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			1948	431		231	1149							572		1620
from nbl/ebl			1242				377									
SB Ramp	0	**0**	**3190**	**431**	**0**	**231**	**1526**	**0**	**0**	**0**	**0**	**0**	**0**	**572**	**0**	**1620**
NB Ramp	0	1242	1948		0		1149	665	0	377	0	133				
from sbl/wbl			572				231									
NB Ramp	0	**1242**	**2520**	**0**	**0**	**0**	**1380**	**665**	**0**	**377**	**0**	**133**	**0**	**0**	**0**	**0**

2040	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			2040	479		224	1210							538		1773
from nbl/ebl			1375				414									
SB Ramp	0	**0**	**3415**	**479**	**0**	**224**	**1624**	**0**	**0**	**0**	**0**	**0**	**0**	**538**	**0**	**1773**
NB Ramp	0	1375	2040		0		1210	641	0	414	0	126				
from sbl/wbl			538				224									
NB Ramp	0	**1375**	**2578**	**0**	**0**	**0**	**1434**	**641**	**0**	**414**	**0**	**126**	**0**	**0**	**0**	**0**

Southern Groves DRI
PEAK HOUR TURNING MOVEMENTS
EXHIBIT 2
I-95 & Becker Road

2030 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
	648	1524	708		455	905	416		636	0	294		401	0	869	6856

2035 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
	666	1723	862		456	1058	353		770	0	283		328	0	892	7391

2040 PEAK HOUR TURNING MOVEMENTS

ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
0	912	2036	998		385	1291	351		869	0	225		307	0	1185	8559

2030	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			1524	708		455	905							401		869
from nbl/ebl			648				636									
SB Ramp	0	**0**	**2172**	**708**	**0**	**455**	**1541**	**0**	**0**	**0**	**0**	**0**	**0**	**401**	**0**	**869**
NB Ramp	0	648	1524		0		905	416	0	636	0	294				
from sbl/wbl			401				455									
NB Ramp	0	**648**	**1925**	**0**	**0**	**0**	**1360**	**416**	**0**	**636**	**0**	**294**	**0**	**0**	**0**	**0**

2035	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			1723	862		456	1058							328		892
from nbl/ebl			666				770									
SB Ramp	0	**0**	**2389**	**862**	**0**	**456**	**1828**	**0**	**0**	**0**	**0**	**0**	**0**	**328**	**0**	**892**
NB Ramp	0	666	1723		0		1058	353	0	770	0	283				
from sbl/wbl			328				456									
NB Ramp	0	**666**	**2051**	**0**	**0**	**0**	**1514**	**353**	**0**	**770**	**0**	**283**	**0**	**0**	**0**	**0**

2040	**ebu**	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	**nbt**	**nbr**	**sbu**	**sbl**	**sbt**	**sbr**
SB Ramp			2036	998		385	1291							307		1185
from nbl/ebl			912				869									
SB Ramp	0	**0**	**2948**	**998**	**0**	**385**	**2160**	**0**	**0**	**0**	**0**	**0**	**0**	**307**	**0**	**1185**
NB Ramp	0	912	2036		0		1291	351	0	869	0	225				
from sbl/wbl			307				385									
NB Ramp	0	**912**	**2343**	**0**	**0**	**0**	**1676**	**351**	**0**	**869**	**0**	**225**	**0**	**0**	**0**	**0**

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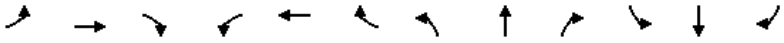
Gatlin Boulevard/Tradition Parkway & I-95

SB Ramp

Phase 2 (2030)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1
Lane Configurations													
Traffic Volume (vph)	0	3015	443	266	1491	0	0	0	0	599	0	1494	
Future Volume (vph)	0	3015	443	266	1491	0	0	0	0	599	0	1494	
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)			406									92	
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	3174	466	280	1569	0	0	0	0	631	0	1573	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	3174	466	280	1569	0	0	0	0	631	0	1573	
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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1
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)		95.4	160.0	14.6	96.8					29.6		131.8	
Actuated g/C Ratio		0.60	1.00	0.09	0.60					0.18		0.82	
v/c Ratio		0.95	0.25	0.87	0.46					0.64		0.34	
Control Delay		38.6	0.3	96.4	24.2					63.4		3.4	
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0	
Total Delay		38.6	0.3	96.4	24.2					63.4		3.4	
LOS		D	A	F	C					E		A	
Approach Delay		33.7			35.2						20.6		
Approach LOS		C			D						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: 0.95			
Intersection Signal Delay: 30.3		Intersection LOS: C	
Intersection Capacity Utilization 94.2%		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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Gatlin Boulevard/Tradition Parkway & I-95

NB Ramp

Phase 2 (2030)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1131	2483	0	0	1366	679	391	0	157	0	0	0
Future Volume (vph)	1131	2483	0	0	1366	679	391	0	157	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)	1191	2614	0	0	1438	715	412	0	165	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1191	2614	0	0	1438	715	412	0	165	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			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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)	60.8	127.7			60.1	160.0	18.7		18.7			
Actuated g/C Ratio	0.38	0.80			0.38	1.00	0.12		0.12			
v/c Ratio	0.91	0.64			0.75	0.45	0.71		0.51			
Control Delay	69.4	11.2			47.5	0.9	74.9		71.5			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	69.4	11.2			47.5	0.9	74.9		71.5			
LOS	E	B			D	A	E		E			
Approach Delay		29.4			32.1			73.9				
Approach LOS		C			C			E				

Intersection Summary

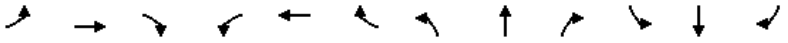
Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 34.2 Intersection LOS: C
Intersection Capacity Utilization 94.2% 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 (2030)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2172	708	455	1541	0	0	0	0	401	0	869
Future Volume (vph)	0	2172	708	455	1541	0	0	0	0	401	0	869
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)			745									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	2286	745	479	1622	0	0	0	0	422	0	915
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2286	745	479	1622	0	0	0	0	422	0	915
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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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)		59.4	160.0	32.2	98.4					48.0		48.0
Actuated g/C Ratio		0.37	1.00	0.20	0.62					0.30		0.30
v/c Ratio		0.66	0.40	0.67	0.47					0.40		0.89
Control Delay		43.7	0.6	45.7	11.8					45.0		59.8
Queue Delay		0.0	0.0	3.7	0.5					0.0		0.0
Total Delay		43.7	0.6	49.5	12.3					45.0		59.8
LOS		D	A	D	B					D		E
Approach Delay		33.1			20.8						55.1	
Approach LOS		C			C						E	

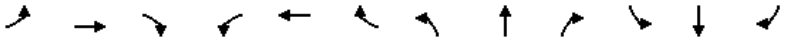
Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 146 (91%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 33.7		Intersection LOS: C	
Intersection Capacity Utilization 86.5%		ICU Level of Service E	
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 (2030)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	648	1925	0	0	1360	416	636	0	294	0	0	0
Future Volume (vph)	648	1925	0	0	1360	416	636	0	294	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)						418						
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)	682	2026	0	0	1432	438	669	0	309	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	682	2026	0	0	1432	438	669	0	309	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			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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)	34.9	82.1			40.4	160.0	64.3		64.3			
Actuated g/C Ratio	0.22	0.51			0.25	1.00	0.40		0.40			
v/c Ratio	0.91	0.78			0.75	0.28	0.94		0.28			
Control Delay	70.2	12.3			59.1	0.4	67.8		32.3			
Queue Delay	7.5	0.7			0.0	0.0	0.4		0.0			
Total Delay	77.7	13.0			59.1	0.4	68.2		32.3			
LOS	E	B			E	A	E		C			
Approach Delay		29.3			45.4			56.8				
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: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 39.6 Intersection LOS: D
Intersection Capacity Utilization 86.5% ICU Level of Service E
Analysis Period (min) 15

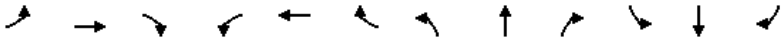
Splits and Phases: 4: I-95 NB Ramp & Becker Road

MacKenzie
Engineering & Planning, Inc.

Gatlin Boulevard/Tradition Parkway & I-95

SB Ramp

Phase 3 (2035)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1
Lane Configurations													
Traffic Volume (vph)	0	3190	431	231	1526	0	0	0	0	572	0	1620	
Future Volume (vph)	0	3190	431	231	1526	0	0	0	0	572	0	1620	
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)			374									85	
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	3358	454	243	1606	0	0	0	0	602	0	1705	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	3358	454	243	1606	0	0	0	0	602	0	1705	
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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1
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)		96.0	160.0	13.9	96.7					29.7		132.5	
Actuated g/C Ratio		0.60	1.00	0.09	0.60					0.19		0.83	
v/c Ratio		1.00	0.24	0.79	0.48					0.61		0.37	
Control Delay		47.8	0.3	83.8	28.4					62.6		3.5	
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0	
Total Delay		47.8	0.3	83.8	28.4					62.6		3.5	
LOS		D	A	F	C					E		A	
Approach Delay		42.2			35.7						18.9		
Approach LOS		D			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: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 33.9 Intersection LOS: C
Intersection Capacity Utilization 96.1% 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 3 (2035)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1242	2520	0	0	1380	665	377	0	133	0	0	0
Future Volume (vph)	1242	2520	0	0	1380	665	377	0	133	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)						617						
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)	1307	2653	0	0	1453	700	397	0	140	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1307	2653	0	0	1453	700	397	0	140	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			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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)	67.5	128.4			54.1	160.0	18.0		18.0			
Actuated g/C Ratio	0.42	0.80			0.34	1.00	0.11		0.11			
v/c Ratio	0.90	0.65			0.84	0.44	0.71		0.45			
Control Delay	67.0	11.4			55.0	0.9	75.5		70.5			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	67.0	11.4			55.0	0.9	75.5		70.5			
LOS	E	B			D	A	E		E			
Approach Delay		29.8			37.4			74.2				
Approach LOS		C			D			E				

Intersection Summary

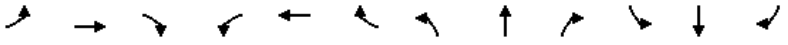
Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 35.8 Intersection LOS: D
Intersection Capacity Utilization 96.1% 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 3 (2035)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2389	862	456	1828	0	0	0	0	328	0	892
Future Volume (vph)	0	2389	862	456	1828	0	0	0	0	328	0	892
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)			822									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	2515	907	480	1924	0	0	0	0	345	0	939
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2515	907	480	1924	0	0	0	0	345	0	939
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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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)		58.5	160.0	32.2	97.5					48.9		48.9
Actuated g/C Ratio		0.37	1.00	0.20	0.61					0.31		0.31
v/c Ratio		0.91	0.49	0.70	0.62					0.33		0.89
Control Delay		54.2	0.9	57.1	16.7					43.1		60.2
Queue Delay		2.7	0.0	2.9	0.2					0.4		0.0
Total Delay		56.9	0.9	60.0	16.9					43.5		60.2
LOS		E	A	E	B					D		E
Approach Delay		42.1			25.5						55.7	
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: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 38.9 Intersection LOS: D
Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 3: Becker Road & I-95 SB Ramp

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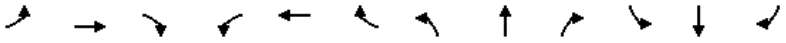
Engineering & Planning, Inc.

