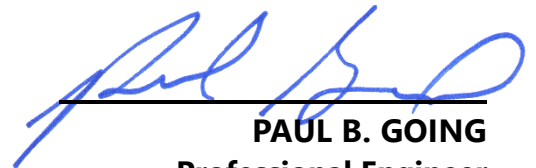


TRAFFIC STATEMENT for PROPOSED RETAIL STORE

**Tax Map 87, Block 157, Lot 5
457 Mount Pleasant Avenue (NJ Route 10)
@ Pleasant Valley Way (CR 636)
& Mount Pleasant Place
West Orange Township
Essex County, New Jersey**



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Revised: December 12, 2025
September 19, 2025

Traffic Planning and Design, Inc. (TPD) has prepared this Traffic Statement to support the application to West Orange Township for the reoccupancy of an existing garden center, located within a shopping center, with retail space.

The site is located is located in the northeast quadrant of the signalized intersection of Mount Pleasant Avenue (NJSH Route 10) and Pleasant Valley Way (CR 636), not including the corner lot, as shown on **Figure 1** in the **Appendix**, with additional frontage along Mount Pleasant Avenue.

CURRENT CONDITION

The approximately 3.7-acre property in question is occupied by the approximately 32,441 square foot Mount Pleasant Plaza shopping center. The South Branch of the Rahway River runs along the northerly and westerly sides of the property.

The center consists of the main, approximately 29,187 square foot, building, including a 1,522 square foot mezzanine, and a smaller building of approximately 3,254 square feet. An approximately 3,200 square foot area in the main building is occupied by Julio's Restaurant while the smaller building is occupied by Bagels by Jarrett/The Slice Shop. Approximately 18,767 square feet on the westerly side of the larger building, including the 1,522 square-foot mezzanine, were, until recently, occupied by the Metropolitan Plant Exchange garden center.

The garden center additionally occupied an approximately 8,980 square foot canopy-roofed and unenclosed sales area on the site, abutting the main building on its westerly side. For the purpose of traffic calculations in this report, and consistent with Institute of Transportation Engineers (ITE) definitions, unenclosed and roofed areas are **not** being included in the building floor area.

Access to the site is provided via 2 driveways along the State highway; a driveway along Pleasant Valley Way (CR 636); and a driveway along Mount Pleasant Place. The driveways accommodate full-movement access; however, trucks are prohibited from using the Pleasant Valley Way (CR 636) driveway, due to a restriction on a section of the driveway that spans over the South Branch of the Rahway River.

The site is served by approximately 165 parking stalls, configured as a mix of perpendicular and angled stalls. Angled stalls are located along the first aisle running perpendicular to Mount Pleasant Avenue (NJSH Route 10), which runs one-way eastbound; and along the aisle on the east side of the main building, which runs one-way northbound. Angled parking is also laid out along the aisle on the south side of the main building, although it is a two-way aisle.

PROPOSED CONDITION

It is proposed to reoccupy the 18,767 square foot former Metropolitan Plant Exchange garden center, including 1,522 square foot mezzanine, with a retail store. The area that had been occupied by the 8,980 square foot canopy would be replaced with additional parking and circulation; thereby increasing the parking supply by approximately 14%, to 188 stalls, including a 4-stall credit for electric vehicle supply equipment (EVSE) stalls.

The 2 parking aisles on the south side of the building would be reconfigured with perpendicular parking and two-way circulation. The one-way northbound aisle on the east side of the building would be maintained. Site access would be maintained in its current configuration

SCOPE OF STUDY

This study has been performed to evaluate the potential for traffic impacts associated with the proposed project. Accordingly, this analysis includes the following:

- A review of existing roadway and traffic conditions in the vicinity of the site including roadway geometrics;

- Projection of the volume of traffic expected to be generated by the proposed project;
- An evaluation of the site access design, on-site circulation and parking supply; and
- Recommendations and conclusions.

EXISTING TRAFFIC CONDITIONS

SUBJECT PROPERTY

The subject property is located on the northeast quadrant at the signalized intersection of Mount Pleasant Avenue (NJ Route 10) and Pleasant Valley Way (CR 636) in the Township of West Orange, Essex County, New Jersey. The following characteristics describe the subject property and surrounding area:

- Located in the B-2 (General Business) zoning district, where retail stores are permitted.
- Designated as Lot 5 in Block 157.
- Occupied by a 32,441 square foot shopping center, and until recently included an 8,980 square foot canopy-roofed and unenclosed sales area.
- Is bound to the north and west by the South Branch of the Rahway River
- Land uses in the site vicinity are predominately residential to the north, east and west, with some commercial uses on the Mount Pleasant Avenue (NJ Route 10) and Pleasant Valley Way (CR 636) corridors; and Essex County's Francis A. Byrne Golf Course located directly to the south.

ROADWAY NETWORK

The subject property has frontage along westbound Mount Pleasant Avenue (NJ Route 10), northbound Pleasant Valley Way (CR 636) and Mount Pleasant Place. The following is a description of the adjacent roadway network:

Mount Pleasant Avenue (NJ Route 10)

- Classified as an Urban Principal Arterial under New Jersey Department of Transportation (NJDOT) jurisdiction.
- Designated as an east/west roadway in the vicinity of the site.
- Provides 2 travel lanes in each direction with designated turn lanes provided at key intersections.

- › Sidewalks are provided in the vicinity of the site.
- › Has a posted speed limit of 40 miles per hour along the site.
- › Meets its easterly terminus approximately 3/4 of a mile east of the site, at Prospect Avenue (CR 577).
- › Serves an Annual Average Daily Traffic (AADT) of approximately 8,500 vehicles according to NJDOT data from 2018.

Pleasant Valley Way (CR 636)

- › Classified as an Urban Principal Arterial under Essex County jurisdiction.
- › Designated as a north/south roadway in the vicinity of the site.
- › Provides 2 travel lanes in each direction with designated turn lanes provided at key intersections.
- › Sidewalks are provided in the vicinity of the site.
- › Has a posted speed limit of 40 miles per hour in the vicinity of the site.
- › Approximately 1/2 mile to the north of the site provides access to and from I-280 at interchange 7.
- › Serves an AADT of approximately 12,300 vehicles according to NJDOT data from 2020.

Mount Pleasant Place

- › Classified as a local roadway under Township jurisdiction.
- › Designated as an east/west roadway in the vicinity of the site.
- › Provides 1 travel lane in each direction in the vicinity of the site.
- › Sidewalks are not provided in either direction of travel.
- › Has a posted speed limit of 25 miles per hour in the vicinity of the site.
- › Meets its westerly terminus at its intersection with Pleasant Valley Way (CR 636). Meets its easterly terminus at its intersection with Mount Pleasant Avenue (NJ Route 10).

PROPOSED DEVELOPMENT TRAFFIC CHARACTERISTICS

TRIP GENERATION

Site-generated peak hour traffic volumes for the existing and proposed conditions have been calculated using data published by the Institute of Transportation Engineers (ITE) in the 11th edition of ***Trip Generation*** and data published by NJDOT in their ***Highway Access Permit Software*** (HAPS).

NJDOT has adopted the ITE rates and equations in HAPS for many land uses, including ITE Land Use Code 820: "***Shopping Center***." Shopping centers are a type of "multi-use" development, where internal trip-making between different tenants in the center is reflected in the data.

Table 1 presents the peak hour HAPS trip generation, per the NJDOT's latest April 21, 2023, version, comparing the existing 32,441 square foot shopping center and proposed 32,441 square foot shopping center.

Table 1
ITE/HAPS Trip Generation
LUC 820 Shopping Center

Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday MD Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Existing 32,441 SF Shopping Center	16	14	30	128	123	251	127	127	254
Proposed 32,441 SF Shopping Center	16	14	30	128	123	251	127	127	254
Difference	0	0	0	0	0	0	0	0	0

As previously stated, the ITE does not include unenclosed roofed areas in their floor area definition for shopping centers. Floor area is the independent variable in the Land Use Code 820 trip generation calculations; therefore, as floor area would not be changed by the proposed project, no additional peak hour trips area calculated.

An increase of fewer than 100 peak hour trips is not considered "significant" by NJDOT, and the proposed project is not expected to result in ANY

additional peak hour trips. It can therefore be concluded that the proposed project will **NOT** have an impact on area traffic.

As the proposed project would not modify the State highway driveways, would not reduction non-State highway access, and would not result in a significant increase in traffic, a new NJDOT Access Permit is not required.

TPD requested NJDOT concurrence with our findings, and the Department issued a Letter of No Interest (LONI), dated September 18, 2025. A copy of the LONI is provided in the **Appendix**.

FURTHER CONSIDERATION

For comparative purposes, TPD also considered trip generation of the specific retail use change proposed by the project. **Note: ITE recommends against calculating trip generation of multi-tenant retail developments on the basis of the individual tenant uses, as this type of calculation does not take internal capture into account.**

Table 2, below, presents the peak hour HAPS trip generation, per the April 21, 2023, version, comparing the pre-existing 18,767 square foot Metropolitan Plant Exchange and proposed 18,767 square foot retail store, assumed to be a supermarket. Specifically, a change in use from Land Use Code 817: "**Nursery (Garden Center)**" to Land Use Code 850: "**Supermarket**" was evaluated.

