

April 15, 2021

Mr. Ken Cassel, City Manager
City of Westlake
4001 Seminole Pratt Whitney Road
Westlake, Florida 33470**Re: Westlake Pod H Master Plan - #PTC21-027
Equivalency Statement**

Dear Mr. Cassel:

The purpose of this letter is to present a trip equivalency analysis for the proposed Pod H Master Plan Application. Westlake is an approved project under Article 12, Traffic Performance Standards, of the Palm Beach County Unified Land Development Code (ULDC) with a buildout year of 2035. This application is for the "specialty uses" on Pod H that were not specifically analyzed in the approved Westlake traffic study. These uses consist of 150,000 SF Light Industrial, 140,000 SF Self Storage, 14.435 Acres Commercial Recreation and 15,670 SF Fast Food Restaurant with Drive-thru.

Attachment E1 provides the calculation of daily, AM and PM peak hour trips associated with this parcel. The Commercial Recreation trip generation rate adopted by Palm Beach County is attached at the end of this report. Because the individual uses were not identified specifically in the original Approval, an equivalency analysis was conducted. Equivalencies for Westlake are based on PM peak hour two-way trips. The trip generation for the PM peak hour was analyzed to determine the equivalent use and intensity. As shown on Attachment E2, the Pod H specialty uses are equivalent to 378,000 SF of Research & Development and 114,000 SF of Retail. Attachments E3 and E4 provide the AM peak hour and Daily trip generation, for informational purposes only. The internalization matrices are provided in the Appendix.

We request that this equivalency analysis be reviewed and approved for future site plan applications within Pod H.

Sincerely,



Digitally signed by
Rebecca J Mulcahy
Date: 2021.04.15
12:51:08 -04'00'

Rebecca J. Mulcahy, P.E.
Vice President

Attachments

ec: John Carter

Rebecca J. Mulcahy, State of Florida, Professional Engineer, License No. 42570

This item has been electronically signed and sealed by Rebecca J. Mulcahy, P.E. on 4/15/21 using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

**Attachment E1
Westlake Pod H Master Plan
Trip Generation - Pod H Specialty Uses**

DAILY

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	% In	Total Trips		Pass-by Trips (1)		Total Trips
Light Industrial	110	150,000 SF	4.96 / 1000 SF	50%		744	74	10%	670
Self Storage	151	140,000 SF	1.51 / 1000 SF	50%		211	21	10%	190
Commercial Recreation	PBC	14.435 Acres	103.944 / Acre	50%		1,500	-	0%	1,500
Fast Food Rest. With DT	934	15,670 SF	470.95 / 1000 SF	50%		7,380	3,616	49%	3,764
Retail Subtotal						9,091	3,637	40%	5,454
Pod H Total						9,835	3,711		6,124

AM PEAK HOUR

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	% In	Total Trips			Pass-by Trips (1)		New Trips		
					In	Out	Trips			In	Out	Trips
Light Industrial	110	150,000 SF	0.7 / 1000 SF	88%	92	13	105	11	10%	83	11	94
Self Storage	151	140,000 SF	0.1 / 1000 SF	60%	8	6	14	1	10%	7	6	13
Commercial Recreation	PBC	14.435 Acres	1.27 / Acre	67%	12	6	18	-	0%	12	6	18
Fast Food Rest. With DT	934	15,670 SF	40.19 / 1000 SF	51%	321	309	630	309	49%	164	157	321
Retail Subtotal					341	321	662	310	47%	183	169	352
Pod H Total					433	334	767	321		266	180	446

PM PEAK HOUR

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	% In	Total Trips			Pass-by Trips (1)		New Trips		
					In	Out	Trips			In	Out	Trips
Light Industrial	110	150,000 SF	0.63 / 1000 SF	13%	12	83	95	10	10%	11	74	85
Self Storage	151	140,000 SF	0.17 / 1000 SF	47%	11	13	24	2	10%	10	12	22
Commercial Recreation	PBC	14.435 Acres	8.83 / Acre	48%	61	66	127	-	0%	61	66	127
Fast Food Rest. With DT	934	15,670 SF	32.67 / 1000 SF	52%	266	246	512	251	49%	136	125	261
Retail Subtotal					338	325	663	253	38%	207	203	410
Pod H Total					350	408	758	263		218	277	495

(1) Source: Palm Beach County Traffic Division and ITE Trip Generation, 10th Edition.

Attachment E2
Westlake Pod H Master Plan Equivalency
PM Peak Hour Trip Generation at Buildout

West Side

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips			Interzonal Trips (2)		External Trips			Pass-by Trips (3)		New Trips		
				In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total			
Residential - MF Condos.	230	150 DUs	$\text{Ln}(T) = 0.82\text{Ln}(x) + 0.32$ (67/33)	56	28	84	41	48.4%	28	15	43	18	21.4%	18	7	25	-	0%	18	7	25
Residential - 55+ Detached	251	300 DUs	0.27 /DU (61/39)	49	32	81	39	48.4%	25	17	42	18	22.2%	15	9	24	-	0%	15	9	24
Residential - 55+ Attached	252	200 DUs	0.25 /DU (54/46)	27	23	50	24	48.4%	14	12	26	11	22.0%	8	7	15	-	0%	8	7	15
General Office	710	50,000 SF	1.49 /1000 SF (17/83)	13	62	75	20	26.5%	7	48	55	15	20.0%	3	37	40	4	10%	3	33	36
Research & Devel.	760	- SF (4)	$\text{Ln}(T) = 0.83\text{Ln}(X) + 1.06$ (15/85)	-	-	-	-	26.5%	-	-	-	-	0.0%	-	-	-	-	10%	-	-	-
Pod H Industrial Use	N/A	150,000 SF	Pre-Calcd	12	83	95	25	26.5%	7	63	70	18	18.9%	2	50	52	5	10%	2	45	47
Retail	820	96,000 SF (4)	$\text{Ln}(T) = 0.67\text{Ln}(X) + 3.31$ (48/52)	280	303	583	32	5.5%	264	287	551	116	19.9%	220	215	435	125	28.7%	157	153	310
Park	412	125 Acres	0.09 /Acre (61/39)	7	4	11	1	10.0%	6	4	10	1	10.0%	5	4	9	-	0%	5	4	9
Car Wash	PBC	1 Lane	13.65 /Lane (50/50)	7	7	14	1	5.5%	7	6	13	3	21.4%	6	4	10	-	0%	6	4	10
Pod H Commercial Uses	N/A	155,670 SF	Pre-Calcd	338	325	663	35	5.5%	320	308	628	132	19.9%	270	226	496	142	28.7%	193	161	354
Gas Station (16 FP)/ C-Store	FDOT	4,500 SF	12.3*FP + 15.5(X) (50/50)	134	133	267	15	5.5%	127	125	252	53	19.9%	107	92	199	121	61%	42	36	78
Publix at Westlake Plaza	N/A	140,000 SF	Pre-Calcd	444	450	894	49	5.5%	420	425	845	178	19.9%	353	314	667	191	28.7%	252	224	476
TOTALS				1,367	1,450	2,817	282	10.0%	1,225	1,310	2,535	563	20.0%	1,007	965	1,972	588		701	683	1,384

East Side

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips			Interzonal Trips (2)		External Trips			Pass-by Trips (3)		New Trips		
				In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total			
Residential - SF (N,O,T,U)	210	1,010 DUs	$\text{Ln}(T) = 0.90\text{Ln}(x) + 0.51$ (63/37)	530	312	842	131	15.6%	447	264	711	123	14.6%	359	229	588	-	0%	359	229	588
Residential - SF (F,M,P,Q,R,S)	210	1,936 DUs	$\text{Ln}(T) = 0.90\text{Ln}(x) + 0.51$ (63/37)	953	560	1,513	236	15.6%	804	473	1,277	221	14.6%	646	410	1,056	-	0%	646	410	1,056
Residential - MF Condos.	230	450 DUs	$\text{Ln}(T) = 0.82\text{Ln}(x) + 0.32$ (67/33)	138	68	206	32	15.6%	116	58	174	30	14.6%	95	49	144	-	0%	95	49	144
Residential - 55+ Detached	251	500 DUs	0.27 /DU (61/39)	82	53	135	21	15.6%	69	45	114	20	14.8%	55	39	94	-	0%	55	39	94
Hotel	310	150 Rooms	0.6 /Room (51/49)	46	44	90	39	43.3%	22	29	51	12	13.3%	16	23	39	4	10%	14	21	35
Community College	540*	- Students	0.14 /Student (54/46)	-	-	-	-	0.0%	-	-	-	-	0.0%	-	-	-	-	0%	-	-	-
General Office	710	296,000 SF	1.49 /1000 SF (17/83)	75	366	441	62	14.1%	51	328	379	32	7.3%	45	302	347	35	10%	41	271	312
Research & Devel.	760	175,000 SF	$\text{Ln}(T) = 0.83\text{Ln}(X) + 1.06$ (15/85)	32	178	210	30	14.1%	22	158	180	15	7.1%	19	146	165	17	10%	17	131	148
Light Industrial	110	450,000 SF	0.97 /1000 SF (12/88)	52	385	437	62	14.1%	36	339	375	32	7.3%	30	313	343	34	10%	27	282	309
Retail	820	150,000 SF	$\text{Ln}(T) = 0.67\text{Ln}(X) + 3.31$ (48/52)	377	409	786	286	36.4%	269	231	500	53	6.7%	241	206	447	164	36.6%	153	130	283
Park	412	67 Acres	0.09 /Acre (61/39)	4	2	6	2	31.9%	3	1	4	-	0.0%	3	1	4	-	0%	3	1	4
Community Center	495	70,000 SF	2.74 /1000 SF (49/51)	94	98	192	61	31.9%	63	68	131	2	1.0%	62	67	129	6	5%	59	64	123
Church	560	70,000 SF	0.55 /1000 SF (48/52)	19	20	39	12	31.9%	13	14	27	-	0.0%	13	14	27	1	5%	12	14	26
Daycare	565	10,000 SF	12.34 /1000 SF (47/53)	58	65	123	39	31.9%	39	45	84	1	0.8%	38	45	83	42	50%	19	22	41
ISTF	N/A	1 Complex	Pre-Calcd	184	239	423	56	13.2%	159	208	367	18	4.3%	150	199	349	-	0%	150	199	349
FSED	650	12,379 SF	Pre-Calcd	9	10	19	11	57.9%	1	7	8	1	5.3%	1	6	7	1	10%	1	5	6
Tax Collector	730	23,735 SF	Pre-Calcd	13	28	41	6	14.1%	9	26	35	3	7.3%	8	24	32	3	10%	7	22	29
TOTALS				2,666	2,837	5,503	1,086	19.7%	2,123	2,294	4,417	563	10.2%	1,781	2,073	3,854	307		1,658	1,889	3,547