Becker Road & I-95 NB Ramp

Phase 3 (2035)

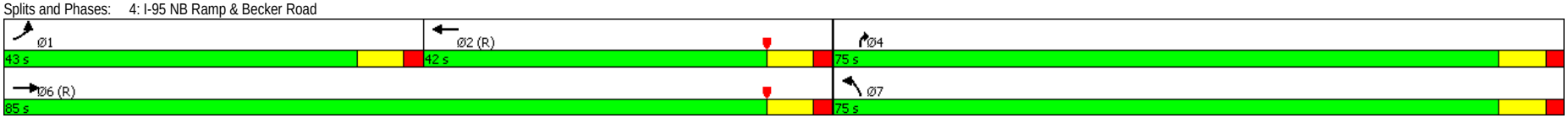


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	666	2051	0	0	1514	353	770	0	283	0	0	0
Future Volume (vph)	666	2051	0	0	1514	353	770	0	283	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (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)						372						
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)	701	2159	0	0	1594	372	811	0	298	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	701	2159	0	0	1594	372	811	0	298	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			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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)	37.2	102.1			58.1	160.0	44.3		44.3			
Actuated g/C Ratio	0.23	0.64			0.36	1.00	0.28		0.28			
v/c Ratio	0.85	0.61			0.47	0.23	0.83		0.34			
Control Delay	100.3	3.7			41.1	0.3	61.9		46.4			
Queue Delay	50.7	0.3			0.0	0.0	0.0		0.0			
Total Delay	151.0	4.0			41.1	0.3	61.9		46.4			
LOS	F	A			D	A	E		D			
Approach Delay		40.0			33.4			57.8				
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: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 41.2		Intersection LOS: D	
Intersection Capacity Utilization 77.9%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 4: I-95 NB Ramp & Becker Road

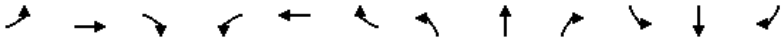


MacKenzie
Engineering & Planning, Inc.

Gatlin Boulevard/Tradition Parkway & I-95

SB Ramp

Phase 4 (2040)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1
Lane Configurations													
Traffic Volume (vph)	0	3415	479	224	1624	0	0	0	0	538	0	1773	
Future Volume (vph)	0	3415	479	224	1624	0	0	0	0	538	0	1773	
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)			388									66	
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	3595	504	236	1709	0	0	0	0	566	0	1866	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	3595	504	236	1709	0	0	0	0	566	0	1866	
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)		110.0		21.0	102.0					29.0			29.0
Total Split (%)		68.8%		13.1%	63.8%					18.1%			18%
Maximum Green (s)		103.2		14.2	95.2					22.2			22.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Ø1
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)		103.6	160.0	13.8	95.2					22.2		132.6	
Actuated g/C Ratio		0.65	1.00	0.09	0.60					0.14		0.83	
v/c Ratio		0.99	0.27	0.78	0.51					0.77		0.40	
Control Delay		41.2	0.4	79.6	33.0					74.3		3.7	
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0	
Total Delay		41.2	0.4	79.6	33.0					74.3		3.7	
LOS		D	A	E	C					E		A	
Approach Delay		36.1			38.6						20.1		
Approach LOS		D			D						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: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.99
Intersection Signal Delay: 32.1 Intersection LOS: C
Intersection Capacity Utilization 99.6% 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 4 (2040)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1375	2578	0	0	1434	641	414	0	126	0	0	0
Future Volume (vph)	1375	2578	0	0	1434	641	414	0	126	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)						615						
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)	1447	2714	0	0	1509	675	436	0	133	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1447	2714	0	0	1509	675	436	0	133	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			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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)	68.8	127.0			51.4	160.0	19.4		19.4			
Actuated g/C Ratio	0.43	0.79			0.32	1.00	0.12		0.12			
v/c Ratio	0.98	0.67			0.92	0.43	0.72		0.39			
Control Delay	71.6	11.9			62.7	0.8	74.6		67.7			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	71.6	11.9			62.7	0.8	74.6		67.7			
LOS	E	B			E	A	E		E			
Approach Delay		32.7			43.6			73.0				
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: 145
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 39.4 Intersection LOS: D
Intersection Capacity Utilization 99.6% 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 4 (2040)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2948	998	385	2160	0	0	0	0	307	0	1185
Future Volume (vph)	0	2948	998	385	2160	0	0	0	0	307	0	1185
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)			868									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	3103	1051	405	2274	0	0	0	0	323	0	1247
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3103	1051	405	2274	0	0	0	0	323	0	1247
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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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)		55.1	160.0	30.2	92.1					54.3		54.3
Actuated g/C Ratio		0.34	1.00	0.19	0.58					0.34		0.34
v/c Ratio		0.97	0.56	0.61	0.71					0.27		0.95
Control Delay		61.4	1.2	44.1	20.9					38.9		63.8
Queue Delay		2.2	0.0	1.2	11.4					0.4		0.0
Total Delay		63.5	1.2	45.4	32.2					39.3		63.8
LOS		E	A	D	C					D		E
Approach Delay		47.8			34.2						58.8	
Approach LOS		D			C						E	

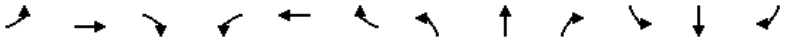
Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 146 (91%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 45.5		Intersection LOS: D	
Intersection Capacity Utilization 94.5%		ICU Level of Service F	
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 4 (2040)

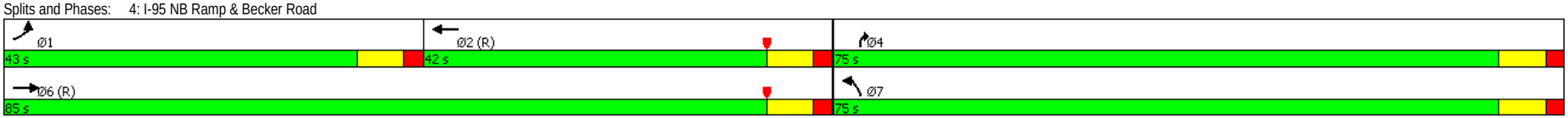


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	912	2343	0	0	1676	351	869	0	225	0	0	0
Future Volume (vph)	912	2343	0	0	1676	351	869	0	225	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (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)						353						
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)	960	2466	0	0	1764	369	915	0	237	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	960	2466	0	0	1764	369	915	0	237	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			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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)	55.0	97.0			35.2	160.0	49.4		49.4			
Actuated g/C Ratio	0.34	0.61			0.22	1.00	0.31		0.31			
v/c Ratio	0.79	0.73			0.86	0.23	0.84		0.24			
Control Delay	61.5	11.4			65.2	0.3	58.8		41.0			
Queue Delay	17.6	0.8			0.0	0.0	0.0		0.0			
Total Delay	79.1	12.3			65.2	0.3	58.8		41.0			
LOS	E	B			E	A	E		D			
Approach Delay		31.0			53.9			55.1				
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: 0.86			
Intersection Signal Delay: 42.4		Intersection LOS: D	
Intersection Capacity Utilization 94.5%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 4: I-95 NB Ramp & Becker Road



