

**SANDAG Series 12
2008 Highway Network
Select Zone Assignment**

VALLEY CENTER Area

Model Run 02/08/13
Series 12 Accretive Valley Center
2008 Base Year 4 Final Calibration
Plus Proposed Project
2008 - 2011 RTP
No Build

Forecasted Volumes:

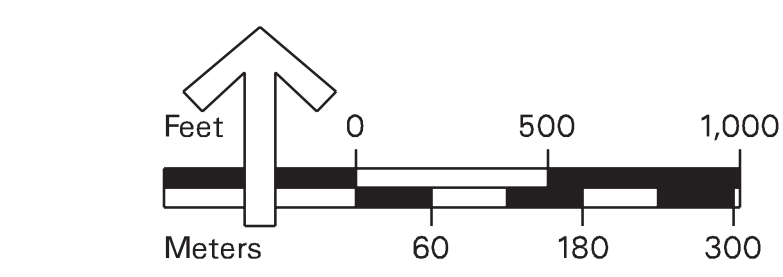
- Unadjusted Forecast Volume (in Thousands)
- Whole Select Link Volume
- Select Link Percentage
- Traffic Analysis Zone

Link Distributions:

- 100%
- 50.1% -> 99.9%
- 25.1% -> 50.0%
- 10.1% -> 25.0%
- 5.1% -> 10.0%
- 0.1% -> 5.0%
- 0%

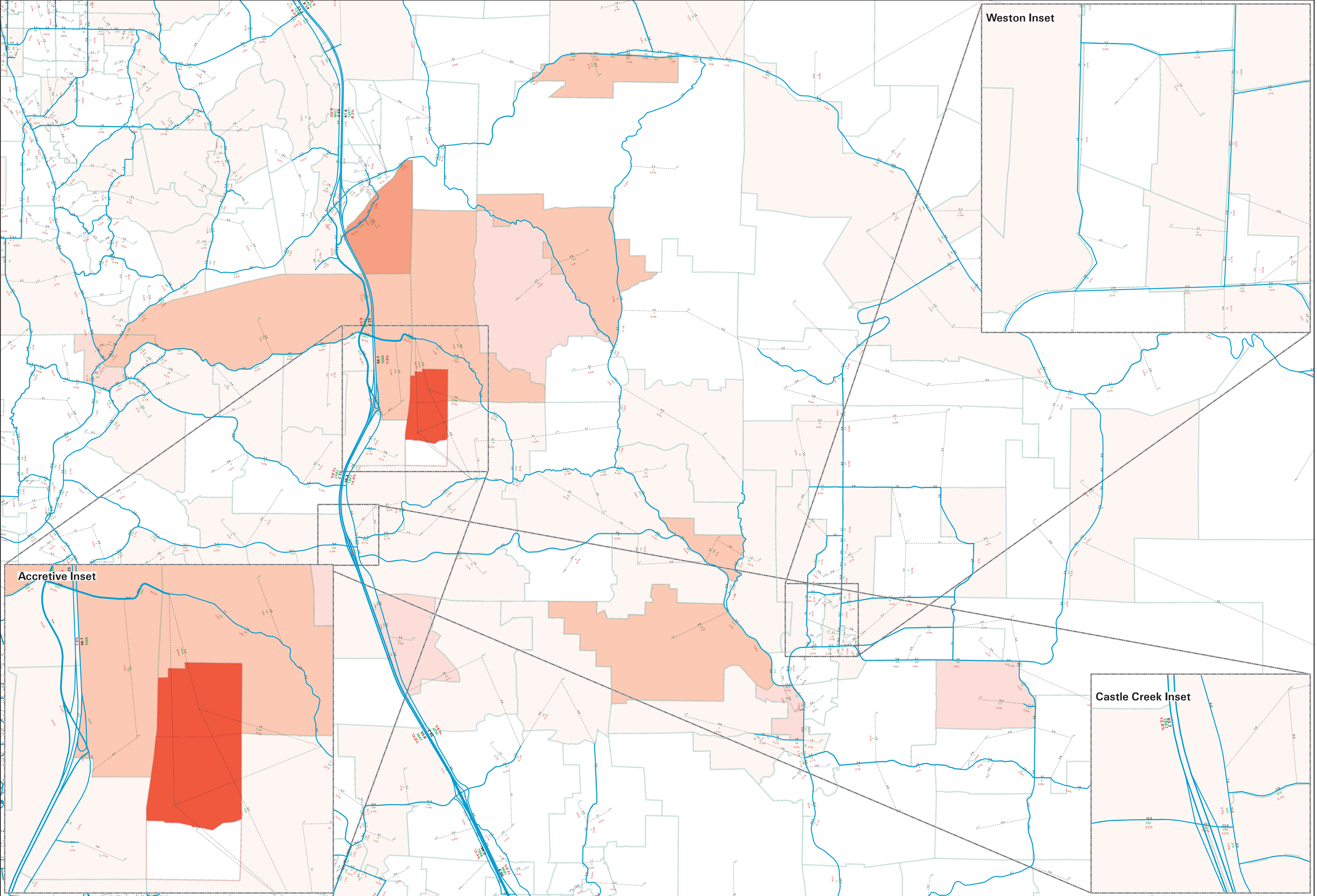
Zonal Distributions:

- 100%
- 25.1% -> 99.9%
- 10.1% -> 25.0%
- 1.1% -> 10.0%
- 0.6% -> 1.0%
- 0.1% -> 0.5%
- Zero Trips (0.0%)