Table 2
ITE/HAPS Trip Generation
LUC 820 Shopping Center

Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday MD Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Existing 18,767 SF Nursery (Garden Center)	78	72	150	77	80	157	188	188	376
Proposed 18,767 SF Supermarket	78	47	125	88	85	173	181	174	355
Difference	0	-25	-25	+11	+5	+16	-7	-14	-21

As shown, for the same floor area, the proposed retail store, when considered a supermarket, is calculated to generate slightly fewer weekday morning peak hour trips and slightly more weekday evening and Saturday midday peak hour trips than the Metropolitan Plant Exchange.

This confirms the conclusion that the proposed project will **NOT** have an impact on area traffic.

SITE ACCESS AND CIRCULATION

An evaluation has been made of the **Site Plan** for the proposed project, prepared by Bohler, dated August 14, 2025, and last revised December 10, 2025. In particular, the evaluation focuses on-site access, on-site circulation and parking supply. The following items address these design characteristics:

Proposed Project

- › Under the proposed project, the former Metropolitan Plant Exchange garden center retail would be reoccupied by other retail.
- › The redevelopment proposal also includes the reuse of the garden center's former unenclosed and canopy-roofed area to accommodate additional site parking and circulation.
- › Other minor reconfiguration of parking and circulation areas are proposed, including the elimination of one-way aisles and angled parking.

Access

- › Currently, State highway access is provided via 2 driveways along westbound Mount Pleasant Avenue (NJ Route 10).
- › Additionally, non-State Highway access is provided via 1 driveway along northbound Pleasant Valley Way (CR 636) and 1 driveway along eastbound Mount Pleasant Place.
- › Trucks are prohibited from using the Pleasant Valley Way (CR 636) driveway.
- › Under future conditions, the existing access points for the site would be maintained.
- › NJDOT has issued a Letter of No Interest (LONI) for the proposed project, confirming that a new Access Permit is not required.
- › A copy of the LONI is provided in the **Appendix**.

Parking

- There are currently 165 stalls provided. Based on previous land use board approvals, a parking variance was granted for the existing shopping center.
- The elimination of the 8,980 square foot canopy-roofed unenclosed sales space has reduced parking demand.
- The project proposes to reuse the former canopy area to add parking; and to reconstruct the 3 rows of parking in front of the main building. These modifications would increase the parking supply by 19 stalls to 184 physical stalls.
- 4 of the 184 proposed stalls would be EVSE stalls, which, under New Jersey State law, are counted as 2 stalls each. A total 188 stalls are therefore proposed, including the EVSE credit.
- The Township requires 1 parking stall per 250 square feet of gross floor area for retail and personal service stores, or 4 stalls per 1,000 square feet; and requires 1 parking stall for every 45 square feet of restaurant.
- In the proposed condition there would be 29,241 square feet of retail and personal service floor area, which includes the 3,254 square foot Bagels by Jarrett/The Slice Shop (which does not have seating) and the 1,522 square foot mezzanine.
- At the required rate of 4 per 1,000 square feet, 117 stalls are required for the retail and personal service uses.
- The existing 3,200 square foot Julio's restaurant would remain in the proposed condition. At the required rate of 1 parking stall for every 45 square feet, 71 stalls are required for the restaurant use.
- A total of 188 parking stalls are thus required. 188 parking stalls are proposed, which meets the parking requirement and **eliminates** the existing need for a parking variance.
- The new and rebuilt parking areas will provide 9 feet wide by 18 feet deep parking stalls, which dimensions meet the Township requirement.

- Two-way circulation aisles are proposed to be 24 feet in width, which meets the Township requirement and accepted engineering design standards.

In summary, it has been determined that the proposed development of the subject property will **not** have a significant negative effect on traffic conditions.

The proposed project is not calculated to generate any additional peak hour trips. The site's sales area was reduced by eliminating the existing unenclosed canopy, while the proposed project would increase the parking supply; and, in doing so, would eliminate the need for a previously-granted parking variance.

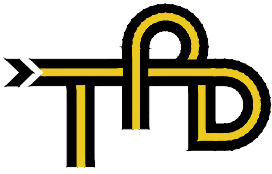


Figure 1

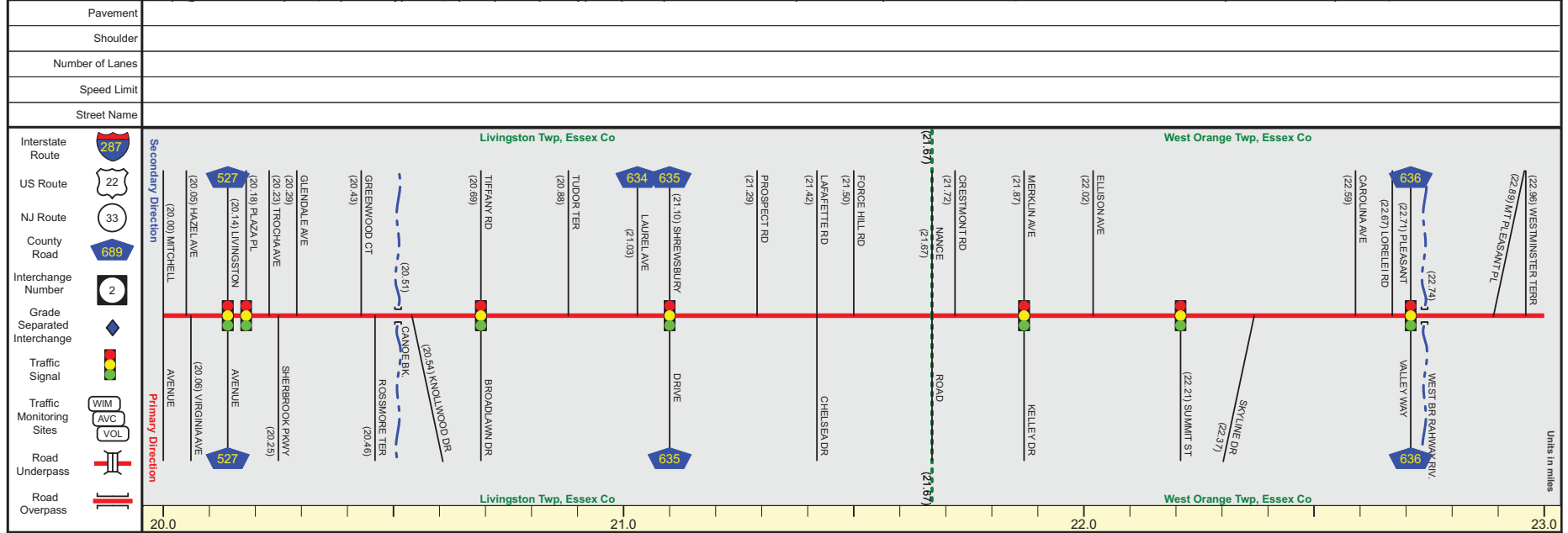
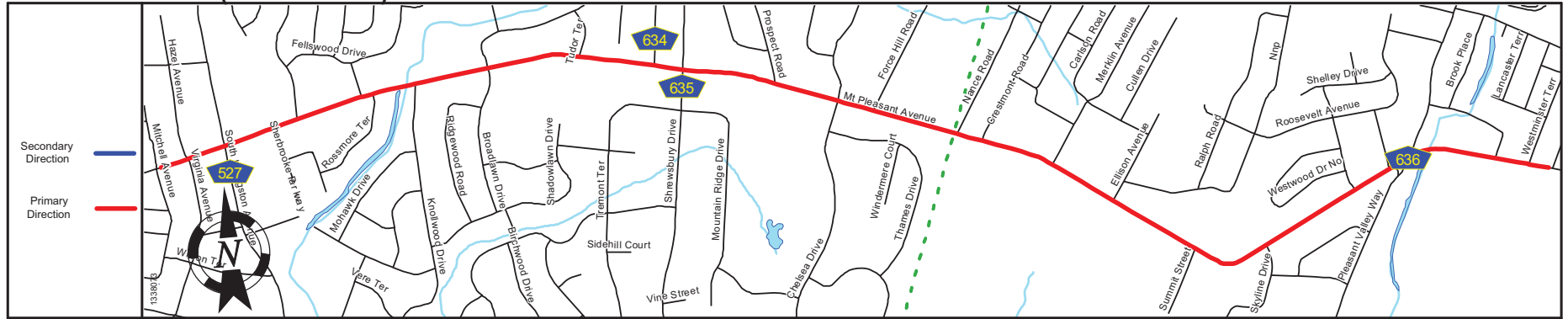
Proposed Retail Store
West Orange Township
Essex County, New Jersey

Location Map



NJ 10 (West to East)