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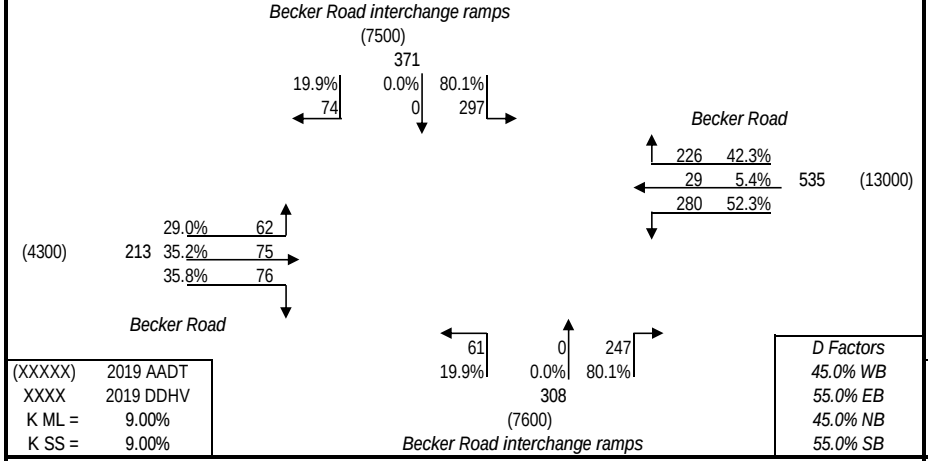
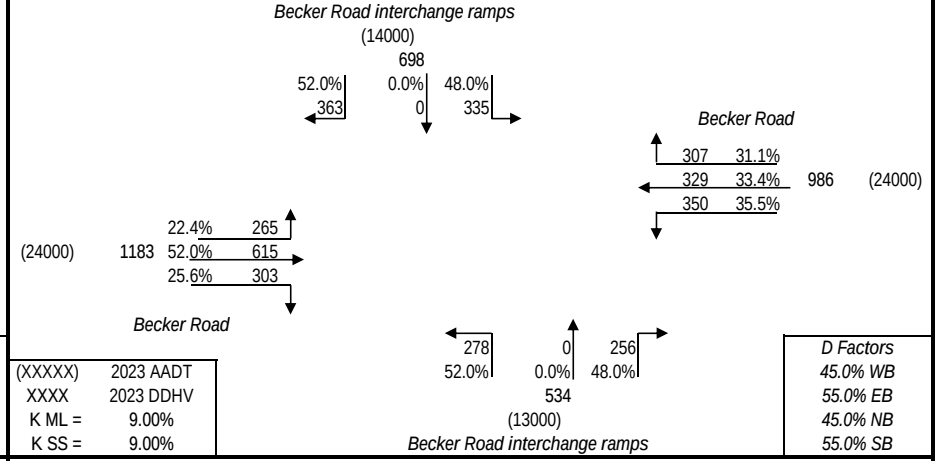
Project Traffic at Becker Road Interchange Ramps

PROJECT TRAFFIC FOR Becker Road AT Becker Road interchange ramps

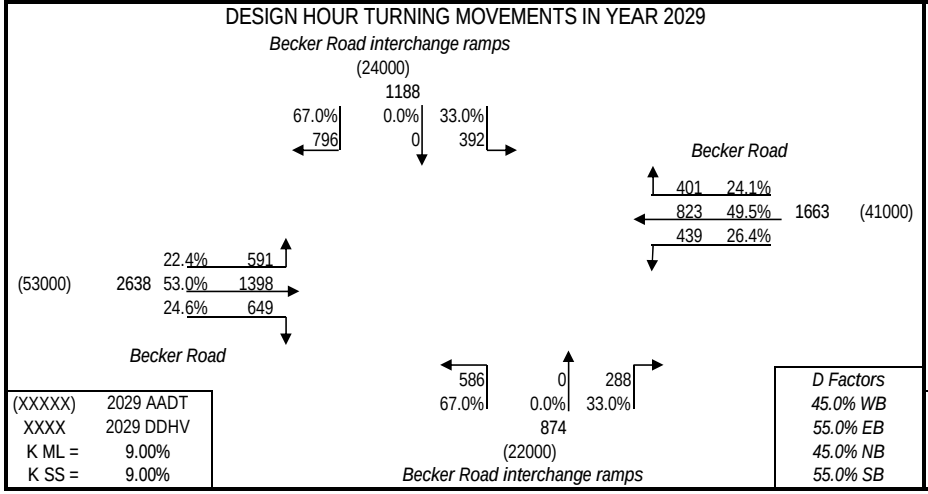
DESIGN HOUR TURNING MOVEMENTS IN YEAR 2019



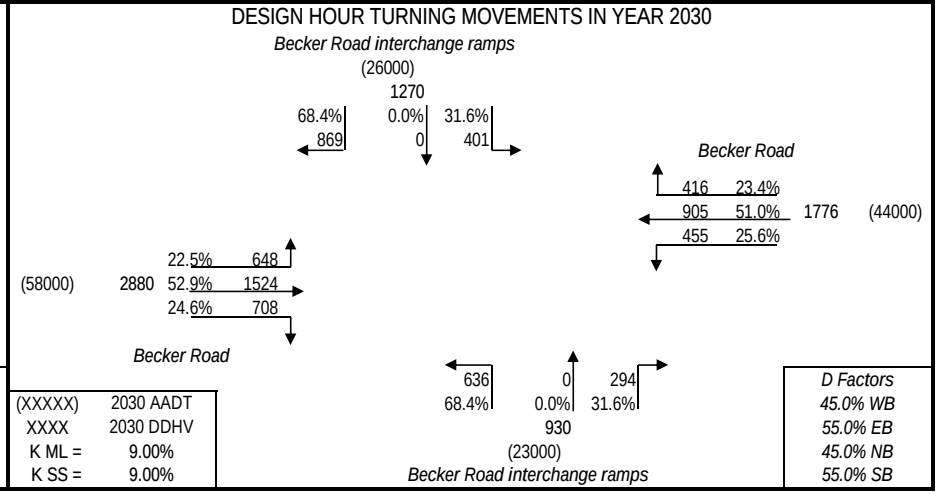
DESIGN HOUR TURNING MOVEMENTS IN YEAR 2023