SANDAG
San Diego's Regional Planning Agency

February 11, 2013



Weston Inset

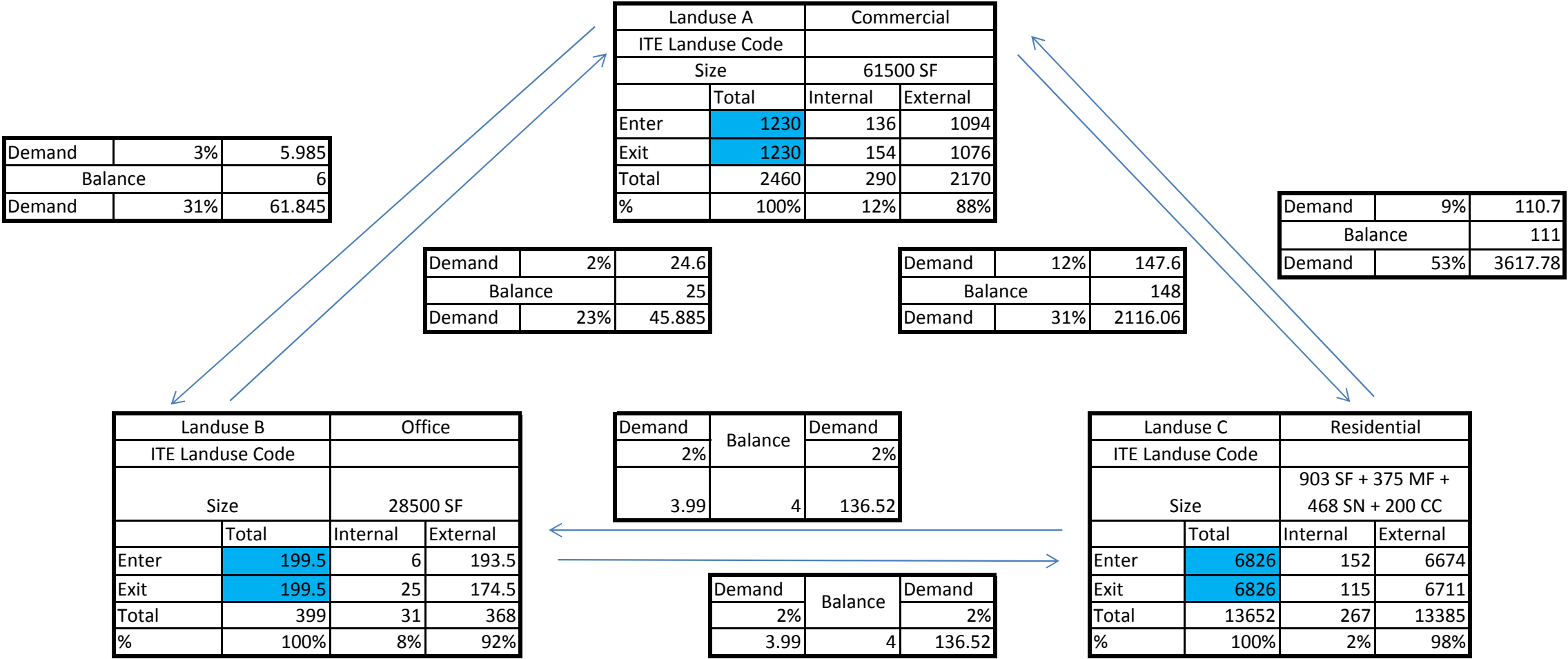
Accretive Inset

Castle Creek Inset

ITE INTERNAL CAPTURE CALCULATION

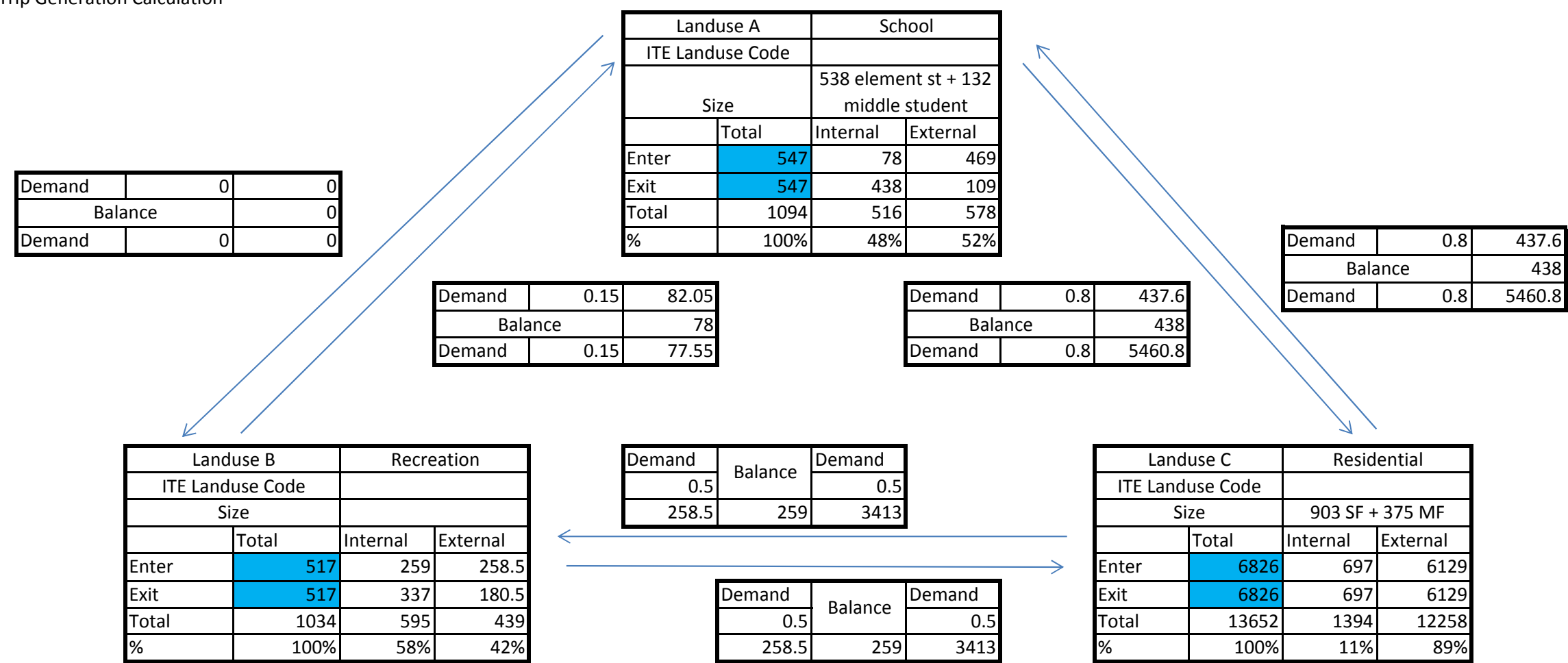
ITE Multi-Use Trip Generation Calculation					
Primary Land Use	ADT	AM - In	AM - Out	PM - In	PM - Out
Residential (903 DU SF + 375 DU MF + 468 DU Senior Community + 200 Beds Congregate Care)	11,280	302	714	872	404
Commercial (61,500 SF)	2,460	44	30	111	111
Office (28,500 SF)	399	54	6	12	48
School (568 Elementary Students + 132 Middle School Students)	1,094	208	139	39	59
Recreation (40,000 SF Recreation Center + 23.8 Acres Park)	1,034	60	53	43	62
Church	321	10	6	13	13
Total Trips	16,588	1,625		1,787	
Total Internal Trips from Worksheet	3,683	582		399	
Internal Capture Percentage	22.2%	35.8%		22.3%	
Internal Capture Percentage used in TIS	22.00%	29.60%		21.60%	

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation
ADT



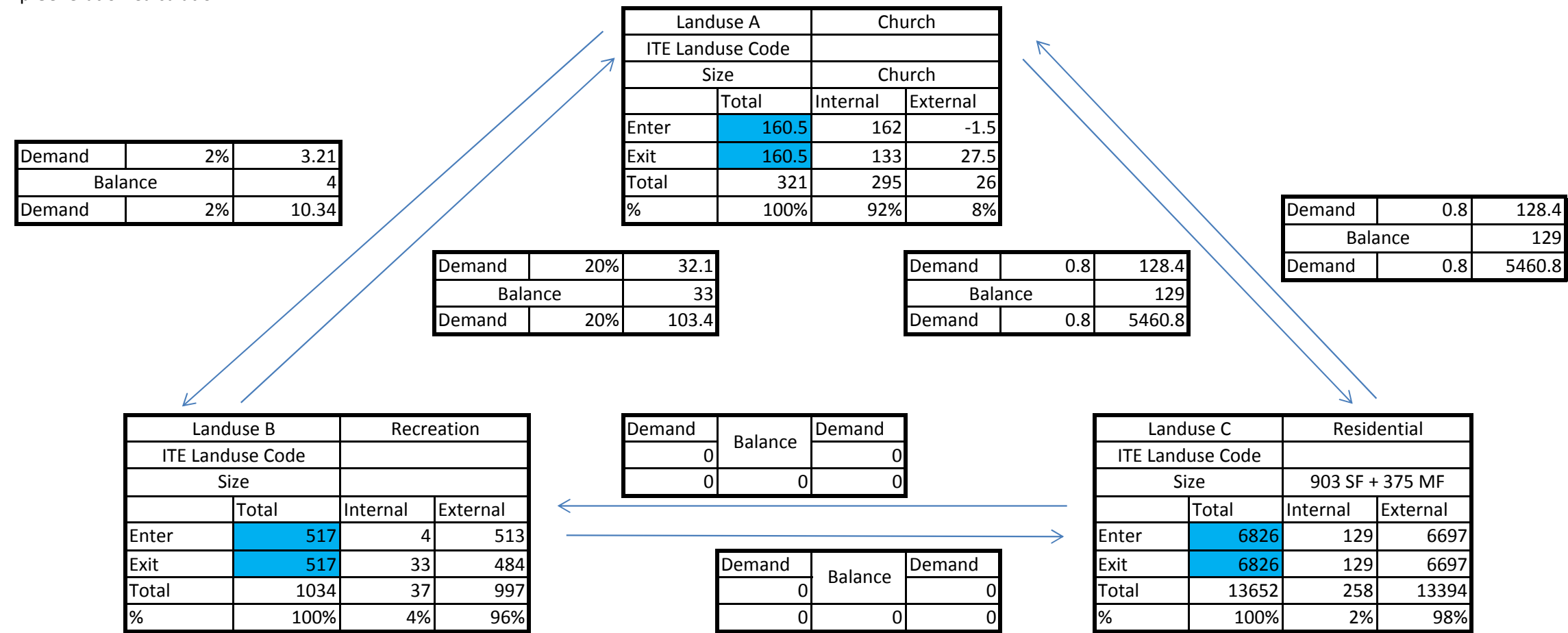
Net External Trips for Multi-Use Development					
	Land Use A	Land Use B	Land Use C	Total	
Enter	1230	199.5	6826	8255.5	
Exit	1230	199.5	6826	8255.5	
Total	2460	399	13652	16511	588
Single-Use Trip Gen. Est.	4920	798	27304	33022	2%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation
ADT