Mile Posts: 20.000 - 23.000



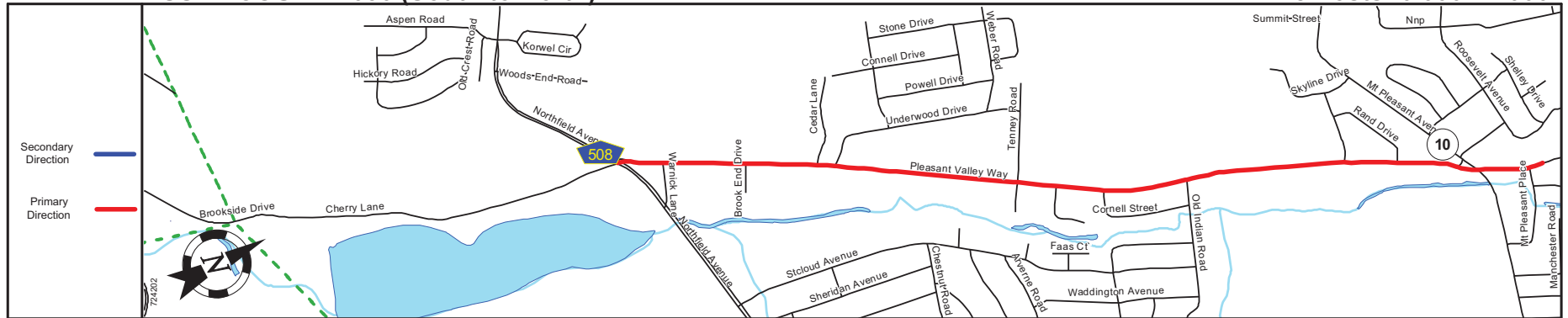
Street Name	Mt Pleasant Avenue																			
Jurisdiction	N.J.D.O.T.																			
Functional Class	Urban Principal Arterial																			
Federal Aid - NHS Sy	NHS																			
Control Section	0710	+				0711			+	0712										
Speed Limit	35			+		40														
Number of Lanes	4			+		2			+	3	+	4								
Med. Type	None																			
Med. Width	0																			
Pavement	48			+		24			+	30	+	40								
Shoulder	0			+		6			+	4	+	0								
Traffic Volume																				
Traffic Sta. ID																				
Structure No.	0711150										0712150									
Enlarged Views																				

SRI = 00000010__

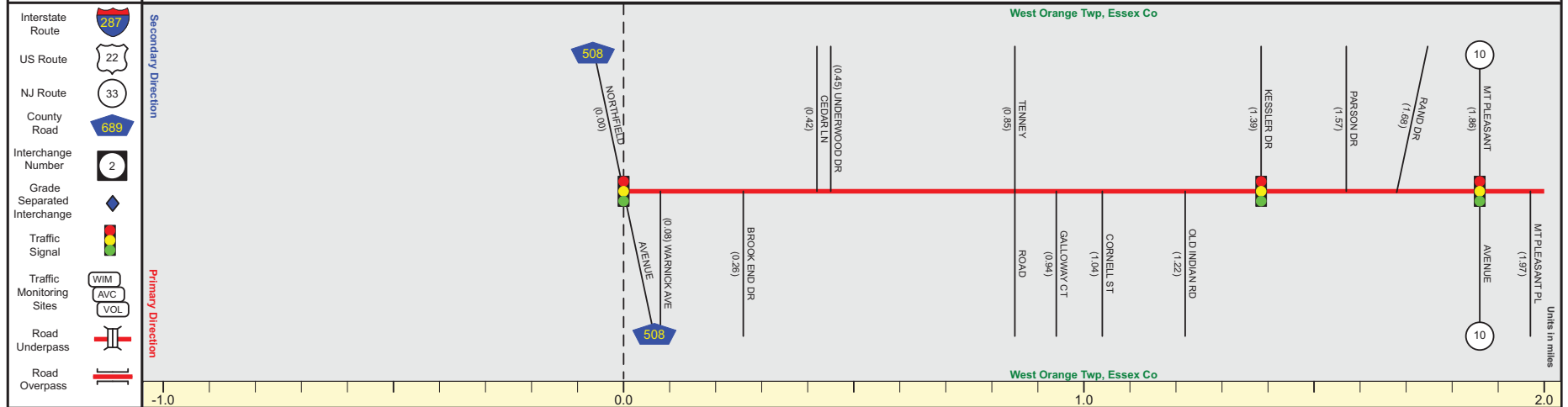
Date last inventoried: June 2016

ESSEX COUNTY 636 (South to North)

Mile Posts: 0.000 - 2.000



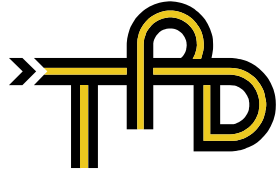
Pavement	
Shoulder	
Number of Lanes	
Speed Limit	
Street Name	



Interstate Route	287
US Route	22
NJ Route	33
County Road	689
Interchange Number	2
Grade Separated Interchange	
Traffic Signal	
Traffic Monitoring Sites	WIM, AVC, VOL
Road Underpass	
Road Overpass	
Street Name	Pleasant Valley Way
Jurisdiction	County
Functional Class	Urban Minor Arterial
Federal Aid - NHS Sy	STP
Control Section	
Speed Limit	50
Number of Lanes	4
Med. Type	None
Med. Width	0
Pavement	40
Shoulder	0
Traffic Volume	15,431 (2018)
Traffic Sta. ID	110745
Structure No.	
Enlarged Views	

SRI = 07000636__

Date last inventoried: July 2011



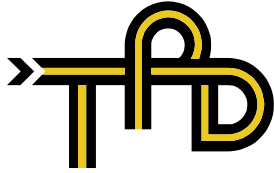
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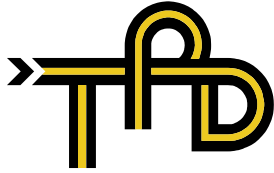
LAND USE CODE	LAND USE DESCRIPTION	UNITS OF MEASURE (X)	AM PEAK HOUR *	PM PEAK HOUR *	WEEKDAY DAILY TRIPS *	WEEKEND PEAK HOUR *	WEEKEND DAILY TRIPS *
820	Shopping Center	SQ. FEET	$(x/1000)*0.94$	$EXP(0.72*LN(x/1000)+3.02)$	$EXP(0.68*LN(x/1000)+5.57)$	$EXP(0.79*LN(x/1000)+2.79)$	$(x/1000)*46.12$
32,441	sq. feet	Added Trips	30	251	2,796	254	1,496
820	Shopping Center	SQ. FEET	$(x/1000)*0.94$	$EXP(0.72*LN(x/1000)+3.02)$	$EXP(0.68*LN(x/1000)+5.57)$	$EXP(0.79*LN(x/1000)+2.79)$	$(x/1000)*46.12$
32,441	sq. feet	Less Trips	30	251	2,796	254	1,496
SUMMARY:	Proposed Use(s)	Added Trips	30	251	2,796	254	1,496
	Existing Use(s)	Less Trips	30	251	2,796	254	1,496