DESIGN HOUR TURNING MOVEMENTS IN YEAR 2029

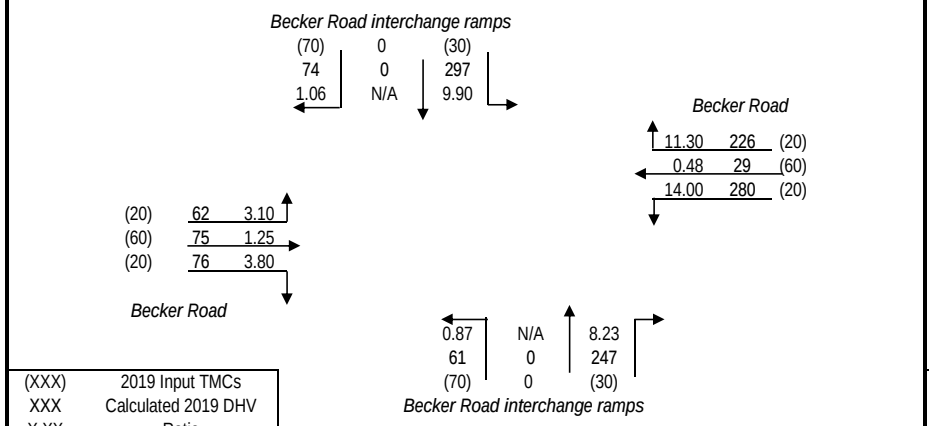


DESIGN HOUR TURNING MOVEMENTS IN YEAR 2030

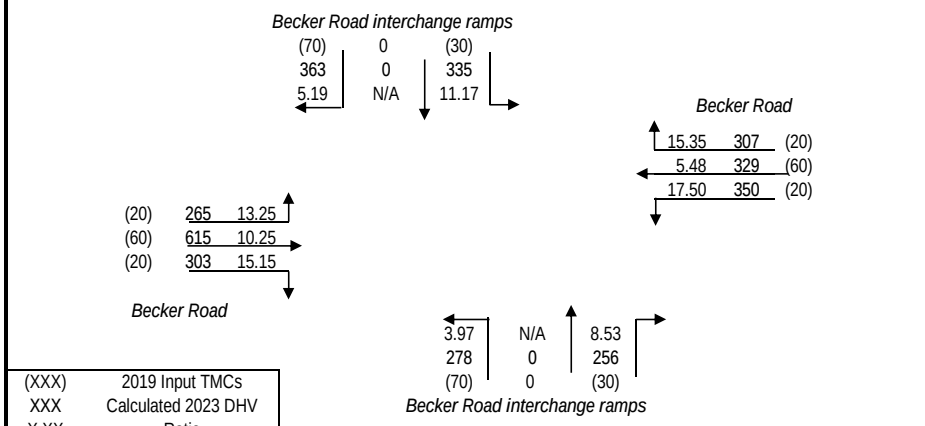


PROJECT TRAFFIC FOR Becker Road AT Becker Road interchange ramps

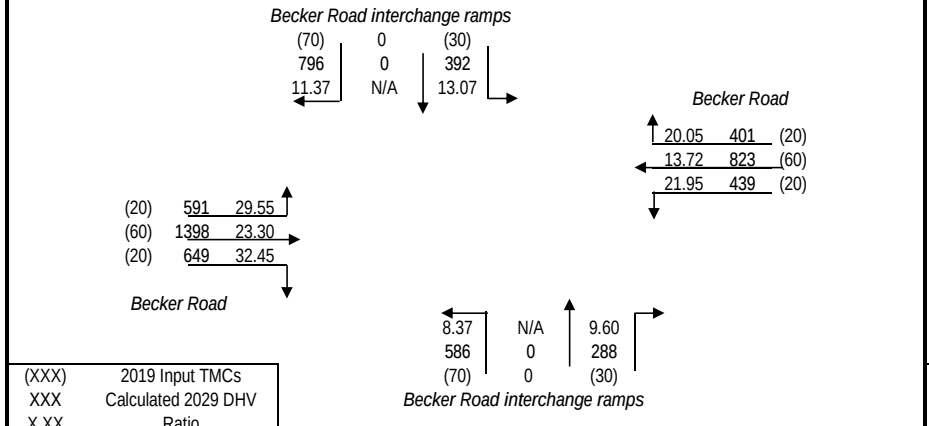
2019 INPUT TMCs COMPARED TO 2019 DHV



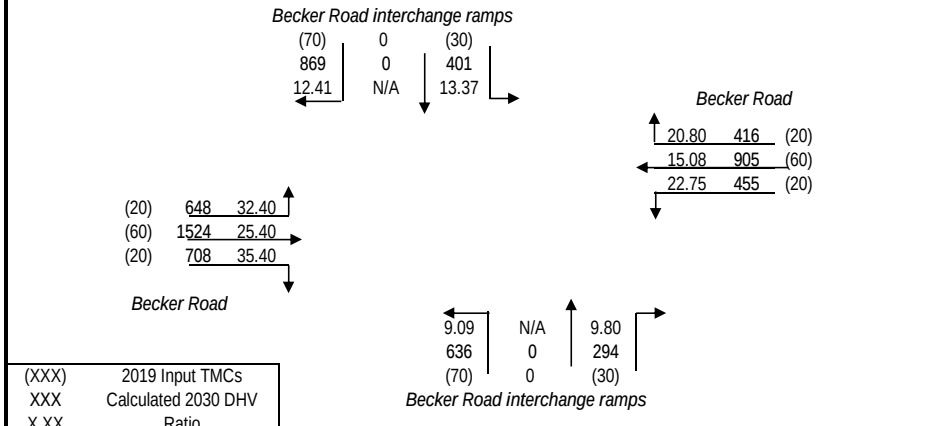
2019 INPUT TMCs COMPARED TO 2023 DHV



2019 INPUT TMCs COMPARED TO 2029 DHV

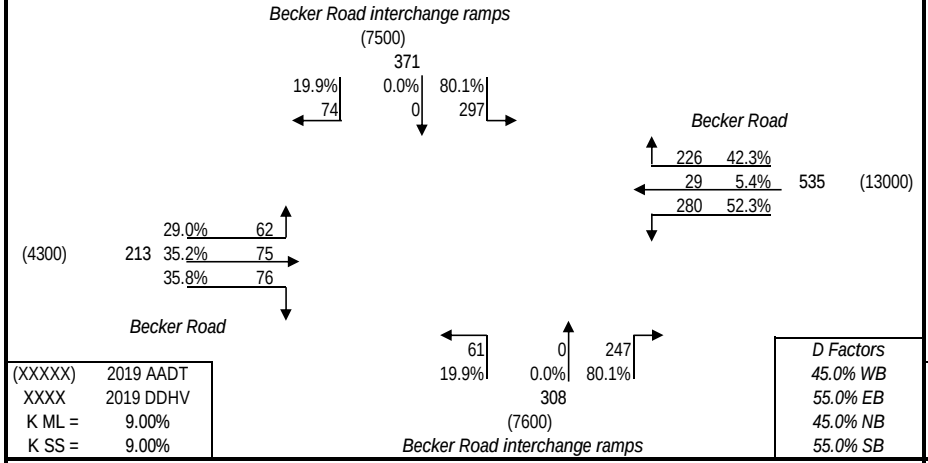


2019 INPUT TMCs COMPARED TO 2030 DHV



PROJECT TRAFFIC FOR Becker Road AT Becker Road interchange ramps

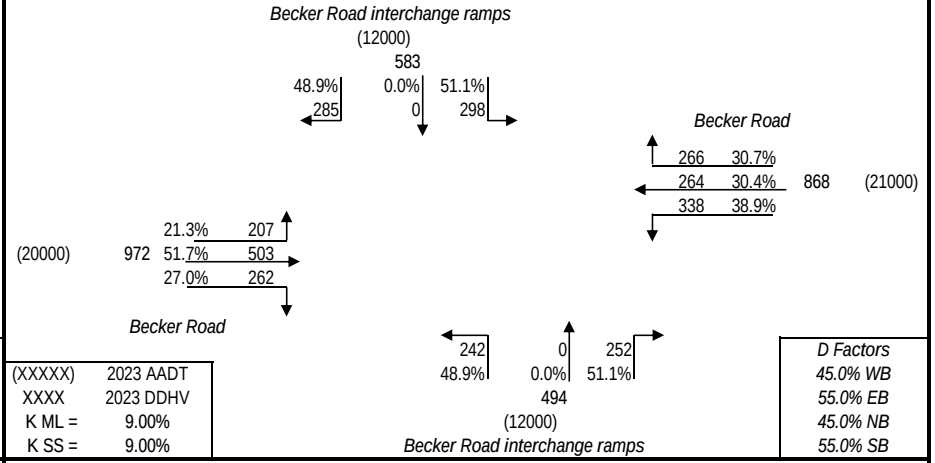
DESIGN HOUR TURNING MOVEMENTS IN YEAR 2019



(XXXXX)	2019 AADT
XXXX	2019 DDHV
K ML =	9.00%
K SS =	9.00%

D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

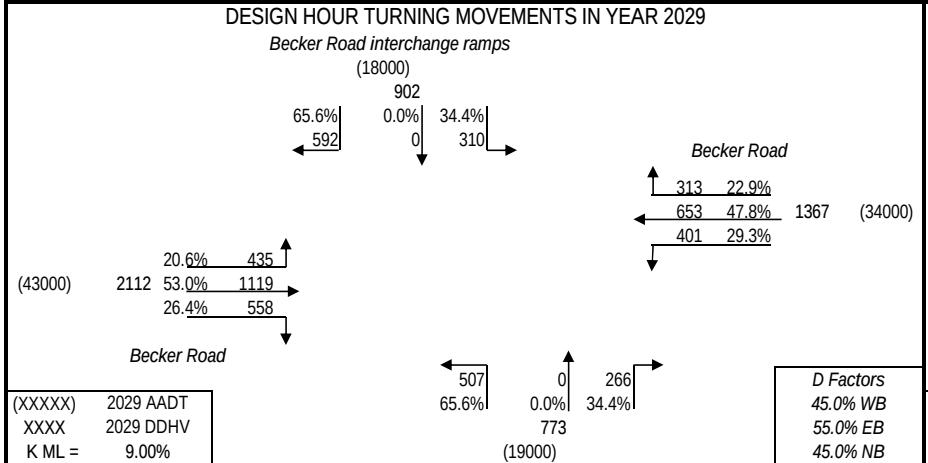
DESIGN HOUR TURNING MOVEMENTS IN YEAR 2023



(XXXXX)	2023 AADT
XXXX	2023 DDHV
K ML =	9.00%
K SS =	9.00%

D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

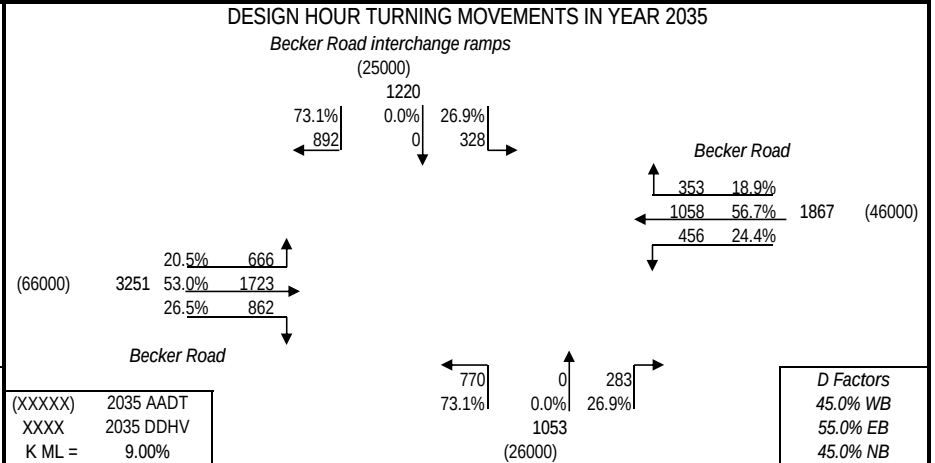
DESIGN HOUR TURNING MOVEMENTS IN YEAR 2029



(XXXXX)	2029 AADT
XXXX	2029 DDHV
K ML =	9.00%
K SS =	9.00%

D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035

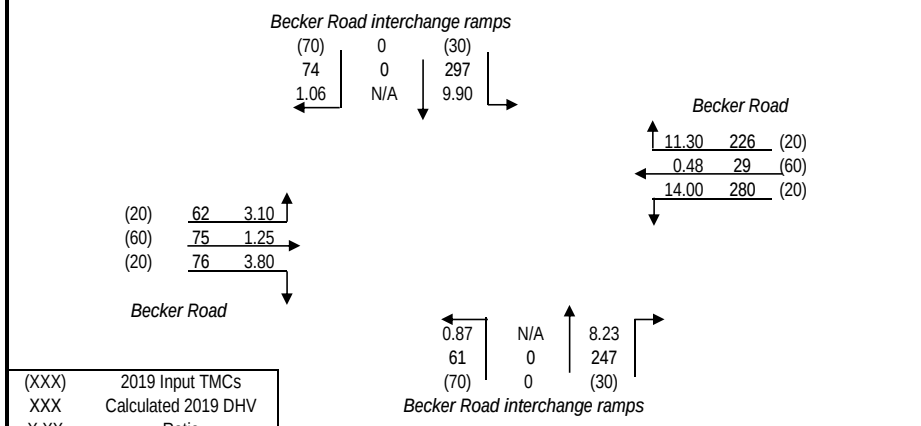


(XXXXX)	2035 AADT
XXXX	2035 DDHV
K ML =	9.00%
K SS =	9.00%

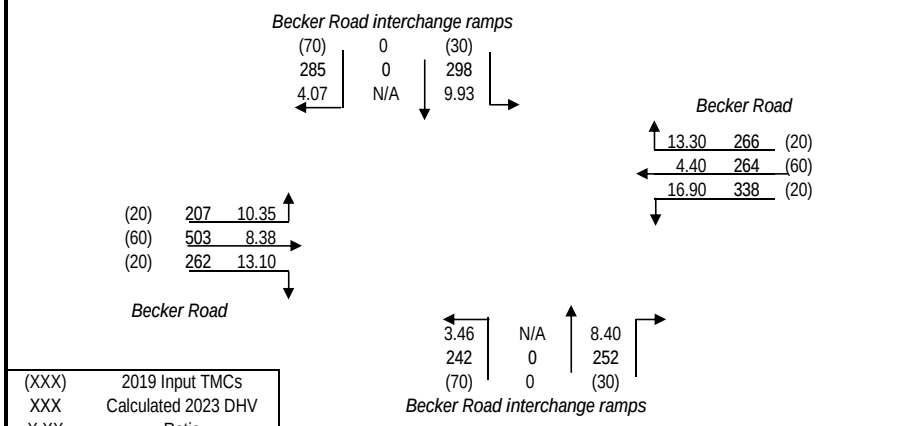
D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