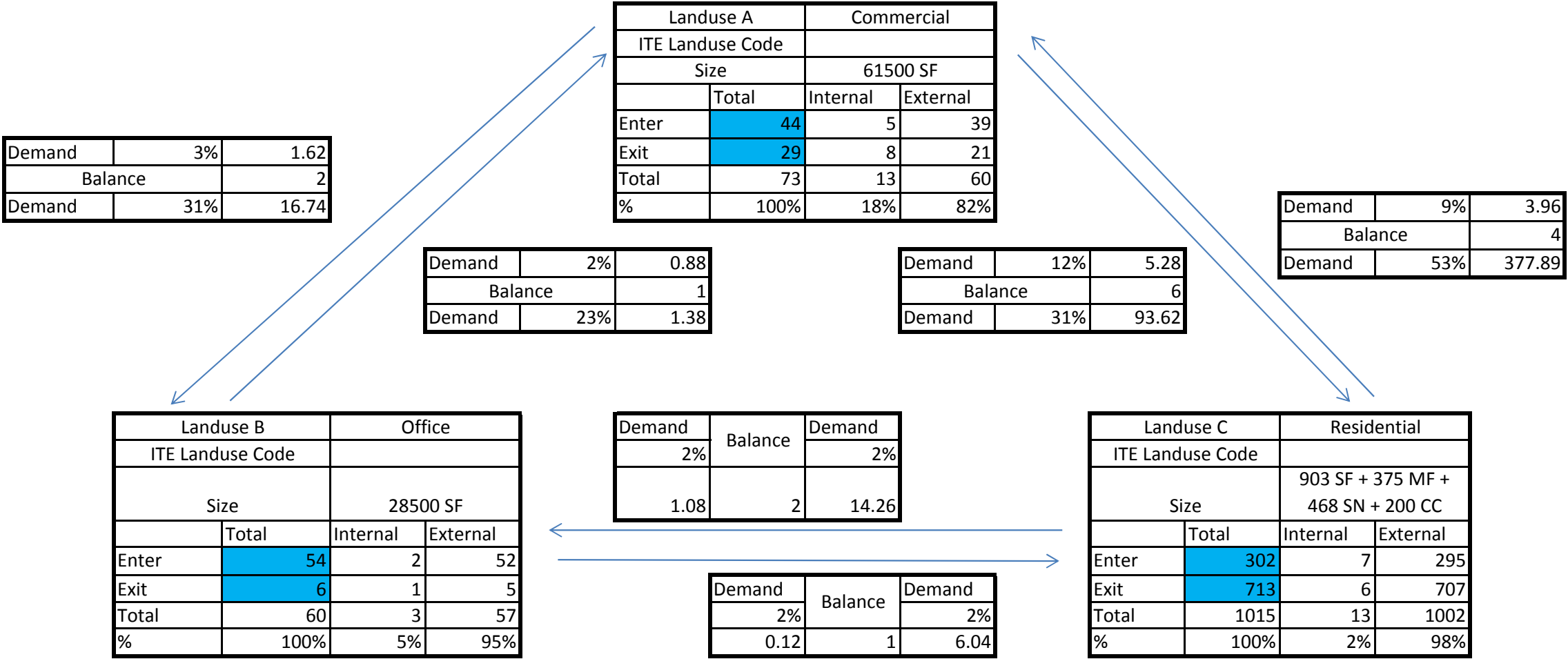
Net External Trips for Multi-Use Development					
	Land Use A	Land Use B	Land Use C	Total	
Enter	547	517	6826	7890	
Exit	547	517	6826	7890	
Total	1094	1034	13652	15780	2505
Single-Use Trip Gen. Est.	2188	2068	27304	31560	8%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation
ADT



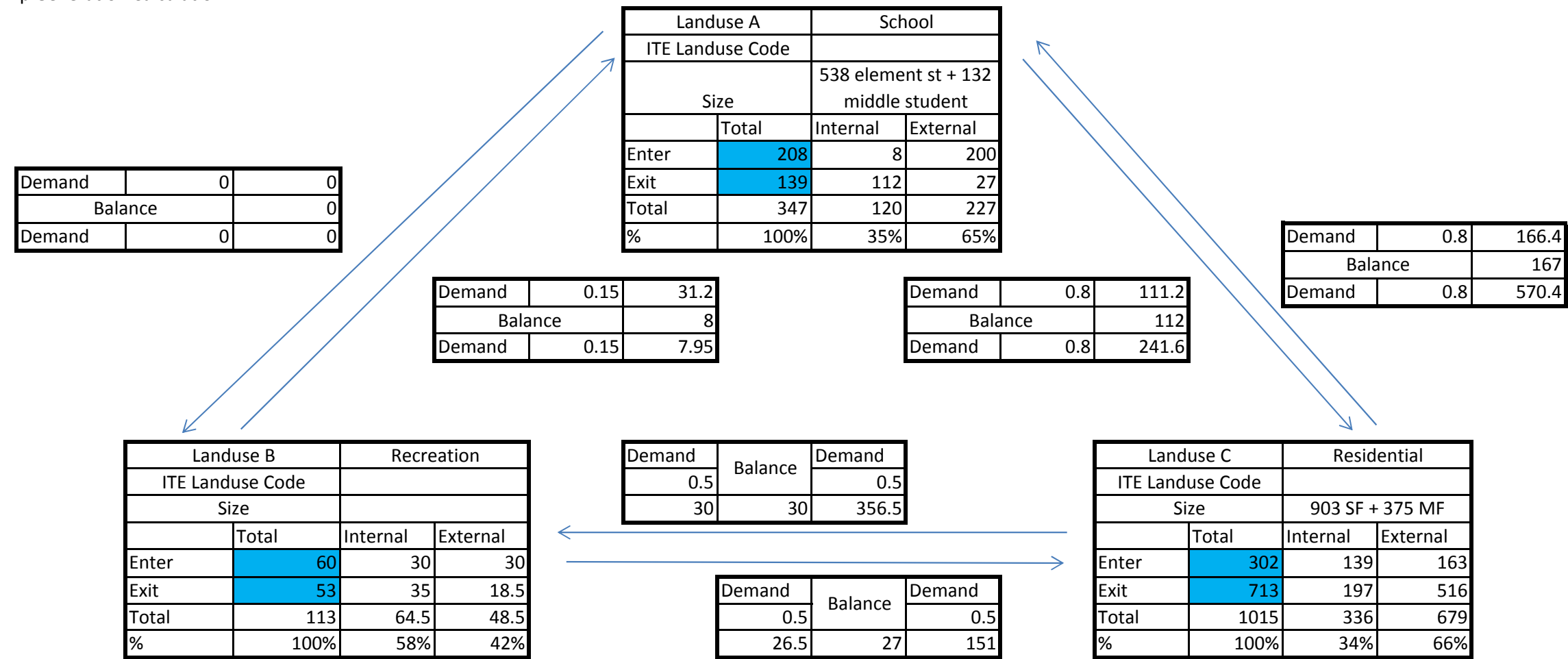
Net External Trips for Multi-Use Development					
	Land Use A	Land Use B	Land Use C	Total	
Enter	160.5	517	6826	7503.5	
Exit	160.5	517	6826	7503.5	
Total	321	1034	13652	15007	590
Single-Use Trip Gen. Est.	642	2068	27304	30014	2%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation
AM PEAK