Total Net Trips: 0 0 0 0 0

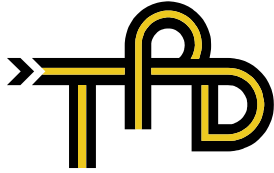
These rates should be used in determining what type of NJDOT Access Permit is needed and any Traffic Analysis							
These are the rates and equations that were being used by the HAPS program as of April 21, 2023 and they will be updated as new information is available.							
LAND USE CODE	LAND USE DESCRIPTION	UNITS OF MEASURE (X)	AM PEAK HOUR *	PM PEAK HOUR *	WEEKDAY DAILY TRIPS *	WEEKEND PEAK HOUR *	WEEKEND DAILY TRIPS *
0	Vacant Lot	LOT	x^0	x^0	x^0	x^0	x^0
30	Intermodal Truck Terminal	SQ. FEET	$x/1000*2.14$	$x/1000*2.02$	$x/1000*21.4$	$x/1000*2.02$	$x/1000*20.2$
90	Park-and-Ride Lot with Bus or Light Rail Service	PRKNG SPACES	$0.71*(x)$	$0.44*(x)$	$x*2.81$	$0.71*(x)$	$x*2.81$
110	General Light Industrial	SQ. FEET	$x/1000*0.92$	$x/1000*0.83$	$x/1000*4.96$	$x/1000*0.69$	$x/1000*5.00$
130	Industrial Park	SQ. FEET	$x/1000*0.41$	$x/1000*0.40$	$x/1000*3.37$	$x/1000*0.44$	$x/1000*2.54$
140	Manufacturing	SQ. FEET	$0.61*(x/1000)+34.25$	$0.62*(x/1000)+29.00$	$3.16*(x/1000)+160.04$	$(x/1000)*0.94$	$(x/1000)*6.42$
150	Warehousing	SQ. FEET	$0.11*(x/1000)+30.07$	$0.15*(x/1000)+22.52$	$1.58*(x/1000)+45.54$	$(x/1000)*0.05$	$(x/1000)*0.15$
151	Mini Warehouse (Self-Storage)	SQ. FEET	$x/1000*0.20$	$x/1000*0.20$	$x/1000*1.51$	$x/1000*0.31$	$(x/1000)*1.95$
154	High-Cube Transload and Short-Term Storage Warehouse	SQ. FEET	$x/1000*0.12$	$x/1000*0.16$	$x/1000*1.40$	$x/1000*0.12$	$(x/1000)*0.94$
155	High-Cube Fulfillment Center Warehouse	SQ. FEET	$x/1000*0.43$	$x/1000*0.48$	$x/1000*8.18$	$x/1000*0.13$	$x/1000*8.18$
156	High-Cube Parcel Hub Warehouse	SQ. FEET	$x/1000*0.88$	$x/1000*0.71$	$x/1000*7.75$	$x/1000*0.88$	$x/1000*7.75$
157	High-Cube Cold Storage Warehouse	SQ. FEET	$0.11*(x/1000)$	$0.12*(x/1000)$	$2.12*(x/1000)$	$0.12*(x/1000)$	$2.12*(x/1000)$
180	Specialty Trade Contractor	SQ. FEET	$1.66*(x/1000)$	$1.93*(x/1000)$	$9.82*(x/1000)$	$1.93*(x/1000)$	$9.82*(x/1000)$
210	Single Family Detached Housing	UNITS	$EXP(0.91*LN(x)+0.20)$	$EXP(0.94*LN(x)+0.34)$	$EXP(0.92*LN(x)+2.71)$	$0.84*x+17.99$	$EXP(0.94*LN(x)+2.56)$
220	Multifamily Housing (Low-Rise)	UNITS	$EXP(0.94*LN(x)-0.29)$	$0.66*x+1.41$	$(7.56*x-40.86)$	$0.70*x$	$8.14*x$
221	Multifamily Housing (Mid-Rise)	UNITS	$x^0.36$	$x^0.44$	$5.45*(x)-1.75$	$x^0.44$	$x^4.91$
222	Multifamily Housing (High-Rise >10 Floor)	UNITS	$0.31*(x)+12.91$	$0.35*x+15.40$	$3.94*(x)+211.81$	$0.31*(x)+24.03$	$4.08*(x)+185.69$
225	Off-Campus Student Apartment	BEDROOMS	$x^0.20$	$0.33*(x)-7.94$	$4.09*(x)-78.98$	$0.33*(x)-7.94$	$4.09*(x)-78.98$
240	Mobile Home Park	UNITS	$x^0.26$	$x^0.49$	$x^5.00$	$x^0.43$	$x^4.61$
251	Senior Adult Housing -- Detached	UNITS	$0.26*x+36.52$	$0.26*x+56.53$	$EXP(0.88*LN(x)+2.28)$	$0.23*x$	$2.73*x$
252	Senior Adult Housing -- Attached	UNITS	$0.20*x-0.18$	$0.36*x-4.50$	$4.02*x-25.37$	$0.35*x-1.67$	$3.97*x-60.09$
253	Congregate Care Facility	UNITS	$0.17*x-1.10$	$0.22*x-2.85$	$x^2.02$	$0.22*x-2.85$	$x^2.02$
254	Assisted Living	BEDS	$x^0.19$	$x^0.34$	$x^2.60$	$x^0.28$	$x^3.15$
310	Hotel	ROOMS	$0.50*(x)-5.34$	$0.75*(x)-26.02$	$11.29*(x)-426.97$	$0.69*(x)+4.32$	$9.62*(x)-294.56$
311	All Suites Hotel	ROOMS	$0.34*(x)$	$0.45*(x)-14.07$	$5.20*(x)-119.26$	$0.45*(x)-14.07$	$5.20*(x)-119.26$
320	Motel	ROOMS	$x^0.43$	$x^0.44$	$3.62*(x)-29.43$	$x^0.44$	$3.62*(x)-29.43$
330	Resort Hotel	ROOMS	$0.50*(x)-47.88$	$0.48*(x)+8.67$	$10*(0.48*(x)+8.67)$	$0.48*(x)+8.67$	$10*(0.48*(x)+8.67)$
411	Public Park	ACRES	$x^0.15$	$0.08*(x)+15.36$	$0.64*(x)+88.46$	$0.18*(x)+36.85$	$x^2.19$
416	Campground/Recreational Vehicle Park	ACRES	$x^0.52$	$x^1.06$	$x^10.6$	$x^1.06$	$x^10.6$
420	Marina	BERTHS	$x^0.12$	$x^0.21$	$x^2.41$	$x^0.31$	$x^3.49$
430	Golf Course	HOLES	$x^2.96$	$x^3.68$	$x^30.38$	$x^3.03$	$x^19.89$
432	Golf Driving Range	TEES	$x^1.02$	$x^1.65$	$x^13.65$	$x^1.32$	$x^17.68$



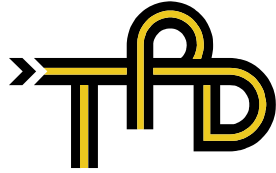
LAND USE CODE	LAND USE DESCRIPTION	UNITS OF MEASURE (X)	AM PEAK HOUR *	PM PEAK HOUR *	WEEKDAY DAILY TRIPS *	WEEKEND PEAK HOUR *	WEEKEND DAILY TRIPS *
437	Bowling Alley	SQ. FEET	$x/1000 \times 0.81$	$x/1000 \times 1.16$	$x/1000 \times 11.60$	$x/1000 \times 1.16$	$x/1000 \times 11.60$
444	Movie Theater (# of Screens <=9)	SCREENS	$x \times 9.5$	$x \times 37.83$	$x \times 220.00$	$x \times 102.87$	$x \times 546.86$
445	Multiplex Movie Theater (# of Screens >=10)	SCREENS	$x \times 9.5$	$x \times 25.84$	$x \times 292.50$	$x \times 65.07$	$x \times 292.50$
465	Ice Skating Rink	SQ. FEET	$(x/1000) \times 0.49$	$(x/1000) \times 1.33$	$(x/1000) \times 13.30$	$(x/1000) \times 2.63$	$(x/1000) \times 26.30$
480	Amusement Park	ACRES	$x \times 3.16$	$x \times 4.99$	$x \times 53.41$	$x \times 19.55$	$x \times 198.97$
488	Soccer Complex	FIELDS	$x \times 1.77$	$x \times 16.90$	$x \times 71.33$	$x \times 40.10$	$x \times 404.88$
492	Health/Fitness Club	SQ. FEET	$x/1000 \times 1.40$	$x/1000 \times 3.92$	$x/1000 \times 39.20$	$x/1000 \times 3.19$	$x/1000 \times 31.90$
493	Athletic Club	SQ. FEET	$x/1000 \times 3.40$	$x/1000 \times 6.36$	$x/1000 \times 63.60$	$x/1000 \times 8.60$	$x/1000 \times 86.00$
495	Recreational Community Center	SQ. FEET	$1.76 \times x/1000$	$2.31 \times x/1000$	$28.82 \times x/1000$	$1.48 \times x/1000$	$13.60 \times x/1000$
520	Elementary School	STUDENTS	$x \times 0.67$	$x \times 0.34$	$x \times 1.89$	$x \times 0.10$	$x \times 0.58$
522	Middle School/Junior High School	STUDENTS	$x \times 0.70$	$x \times 0.35$	$x \times 2.12$	$x \times 0.10$	$x \times 0.58$
530	High School	STUDENTS	$x \times 0.55$	$x \times 0.33$	$x \times 2.03$	$x \times 0.10$	$x \times 0.58$
534	Private School (K-8)	STUDENTS	$0.88 \times (x) + 14.85$	$0.63 \times (x) - 1.93$	$x \times 4.11$	$x \times 0.10$	$x \times 0.58$
536	Private School (K-12)	STUDENTS	$x \times 0.81$	$x \times 0.58$	$x \times 2.48$	$x \times 0.10$	$x \times 0.58$
540	Junior/Community College	STUDENTS	$x \times 0.12$	$x \times 0.13$	$x \times 1.15$	$x \times 0.05$	$x \times 0.42$
550	University/College	STUDENTS	$EXP(0.95 \times LN(x) - 1.63)$	$EXP(0.97 \times LN(x) - 1.69)$	$1.38 \times (x) + 2108.83$	$EXP(0.97 \times LN(x) - 1.69)$	$1.38 \times (x) + 2108.83$
560	Church	SQ. FEET	$(x/1000) \times 0.65$	$(x/1000) \times 0.80$	$(x/1000) \times 6.95$	$(x/1000) \times 9.99$	$(x/1000) \times 27.63$
561	Synagogue	SQ. FEET	$(x/1000) \times 2.41$	$(x/1000) \times 2.92$	$(x/1000) \times 29.20$	$(x/1000) \times 7.83$	$(x/1000) \times 78.30$
565	Day Care Center	SQ. FEET	$(x/1000) \times 11.73$	$(x/1000) \times 11.82$	$(x/1000) \times 47.62$	$(x/1000) \times 1.75$	$(x/1000) \times 6.22$
566	Cemetery	ACRES	$x \times 1.23$	$x \times 1.26$	$4.65 \times (x) + 70.83$	$x \times 2.63$	$x \times 13.94$
590	Library	SQ. FEET	$7.21 \times x/1000 - 14.35$	$8.48 \times x/1000 + 0.80$	$EXP(0.99 \times LN(x/1000) + 4.28)$	$(x/1000) \times 12.60$	$(x/1000) \times 80.09$
610	Hospital	SQ. FEET	$0.74 \times (x/1000) + 126.36$	$0.83 \times (x/1000) + 118.28$	$10.72 \times (x/1000)$	$x/1000 \times 4.85$	$x/1000 \times 7.72$
620	Nursing Home	BEDS	$x \times 0.22$	$x \times 0.37$	$x \times 3.06$	$x \times 0.40$	$x \times 2.41$
630	Clinic	SQ. FEET	$x/1000 \times 5.22$	$x/1000 \times 4.64$	$x/1000 \times 38.16$	$x/1000 \times 5.22$	$x/1000 \times 38.16$
640	Animal Hospital/Veterinary Clinic	SQ. FEET	$3.73 \times x/1000$	$3.83 \times x/1000$	$21.50 \times x/1000$	$3.83 \times x/1000$	$21.50 \times x/1000$
710	General Office Building (> or = 200,000 SF)	SQ. FEET	$EXP(0.88 \times LN(x/1000) + 1.06)$	$1.10 \times (x/1000) + 65.39$	$EXP(0.97 \times LN(x/1000) + 2.50)$	$0.53 \times (x/1000)$	$2.21 \times (x/1000)$
714	Corporate Headquarters Building	SQ. FEET	$(x/1000) \times 1.46$	$(x/1000) \times 1.40$	$6.16 \times (x/1000) + 462.50$	$(x/1000) \times 0.10$	$(x/1000) \times 10.00$
720	Medical-Dental Office Building	SQ. FEET	$3.43 \times (x/1000) + 2.57$	$4.10 \times (x/1000)$	$34.80 \times (x/1000)$	$(x/1000) \times 3.10$	$x/1000 \times 8.57$
730	Government Office Building	SQ. FEET	$x/1000 \times 3.69$	$x/1000 \times 3.19$	$x/1000 \times 22.59$	$x/1000 \times 3.69$	$x/1000 \times 22.59$
731	State Motor Vehicles Department	SQ. FEET	$(x/1000) \times 8.86$	$(x/1000) \times 7.68$	$(x/1000) \times 11.21$	$(x/1000) \times 8.86$	$(x/1000) \times 11.21$
732	United States Post Office	SQ. FEET	$(x/1000) \times 12.38$	$(x/1000) \times 15.11$	$(x/1000) \times 103.94$	$(x/1000) \times 5.33$	$(x/1000) \times 43.83$
760	Research and Development Center	SQ. FEET	$x/1000 \times 1.22$	$x/1000 \times 1.11$	$10.23 \times (x/1000) + 204.68$	$x/1000 \times 0.24$	$x/1000 \times 1.90$
810	Tractor Supply Store	SQ. FEET	$(x/1000) \times 1.40$	$(x/1000) \times 1.40$	$(x/1000) \times 14.00$	$(x/1000) \times 3.17$	$(x/1000) \times 31.70$
812	Building Materials and Lumber Store	SQ. FEET	$2.37 \times (x/1000)$	$2.77 \times (x/1000)$	$18.05 \times (x/1000)$	$EXP(0.95 \times LN(x/1000) + 2.35)$	$36.74 \times (x/1000) + 137.42$
814	Variety Store	SQ. FEET	$x/1000 \times 4.52$	$x/1000 \times 7.42$	$x/1000 \times 63.47$	$x/1000 \times 7.42$	$x/1000 \times 63.47$
815	Free-Standing Discount Store	SQ. FEET	$x/1000 \times 5.43$	$x/1000 \times 5.33$	$x/1000 \times 53.12$	$x/1000 \times 7.87$	$x/1000 \times 70.76$
816	Hardware/Paint Store	SQ. FEET	$1.07 \times (x/1000) + 4.31$	$0.98 \times (x/1000) + 2.27$	$9.94 \times (x/1000) - 12.22$	$2.25 \times (x/1000)$	$22.50 \times (x/1000)$
817	Nursery (Garden Center)	SQ. FEET	$x/1000 \times 8.0$	$x/1000 \times 8.37$	$x/1000 \times 68.10$	$x/1000 \times 20.06$	$x/1000 \times 133.31$
818	Nursery (Wholesale)	SQ. FEET	$(x/1000) \times 3.03$	$(x/1000) \times 5.18$	$(x/1000) \times 39.00$	$(x/1000) \times 5.70$	$(x/1000) \times 29.94$
820	Shopping Center	SQ. FEET	$(x/1000) \times 0.94$	$EXP(0.72 \times LN(x/1000) + 3.02)$	$EXP(0.68 \times LN(x/1000) + 5.57)$	$EXP(0.79 \times LN(x/1000) + 2.79)$	$(x/1000) \times 46.12$
823	Factory Outlet Center	SQ. FEET	$2.06 \times x/1000$	$2.29 \times x/1000$	$26.59 \times x/1000$	$3.79 \times x/1000$	$40.97 \times x/1000$
843	Automobile Parts Sales	SQ. FEET	$4.41 \times x/1000$	$5.83 \times x/1000$	$55.34 \times x/1000$	$11.53 \times x/1000$	$115.30 \times x/1000$
848	Tire Store	SQ. FEET	$(x/1000) \times 3.73$	$(x/1000) \times 3.98$	$(x/1000) \times 28.52$	$(x/1000) \times 5.05$	$(x/1000) \times 50.50$