PROJECT TRAFFIC FOR Becker Road AT Becker Road interchange ramps

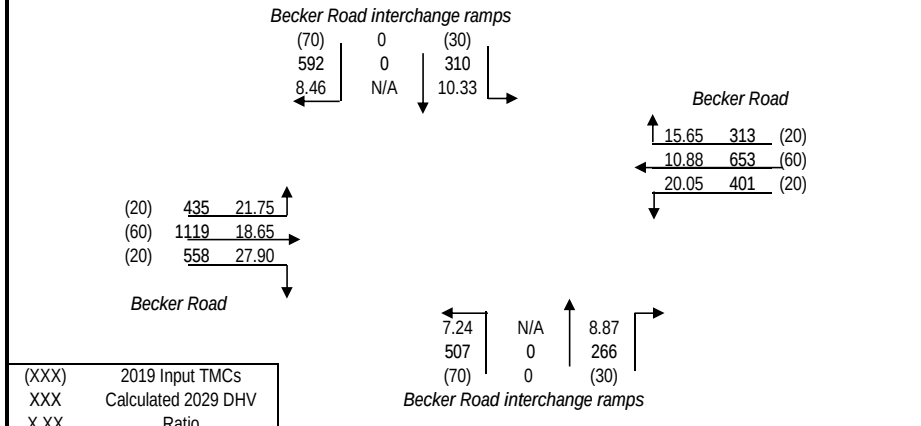
2019 INPUT TMCs COMPARED TO 2019 DHV



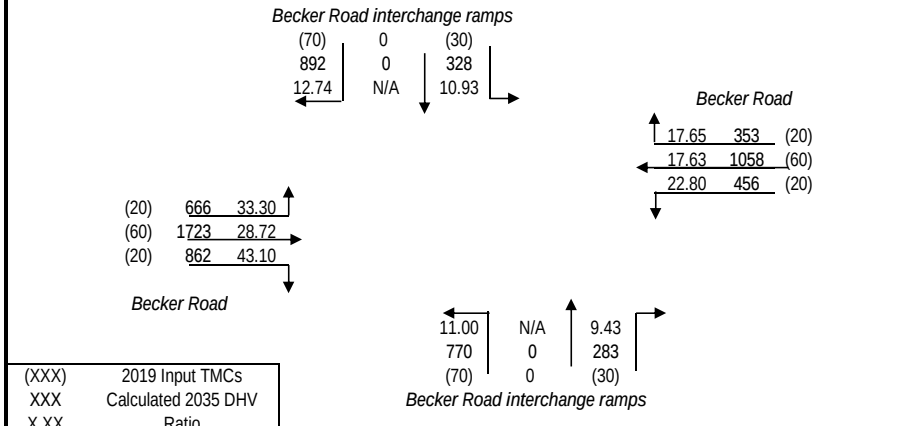
2019 INPUT TMCs COMPARED TO 2023 DHV



2019 INPUT TMCs COMPARED TO 2029 DHV

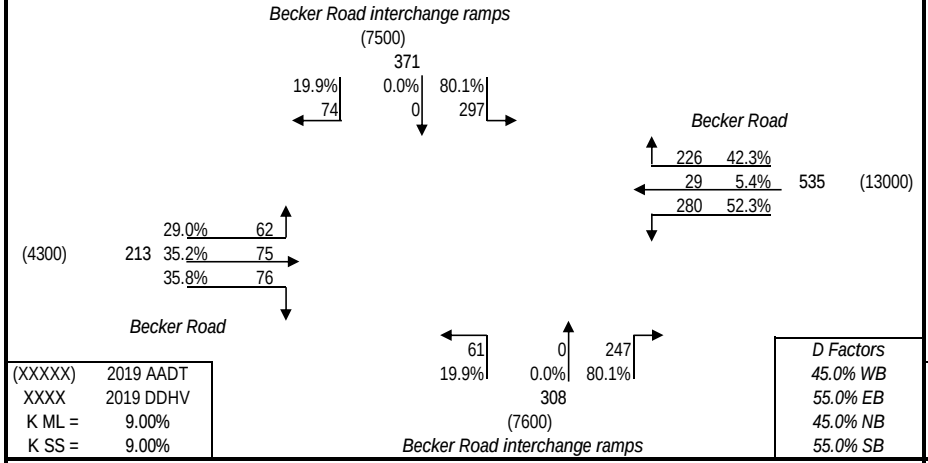


2019 INPUT TMCs COMPARED TO 2035 DHV



PROJECT TRAFFIC FOR Becker Road AT Becker Road interchange ramps

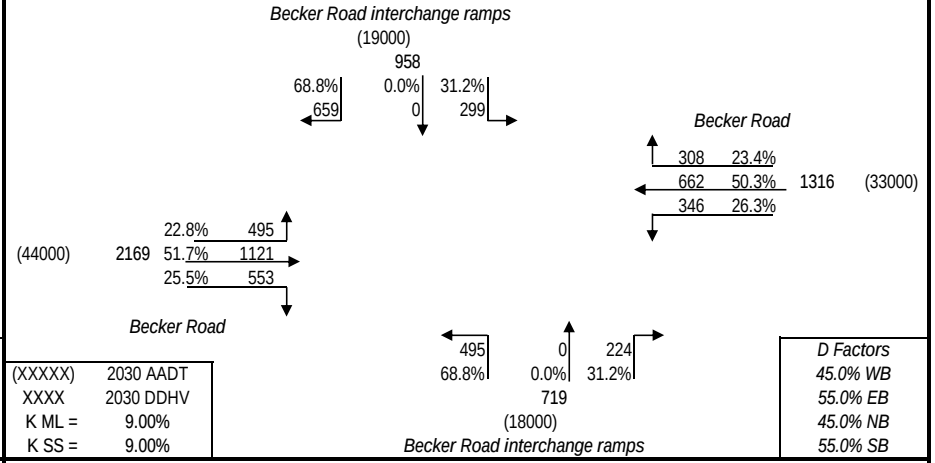
DESIGN HOUR TURNING MOVEMENTS IN YEAR 2019



(XXXXX)	2019 AADT
XXXX	2019 DDHV
K ML =	9.00%
K SS =	9.00%

D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

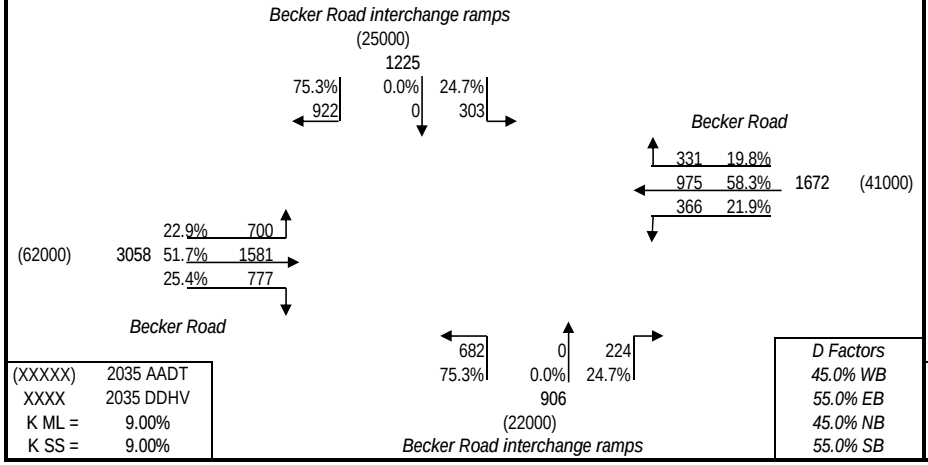
DESIGN HOUR TURNING MOVEMENTS IN YEAR 2030



(XXXXX)	2030 AADT
XXXX	2030 DDHV
K ML =	9.00%
K SS =	9.00%

D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

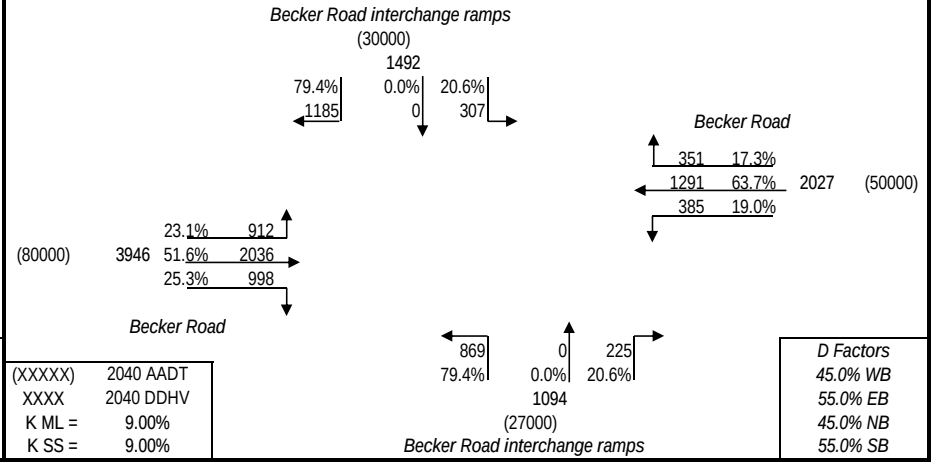
DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