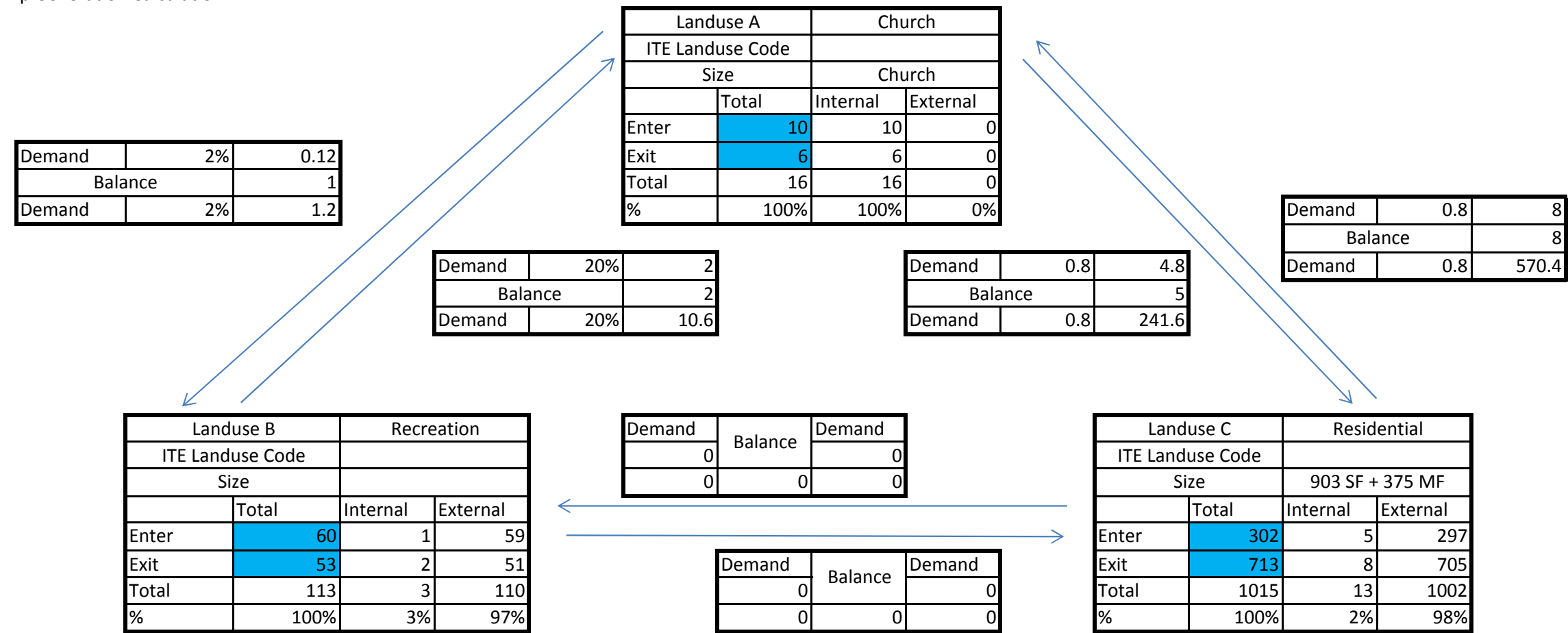
Net External Trips for Multi-Use Development					
	Land Use A	Land Use B	Land Use C	Total	
Enter	44	54	302	400	
Exit	29	6	713	748	
Total	73	60	1015	1148	29
Single-Use Trip Gen. Est.	146	120	2030	2296	1%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation
AM PEAK



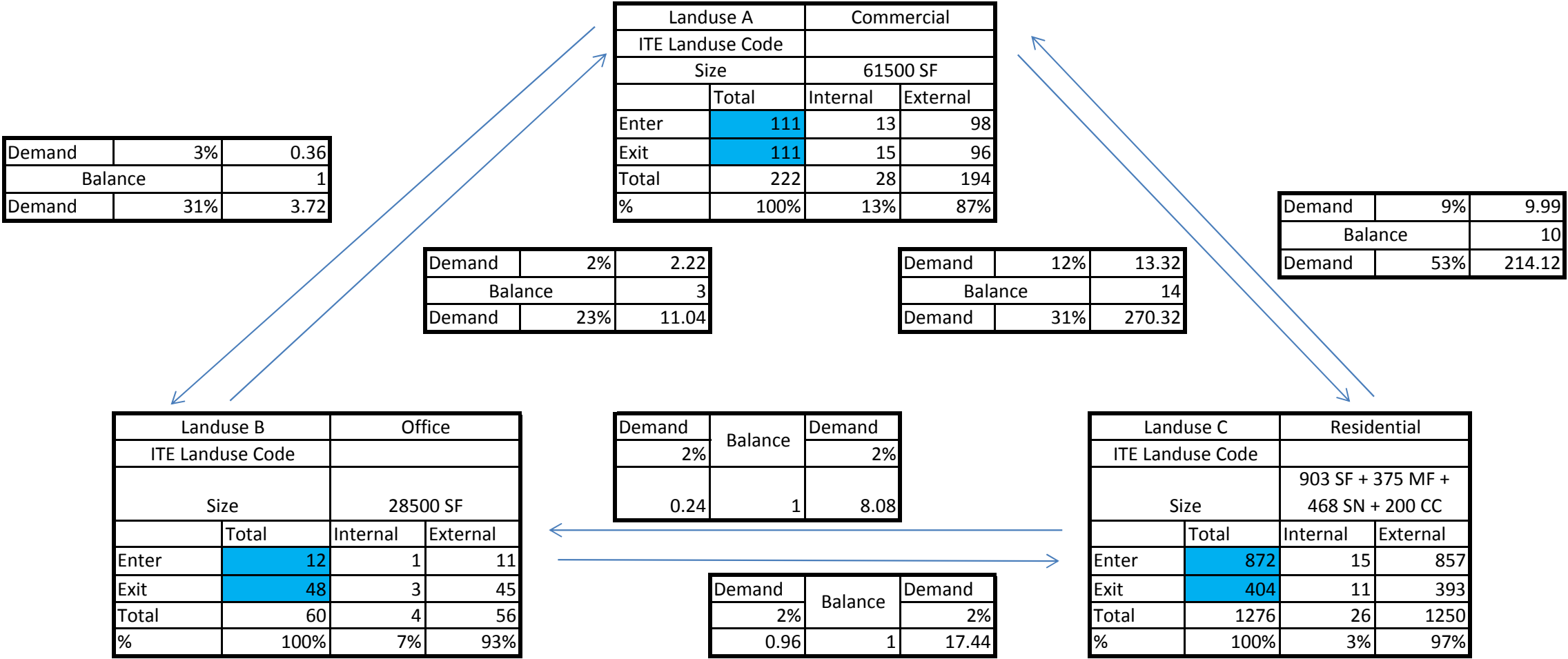
Net External Trips for Multi-Use Development					
	Land Use A	Land Use B	Land Use C	Total	
Enter	208	60	302	570	
Exit	139	53	713	905	
Total	347	113	1015	1475	520.5
Single-Use Trip Gen. Est.	694	226	2030	2950	18%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation
AM PEAK



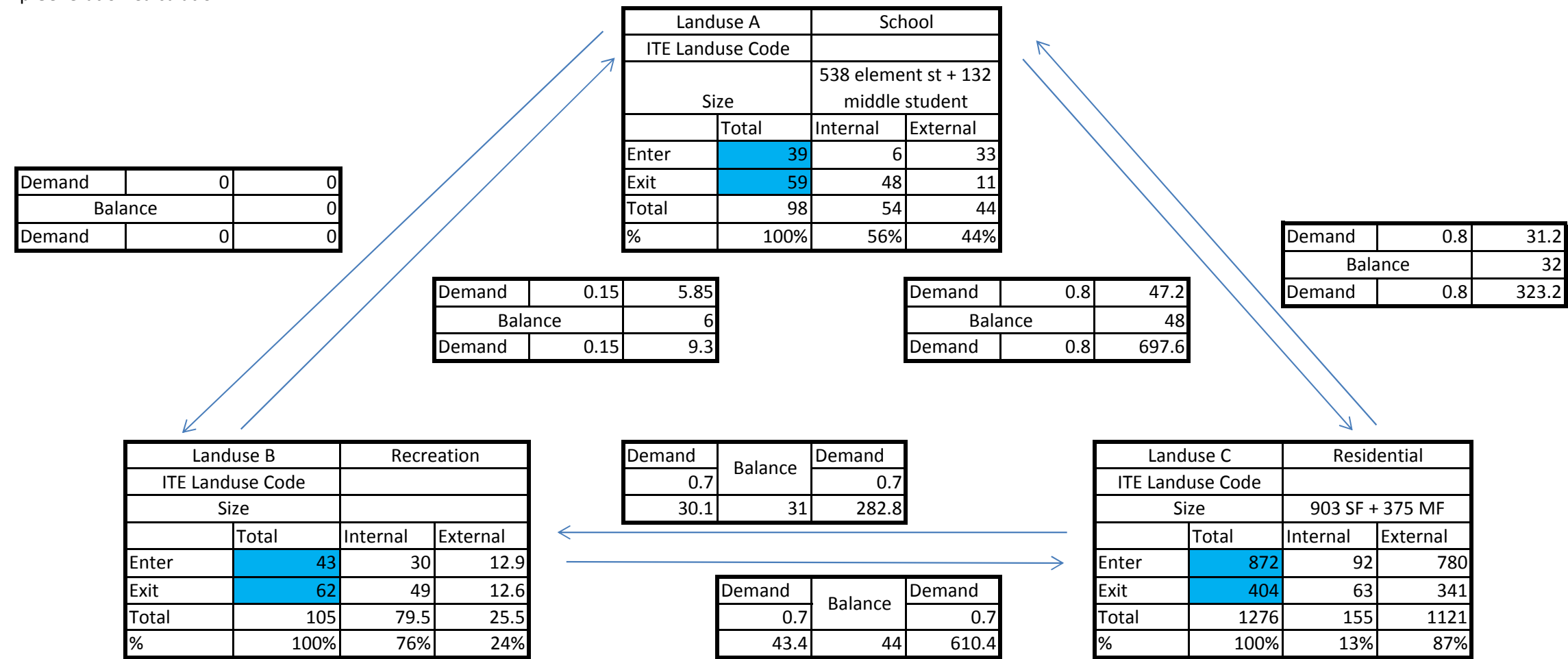
Net External Trips for Multi-Use Development					
	Land Use A	Land Use B	Land Use C	Total	
Enter	10	60	302	372	
Exit	6	53	713	772	
Total	16	113	1015	1144	32
Single-Use Trip Gen. Est.	32	226	2030	2288	1%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation
PM PEAK