COMBINED TOTALS				4,033	4,287	8,320	1,368	16.4%	3,348	3,604	6,952	1,126	13.5%	2,788	3,038	5,826	895		2,359	2,572	4,931
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* Rate obtained from Palm Beach State College trip generation study by Kimley-Horn.

(1) Source: Institute of Transportation Engineers, Trip Generation, 9th Edition, unless otherwise noted.

(2) Internalization matrices are included in Appendix B.

(3) Source: Palm Beach County ULDC Article 13. Retail pass-by rate limited to 28.7% per approved study.

(4) Previous amount = 378,000 SF of R&D and 210,000 SF of Retail. Results in a decrease of 378,000 SF of R&D and 114,000 SF of Retail.

Approved Total

4,932

Attachment E3
Westlake Pod H Master Plan Equivalency
AM Peak Hour Trip Generation at Buildout

West Side

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips			Interzonal Trips (2)		External Trips			Pass-by Trips (3)		New Trips		
				In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total			
Residential - MF Condos.	230	150 DUs	$\ln(T) = 0.80\ln(x)+0.26$ (17/83)	12	59	71	2	4.0%	12	57	69	7	9.9%	10	52	62	-	0%	10	52	62
Residential - 55+ Detached	251	300 DUs	0.22 /DU (35/65)	23	43	66	3	4.0%	23	40	63	7	10.6%	21	35	56	-	0%	21	35	56
Residential - 55+ Attached	252	200 DUs	0.2 /DU (34/66)	14	26	40	2	4.0%	14	24	38	4	10.0%	13	21	34	-	0%	13	21	34
General Office	710	50,000 SF	$\ln(T) = 0.80\ln(x)+1.57$ (88/12)	97	13	110	10	9.3%	90	10	100	10	9.1%	82	8	90	9	10%	74	7	81
Research & Devel.	760	- SF	$\ln(T) = 0.87\ln(x)+0.86$ (83/17)	-	-	-	-	9.3%	(1)	1	-	-	0.0%	(1)	1	-	-	10%	(1)	1	-
Pod H Industrial Use	N/A	150,000 SF	Pre-Calc'd	92	13	105	10	9.3%	86	9	95	9	8.6%	79	7	86	9	10%	71	6	77
Retail	820	96,000 SF	0.96 /1000 SF (62/38)	57	35	92	1	1.2%	55	36	91	8	8.7%	51	32	83	24	28.7%	36	23	59
Park	412	125 Acres	0.02 /Acre (61/39)	2	1	3	-	10.0%	2	1	3	-	10.0%	2	1	3	-	0%	2	1	3
Car Wash	PBC	1 Lane	11.97 /Lane (50/50)	6	6	12	-	1.2%	6	6	12	1	8.3%	5	6	11	-	0%	5	6	11
Pod H Commercial Uses	N/A	155,670 SF	Pre-Calc'd	341	321	662	8	1.2%	337	317	654	56	8.5%	307	291	598	172	28.7%	219	207	426
Gas Station (16 FP)/ C-Store	FDOT	4,500 SF	12.3*FP + 15.5(X) (50/50)	134	133	267	3	1.2%	133	131	264	23	8.6%	121	120	241	147	61%	47	47	94
Publix at Westlake Plaza	N/A	140,000 SF	Pre-Calc'd	207	161	368	4	1.2%	205	159	364	32	8.7%	188	144	332	95	28.7%	134	103	237
TOTALS				985	811	1,796	43	2.4%	962	791	1,753	157	8.7%	878	718	1,596	456		631	509	1,140

East Side

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips			Internal Trips (2)		External Trips			Interzonal Trips (2)		External Trips			Pass-by Trips (3)		New Trips		
				In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total			
Residential - SF (N,O,T,U)	210	1,010 DUs	0.75 /DU (25/75)	190	568	758	74	9.7%	168	516	684	8	1.1%	166	510	676	-	0%	166	510	676
Residential - SF (F,M,P,Q,R,S)	210	1,936 DUs	0.75 /DU (25/75)	363	1,089	1,452	141	9.7%	321	990	1,311	16	1.1%	316	979	1,295	-	0%	316	979	1,295
Residential - MF Condos.	230	450 DUs	$\ln(T) = 0.80\ln(x)+0.26$ (17/83)	29	143	172	17	9.7%	26	129	155	2	1.2%	25	128	153	-	0%	25	128	153
Residential - 55+ Detached	251	500 DUs	0.22 /DU (35/65)	39	71	110	11	9.7%	34	65	99	1	0.9%	34	64	98	-	0%	34	64	98
Hotel	310	150 Rooms	0.53 /Room (59/41)	47	33	80	36	45.0%	43	1	44	2	2.5%	42	-	42	4	10%	38	-	38
Community College	540*	- Students	0.11 /Student (87/13)	-	-	-	-	0.0%	-	-	-	-	0.0%	-	-	-	-	0%	-	-	-
General Office	710	296,000 SF	$\ln(T) = 0.80\ln(x)+1.57$ (88/12)	401	55	456	56	12.2%	358	42	400	21	4.6%	350	29	379	38	10%	315	26	341
Research & Devel.	760	175,000 SF	$\ln(T) = 0.87\ln(x)+0.86$ (83/17)	175	36	211	26	12.2%	156	29	185	10	4.7%	152	23	175	18	10%	137	20	157
Light Industrial	110	450,000 SF	0.92 /1000 SF (88/12)	364	50	414	51	12.2%	325	38	363	19	4.6%	317	27	344	34	10%	285	25	310
Retail	820	150,000 SF	0.96 /1000 SF (62/38)	89	55	144	83	57.6%	34	27	61	11	7.6%	29	21	50	18	36.6%	18	14	32
Park	412	67 Acres	0.02 /Acre (61/39)	1	-	1	-	30.1%	1	-	1	-	0.0%	1	-	1	-	0%	1	-	1
Community Center	495	70,000 SF	2.05 /1000 SF (66/34)	95	49	144	43	30.1%	67	34	101	3	2.1%	66	32	98	5	5%	63	30	93
Church	560	70,000 SF	0.56 /1000 SF (62/38)	24	15	39	12	30.1%	17	10	27	1	2.6%	17	9	26	1	5%	16	9	25
Daycare	565	10,000 SF	12.18 /1000 SF (53/47)	65	57	122	37	30.1%	46	39	85	2	1.6%	45	38	83	42	50%	23	18	41
ISTF	N/A	1 Complex	Pre-Calc'd	474	334	808	98	12.1%	419	291	710	56	6.9%	392	262	654	-	0%	392	262	654
FSED	650	12,379 SF	Pre-Calc'd	7	7	14	2	14.3%	7	5	12	1	7.1%	7	4	11	1	10%	6	4	10
Tax Collector	730	23,735 SF	Pre-Calc'd	59	20	79	10	12.2%	53	16	69	4	5.1%	51	14	65	7	10%	46	12	58
TOTALS				2,422	2,582	5,004	697	13.9%	2,075	2,232	4,307	157	3.1%	2,010	2,140	4,150	168		1,881	2,101	3,982

COMBINED TOTALS				3,407	3,393	6,800	740	10.9%	3,037	3,023	6,060	314	4.6%	2,888	2,858	5,746	624		2,512	2,610	5,122
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* Rate obtained from Palm Beach State College trip generation study by Kimley-Horn.
(1) Source: Institute of Transportation Engineers, *Trip Generation*, 9th Edition, unless otherwise noted.
(2) Internalization matrices are included in Appendix B.
(3) Source: Palm Beach County ULDC Article 13. Retail pass-by rate limited to 28.7% per approved study.