(XXXXX)	2035 AADT
XXXX	2035 DDHV
K ML =	9.00%
K SS =	9.00%

D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

DESIGN HOUR TURNING MOVEMENTS IN YEAR 2040

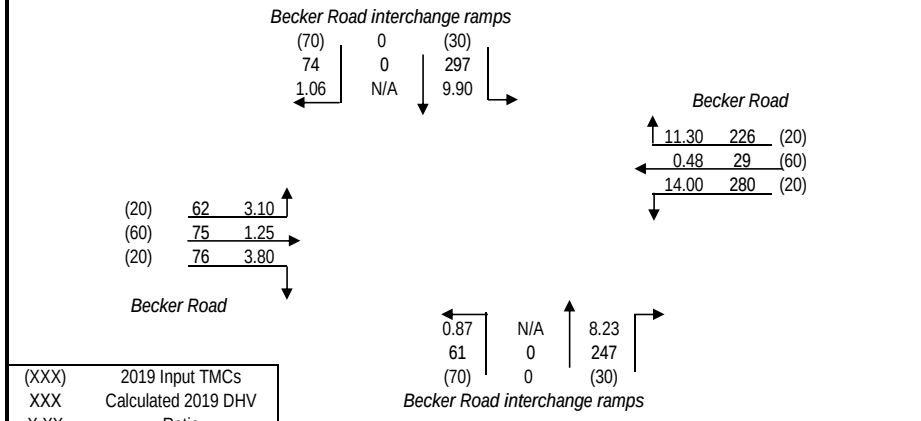


(XXXXX)	2040 AADT
XXXX	2040 DDHV
K ML =	9.00%
K SS =	9.00%

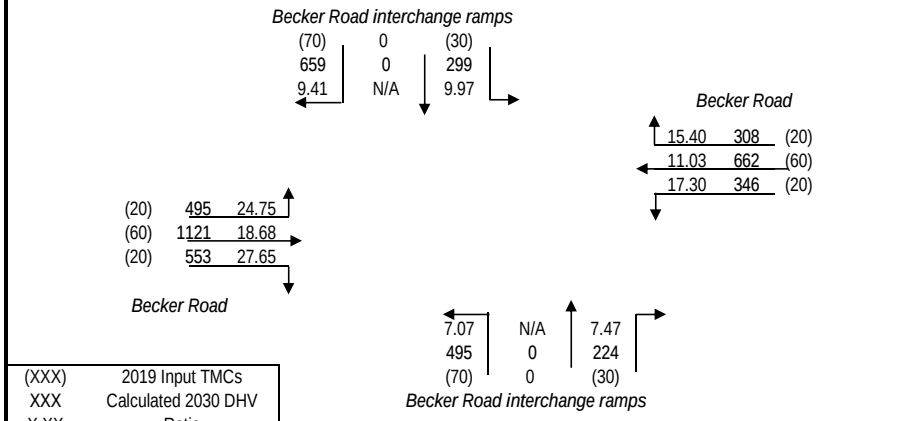
D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

PROJECT TRAFFIC FOR Becker Road AT Becker Road interchange ramps

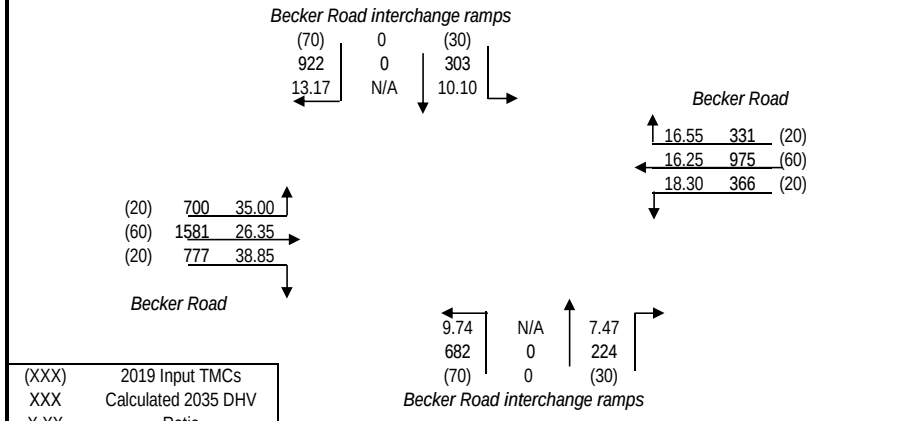
2019 INPUT TMCs COMPARED TO 2019 DHV



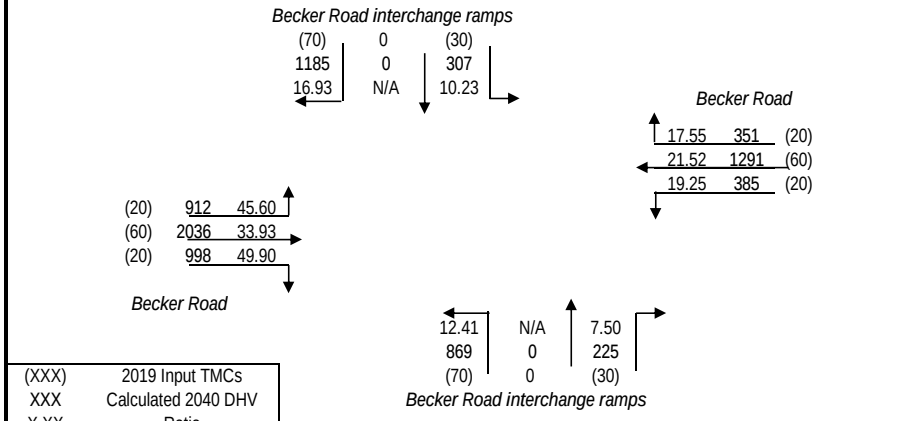
2019 INPUT TMCs COMPARED TO 2030 DHV



2019 INPUT TMCs COMPARED TO 2035 DHV



2019 INPUT TMCs COMPARED TO 2040 DHV



MacKenzie
Engineering & Planning, Inc.

Project Traffic at Gatlin Boulevard/Tradition Parkway Interchange Ramps

PROJECT TRAFFIC FOR Tradition Pkwy/Gatlin Blvd AT Tradition/Gatlin interchange ramps

DESIGN HOUR TURNING MOVEMENTS IN YEAR 2019

Tradition/Gatlin interchange ramps

(26000)
1262
12.3% 155 | 0.0% 0 | 87.7% 1107

Tradition Pkwy/Gatlin Blvd

922 45.1%
567 27.7% 2045 (51000)
556 27.2%

(20000) 990
7.8% 77
87.5% 866
4.7% 47

Tradition Pkwy/Gatlin Blvd

63 12.3% | 0 0.0% | 447 87.7%
510
(13000)

Tradition/Gatlin interchange ramps

(XXXXX)	2019 AADT
XXXX	2019 DDHV
K ML =	9.00%
K SS =	9.00%

D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

DESIGN HOUR TURNING MOVEMENTS IN YEAR 2023

Tradition/Gatlin interchange ramps

(32000)
1564
40.2% 629 | 0.0% 0 | 59.8% 935

Tradition Pkwy/Gatlin Blvd

883 43.2%
720 35.2% 2045 (51000)
442 21.6%

(38000) 1887
21.7% 409
67.5% 1274
10.8% 204

Tradition Pkwy/Gatlin Blvd

211 40.2% | 0 0.0% | 313 59.8%
524
(13000)

Tradition/Gatlin interchange ramps

(XXXXX)	2023 AADT
XXXX	2023 DDHV
K ML =	9.00%
K SS =	9.00%

D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

DESIGN HOUR TURNING MOVEMENTS IN YEAR 2029

Tradition/Gatlin interchange ramps

(41000)
2018
67.9% 1370 | 0.0% 0 | 32.1% 648

Tradition Pkwy/Gatlin Blvd

716 35.0%
1041 50.9% 2045 (51000)
288 14.1%

(65000) 3234
31.5% 1019
55.8% 1804
12.7% 411

Tradition Pkwy/Gatlin Blvd

369 67.9% | 0 0.0% | 175 32.1%
544
(13000)

Tradition/Gatlin interchange ramps

(XXXXX)	2029 AADT
XXXX	2029 DDHV
K ML =	9.00%
K SS =	9.00%

D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

DESIGN HOUR TURNING MOVEMENTS IN YEAR 2030

Tradition/Gatlin interchange ramps

(42000)
2093
71.4% 1494 | 0.0% 0 | 28.6% 599

Tradition Pkwy/Gatlin Blvd

679 33.2%
1100 53.8% 2045 (51000)
266 13.0%

(70000) 3458
32.7% 1131
54.5% 1884
12.8% 443

Tradition Pkwy/Gatlin Blvd

391 71.4% | 0 0.0% | 157 28.6%
548
(14000)

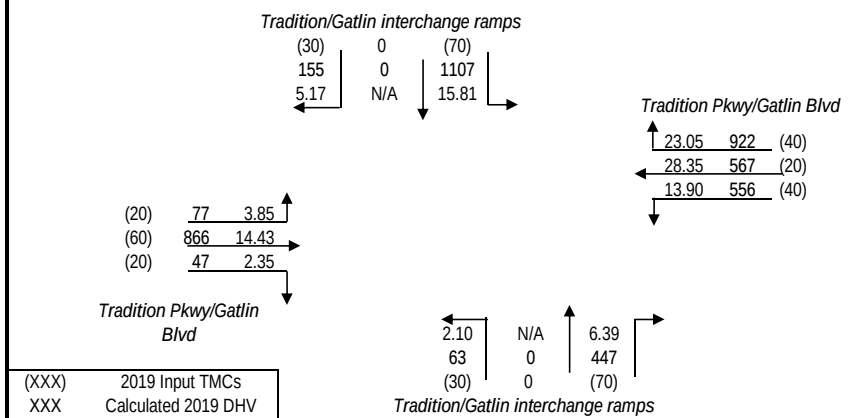
Tradition/Gatlin interchange ramps

(XXXXX)	2030 AADT
XXXX	2030 DDHV
K ML =	9.00%
K SS =	9.00%

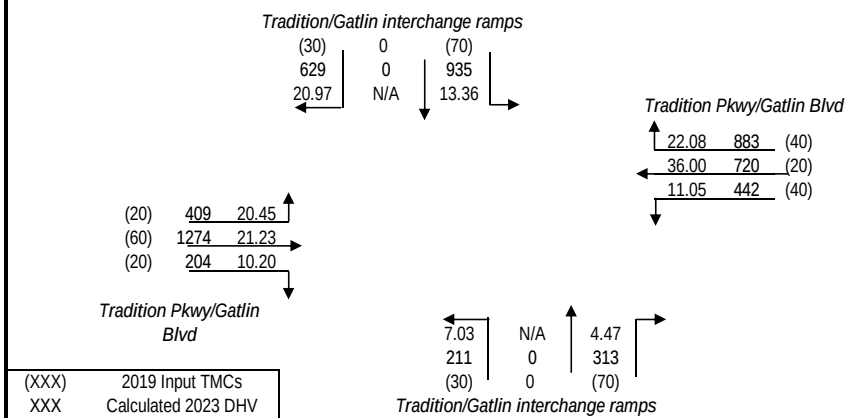
D Factors
45.0% WB
55.0% EB
45.0% NB
55.0% SB