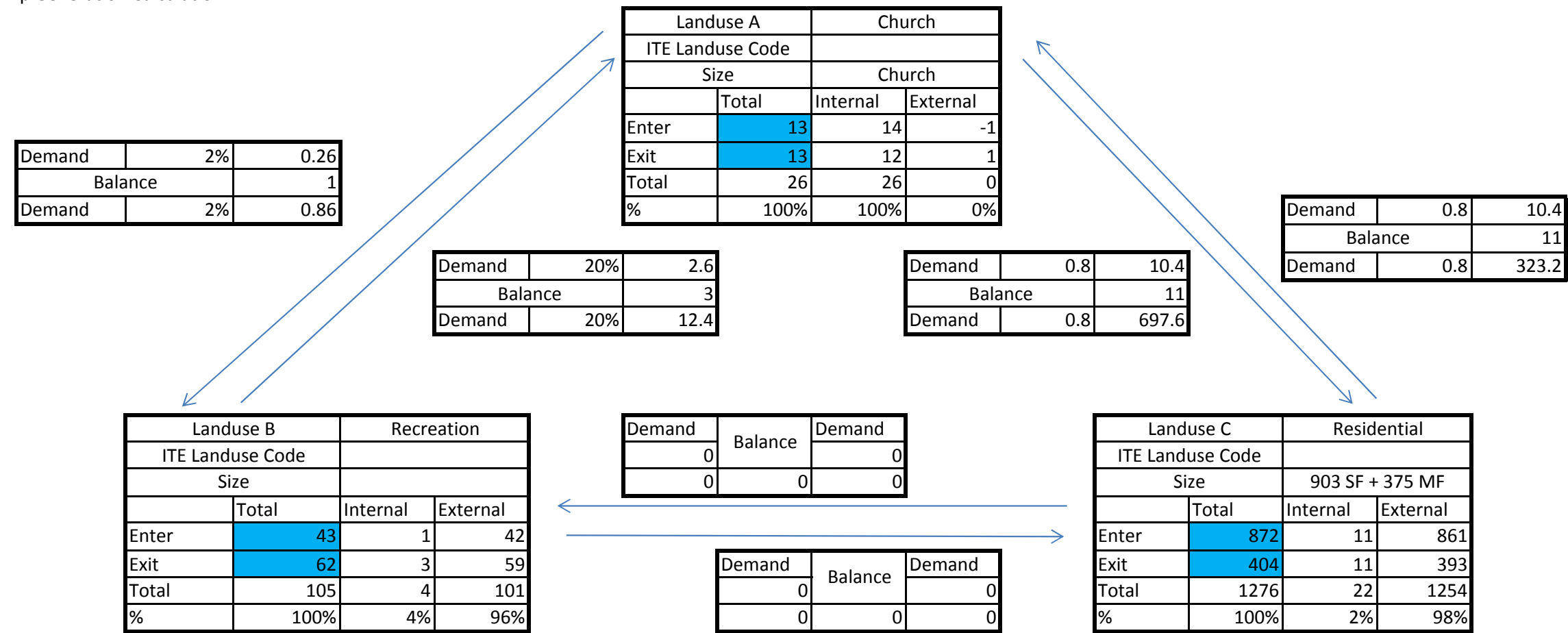
Net External Trips for Multi-Use Development					
	Land Use A	Land Use B	Land Use C	Total	
Enter	111	12	872	995	
Exit	111	48	404	563	
Total	222	60	1276	1558	58
Single-Use Trip Gen. Est.	444	120	2552	3116	2%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation
PM PEAK



Net External Trips for Multi-Use Development					
	Land Use A	Land Use B	Land Use C	Total	
Enter	39	43	872	954	
Exit	59	62	404	525	
Total	98	105	1276	1479	288.5
Single-Use Trip Gen. Est.	196	210	2552	2958	10%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation
PM PEAK



Net External Trips for Multi-Use Development					
	Land Use A	Land Use B	Land Use C	Total	
Enter	13	43	872	928	
Exit	13	62	404	479	
Total	26	105	1276	1407	52
Single-Use Trip Gen. Est.	52	210	2552	2814	2%

Appendix J
SANDAG Land Use Description
and ITE Office Trip Generation



SANDAG GIS

Last revision: September 18, 2007

LAND USE DEFINITIONS

1000 SPACED RURAL RESIDENTIAL – Single family homes located in rural areas with lot sizes greater than 1 acre. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit.

1100 SINGLE FAMILY RESIDENTIAL

1110 SINGLE FAMILY DETACHED – Single family **detached housing units**, on lots smaller than 1 acre. Newer developments may include clubhouses, recreation areas, pools, tennis, etc. located within and associated with the residential development, if a separate parcel/lot designation does not exist.

1120 SINGLE FAMILY MULTIPLE-UNITS – Includes single family **attached housing units**, duplexes, townhouses, and lower density condominium developments (in general, less than or equal to 12 units per acre). Single family attached units are structures with one or more walls extending from ground to roof separating adjoining structures.

1190 SINGLE FAMILY RESIDENTIAL WITHOUT UNITS – Small parcels of land associated with larger residential parcels. Includes but not limited to strips of land adjacent to developed land, car ports, sloped land, or odd-shaped parcels. May include land where a building straddles parcels and only one parcel has dwelling units.

1200 MULTI-FAMILY RESIDENTIAL – Apartments and higher density condominium developments (in general, more than 12 units per acre). Newer developments may include clubhouses, recreation areas, pools, tennis, etc. located within and associated with the residential development, if a separate parcel/lot designation does not exist.

1280 SINGLE ROOM OCCUPANCY UNITS (SROs) – For Rent SROs provide small, fully furnished rooms with utilities included, and rent on daily weekly and monthly terms.

1290 MULTI-FAMILY RESIDENTIAL WITHOUT UNITS – Small parcels of land associated with larger residential parcels. Includes but not limited to strips of land adjacent to developed land, car ports, sloped land, or odd-shaped parcels. May include land where a building straddles parcels and only one parcel has dwelling units.

1300 MOBILE HOME PARK – Includes mobile home parks with 10 or more spaces that are primarily for residential use. (RV parks are included within the commercial recreation category).

1400 GROUP QUARTERS

1401 JAIL/PRISON/BORDER PATROL HOLDING STATION

1402 DORMITORY

1403 MILITARY BARRACKS

1404 MONASTERY

1409 OTHER GROUP QUARTERS FACILITY – Convalescent or retirement homes not associated with or within a health care facility, rooming houses, half-way houses, California Conservation Corps, Honor Camps and other correctional facilities.

1500 HOTEL/MOTEL/RESORT

1501 HOTEL/MOTEL (LOW-RISE) – Hotels, motels, and other transient accommodations with three or less floors. Commonly found along freeways and prime commercial areas.