Attachment E4
Westlake Pod H Master Plan Equivalency
Daily Trip Generation at Buildout

West Side

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips	Interzonal Trips (4)		External Trips	Pass-by Trips (1)		New Trips
Residential - MF Condos.	230	150 DUs	6.65 /DU	998	261	26.2%	737	89	12.1%	648	-	0%	648
Residential - 55+ Detached	251	300 DUs	8 /DU	2,400	629	26.2%	1,771	222	12.5%	1,549	-	0%	1,549
Residential - 55+ Attached	252	200 DUs	6 /DU	1,200	314	26.2%	886	109	12.3%	777	-	0%	777
General Office	710	50,000 SF	$\ln(T) = 0.77\ln(X) + 3.65$	782	140	17.9%	642	72	11.2%	570	57	10%	513
Research & Devel.	760	- SF	$\ln(T) = 0.83\ln(X) + 3.09$ (3)	-	-	17.9%	-	-	0.0%	-	-	10%	-
Pod H Industrial Use	N/A	150,000 SF	Pre-Calc'd	744	133	17.9%	611	64	10.5%	547	55	10%	492
Retail	820	96,000 SF	$\ln(T) = 0.65\ln(X) + 5.83$	6,613	225	3.4%	6,388	699	10.9%	5,689	1,633	28.7%	4,056
Park	412	125 Acres	2.28 /Acre	285	29	10.0%	256	20	7.8%	236	-	0%	236
Car Wash	PBC	1 Lane	166 /Lane	166	6	3.4%	160	18	11.3%	142	-	0%	142
Pod H Commercial Uses	N/A	155,670 SF	Pre-Calc'd	9,091	309	3.4%	8,782	955	10.9%	7,827	2,246	28.7%	5,581
Gas Station (16 FP)/ C-Store	FDOT	4,500 SF	14.3 X PM Peak Hour Trips	3,818	130	3.4%	3,688	404	11.0%	3,284	2,003	61%	1,281
Publix at Westlake Plaza	N/A	140,000 SF	Pre-Calc'd	9,570	325	3.4%	9,245	1,012	10.9%	8,233	2,363	28.7%	5,870
TOTALS				35,667	2,501	7.0%	33,166	3,664	10.3%	29,502	8,357		21,145

East Side

Land Use	ITE Code	Intensity	Trip Generation Rate (1)	Total Trips	Internal Trips (2)		External Trips	Interzonal Trips (2)		External Trips	Pass-by Trips (1)		New Trips
Residential - SF (N,O,T,U)	210	1,010 DUs	10 /DU	10,100	1,283	12.7%	8,817	697	7.9%	8,120	-	0%	8,120
Residential - SF (F,M,P,Q,R,S)	210	1,936 DUs	10 /DU	19,360	2,459	12.7%	16,901	1,335	7.9%	15,566	-	0%	15,566
Residential - MF Condos.	230	450 DUs	6.65 /DU	2,993	380	12.7%	2,613	206	7.9%	2,407	-	0%	2,407
Residential - 55+ Detached	251	500 DUs	8 /DU	4,000	508	12.7%	3,492	276	7.9%	3,216	-	0%	3,216
Hotel	310	150 Rooms	8.92 /Room	1,338	591	44.2%	747	59	7.9%	688	69	10%	619
Community College	540*	- Students	2.29 /Student	-	-	0.0%	-	-	0.0%	-	-	0%	-
General Office	710	296,000 SF	$\ln(T) = 0.77\ln(X) + 3.65$	3,077	406	13.2%	2,671	160	6.0%	2,511	251	10%	2,260
Research & Devel.	760	175,000 SF	$\ln(T) = 0.83\ln(X) + 3.09$ (3)	1,598	211	13.2%	1,387	82	5.9%	1,305	131	10%	1,174
Light Industrial	110	450,000 SF	6.97 /1000 SF	3,137	414	13.2%	2,723	163	6.0%	2,560	256	10%	2,304
Retail	820	150,000 SF	$\ln(T) = 0.65\ln(X) + 5.83$	8,839	4,154	47.0%	4,685	337	7.2%	4,348	1,591	36.6%	2,757
Park	412	67 Acres	2.28 /Acre	153	47	31.0%	106	-	0.0%	106	-	0%	106
Community Center	495	70,000 SF	33.82 /1000 SF	2,367	734	31.0%	1,633	26	1.6%	1,607	80	5%	1,527
Church	560	70,000 SF	9.11 /1000 SF	638	198	31.0%	440	6	1.3%	434	22	5%	412
Daycare	565	10,000 SF	74.06 /1000 SF	741	230	31.0%	511	6	1.2%	505	253	50%	252
ISTF	N/A	1 Complex	Pre-Calc'd	5,520	701	12.7%	4,819	270	5.6%	4,549	-	0%	4,549
FSED	650	12,379 SF	Pre-Calc'd	309	112	36.1%	197	12	6.2%	185	19	10%	166
Tax Collector	730	23,735 SF	Pre-Calc'd	536	71	13.2%	465	29	6.2%	436	44	10%	392
TOTALS				64,706	12,499	19.3%	52,207	3,664	5.7%	48,543	2,716		45,827

COMBINED TOTALS				100,373	15,000	14.9%	85,373	7,328	7.3%	78,045	11,073		66,972
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* Rate obtained from Palm Beach State College trip generation study by Kimley-Horn.

(1) Source: Palm Beach County ULDC Article 13, unless otherwise noted. Retail pass-by rate limited to 28.7% per approved study.

(2) Utilized average of individual AM and PM peak hour internalization rates.

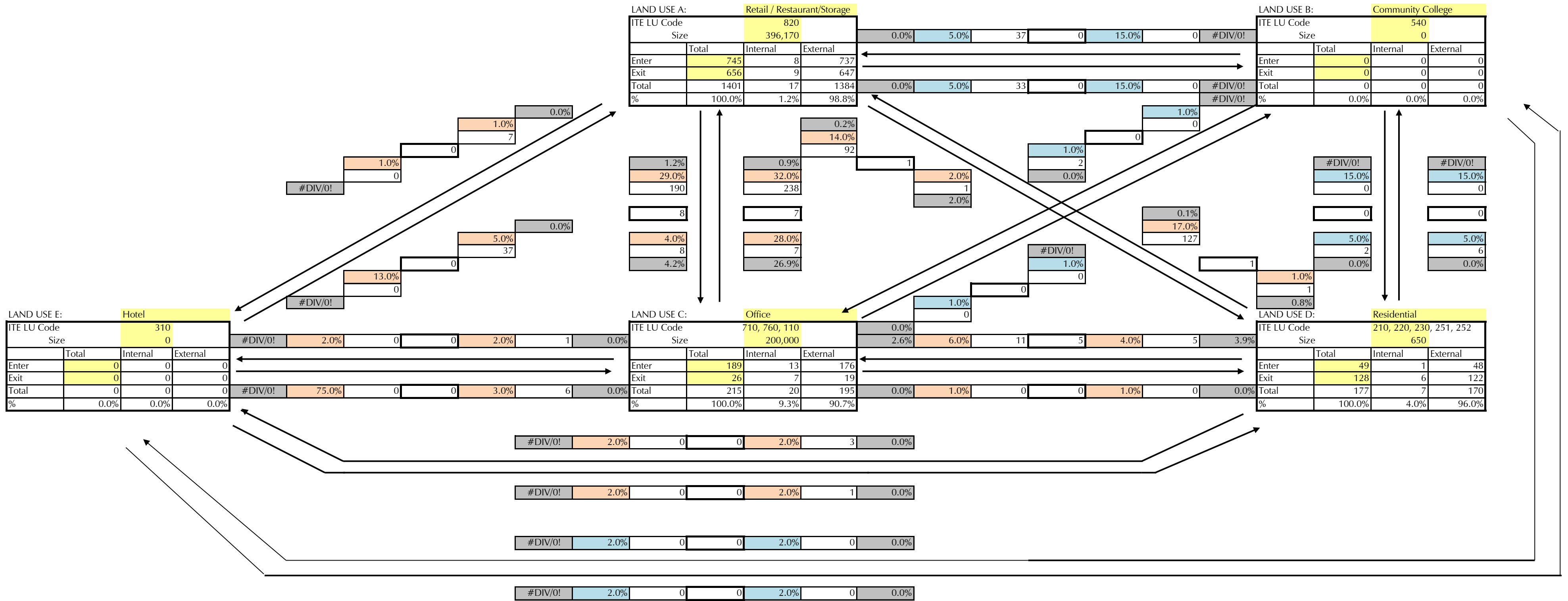
(3) Source: Institute of Transportation Engineers, *Trip Generation*, 9th Edition.

(4) Utilized average of individual AM and PM peak hour internalization rates with adjustments to balance with the east side interzonal trips.

APPENDIX

INTERNAL CAPTURE WORKSHEET

PROJECT: Westlake - West Side
TIME PERIOD: AM Peak Hour Traffic
DATE: 04/15/21



	Net External Trips for Multi-Use Development					
	L.U. A	L.U. B	L.U. C	L.U. D	L.U. E	TOTAL
Enter	737	0	176	48	0	961
Exit	647	0	19	122	0	788
Total	1384	0	195	170	0	1749
Single-Use Trip Gen. Estimate	1401	0	215	177	0	1793