LAND USE CODE	LAND USE DESCRIPTION	UNITS OF MEASURE (X)	AM PEAK HOUR *	PM PEAK HOUR *	WEEKDAY DAILY TRIPS *	WEEKEND PEAK HOUR *	WEEKEND DAILY TRIPS *
850	Supermarket	SQ. FEET	x/1000*6.67	x/1000*9.24	x/1000*106.78	x/1000*18.94	x/1000*177.62
851	Convenience Market	SQ. FEET	x/1000*68.83	x/1000*53.51	x/1000*762.28	x/1000*79.12	x/1000*1084.17
853	Convenience Market With Gas Pumps(<3000 SF)	SQ. FEET	x/1000*42.19	x/1000*49.59	x/1000*624.20	x/1000*49.59	x/1000*624.20
854	Discount Supermarket	SQ. FEET	8.06*(x/1000)-162.88	EXP(0.89*LN(x/1000)+2.59)	(x/1000)*90.87	EXP(0.78*LN(x/1000)+3.21)	(x/1000)*111.86
857	Discount Club	SQ. FEET	(x/1000)*3.37	(x/1000)*4.61	(x/1000)*41.80	(x/1000)*6.37	(x/1000)*53.75
862	Home Improvement Superstore	SQ. FEET	(x/1000)*2.75	(x/1000)*3.29	(x/1000)*30.74	(x/1000)*7.05	(x/1000)*56.72
863	Electronics Superstore	SQ. FEET	7.02*(x/1000)-125.74	8.87*(x/1000)-162.71	84.01*(x/1000)-1576.41	(x/1000)*7.02	(x/1000)*55.12
864	Toy/Children's Superstore	SQ. FEET	(x/1000)*5.00	(x/1000)*5.00	(x/1000)*50.00	(x/1000)*5.53	(x/1000)*55.3
869	Discount Home Furnishing Superstore	SQ. FEET	x/1000*0.57	x/1000*1.57	x/1000*20.00	x/1000*3.40	x/1000*33.29
880	Pharmacy/Drugstore without Drive-Through Window	SQ. FEET	(x/1000)*7.71	(x/1000)*11.07	90.08*(x/1000)	(x/1000)*10.68	(x/1000)*106.80
881	Pharmacy/Drugstore with Drive-Through Window	SQ. FEET	(x/1000)*9.13	(x/1000)*11.32	(x/1000)*109.16	(x/1000)*8.75	(x/1000)*114.89
882	Marijuana Dispensary	SQ. FEET	(x/1000)*16.57	(x/1000)*24.57	(x/1000)*211.12	(x/1000)*28.85	(x/1000)*259.31
890	Furniture Store	SQ. FEET	(x/1000)*0.52	(x/1000)*0.70	(x/1000)*6.30	(x/1000)*1.29	(x/1000)*7.15
899	Liquor Store	SQ. FEET	4.14*(x/1000)+1.97	17.12*x/1000	x/1000*101.49	17.12*x/1000	x/1000*171.20
912	Drive-in Bank	WINDOWS	x*17.55	x*27.15	x*124.76	x*27.67	x*127.26
931	Quality Restaurant	SQ. FEET	x/1000*4.47	x/1000*8.28	x/1000*83.84	x/1000*10.68	x/1000*90.04
932	High Turnover (Sit-Down) Restaurant	SQ. FEET	x/1000*14.04	x/1000*17.41	x/1000*112.18	x/1000*18.46	x/1000*142.64
933	Fast Food Restaurant without Drive Through Window	SQ. FEET	x/1000*47.66	x/1000*48.70	x/1000*346.23	x/1000*54.60	x/1000*696.00
934	Fast Food Restaurant with Drive Through Window	SQ. FEET	x/1000*50.97	x/1000*51.36	x/1000*470.95	x/1000*55.15	x/1000*616.12
935	Fast Food Restaurant with Drive Through Window and No Indoor Seating	SQ. FEET	x/1000*65.81	x/1000*67.44	x/1000*459.20	x/1000*67.44	x/1000*459.20
936	Coffee/Donut Shop without Drive-Through Window	SQ. FEET	x/1000*101.14	x/1000*36.31	x/1000*1011.40	x/1000*59.01	x/1000*590.10
937	Coffee/Donut Shop with Drive-Through Window	SQ. FEET	x/1000*97.96	x/1000*43.38	x/1000*820.38	x/1000*87.70	x/1000*877.00
941	Quick Lubrication Vehicle Shop	SERVICE BAYS	x*4.00	x*4.60	x*40.00	x*4.50	x*42.00
942	Automobile Care Center	SQ. FEET	x/1000*2.83	x/1000*3.51	x/1000*35.10	x/1000*2.37	x/1000*23.72
943	Automobile Parts and Service Center	SQ. FEET	x/1000*2.75	x/1000*2.62	x/1000*16.28	x/1000*6.62	x/1000*66.20
947	Self Service Car Wash	WASH STALLS	x*8.00	x*8.00	x*108	x*15.25	x*132.80
948	Automated Car Wash	TUNNEL	x*77.50	x*77.50	x*775.00	x*41	x*410.00
950	Truck Stop	SQ. FEET	x/1000*34.60	x/1000*36.44	x/1000*455.53	x/1000*36.44	x/1000*455.53
960	Super Convenience Market/Gas Station (> 3,000 SF)	SQ. FEET	x/1000*83.14	x/1000*69.28	x/1000*837.58	x/1000*63.80	x/1000*700.00
971	Brewery Tap Room	SQ. FEET	x/1000*0.93	x/1000*10.93	x/1000*61.69	x/1000*22.97	x/1000*122.03
W09	Banquet Hall	SEATS	x*0.16	x*0.3	x*2.86	x*0.33	x*2.81
X01	Service Station With Gas Only	STATIONS	x*71	x*92	x*1012	x*92	x*1012
X02	Service Station With Gas & Service Bays	STATIONS	x*81	x*86	x*781	x*86	x*781
X04	Service Station With Gas & Car Wash	STATIONS	x*108	x*94	x*1174	x*108	x*1174
Y01	Water Tower	TOWERS	x*2	x*2	x*4	x*2	x*4
Y02	Water Treatment Facility	PRKNG SLOTS	x*1	x*1	x*4	x*1	x*4
Y03	Maintenance Yard	EMPLOYEES	x*2	x*2	x*4	x*2	x*4
Y07	Ice Cream Parlor (Sit-Down, no take out)	SQ. FEET	x/1000*71.428	x/1000*71.428	x/1000*521.428	x/1000*71.428	x/1000*546.428
Y09	Firehouse	EMPLOYEES	x*2	x*2	x*4	x*2	x*4
Y10	State Police Headquarters	SQ. FEET	x/1000*1.01	x/1000*1.962	x/1000*11.679	x/1000*1.01	x/1000*4.279
Y14	Parking Lot	SPACES	x*1	x*1	x*10	x*1	x*10
Y15	Farm Stand/Market	FACILITY	x*20	x*38	x*375	x*52	x*480
Y16	Emergency Entrance	LOT	x*1	x*1	x*4	x*1	x*2