1502 HOTEL/MOTEL (HIGH-RISE) – Hotels and motels that have four or more floors. Primarily found in downtown areas and near tourist attractions.

1503 RESORT – Resorts with hotel accommodations that usually contain recreation areas. Examples of resorts would be La Costa Health Spa, Lawrence Welk and the Olympic Resort in Carlsbad near the airport.

2000 HEAVY INDUSTRY

2001 HEAVY INDUSTRY – Shipbuilding, airframe, and aircraft manufacturing. Usually located close to transportation facilities and commercial areas. Parcels are typically large, 20-50 acres.

2100 LIGHT INDUSTRY

2101 INDUSTRIAL PARK – Office/industrial uses clustered into a center. The primary uses are industrial but may include high percentages of other uses in service or retail activities.

2103 LIGHT INDUSTRY-GENERAL – All other industrial uses and manufacturing not included in the categories above. These are not located inside of parks, but are usually along major streets or clustered in certain areas. Includes manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; as well as light industrial uses as auto repair services and recycling centers. Mixed commercial and office uses (if not large enough to be identified separately) are also included. General industrial areas are comprised of 75 percent or more of industrial uses (manufacturing, warehousing, and wholesale trade).

2104 WAREHOUSING – Usually large buildings located near freeways, industrial or strip commercial areas.

2105 PUBLIC STORAGE – Public self-storage buildings are typically long, rectangular and closely spaced. Also includes RV storage areas.

2200 EXTRACTIVE INDUSTRY

2201 EXTRACTIVE INDUSTRY – Mining, sand and gravel extraction, salt evaporation.

2300 JUNKYARDS/DUMPS/LANDFILLS

2301 JUNKYARD/DUMP/LANDFILL – The landscape should show visible signs of the activity. Also include auto wrecking/dismantling and recycling centers.

4100 AIRPORTS

4101 COMMERCIAL AIRPORT – Lindbergh Field only.

4102 MILITARY AIRPORT – Airports owned and operated by the military. Found on Military bases.

4103 GENERAL AVIATION AIRPORT – All general aviation airports.

4104 AIRSTRIP

4110 OTHER TRANSPORTATION

4111 RAIL STATION/TRANSIT CENTER/SEAPORT – Major transit centers (e.g. Oceanside Transit Center, El Cajon Transit Center), rail stations (e.g. Santa Fe Depot, Solana Beach Station), Coaster stations (Oceanside, Carlsbad Village, Carlsbad Poinsettia, Encinitas, Solana Beach, Sorrento Valley, Old Town, San Diego), major trolley stations, and seaport terminals (Port of SD). Parking areas associated with these uses are included. Transit centers within shopping centers are included within the shopping center category.

4112 FREEWAY – Divided roadways with four or more lanes, restricted access, grade separations, and rights of way greater than 200 ft. wide. Includes all right of way and interchange areas, but not frontage roads.

4113 COMMUNICATIONS AND UTILITIES – TV and radio broadcasting stations, relay towers, electrical power generating plants, water and sewage treatment facilities, and large public water supply storage tanks.

4114 PARKING LOT-SURFACE – All surface parking lots not associated with another land use.

4115 PARKING LOT-STRUCTURE – All large parking structures not associated with another land use.

4116 PARK AND RIDE LOT – Stand-alone parking areas that are not associated with any land use. These are usually located near freeways.

4117 RAILROAD RIGHT-OF-WAY – All railroad ROWs.

4118 SURFACE STREET RIGHT-OF-WAY – All street ROWs.

4119 OTHER TRANSPORTATION – Maintenance yards and their associated activities, transit yards and walking bridges.

4120 MARINE TERMINAL – National City and 10th Street (Centre City) marine terminals.

5000 COMMERCIAL

5001 WHOLESALE TRADE – Usually located near transportation facilities. Structures are usually large and cover the majority of the parcel. Examples are clothing and supply. Also includes swap meet areas.

5002 REGIONAL SHOPPING CENTER – Contain one to five major department stores, and usually have more than 50 tenants. Typically are larger than 40 acres in size.

5003 COMMUNITY SHOPPING CENTER – Smaller in size than the regional shopping centers. Contain a junior department store or variety store (i.e. a Target Center with other commercial stores) as a major tenant and have 15 to 50 other tenants. Smaller in size, 8 to 20 acres. May also have a variety store (i.e. Target, Home Depot or Price/Costco) by itself.

5004 NEIGHBORHOOD SHOPPING CENTER – Usually less than 10 acres in size with on-site parking. Includes supermarket and drug store centers not identified as community commercial. May include office uses that are not large enough to code separately. Neighborhood centers with over 100,000 sq. ft. are inventoried by the Chamber of Commerce, and The Union Tribune (Copley) also collects data on neighborhood centers.

5005 SPECIALTY COMMERCIAL – Tourist or specialty commercial shopping areas such as Seaport Village, Marina Village, Ferry Landing at Coronado, Bazaar del Mundo, Flower Hill, Glasshouse Square, The Lumberyard, Park Plaza at the Village, Promenade, Belmont Park, Del Mar Plaza.

5006 AUTOMOBILE DEALERSHIP – Includes National City Mile of Cars and Carlsbad's Car Country, among others.

5007 ARTERIAL COMMERCIAL – Includes commercial activities found along major streets (not in planned centers), with limited on-site parking. May include mixed office uses that are not large enough to be identified as a separate area. Also may include mixed residential uses, i.e. residential on top of commercial or residential units adjacent to commercial establishments.

5008 SERVICE STATION – Includes gasoline service stations and associated convenience store on stand-alone parcels where it is the primary use.

5009 OTHER RETAIL TRADE AND STRIP COMMERCIAL – Other retail land uses not classified above.

6000 OFFICE

6001 OFFICE (HIGH-RISE) – High rise buildings with **more than four stories** containing banking, offices for business and professional services (finance, insurance, real estate), some retail activities and restaurants.

6002 OFFICE (LOW-RISE) – Low rise buildings with **less than five stories** containing banking, offices for business and professional services (finance, insurance, real estate), some retail activities and restaurants.

6003 GOVERNMENT OFFICE/CIVIC CENTER – Large government office buildings or centers (outside of military reservations) and civic centers, or city halls of local governments. Also includes the Chamber of Commerce buildings and DMV Offices.

6100 PUBLIC SERVICES

6101 CEMETERY

6102 RELIGIOUS FACILITY

6103 LIBRARY

6104 POST OFFICE

6105 FIRE/POLICE/RANGER STATION

6108 MISSION

6109 OTHER PUBLIC SERVICES – cultural facilities, museums, art galleries, social service agencies, humane societies, historic sites and observatories.

6500 HOSPITALS

6501 UCSD/VA HOSPITAL/BALBOA NAVAL HOSPITAL

6502 HOSPITAL-GENERAL – Hospitals not included above.

6509 OTHER HEALTH CARE – Medical centers and buildings or offices, health care services and other health care facilities. Smaller medical offices and facilities may be included within office, strip commercial or other surrounding uses.

6700 MILITARY USE

6701 MILITARY USE – Defense installations; operational facilities; maintenance facilities (non-weapons); research & development; supply & storage (non-weapons); community support facilities and any other military use that does not fall in other categories.

6702 MILITARY TRAINING – Academic, operational & combat training facilities; training ranges; and special purpose training ranges.

6703 WEAPONS FACILITY – Weapons assembly, maintenance and storage facilities.

6800 SCHOOLS

6801 SDSU/CSU SAN MARCOS/UCSD

6802 OTHER UNIVERSITY OR COLLEGE

6803 JUNIOR COLLEGE – Includes trade or vocational schools.

6804 SENIOR HIGH SCHOOL

6805 JUNIOR HIGH SCHOOL OR MIDDLE SCHOOL

6806 ELEMENTARY SCHOOL

6807 SCHOOL DISTRICT OFFICE

6809 OTHER SCHOOL – Includes adult schools, non-residential day care and nursery schools.

7200 COMMERCIAL RECREATION

7201 TOURIST ATTRACTION – Sea World, Zoo, and Wild Animal Park, Legoland.

7202 STADIUM/ARENA – Sports Arena, San Diego Stadium, and Petco Park.

7203 RACETRACK – Del Mar, San Luis Rey Downs.

7204 GOLF COURSE – Public and private golf courses.

7205 GOLF COURSE CLUBHOUSE – Clubhouses, swimming and tennis facilities and parking lots associated with the golf course.