PROJECT TRAFFIC FOR Tradition Pkwy/Gatlin Blvd AT Tradition/Gatlin interchange ramps

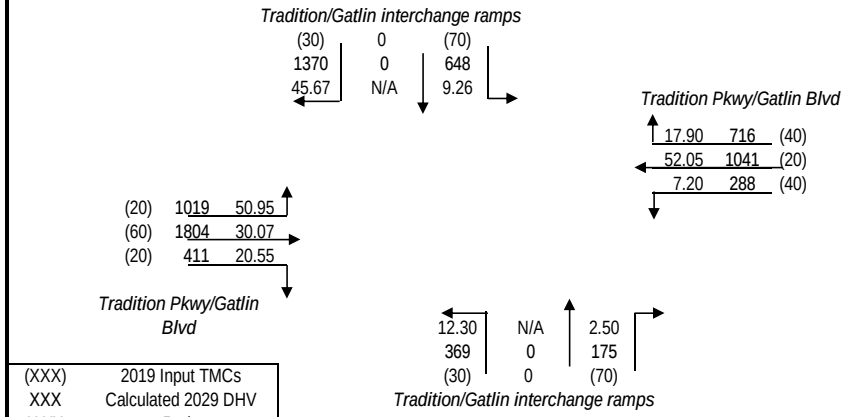
2019 INPUT TMCs COMPARED TO 2019 DHV



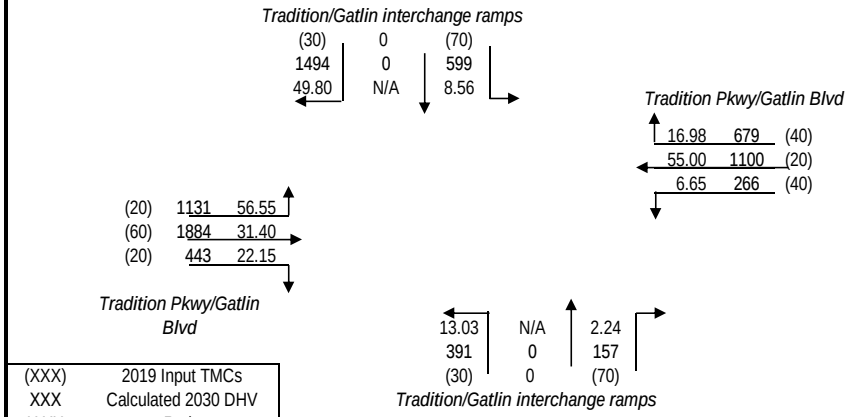
2019 INPUT TMCs COMPARED TO 2023 DHV



2019 INPUT TMCs COMPARED TO 2029 DHV



2019 INPUT TMCs COMPARED TO 2030 DHV



PROJECT TRAFFIC FOR Tradition Pkwy/Gatlin Blvd AT Tradition/Gatlin interchange ramps

DESIGN HOUR TURNING MOVEMENTS IN YEAR 2019

Tradition/Gatlin interchange ramps

(26000)
1262
12.3% 155 | 0.0% 0 | 87.7% 1107

Tradition Pkwy/Gatlin Blvd

922 45.1%
567 27.7% 2045 (51000)
556 27.2%

7.8% 77
(20000) 990 87.5% 866
4.7% 47

Tradition Pkwy/Gatlin Blvd

63 | 0 | 447
12.3% | 0.0% | 87.7%
510
(13000)
Tradition/Gatlin interchange ramps

		D Factors
(XXXXX)	2019 AADT	*45.0% WB*
XXXX	2019 DDHV	*55.0% EB*
K ML =	9.00%	*45.0% NB*
K SS =	9.00%	*55.0% SB*

DESIGN HOUR TURNING MOVEMENTS IN YEAR 2023

Tradition/Gatlin interchange ramps

(30000)
1495
33.8% 505 | 0.0% 0 | 66.2% 990

Tradition Pkwy/Gatlin Blvd

910 44.5%
671 32.8% 2045 (51000)
464 22.7%

19.1% 315
(33000) 1648 71.2% 1173
9.7% 160

Tradition Pkwy/Gatlin Blvd

172 | 0 | 338
33.8% | 0.0% | 66.2%
510
(13000)
Tradition/Gatlin interchange ramps

		D Factors
(XXXXX)	2023 AADT	*45.0% WB*
XXXX	2023 DDHV	*55.0% EB*
K ML =	9.00%	*45.0% NB*
K SS =	9.00%	*55.0% SB*

DESIGN HOUR TURNING MOVEMENTS IN YEAR 2029

Tradition/Gatlin interchange ramps

(37000)
1844
57.0% 1051 | 0.0% 0 | 43.0% 793

Tradition Pkwy/Gatlin Blvd

816 39.9%
892 43.6% 2045 (51000)
337 16.5%

28.3% 745
(53000) 2634 60.0% 1581
11.7% 308

Tradition Pkwy/Gatlin Blvd

291 | 0 | 219
57.0% | 0.0% | 43.0%
510
(13000)
Tradition/Gatlin interchange ramps

		D Factors
(XXXXX)	2029 AADT	*45.0% WB*
XXXX	2029 DDHV	*55.0% EB*
K ML =	9.00%	*45.0% NB*
K SS =	9.00%	*55.0% SB*

DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035

Tradition/Gatlin interchange ramps

(44000)
2192
73.9% 1620 | 0.0% 0 | 26.1% 572

Tradition Pkwy/Gatlin Blvd

665 32.5%
1149 56.2% 2045 (51000)
231 11.3%

34.3% 1242
(73000) 3621 53.8% 1948
11.9% 431

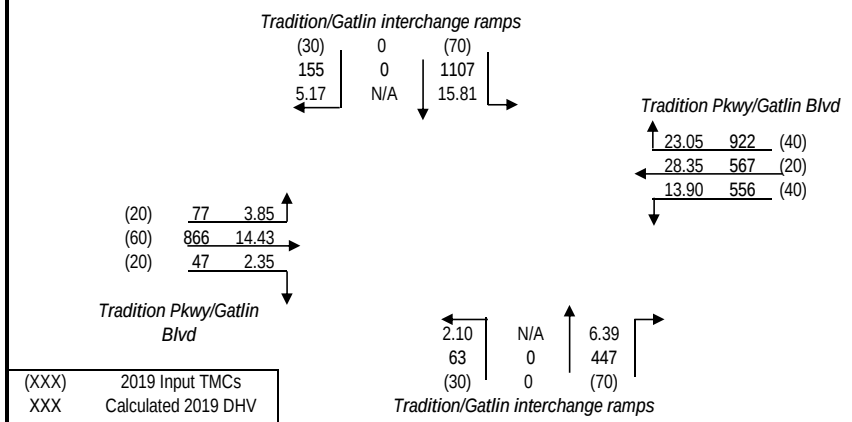
Tradition Pkwy/Gatlin Blvd

377 | 0 | 133
73.9% | 0.0% | 26.1%
510
(13000)
Tradition/Gatlin interchange ramps

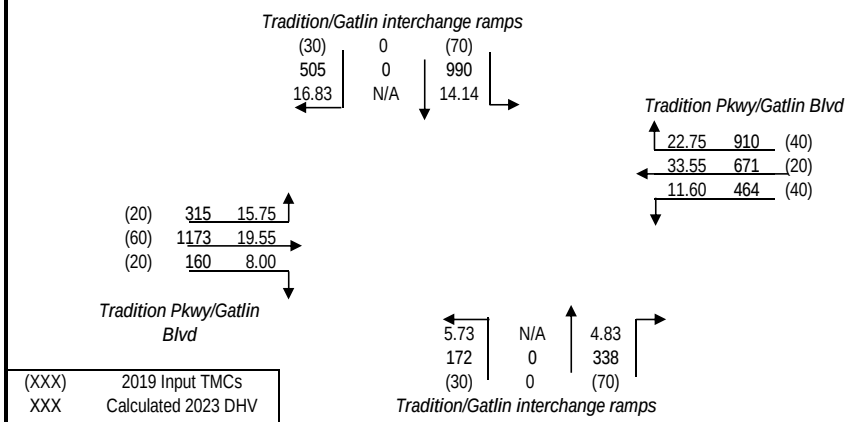
		D Factors
(XXXXX)	2035 AADT	*45.0% WB*
XXXX	2035 DDHV	*55.0% EB*
K ML =	9.00%	*45.0% NB*
K SS =	9.00%	*55.0% SB*

PROJECT TRAFFIC FOR Tradition Pkwy/Gatlin Blvd AT Tradition/Gatlin interchange ramps