LAND USE CODE	LAND USE DESCRIPTION	UNITS OF MEASURE (X)	AM PEAK HOUR *	PM PEAK HOUR *	WEEKDAY DAILY TRIPS *	WEEKEND PEAK HOUR *	WEEKEND DAILY TRIPS *
Y17	Parking Lot (Long Term Parking)	PRK SPACES	x*0.053	x*0.052	x*0.695	x*0.053	x*0.534
Y18	Funeral Home	FACILITY	x*20	x*24	x*124	x*16	x*53
Y23	Cellular Tower	TOWERS	x*2	x*2	x*4	x*2	x*4
Y27	Car Rental	FACILITY	x*20	x*21	x*140	x*21	x*140
Y31	Auction Facility	PRK SPACES	x*1	x*1	x*2.52	x*1	x*2.52
Y32	Rita's Water Ice	FACILITY	x*55	x*55	x*435	x*70	x*545
Y33	Motorcycle Dealer	SQ. FEET	x/1000*0.604	x/1000*1.02	x/1000*6.4175	x/1000*1.1875	x/1000*7.395
Y40	Cultural Center	SEATS	x*0.16	x*0.2	x*1.5	x*0.33	x*2.81
Y52	General Office Building (<200,000 SF)	SQ. FEET	1.47*(x/1000)	1.42*(x/1000)	EXP(0.97*LN(x/1000)+2.50)	0.53*(x/1000)	2.21*(x/1000)
Y53	Specialty Retail Center	SQ. FEET	4.91*(x/1000)+115.59	(x/1000)*5.02	(x/1000)*44.32	4.91*(x/1000)+115.59	(x/1000)*42.04
Y55	Recreation Parking Lot	PRK SPACES	x*0.25	x*0.25	x*0.25	x*0.90	x*0.90
Y56	Boat Sales / Service Facility	SQ. FEET	x/1000*0.604	x/1000*1.02	x/1000*6.4175	x/1000*1.1875	x/1000*7.395
Y60	Automobile New & Used Sales	SQ. FEET	x/1000*2.22	x/1000*2.80	x/1000*32.30	x/1000*4.02	x/1000*29.74
Y61	Convenience Store with Drive-Thru Restaurant (<3,000 SF)	SQ. FEET	x/1000*50.63	x/1000*59.51	x/1000*624.20	x/1000*59.51	x/1000*624.20
Y62	Convenience Store with Drive-Thru Restaurant (>=3,000 SF)	SQ. FEET	x/1000*99.77	x/1000*83.14	x/1000*1005.10	x/1000*76.56	x/1000*840.00
Y63	Movie Theater without Matinee (XXX) - 9th Edition	SCREENS	x*9.5	x*37.83	x*220.0	x*64.5	x*376.0
Y64	Mobile Kitchen	FACILITY	x*35	x*108	x*758	x*117	x*533
*The units of measure is the quantity that should be substituted for the "X" in the equations. It should be noted that the actual SF should be entered into these equations unlike the equations in the ITE books which are based upon 1,000 SF. Example: A 125,000 sf shopping center will generate the following PM peak hour trips (X would equal 125,000): Number of PM peak hour trips = $\text{EXP}(0.66 \cdot \text{LN}(X/1000) + 3.40) = \text{EXP}(0.66 \cdot \text{LN}(125,000/1000) + 3.40) = \text{EXP}(0.66 \cdot \text{LN}(125) + 3.40) = \text{EXP}(0.66 \cdot 4.828 + 3.40) = \text{EXP}(6.586) = 725$							



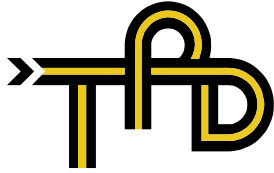
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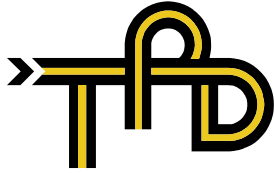
LAND USE CODE	LAND USE DESCRIPTION	UNITS OF MEASURE (X)	AM PEAK HOUR *	PM PEAK HOUR *	WEEKDAY DAILY TRIPS *	WEEKEND PEAK HOUR *	WEEKEND DAILY TRIPS *
850	Supermarket	SQ. FEET	$x/1000 \times 6.67$	$x/1000 \times 9.24$	$x/1000 \times 106.78$	$x/1000 \times 18.94$	$x/1000 \times 177.62$
18,767	sq. feet	Added Trips	125	173	2,004	355	3,333
932	High Turnover (Sit-Down) Restaurant	SQ. FEET	$x/1000 \times 14.04$	$x/1000 \times 17.41$	$x/1000 \times 112.18$	$x/1000 \times 18.46$	$x/1000 \times 142.64$
6,454	sq. feet	Added Trips	91	112	724	119	921
820	Shopping Center	SQ. FEET	$(x/1000) \times 0.94$	$EXP(0.72 \times LN(x/1000) + 3.02)$	$EXP(0.68 \times LN(x/1000) + 5.57)$	$EXP(0.79 \times LN(x/1000) + 2.79)$	$(x/1000) \times 46.12$
7,220	sq. feet	Added Trips	7	85	1,007	78	333
817	Nursery (Garden Center)	SQ. FEET	$x/1000 \times 8.0$	$x/1000 \times 8.37$	$x/1000 \times 68.10$	$x/1000 \times 20.06$	$x/1000 \times 133.31$
18,767	sq. feet	Less Trips	150	157	1,278	376	2,502
932	High Turnover (Sit-Down) Restaurant	SQ. FEET	$x/1000 \times 14.04$	$x/1000 \times 17.41$	$x/1000 \times 112.18$	$x/1000 \times 18.46$	$x/1000 \times 142.64$
6,454	sq. feet	Less Trips	91	112	724	119	921
820	Shopping Center	SQ. FEET	$(x/1000) \times 0.94$	$EXP(0.72 \times LN(x/1000) + 3.02)$	$EXP(0.68 \times LN(x/1000) + 5.57)$	$EXP(0.79 \times LN(x/1000) + 2.79)$	$(x/1000) \times 46.12$
7,220	sq. feet	Less Trips	7	85	1,007	78	333
SUMMARY:	Proposed Use(s)	Added Trips	223	370	3,735	552	4,587
	Existing Use(s)	Less Trips	248	354	3,009	573	3,756