7206 CONVENTION CENTER – Centre City, Embarcadero.

7207 MARINA – Includes marinas such as Oceanside Harbor, Quivira Basin, Shelter Island, Harbor Island, Embarcadero and Chula Vista marina.

7208 OLYMPIC TRAINING CENTER – Olympic Training Center in Chula Vista

7209 CASINO – Gambling establishments, typically located on Indian Reservations.

7210 OTHER RECREATION-HIGH – High intensity uses primarily in urban areas. Drive-in theaters, fitness clubs, boys/girls clubs, YMCA's, swim clubs, and stand-alone movie theaters. Also includes tennis clubs without golf, rodeo grounds and senior recreation centers.

7211 OTHER RECREATION-LOW – Campgrounds and other low intensity recreation. Includes public and private primitive and developed camping areas for tents and RVs. Also includes camps and retreat centers owned or used by religious organizations,

scouting, or YMCA. Other low intensity uses such as rifle ranges are included.

7600 PARKS

7601 PARK-ACTIVE – Recreation areas and centers containing one or more of the following activities: tennis or basketball courts, baseball diamonds, soccer fields, or swings. Examples are Robb Field, Morley Field, Diamond Street Recreation Center, Presidio Park. Smaller neighborhood parks with a high level of use are also included as active parks.

7603 OPEN SPACE PARK OR PRESERVE – Wildlife and nature preserves, lands set aside for open space, and parks with limited development and access. Examples are Torrey Pines State Reserve, Penasquitos Canyon Reserve, San Elijo Ecological Preserve, Nature Conservancy properties.

7604 BEACH-ACTIVE – Accessible sandy areas along the coast or major water bodies (San Diego and Mission Bay) allowing swimming, picnicking, and other beach related recreational activities. Usually has parking associated with it.

7605 BEACH-PASSIVE – Other sandy areas along the coastline with limited parking and access (beaches along cliffs, or near preserves).

7606 LANDSCAPE OPEN SPACE – Actively landscaped areas within residential neighborhoods such as greenbelt areas, hillsides with planted vegetation (trees/shrubs), among others.

7607 RESIDENTIAL RECREATION – Active neighborhood parks that are for the use of residents only such as fenced in areas that may contain pools, tennis & basketball courts, barbecues & a community meeting room.

7609 UNDEVELOPABLE NATURAL AREA * **(Planned land-use only)** – Undevelopable natural areas that are not part of an established open space park or preserve. Examples are Cleveland National Forest and open space easements around developments.

8000 AGRICULTURE

8001 ORCHARD OR VINEYARD

8002 INTENSIVE AGRICULTURE – Nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains.

8003 FIELD CROPS – Pasture, fallow.

9100 VACANT AND UNDEVELOPED LAND * (Historical and Existing only)

9101 VACANT

9200 WATER

9201 BAY OR LAGOON

9202 INLAND WATER – Lakes, reservoirs and large ponds.

9300 INDIAN RESERVATION * (Planned land-use only)

9400 PUBLIC/SEMI-PUBLIC * (Planned land-use only)

9500 UNDER CONSTRUCTION * (Historical and Existing only)

9501 RESIDENTIAL UNDER CONSTRUCTION – Usually located near existing residential developments.

9502 COMMERCIAL UNDER CONSTRUCTION – Usually located near existing commercial or residential areas.

9503 INDUSTRIAL UNDER CONSTRUCTION – Usually located near existing industrial or commercial developments.

9504 OFFICE UNDER CONSTRUCTION – Usually located near existing industrial or commercial developments.

9505 SCHOOL UNDER CONSTRUCTION

9506 -ROAD UNDER CONSTRUCTION

9507 - FREEWAY UNDER CONSTRUCTION

9600 SPECIFIC PLAN AREA * (Planned land-use only)

9700 MIXED USE * (Planned land-use only)

* The same 4-digit land-use coding system is used for historical, existing and planned land-use. Codes that are used only for historical/existing or planned are indicated.

Revised: September 18, 2007

General Office Building (710)

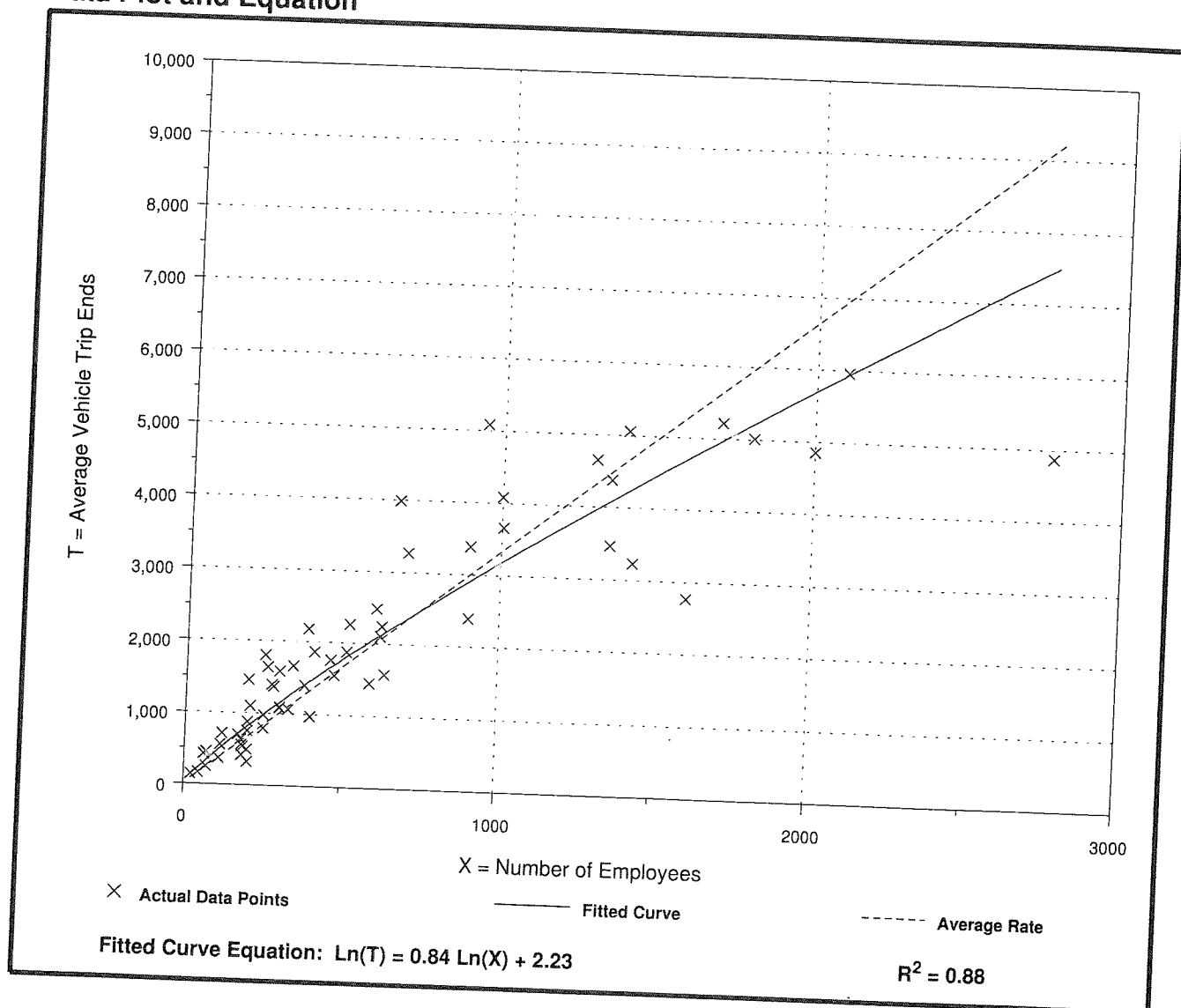
Average Vehicle Trip Ends vs: Employees
On a: Weekday

Number of Studies: 62
Avg. Number of Employees: 610
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
3.32	1.59 - 7.28	2.16

Data Plot and Equation



General Office Building (710)