INTERNAL CAPTURE

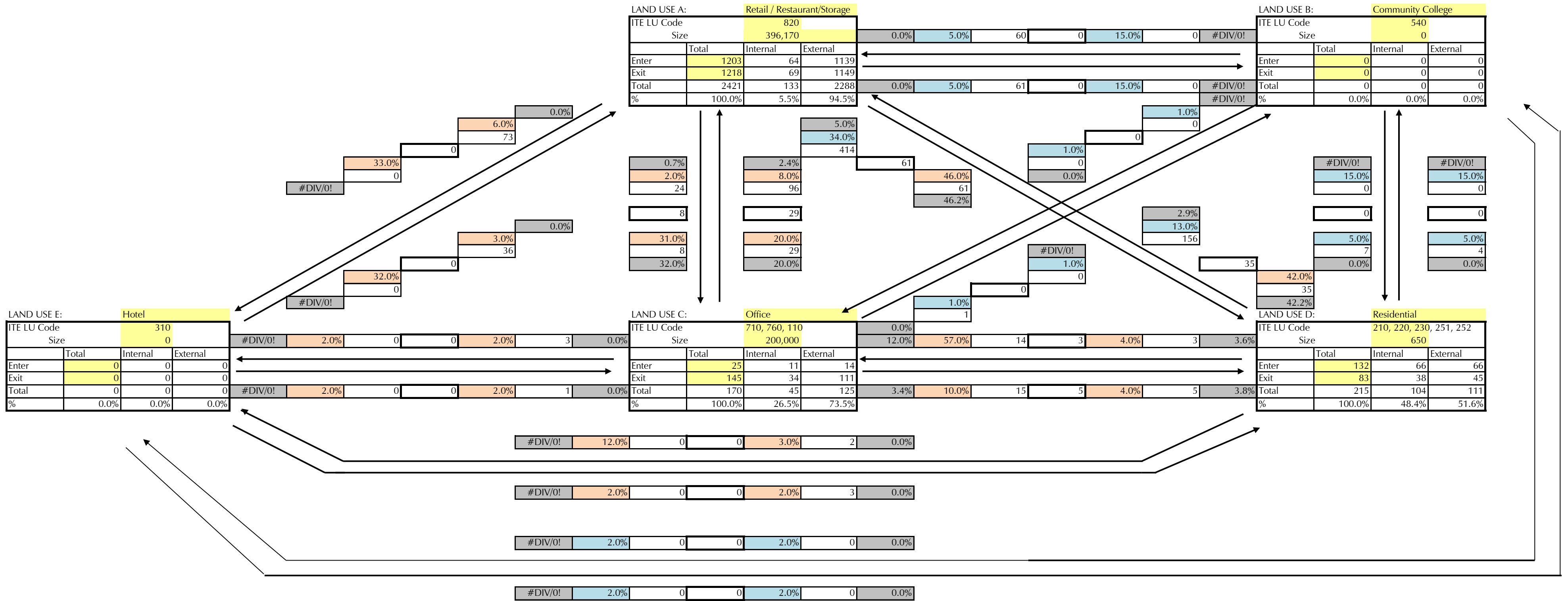
2.5%

LEGEND

- 1.0% Actual percent of trips entering (or exiting) a land use from another land use based on balanced number of trips.
- 5.0% Estimated percent of trips entering (or exiting) a land use from another land use based on NCHRP Report 684 (input by user).
- 5.0% Estimated percent of trips entering (or exiting) a land use from another land use (input by user).
- 61 Number of trips entering (or exiting) a land use from another land use based on percent input by user.
- 12 Balanced number of trips (lowest value) between two land uses.

INTERNAL CAPTURE WORKSHEET

PROJECT: Westlake - West Side
TIME PERIOD: PM Peak Hour Traffic
DATE: 04/15/21



	Net External Trips for Multi-Use Development					
	L.U. A	L.U. B	L.U. C	L.U. D	L.U. E	TOTAL
Enter	1139	0	14	66	0	1219
Exit	1149	0	111	45	0	1305
Total	2288	0	125	111	0	2524
Single-Use Trip Gen. Estimate	2421	0	170	215	0	2806

INTERNAL CAPTURE

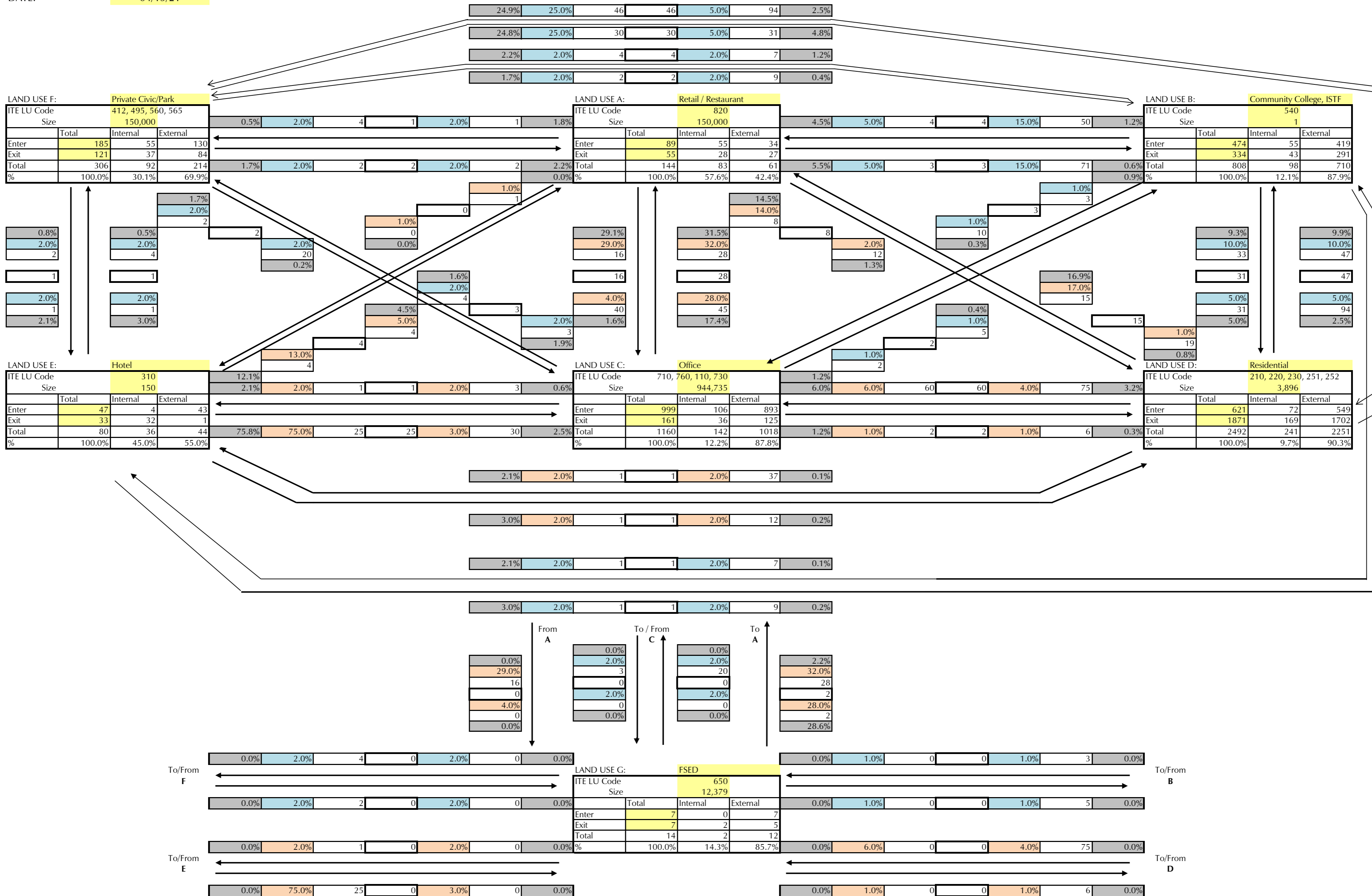
10.0%

LEGEND

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- 12 Balanced number of trips (lowest value) between two land uses.

INTERNAL CAPTURE WORKSHEET

PROJECT: Westlake - East Side
TIME PERIOD: AM Peak Hour Traffic
DATE: 04/15/21



	Net External Trips for Multi-Use Development							TOTAL
	L.U. A	L.U. B	L.U. C	L.U. D	L.U. E	L.U. F	L.U. G	
Enter	34	419	893	549	43	130	7	2075
Exit	27	291	125	1702	1	84	5	2235
Total	61	710	1018	2251	44	214	12	4310
Single-Use Trip Gen. Estimate	144	808	1160	2492	80	306	14	5004