Total Net Trips: -25 16 726 -21 831

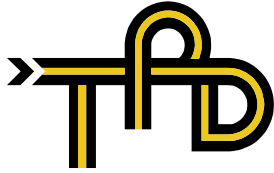
These rates should be used in determining what type of NJDOT Access Permit is needed and any Traffic Analysis							
These are the rates and equations that were being used by the HAPS program as of April 21, 2023 and they will be updated as new information is available.							
LAND USE CODE	LAND USE DESCRIPTION	UNITS OF MEASURE (X)	AM PEAK HOUR *	PM PEAK HOUR *	WEEKDAY DAILY TRIPS *	WEEKEND PEAK HOUR *	WEEKEND DAILY TRIPS *
0	Vacant Lot	LOT	$x \times 0$	$x \times 0$	$x \times 0$	$x \times 0$	$x \times 0$
30	Intermodal Truck Terminal	SQ. FEET	$x/1000 \times 2.14$	$x/1000 \times 2.02$	$x/1000 \times 21.4$	$x/1000 \times 2.02$	$x/1000 \times 20.2$
90	Park-and-Ride Lot with Bus or Light Rail Service	PRKNG SPACES	$0.71 \times (x)$	$0.44 \times (x)$	$x \times 2.81$	$0.71 \times (x)$	$x \times 2.81$
110	General Light Industrial	SQ. FEET	$x/1000 \times 0.92$	$x/1000 \times 0.83$	$x/1000 \times 4.96$	$x/1000 \times 0.69$	$x/1000 \times 5.00$
130	Industrial Park	SQ. FEET	$x/1000 \times 0.41$	$x/1000 \times 0.40$	$x/1000 \times 3.37$	$x/1000 \times 0.44$	$x/1000 \times 2.54$
140	Manufacturing	SQ. FEET	$0.61 \times (x/1000) + 34.25$	$0.62 \times (x/1000) + 29.00$	$3.16 \times (x/1000) + 160.04$	$(x/1000) \times 0.94$	$(x/1000) \times 6.42$
150	Warehousing	SQ. FEET	$0.11 \times (x/1000) + 30.07$	$0.15 \times (x/1000) + 22.52$	$1.58 \times (x/1000) + 45.54$	$(x/1000) \times 0.05$	$(x/1000) \times 0.15$
151	Mini Warehouse (Self-Storage)	SQ. FEET	$x/1000 \times 0.20$	$x/1000 \times 0.20$	$x/1000 \times 1.51$	$x/1000 \times 0.31$	$(x/1000) \times 1.95$
154	High-Cube Transload and Short-Term Storage Warehouse	SQ. FEET	$x/1000 \times 0.12$	$x/1000 \times 0.16$	$x/1000 \times 1.40$	$x/1000 \times 0.12$	$(x/1000) \times 0.94$
155	High-Cube Fulfillment Center Warehouse	SQ. FEET	$x/1000 \times 0.43$	$x/1000 \times 0.48$	$x/1000 \times 8.18$	$x/1000 \times 0.13$	$x/1000 \times 8.18$
156	High-Cube Parcel Hub Warehouse	SQ. FEET	$x/1000 \times 0.88$	$x/1000 \times 0.71$	$x/1000 \times 7.75$	$x/1000 \times 0.88$	$x/1000 \times 7.75$
157	High-Cube Cold Storage Warehouse	SQ. FEET	$0.11 \times (x/1000)$	$0.12 \times (x/1000)$	$2.12 \times (x/1000)$	$0.12 \times (x/1000)$	$2.12 \times (x/1000)$
180	Specialty Trade Contractor	SQ. FEET	$1.66 \times (x/1000)$	$1.93 \times (x/1000)$	$9.82 \times (x/1000)$	$1.93 \times (x/1000)$	$9.82 \times (x/1000)$
210	Single Family Detached Housing	UNITS	$EXP(0.91 \times LN(x) + 0.20)$	$EXP(0.94 \times LN(x) + 0.34)$	$EXP(0.92 \times LN(x) + 2.71)$	$0.84 \times x + 17.99$	$EXP(0.94 \times LN(x) + 2.56)$
220	Multifamily Housing (Low-Rise)	UNITS	$EXP(0.94 \times LN(x) - 0.29)$	$0.66 \times x + 1.41$	$(7.56 \times x - 40.86)$	$0.70 \times x$	$8.14 \times x$
221	Multifamily Housing (Mid-Rise)	UNITS	$x \times 0.36$	$x \times 0.44$	$5.45 \times (x) - 1.75$	$x \times 0.44$	$x \times 4.91$
222	Multifamily Housing (High-Rise >10 Floor)	UNITS	$0.31 \times (x) + 12.91$	$0.35 \times x + 15.40$	$3.94 \times (x) + 211.81$	$0.31 \times (x) + 24.03$	$4.08 \times (x) + 185.69$
225	Off-Campus Student Apartment	BEDROOMS	$x \times 0.20$	$0.33 \times (x) - 7.94$	$4.09 \times (x) - 78.98$	$0.33 \times (x) - 7.94$	$4.09 \times (x) - 78.98$
240	Mobile Home Park	UNITS	$x \times 0.26$	$x \times 0.49$	$x \times 5.00$	$x \times 0.43$	$x \times 4.61$
251	Senior Adult Housing -- Detached	UNITS	$0.26 \times x + 36.52$	$0.26 \times x + 56.53$	$EXP(0.88 \times LN(x) + 2.28)$	$0.23 \times x$	$2.73 \times x$
252	Senior Adult Housing -- Attached	UNITS	$0.20 \times x - 0.18$	$0.36 \times x - 4.50$	$4.02 \times x - 25.37$	$0.35 \times x - 1.67$	$3.97 \times x - 60.09$
253	Congregate Care Facility	UNITS	$0.17 \times x - 1.10$	$0.22 \times x - 2.85$	$x \times 2.02$	$0.22 \times x - 2.85$	$x \times 2.02$
254	Assisted Living	BEDS	$x \times 0.19$	$x \times 0.34$	$x \times 2.60$	$x \times 0.28$	$x \times 3.15$
310	Hotel	ROOMS	$0.50 \times (x) - 5.34$	$0.75 \times (x) - 26.02$	$11.29 \times (x) - 426.97$	$0.69 \times (x) + 4.32$	$9.62 \times (x) - 294.56$
311	All Suites Hotel	ROOMS	$0.34 \times (x)$	$0.45 \times (x) - 14.07$	$5.20 \times (x) - 119.26$	$0.45 \times (x) - 14.07$	$5.20 \times (x) - 119.26$