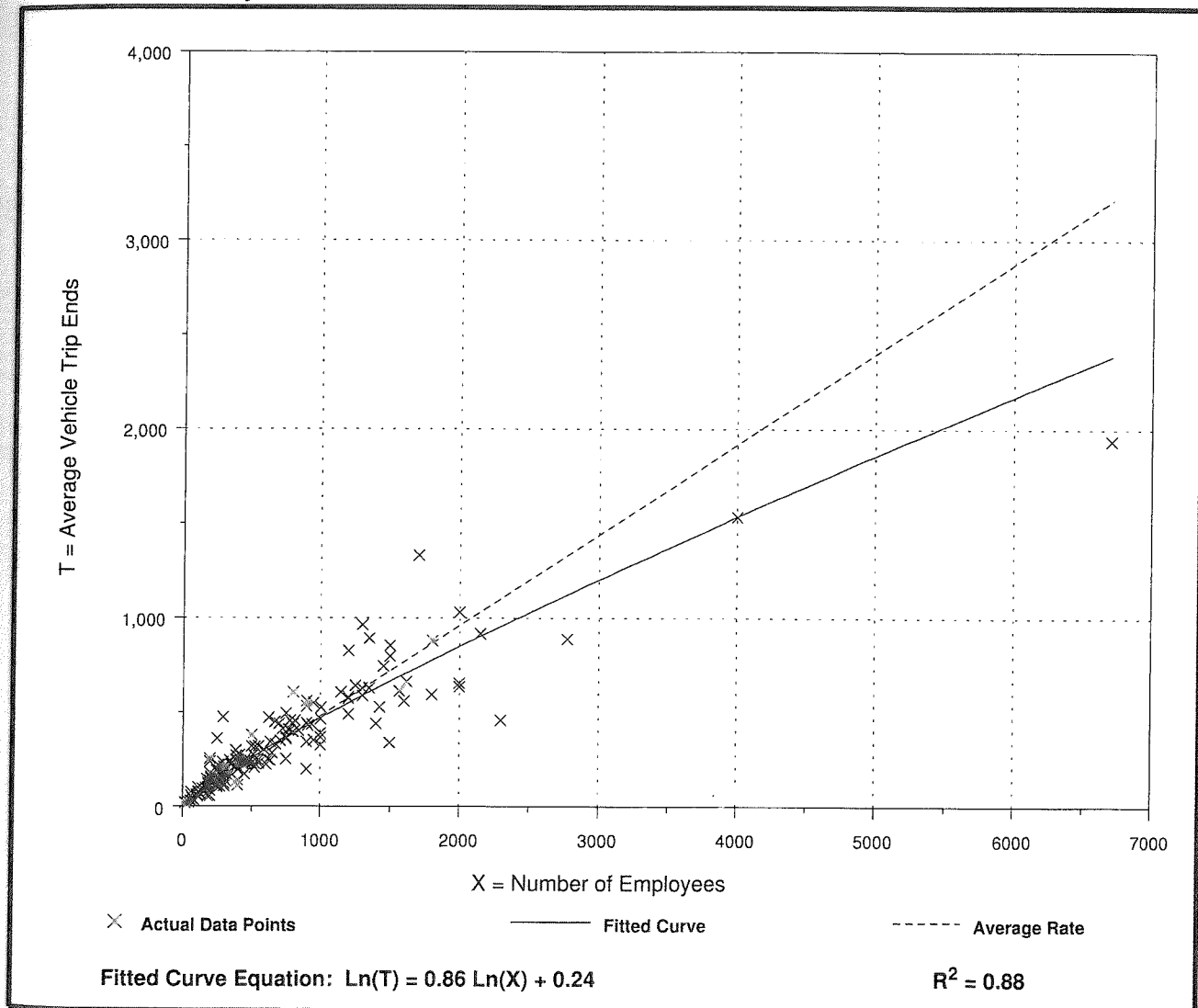
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
A.M. Peak Hour

Number of Studies: 163
Avg. Number of Employees: 695
Directional Distribution: 88% entering, 12% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.48	0.20 - 1.62	0.71

Data Plot and Equation



General Office Building (710)

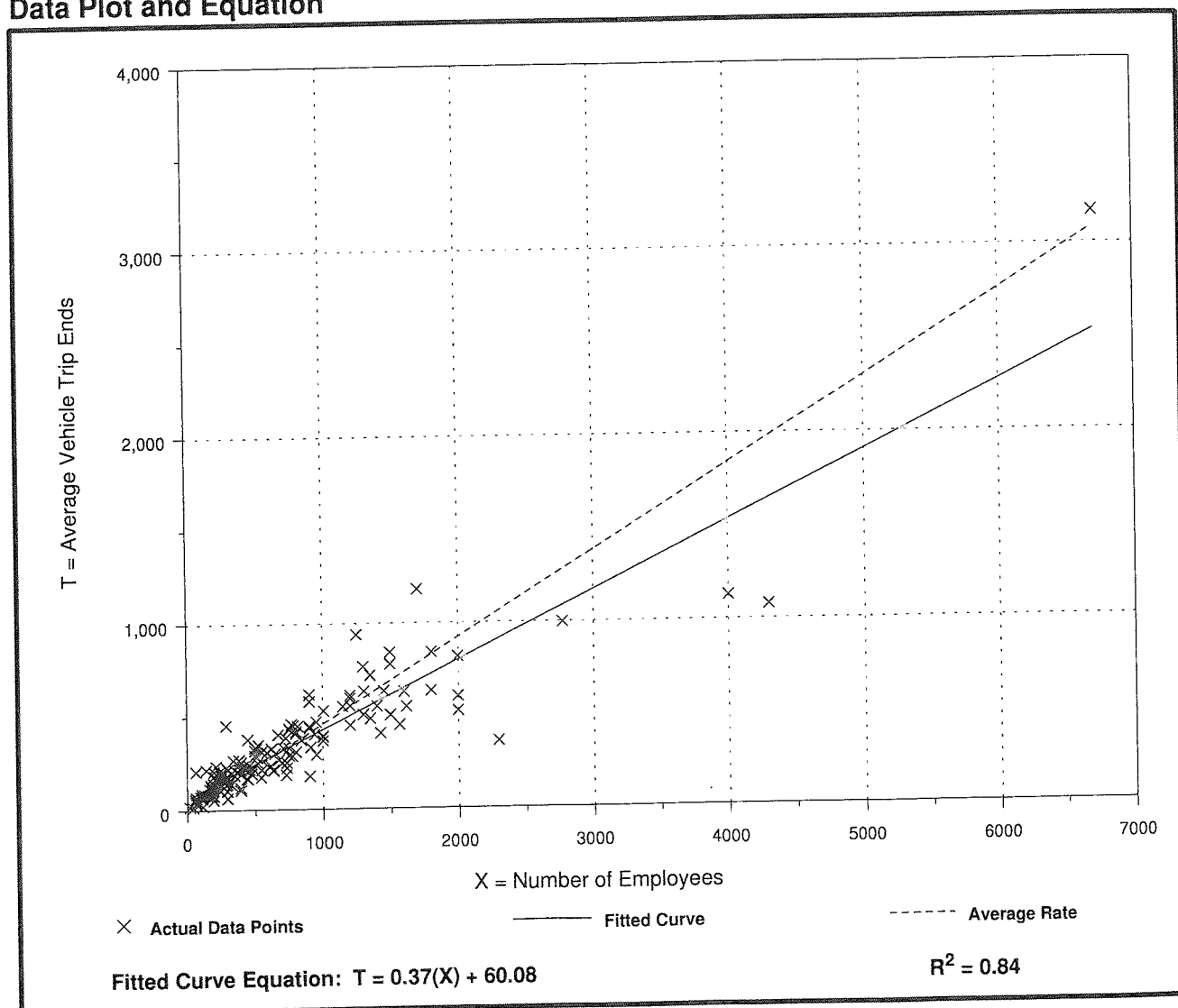
Average Vehicle Trip Ends vs: Employees
On a: Weekday,
P.M. Peak Hour

Number of Studies: 173
Avg. Number of Employees: 688
Directional Distribution: 17% entering, 83% exiting

Trip Generation per Employee

Average Rate	Range of Rates	Standard Deviation
0.46	0.16 - 3.12	0.70

Data Plot and Equation



Appendix K

SANDAG Select Zone Assignments for Project Trip Distribution