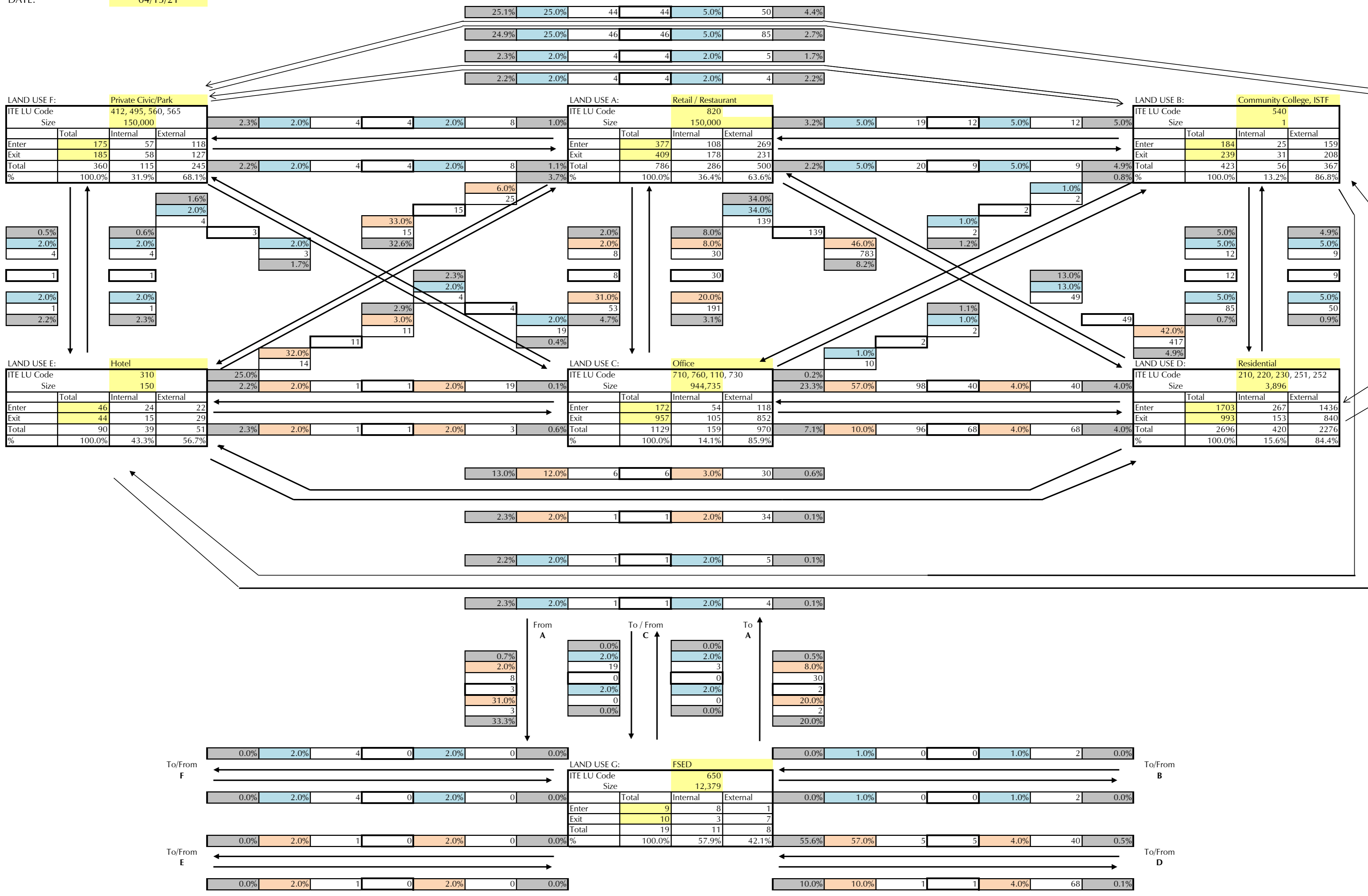
INTERNAL CAPTURE

LEGEND

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INTERNAL CAPTURE WORKSHEET

PROJECT: Westlake - East Side
TIME PERIOD: PM Peak Hour Traffic
DATE: 04/15/21



Net External Trips for Multi-Use Development								
	L.U. A	L.U. B	L.U. C	L.U. D	L.U. E	L.U. F	L.U. G	TOTAL
Enter	269	159	118	1436	22	118	1	2123
Exit	231	208	852	840	29	127	7	2294
Total	500	367	970	2276	51	245	8	4417
Single-Use Trip Gen. Estimate	786	423	1129	2696	90	360	19	5503

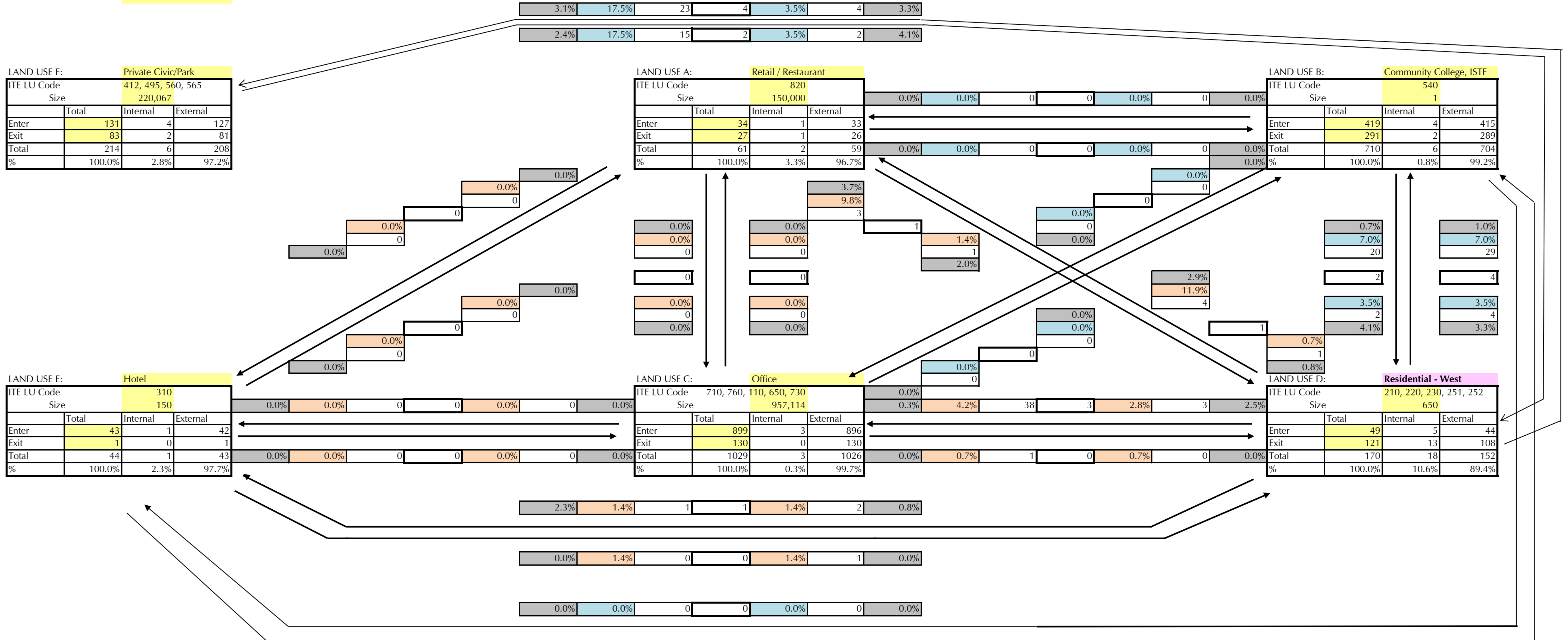
INTERNAL CAPTURE

LEGEND

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- 12 Balanced number of trips (lowest value) between two land uses.

INTERNAL CAPTURE WORKSHEET

PROJECT: Westlake - Interzonal - Residential
 TIME PERIOD: AM Peak Hour Traffic
 DATE: 04/15/21



LAND USE F: Private Civic/Park

ITE LU Code	412, 495, 560, 565		
Size	220,067		
Total			
Enter	131	4	127
Exit	83	2	81
Total	214	6	208
%	100.0%	2.8%	97.2%

LAND USE A: Retail / Restaurant

ITE LU Code	820		
Size	150,000		
Total			
Enter	34	1	33
Exit	27	1	26
Total	61	2	59
%	100.0%	3.3%	96.7%

LAND USE B: Community College, ISTF

ITE LU Code	540		
Size	1		
Total			
Enter	419	4	415
Exit	291	2	289
Total	710	6	704
%	100.0%	0.8%	99.2%

LAND USE E: Hotel

ITE LU Code	310		
Size	150		
Total			
Enter	43	1	42
Exit	1	0	1
Total	44	1	43
%	100.0%	2.3%	97.7%

LAND USE C: Office

ITE LU Code	710, 760, 110, 650, 730		
Size	957,114		
Total			
Enter	899	3	896
Exit	130	0	130
Total	1029	3	1026
%	100.0%	0.3%	99.7%

LAND USE D: Residential - West

ITE LU Code	210, 220, 230, 251, 252		
Size	650		
Total			
Enter	49	5	44
Exit	121	13	108
Total	170	18	152
%	100.0%	10.6%	89.4%

	Net External Trips for Multi-Use Development					
	L.U. A	L.U. B	L.U. C	L.U. D	L.U. E	TOTAL
Enter	33	415	896	44	42	1430
Exit	26	289	130	108	1	554
Total	59	704	1026	152	43	1984
Single-Use Trip Gen. Estimate	61	710	1029	170	44	2014