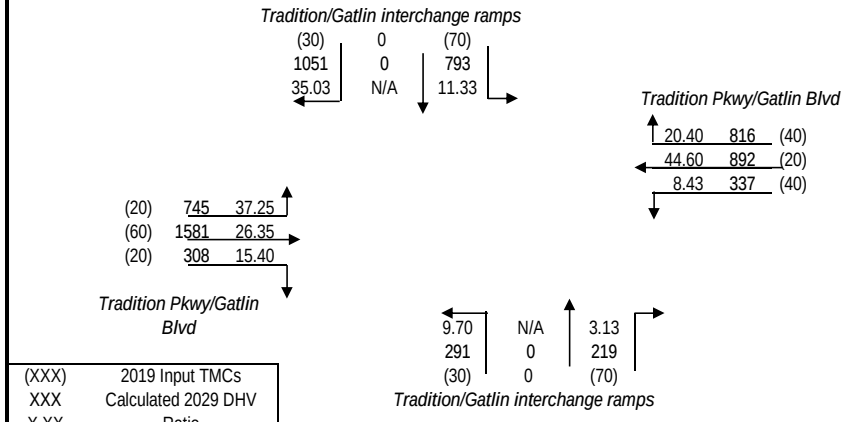
2019 INPUT TMCs COMPARED TO 2019 DHV



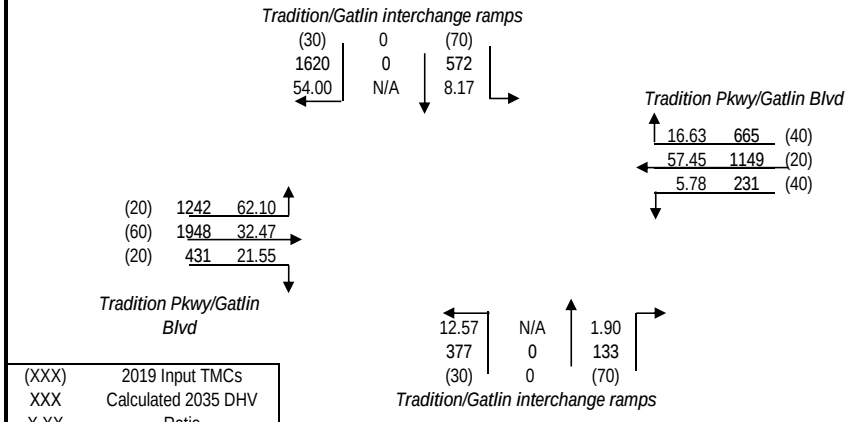
2019 INPUT TMCs COMPARED TO 2023 DHV



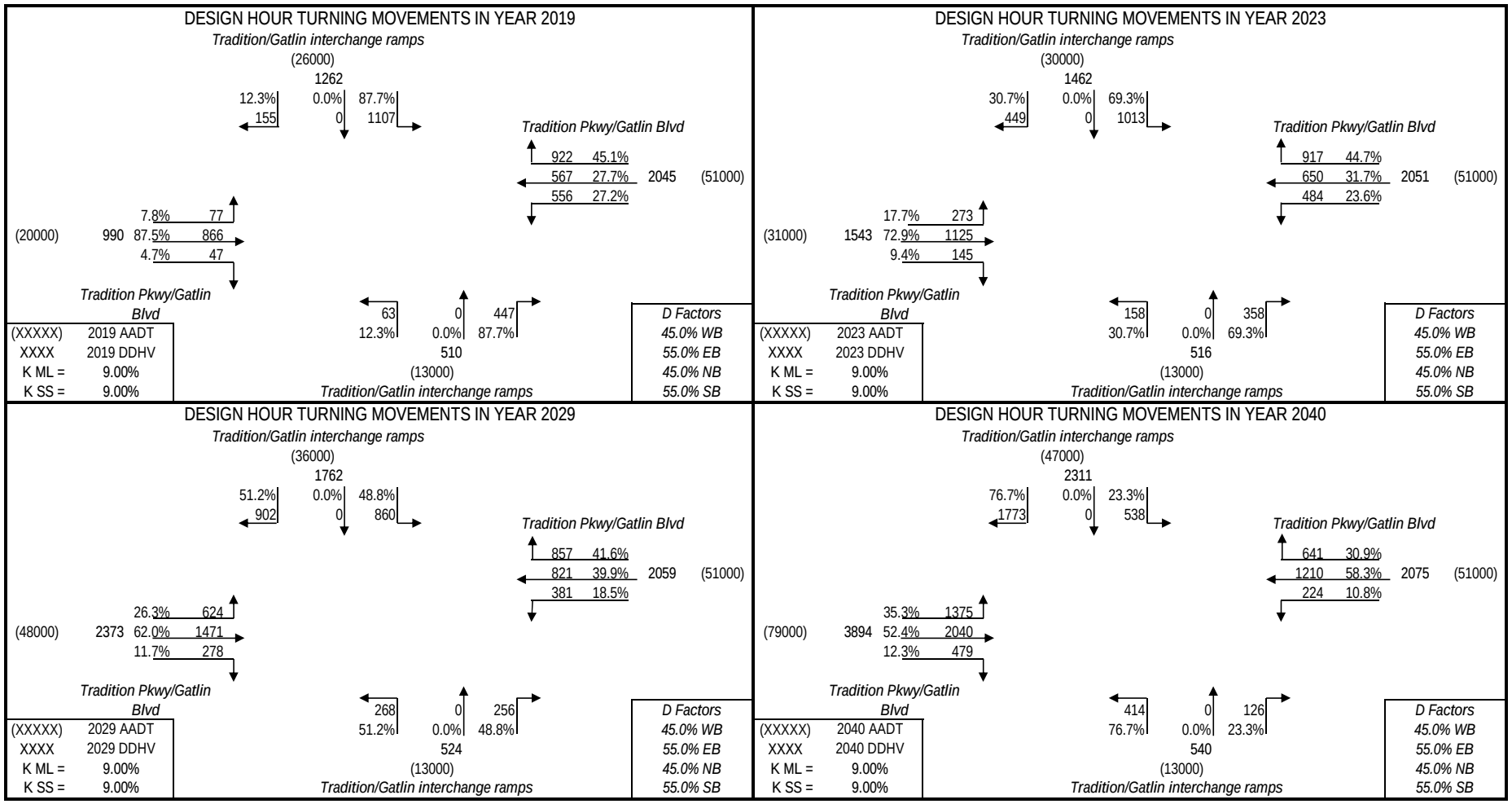
2019 INPUT TMCs COMPARED TO 2029 DHV



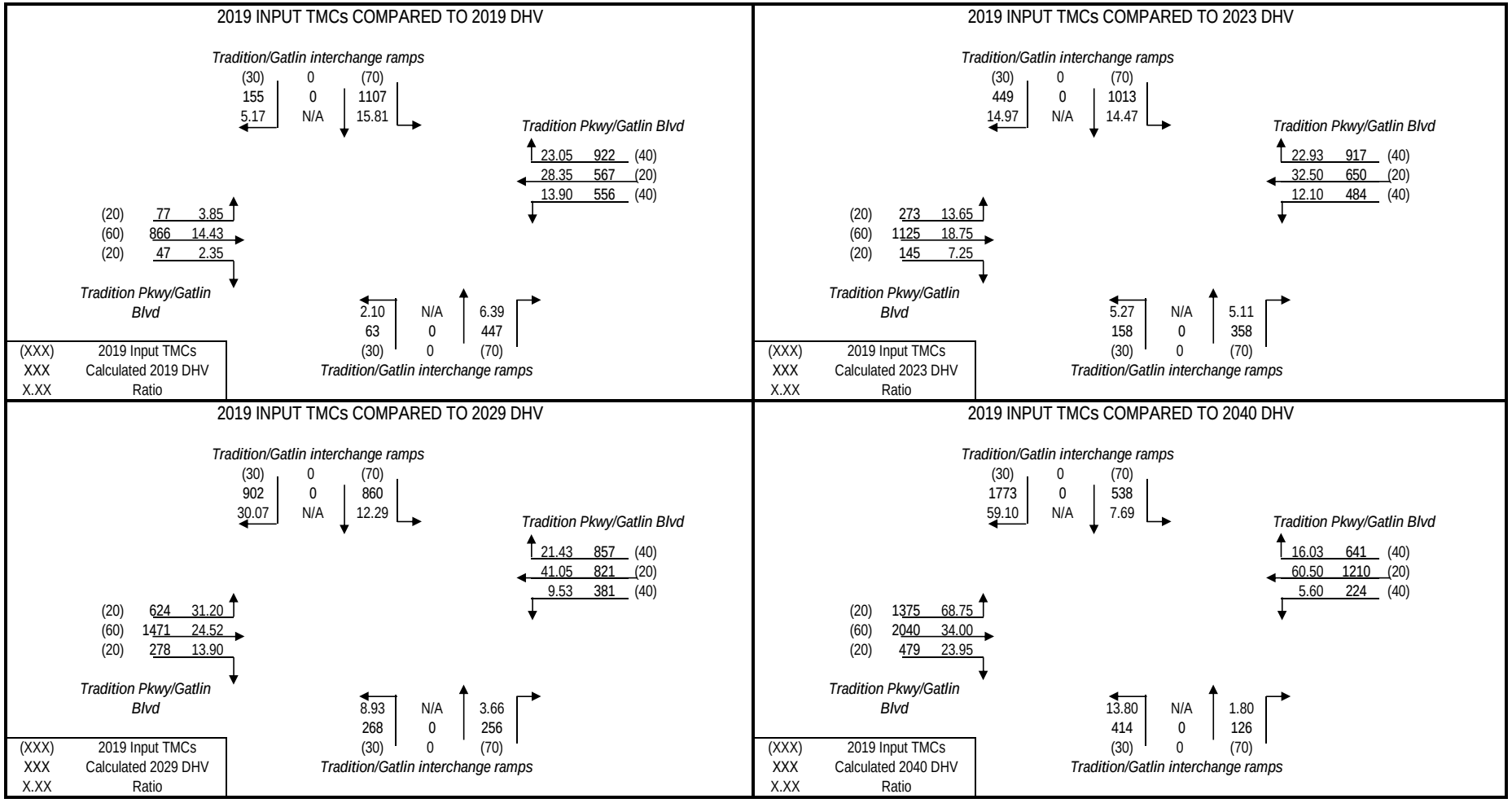
2019 INPUT TMCs COMPARED TO 2035 DHV



PROJECT TRAFFIC FOR Tradition Pkwy/Gatlin Blvd AT Tradition/Gatlin interchange ramps



PROJECT TRAFFIC FOR Tradition Pkwy/Gatlin Blvd AT Tradition/Gatlin interchange ramps



MacKenzie
Engineering & Planning, Inc.

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

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								

City of Port St Lucie Timing Sheet 5/5/2020 9:39:46 AM

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	
27	
28	
29	
30	
31	
32	
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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	
25	
26	
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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
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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	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	
20	
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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	
15	
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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
9																																																	1
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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 : 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																

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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	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
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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																

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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.

Appendix J

ITE Pass-by Capture

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