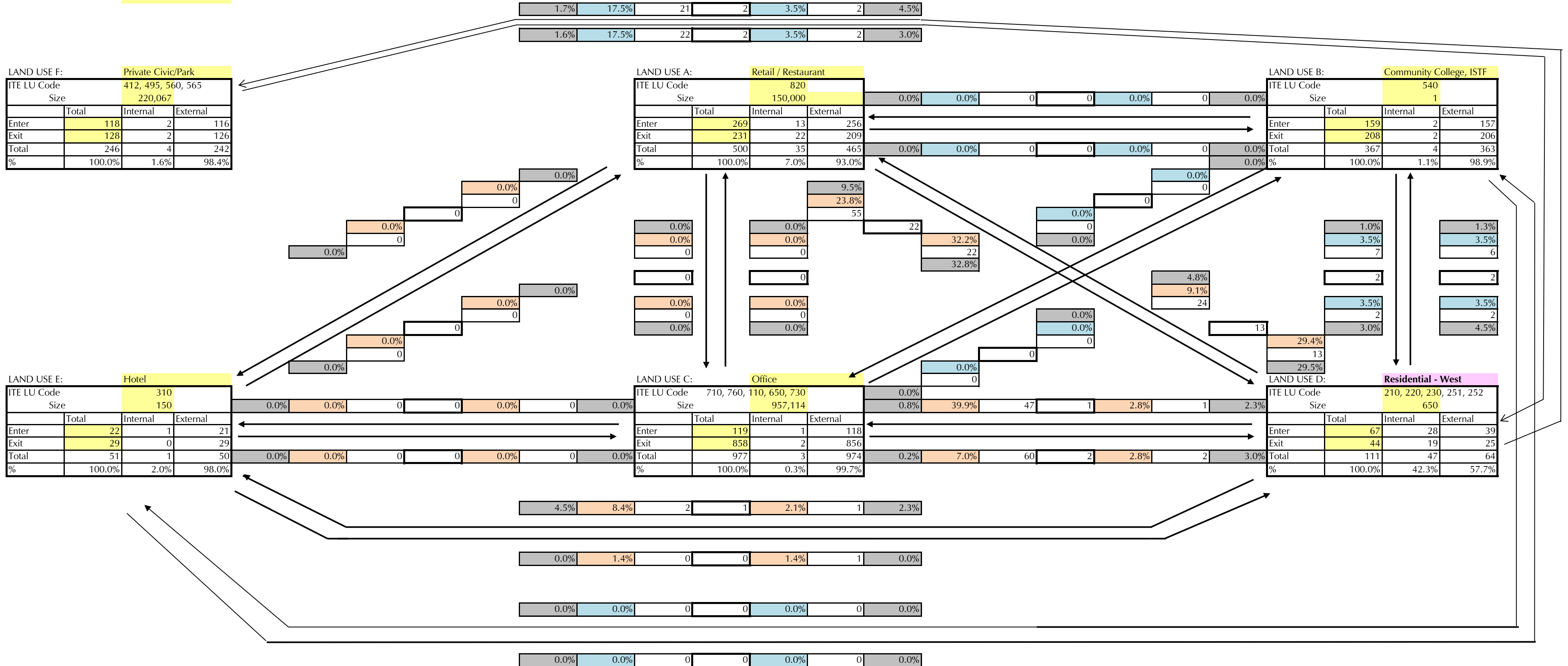
INTERNAL CAPTURE

LEGEND

- 1.0% Actual percent of trips entering (or exiting) a land use from another land use based on balanced number of trips.
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- 61 Number of trips entering (or exiting) a land use from another land use based on percent input by user.
- 12 Balanced number of trips (lowest value) between two land uses.

INTERNAL CAPTURE WORKSHEET

PROJECT: Westlake - Interzonal - Residential
 TIME PERIOD: PM Peak Hour Traffic
 DATE: 04/15/21



	Net External Trips for Multi-Use Development						TOTAL
	L.U. A	L.U. B	L.U. C	L.U. D	L.U. E		
Enter	256	157	118	39	21		591
Exit	209	206	856	25	29		1325
Total	465	363	974	64	50		1916
Single-Use Trip Gen. Estimate	500	367	977	111	51		2006

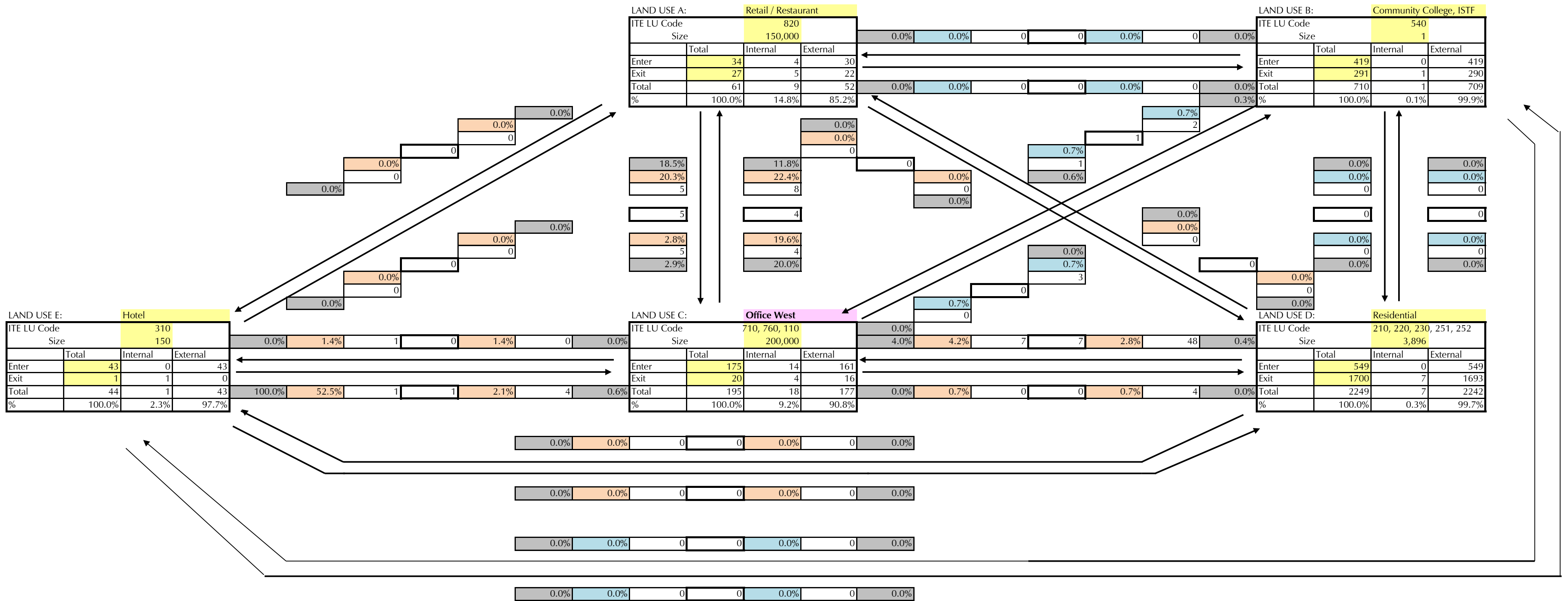
INTERNAL CAPTURE

LEGEND

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- 12 Balanced number of trips (lowest value) between two land uses.

INTERNAL CAPTURE WORKSHEET

PROJECT: Westlake - Interzonal - Office
 TIME PERIOD: AM Peak Hour Traffic
 DATE: 04/15/21



	Net External Trips for Multi-Use Development					
	L.U. A	L.U. B	L.U. C	L.U. D	L.U. E	TOTAL
Enter	30	419	161	549	43	1202
Exit	22	290	16	1693	0	2021
Total	52	709	177	2242	43	3223
Single-Use Trip Gen. Estimate	61	710	195	2249	44	3259

INTERNAL CAPTURE

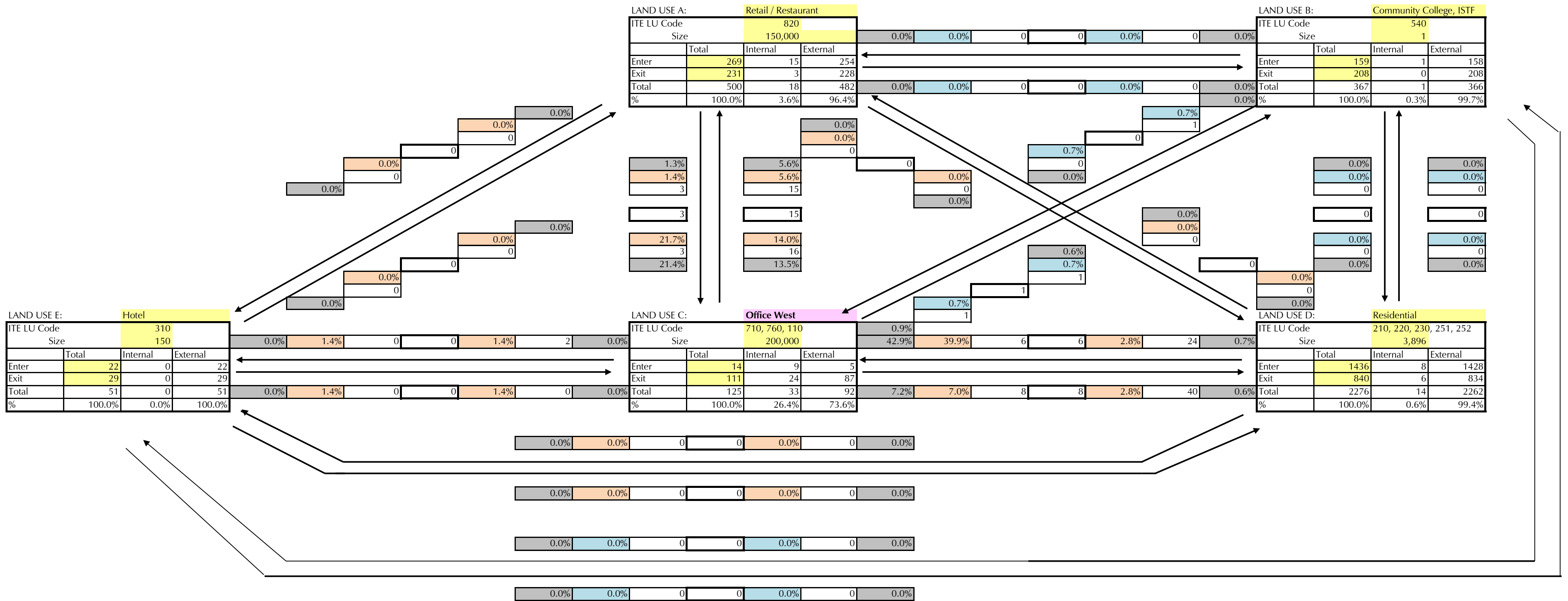
1.1%

LEGEND

- 1.0% Actual percent of trips entering (or exiting) a land use from another land use based on balanced number of trips.
- 5.0% Estimated percent of trips entering (or exiting) a land use from another land use based on NCHRP Report 684 (input by user).
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- 12 Balanced number of trips (lowest value) between two land uses.

INTERNAL CAPTURE WORKSHEET

PROJECT: Westlake - Interzonal - Office
 TIME PERIOD: PM Peak Hour Traffic
 DATE: 04/15/21



	Net External Trips for Multi-Use Development					
	L.U. A	L.U. B	L.U. C	L.U. D	L.U. E	TOTAL
Enter	254	158	5	1428	22	1867
Exit	228	208	87	834	29	1386
Total	482	366	92	2262	51	3253
Single-Use Trip Gen. Estimate	500	367	125	2276	51	3319

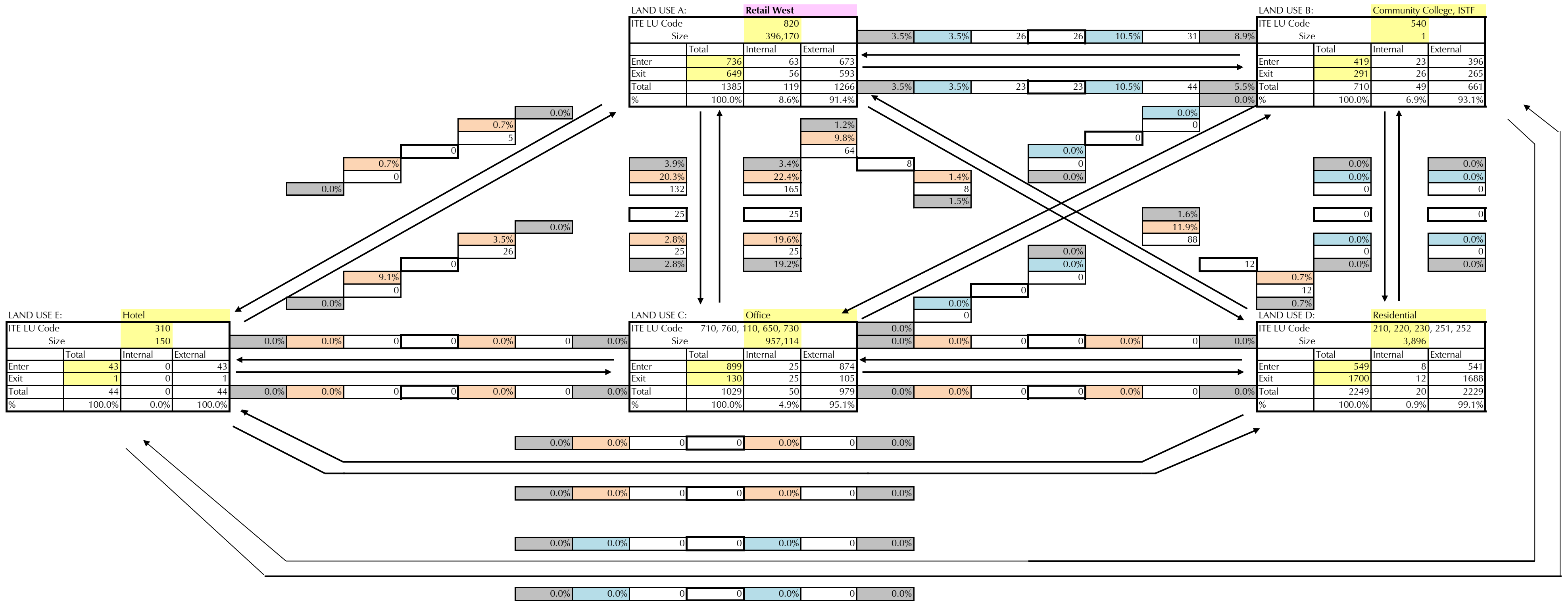
INTERNAL CAPTURE 2.0%

LEGEND

- 1.0% Actual percent of trips entering (or exiting) a land use from another land use based on balanced number of trips.
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- 61 Number of trips entering (or exiting) a land use from another land use based on percent input by user.
- 12 Balanced number of trips (lowest value) between two land uses.

INTERNAL CAPTURE WORKSHEET

PROJECT: Westlake - Interzonal - Retail
 TIME PERIOD: AM Peak Hour Traffic
 DATE: 04/15/21



	Net External Trips for Multi-Use Development						TOTAL
	L.U. A	L.U. B	L.U. C	L.U. D	L.U. E		
Enter	673	396	874	541	43	43	2527
Exit	593	265	105	1688	1	1	2652
Total	1266	661	979	2229	44	44	5179
Single-Use Trip Gen. Estimate	1385	710	1029	2249	44	44	5417

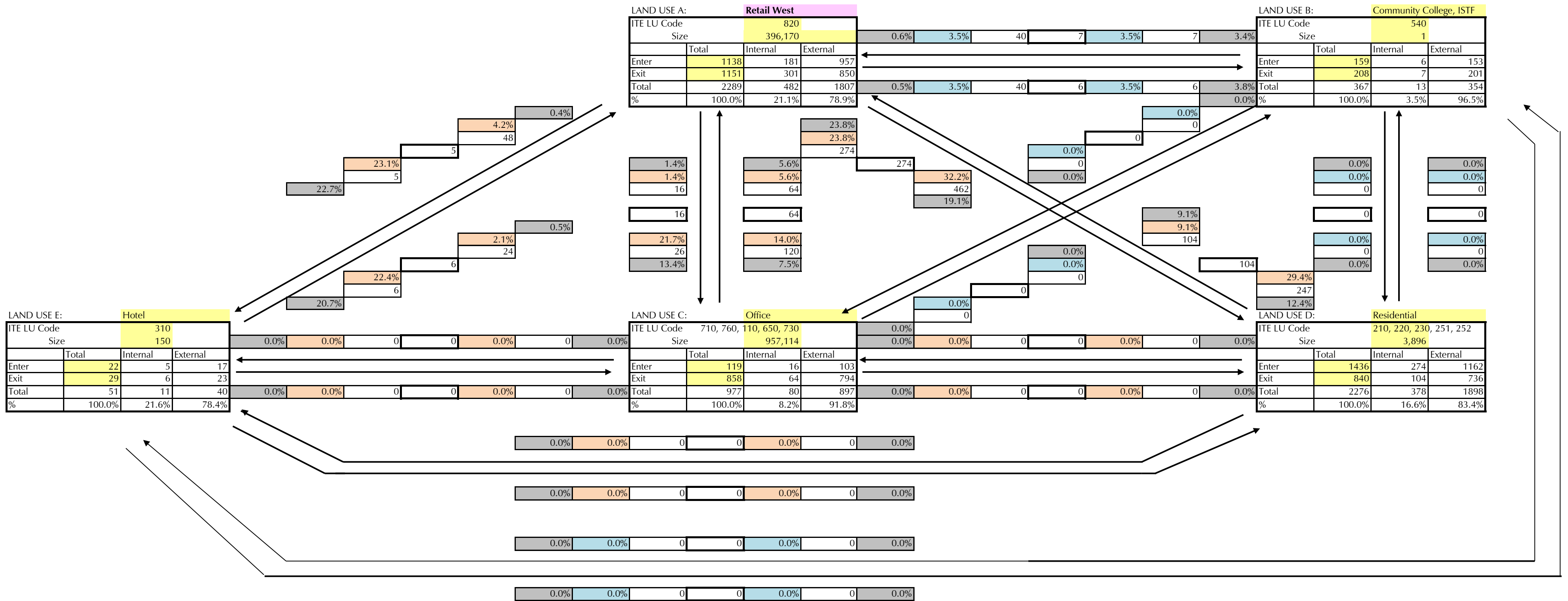
INTERNAL CAPTURE 4.4%

LEGEND

- 1.0% Actual percent of trips entering (or exiting) a land use from another land use based on balanced number of trips.
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- 5.0% Estimated percent of trips entering (or exiting) a land use from another land use (input by user).
- 61 Number of trips entering (or exiting) a land use from another land use based on percent input by user.
- 12 Balanced number of trips (lowest value) between two land uses.

INTERNAL CAPTURE WORKSHEET

PROJECT: Westlake - Interzonal - Retail
 TIME PERIOD: PM Peak Hour Traffic
 DATE: 04/15/21



	Net External Trips for Multi-Use Development					
	L.U. A	L.U. B	L.U. C	L.U. D	L.U. E	TOTAL
Enter	957	153	103	1162	17	2392
Exit	850	201	794	736	23	2604
Total	1807	354	897	1898	40	4996
Single-Use Trip Gen. Estimate	2289	367	977	2276	51	5960

INTERNAL CAPTURE

16.2%

LEGEND

- 1.0% Actual percent of trips entering (or exiting) a land use from another land use based on balanced number of trips.
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- 61 Number of trips entering (or exiting) a land use from another land use based on percent input by user.
- 12 Balanced number of trips (lowest value) between two land uses.

TABLE 1
BOOMERS
AVERAGE TRIP GENERATION

- 3 DAY AVE.

BOOMERS - BOCA
TRIP GEN STUDY
APPROVED RATES

ENTER	EXIT	TOTAL
12- 1 AM	0	0
1- 2 AM	0	0
2- 3 AM	0	0
3- 4 AM	0	0
4- 5 AM	0	0
5- 6 AM	0	0
6- 7 AM	1	1
7- 8 AM	4	1
8- 9 AM	6	3
9-10 AM	13	4
10-11 AM	13	8
11-12 AM	20	15
12- 1 PM	28	15
1- 2 PM	29	24
2- 3 PM	25	24
3- 4 PM	37	26
4- 5 PM	30	32
5- 6 PM	30	32
6- 7 PM	29	29
7- 8 PM	31	24
8- 9 PM	38	31
9-10 PM	27	30
10-11 PM	11	47
11-12 PM	5	16
TOTAL:	377	361

TABLE 2
BOOMERS
PROJECT DATA AND DAILY TRIP RATES BY INDEPENDENT VARIABLES

LOCATION: BOOMERS
LAND USE/BUILDING TYPE: AMUSEMENT PARK
ACRES: 7.1

INDEPENDENT VARIABLE - TRIPS PER:
WEEKDAY AVERAGE VEHICLE TRIP RATE (24 HR): STUDENT ERR

INDEPENDENT VARIABLE - TRIPS PER:
WEEKDAY AVERAGE VEHICLE TRIP RATE (24 HR): EMPLOYEE ERR

INDEPENDENT VARIABLE - TRIPS PER:
WEEKDAY AVERAGE VEHICLE TRIP RATE (24 HR): ACRE 103.944 ADT

TABLE 3
BOOMERS
TRIP RATES - INDEPENDENT VARIABLE: ACRE

AVG WKDY VEHICLE TRIP ENDS
AVERAGE DAILY TRIP RATE
PER ACRE: 103.944

PK HR	BTWN	ENTER	EXIT	TOTAL	VOLUME	RATE	%
OF	7 & 9	3	0	3	0.845	67	
ADJ.	AM	9	0	9	0.423	33	
STREET	BTWN	30	0	30	1.268	48	
TRAFFIC	4 & 6	32	0	32	4.272	52	
	PM	63	0	63	4.554		
					8.826		
PEAK							
HOUR	11-12 AM	20	0	20	2.770	57	
OF	AM	15	0	15	2.066	43	
GENERATOR	AM	34	0	34	4.836		
	ENTER	38	0	38	5.352	55	
	8- 9 PM	31	0	31	4.319	45	
	PM	69	0	69	9.671		

AM PEAK = 1.268/AC (67/33)

PM PEAK = 8.826/AC (48/52)

BOOMERS
TRIP GENERATION FIELD DATA

JAN 10, 1995			JAN 11, 1995			JAN 12, 1995		
ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
12- 1 AM	0	0	12- 1 AM	0	0	12- 1 AM	1	1
1- 2 AM	0	0	1- 2 AM	0	0	1- 2 AM	0	0
2- 3 AM	0	0	2- 3 AM	0	0	2- 3 AM	0	0
3- 4 AM	0	0	3- 4 AM	0	0	3- 4 AM	0	0
4- 5 AM	0	0	4- 5 AM	0	0	4- 5 AM	0	0
5- 6 AM	0	0	5- 6 AM	0	0	5- 6 AM	0	0
6- 7 AM	1	0	6- 7 AM	1	0	6- 7 AM	2	2
7- 8 AM	5	2	7- 8 AM	2	1	7- 8 AM	4	1
8- 9 AM	10	4	8- 9 AM	4	1	8- 9 AM	4	4
9-10 AM	11	4	9-10 AM	10	5	9-10 AM	17	3
10-11 AM	10	9	10-11 AM	16	7	10-11 AM	13	9
11-12 AM	19	12	11-12 AM	17	13	11-12 AM	23	19
12- 1 PM	40	22	12- 1 PM	24	11	12- 1 PM	21	12
1- 2 PM	20	26	1- 2 PM	31	25	1- 2 PM	36	20
2- 3 PM	24	22	2- 3 PM	23	18	2- 3 PM	29	31
3- 4 PM	30	21	3- 4 PM	40	24	3- 4 PM	41	32
4- 5 PM	31	28	4- 5 PM	27	31	4- 5 PM	33	38
5- 6 PM	21	27	5- 6 PM	36	37	5- 6 PM	32	32
6- 7 PM	39	29	6- 7 PM	26	30	6- 7 PM	23	28
7- 8 PM	37	23	7- 8 PM	29	29	7- 8 PM	26	19
8- 9 PM	30	38	8- 9 PM	35	22	8- 9 PM	49	32
9-10 PM	31	27	9-10 PM	30	30	9-10 PM	19	34
10-11 PM	13	52	10-11 PM	10	43	10-11 PM	9	46
11-12 PM	3	17	11-12 PM	6	23	11-12 PM	7	7
TOTAL:	375	363	TOTAL:	367	350	TOTAL:	389	370



YVONNE ZIEL TRAFFIC CONSULTANTS, INC.

40 86th St. North, West Palm Beach, Florida 33412

Telephone (561) 624-7262 • Facsimile (561) 624-9578

March 22, 2001

Mr. Dan Weisberg, P.E.
Palm Beach County Traffic Division
160 Australian Avenue, Suite 303
West Palm Beach, Florida 33406

RE: Premier Aviation - Boca Raton Airport - Trip Equivalency

Dear Mr. Weisberg:

Yvonne Ziel Traffic Consultants, Inc was retained to prepare a trip equivalency analysis for the existing uses at the Boca Raton Airport ("Airport") and the proposed Premier Aviation project at the Airport. The Airport is located north of Glades Road and east of I-95. On July 28, 1995 you sent a letter ("Vesting Letter") to the Airport recognizing certain vested uses and trips at the Airport. A copy of the Vesting Letter is attached. The uses vested on the Aviation Side are: a Based Aircraft Terminal/Office/Administration (545 aircraft and 74,000 square feet (SF)) and a Restaurant (6,000 SF). The uses vested on the Non-Aviation Side are a 29,900 SF restaurant, a 286,475 SF office and a 285 room hotel.

The current plan for a 20 acre Premier Aviation parcel consists of adding a Fixed Base Operator (40 aircraft), 125,000 SF of office and a 10,800 SF restaurant.

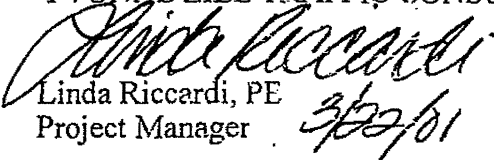
At this time the existing uses at the Airport for both the Aviation and Non-Aviation Side are: 236 Based Aircraft, Boomer's Family Entertainment Center (9.1 acres), and the Muvico Cinema complex (4,200 seats) with the associated 6,025 SF restaurant.

Based on ITE Trip Generation Rates, the uses approved in the Vesting Letter generate 10,372 vested daily trips. Using ITE Trip Generation Rates for the proposed Premier Aviation plan and the existing uses, results in a total daily trip generation of 7,142 trips. Refer to Tables 1 through 7 for traffic generation information used to develop this data. The current and proposed Premier Aviation average daily traffic generation at the Airport is less than the vested daily trips. After Premier Aviation there remains only a vacant five acre site at the Airport.

Per your request we reviewed the ability to accommodate a total of 545 Fixed Based Aircraft after implementation of the Premier Aviation plan. Tables 8, 9, and 10 demonstrate that the total number of vested trips is not exceeded with 545 Fixed Based Aircraft.

Sincerely,

YVONNE ZIEL TRAFFIC CONSULTANTS, INC.


Linda Riccardi, PE
Project Manager

ENCLOSURES

Table 1
PREMIER AVIATION
TRIP GENERATION RATES

14-Mar-01
10:05:25 AM

LAND USE	ITE CODE	ADT TRIP RATES		AM PEAK TRIP RATES		PM PEAK TRIP RATES	
		TOTAL	PERCENT	TOTAL	PERCENT	TOTAL	PERCENT
GENERAL AVIATION AIRPORT	022	6.61	0.67	44	56	1	48
RESTAURANT-QUALITY	831	96.51	0.81	6	94	7.49	67
OFFICE/SF	710	LNT=756*LNK+3.765	1.56	12	88	1.49	17
HOTEL/AVG	310	8.7	0.67	58	42	8.828	48
BOOMER/SIACRE	IND	103.94	1.268	33	67	0.0251	48
MUVICD/SEAT	IND	0.43	0.0088	36	64		52

SOURCE: INSTITUTE OF TRANSPORTATION ENGINEERS, TRIP GENERATION, 5TH EDITION, 6TH EDITION PK
SOURCE: PALM BEACH COUNTY IMPACT FEE ORDINANCE-ADT
IND - INDEPENDENT STUDY

TABLE 2
PREMIER AVIATION
TRIP GENERATION - VESTED USES

LAND USE	SIZE	ADT TRIPS		AM PEAK TRIPS		PM PEAK TRIPS	
		TOTAL	PERCENT	TOTAL	PERCENT	TOTAL	PERCENT
GENERAL AVIATION AIRPORT	545	3,602	365	204	161	545	262
RESTAURANT-QUALITY	29,900	2,886	24	23	1	224	150
OFFICE/SF	286,475	3,109	447	393	54	427	73
HOTEL/AVG	285	2,480	191	111	80	202	99
TOTAL:		12,077	1,027	731	296	1,398	583

TABLE 3
PREMIER AVIATION
INTERNAL/EXTERNAL TRIPS - VESTED USES

LAND USE	INTERNAL RATE	AM PEAK		PM PEAK		INTERNAL TRIPS		AM PEAK		PM PEAK		EXTERNAL TRIPS	
		TOTAL	ADT	TOTAL	ADT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT
GENERAL AVIATION AIRPORT	0	0	0	0	0	0	0	0	3,602	365	204	161	545
RESTAURANT-QUALITY	10	289	2	0	0	22	15	7	2,597	22	21	1	202
OFFICE/SF	17	537	77	88	9	74	13	61	2,572	370	325	45	353
HOTEL/AVG	10	248	19	11	6	20	10	10	2,232	172	100	72	182
TOTAL:									11,003	929	650	279	1,282

TABLE 4
PREMIER AVIATION
PASS-BY AND NEW TRIPS - VESTED USES

LAND USE	PASS-BY PERCENT	ADT		AM PEAK		PM PEAK		PASS-BY		NEW		PM PEAK	
		TOTAL	PERCENT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT
GENERAL AVIATION AIRPORT	0	0	0	0	0	0	0	0	0	0	0	0	545
RESTAURANT-QUALITY	15	380	2,207	3	0	19	18	1	30	20	10	172	115
OFFICE/SF	5	129	2,443	19	16	2	351	43	18	3	15	355	57
HOTEL/AVG	5	112	2,120	9	5	4	163	95	9	4	5	173	85
TOTAL:													1,275

10,372 808 625 273 1,275 519 706