LAND USE CODE	LAND USE DESCRIPTION	UNITS OF MEASURE (X)	AM PEAK HOUR *	PM PEAK HOUR *	WEEKDAY DAILY TRIPS *	WEEKEND PEAK HOUR *	WEEKEND DAILY TRIPS *
320	Motel	ROOMS	x*0.43	x*0.44	3.62*(x)-29.43	x*0.44	3.62*(x)-29.43
330	Resort Hotel	ROOMS	0.50*(x)-47.88	0.48*(x)+8.67	10*(0.48*(x)+8.67)	0.48*(x)+8.67	10*(0.48*(x)+8.67)
411	Public Park	ACRES	x*0.15	0.08*(x)+15.36	0.64*(x)+88.46	0.18*(x)+36.85	x*2.19
416	Campground/Recreational Vehicle Park	ACRES	x*0.52	x*1.06	x*10.6	x*1.06	x*10.6
420	Marina	BERTHS	x*0.12	x*0.21	x*2.41	x*0.31	x*3.49
430	Golf Course	HOLES	x*2.96	x*3.68	x*30.38	x*3.03	x*19.89
432	Golf Driving Range	TEES	x*1.02	x*1.65	x*13.65	x*1.32	x*17.68
437	Bowling Alley	SQ. FEET	x/1000*0.81	x/1000*1.16	x/1000*11.60	x/1000*1.16	x/1000*11.60
444	Movie Theater (# of Screens <=9)	SCREENS	x*9.5	x*37.83	x*220.00	x*102.87	x*546.86
445	Multiplex Movie Theater (# of Screens >=10)	SCREENS	x*9.5	x*25.84	x*292.50	x*65.07	x*292.50
465	Ice Skating Rink	SQ. FEET	(x/1000)*0.49	(x/1000)*1.33	(x/1000)*13.30	(x/1000)*2.63	(x/1000)*26.30
480	Amusement Park	ACRES	x*3.16	x*4.99	x*53.41	x*19.55	x*198.97
488	Soccer Complex	FIELDS	x*1.77	x*16.90	x*71.33	x*40.10	x*404.88
492	Health/Fitness Club	SQ. FEET	x/1000*1.40	x/1000*3.92	x/1000*39.20	x/1000*3.19	x/1000*31.90
493	Athletic Club	SQ. FEET	x/1000*3.40	x/1000*6.36	x/1000*63.60	x/1000*8.60	x/1000*86.00
495	Recreational Community Center	SQ. FEET	1.76*x/1000	2.31*x/1000	28.82*x/1000	1.48*x/1000	13.60*x/1000
520	Elementary School	STUDENTS	x*0.67	x*0.34	x*1.89	x*0.10	x*0.58
522	Middle School/Junior High School	STUDENTS	x*0.70	x*0.35	x*2.12	x*0.10	x*0.58
530	High School	STUDENTS	x*0.55	x*0.33	x*2.03	x*0.10	x*0.58
534	Private School (K-8)	STUDENTS	0.88*(x)+14.85	0.63*(x)-1.93	x*4.11	x*0.10	x*0.58
536	Private School (K-12)	STUDENTS	x*0.81	x*0.58	x*2.48	x*0.10	x*0.58
540	Junior/Community College	STUDENTS	x*0.12	x*0.13	x*1.15	x*0.05	x*0.42
550	University/College	STUDENTS	EXP(0.95*LN(x))-1.63	EXP(0.97*LN(x))-1.69	1.38*(x)+2108.83	EXP(0.97*LN(x))-1.69	1.38*(x)+2108.83
560	Church	SQ. FEET	(x/1000)*0.65	(x/1000)*0.80	(x/1000)*6.95	(x/1000)*9.99	(x/1000)*27.63
561	Synagogue	SQ. FEET	(x/1000)*2.41	(x/1000)*2.92	(x/1000)*29.20	(x/1000)*7.83	(x/1000)*78.30
565	Day Care Center	SQ. FEET	(x/1000)*11.73	(x/1000)*11.82	(x/1000)*47.62	(x/1000)*1.75	(x/1000)*6.22
566	Cemetery	ACRES	x*1.23	x*1.26	4.65*(x)+70.83	x*2.63	x*13.94
590	Library	SQ. FEET	7.21*x/1000-14.35	8.48*x/1000+0.80	EXP(0.99*LN(x/1000)+4.28)	(x/1000)*12.60	(x/1000)*80.09
610	Hospital	SQ. FEET	0.74*(x/1000)+126.36	0.83*(x/1000)+118.28	10.72*(x/1000)	x/1000*4.85	x/1000*7.72
620	Nursing Home	BEDS	x*0.22	x*0.37	x*3.06	x*0.40	x*2.41
630	Clinic	SQ. FEET	x/1000*5.22	x/1000*4.64	x/1000*38.16	x/1000*5.22	x/1000*38.16
640	Animal Hospital/Veterinary Clinic	SQ. FEET	3.73*x/1000	3.83*x/1000	21.50*x/1000	3.83*x/1000	21.50*x/1000
710	General Office Building (> or = 200,000 SF)	SQ. FEET	EXP(0.88*LN(x/1000)+1.06)	1.10*(x/1000)+65.39	EXP(0.97*LN(x/1000)+2.50)	0.53*(x/1000)	2.21*(x/1000)
714	Corporate Headquarters Building	SQ. FEET	(x/1000)*1.46	(x/1000)*1.40	6.16*(x/1000)+462.50	(x/1000)*0.10	(x/1000)*10.00
720	Medical-Dental Office Building	SQ. FEET	3.43*(x/1000)+2.57	4.10*(x/1000)	34.80*(x/1000)	(x/1000)*3.10	x/1000*8.57
730	Government Office Building	SQ. FEET	x/1000*3.69	x/1000*3.19	x/1000*22.59	x/1000*3.69	x/1000*22.59
731	State Motor Vehicles Department	SQ. FEET	(x/1000)*8.86	(x/1000)*7.68	(x/1000)*11.21	(x/1000)*8.86	(x/1000)*11.21
732	United States Post Office	SQ. FEET	(x/1000)*12.38	(x/1000)*15.11	(x/1000)*103.94	(x/1000)*5.33	(x/1000)*43.83
760	Research and Development Center	SQ. FEET	x/1000*1.22	x/1000*1.11	10.23*(x/1000)+204.68	x/1000*0.24	x/1000*1.90
810	Tractor Supply Store	SQ. FEET	(x/1000)*1.40	(x/1000)*1.40	(x/1000)*14.00	(x/1000)*3.17	(x/1000)*31.70
812	Building Materials and Lumber Store	SQ. FEET	2.37*(x/1000)	2.77*(x/1000)	18.05*(x/1000)	EXP(0.95*LN(x/1000)+2.35)	36.74*(x/1000)+137.42
814	Variety Store	SQ. FEET	x/1000*4.52	x/1000*7.42	x/1000*63.47	x/1000*7.42	x/1000*63.47
815	Free-Standing Discount Store	SQ. FEET	x/1000*5.43	x/1000*5.33	x/1000*53.12	x/1000*7.87	x/1000*70.76



LAND USE CODE	LAND USE DESCRIPTION	UNITS OF MEASURE (X)	AM PEAK HOUR *	PM PEAK HOUR *	WEEKDAY DAILY TRIPS *	WEEKEND PEAK HOUR *	WEEKEND DAILY TRIPS *
816	Hardware/Paint Store	SQ. FEET	1.07*(x/1000)+4.31	0.98*(x/1000)+2.27	9.94*(x/1000)-12.22	2.25*(x/1000)	22.50*(x/1000)
817	Nursery (Garden Center)	SQ. FEET	x/1000*8.0	x/1000*8.37	x/1000*68.10	x/1000*20.06	x/1000*133.31
818	Nursery (Wholesale)	SQ. FEET	(x/1000)*3.03	(x/1000)*5.18	(x/1000)*39.00	(x/1000)*5.70	(x/1000)*29.94
820	Shopping Center	SQ. FEET	(x/1000)*0.94	EXP(0.72*LN(x/1000)+3.02)	EXP(0.68*LN(x/1000)+5.57)	EXP(0.79*LN(x/1000)+2.79)	(x/1000)*46.12
823	Factory Outlet Center	SQ. FEET	2.06*x/1000	2.29*x/1000	26.59*x/1000	3.79*x/1000	40.97*x/1000
843	Automobile Parts Sales	SQ. FEET	4.41*x/1000	5.83*x/1000	55.34*x/1000	11.53*x/1000	115.30*x/1000
848	Tire Store	SQ. FEET	(x/1000)*3.73	(x/1000)*3.98	(x/1000)*28.52	(x/1000)*5.05	(x/1000)*50.50
850	Supermarket	SQ. FEET	x/1000*6.67	x/1000*9.24	x/1000*106.78	x/1000*18.94	x/1000*177.62
851	Convenience Market	SQ. FEET	x/1000*68.83	x/1000*53.51	x/1000*762.28	x/1000*79.12	x/1000*1084.17
853	Convenience Market With Gas Pumps(<3000 SF)	SQ. FEET	x/1000*42.19	x/1000*49.59	x/1000*624.20	x/1000*49.59	x/1000*624.20
854	Discount Supermarket	SQ. FEET	8.06*(x/1000)-162.88	EXP(0.89*LN(x/1000)+2.59)	(x/1000)*90.87	EXP(0.78*LN(x/1000)+3.21)	(x/1000)*111.86
857	Discount Club	SQ. FEET	(x/1000)*3.37	(x/1000)*4.61	(x/1000)*41.80	(x/1000)*6.37	(x/1000)*53.75
862	Home Improvement Superstore	SQ. FEET	(x/1000)*2.75	(x/1000)*3.29	(x/1000)*30.74	(x/1000)*7.05	(x/1000)*56.72
863	Electronics Superstore	SQ. FEET	7.02*(x/1000)-125.74	8.87*(x/1000)-162.71	84.01*(x/1000)-1576.41	(x/1000)*7.02	(x/1000)*55.12
864	Toy/Children's Superstore	SQ. FEET	(x/1000)*5.00	(x/1000)*5.00	(x/1000)*50.00	(x/1000)*5.53	(x/1000)*55.3
869	Discount Home Furnishing Superstore	SQ. FEET	x/1000*0.57	x/1000*1.57	x/1000*20.00	x/1000*3.40	x/1000*33.29
880	Pharmacy/Drugstore without Drive-Through Window	SQ. FEET	(x/1000)*7.71	(x/1000)*11.07	90.08*(x/1000)	(x/1000)*10.68	(x/1000)*106.80
881	Pharmacy/Drugstore with Drive-Through Window	SQ. FEET	(x/1000)*9.13	(x/1000)*11.32	(x/1000)*109.16	(x/1000)*8.75	(x/1000)*114.89
882	Marijuana Dispensary	SQ. FEET	(x/1000)*16.57	(x/1000)*24.57	(x/1000)*211.12	(x/1000)*28.85	(x/1000)*259.31
890	Furniture Store	SQ. FEET	(x/1000)*0.52	(x/1000)*0.70	(x/1000)*6.30	(x/1000)*1.29	(x/1000)*7.15
899	Liquor Store	SQ. FEET	4.14*(x/1000)+1.97	17.12*x/1000	x/1000*101.49	17.12*x/1000	x/1000*171.20
912	Drive-in Bank	WINDOWS	x*17.55	x*27.15	x*124.76	x*27.67	x*127.26
931	Quality Restaurant	SQ. FEET	x/1000*4.47	x/1000*8.28	x/1000*83.84	x/1000*10.68	x/1000*90.04
932	High Turnover (Sit-Down) Restaurant	SQ. FEET	x/1000*14.04	x/1000*17.41	x/1000*112.18	x/1000*18.46	x/1000*142.64
933	Fast Food Restaurant without Drive Through Window	SQ. FEET	x/1000*47.66	x/1000*48.70	x/1000*346.23	x/1000*54.60	x/1000*696.00
934	Fast Food Restaurant with Drive Through Window	SQ. FEET	x/1000*50.97	x/1000*51.36	x/1000*470.95	x/1000*55.15	x/1000*616.12
935	Fast Food Restaurant with Drive Through Window and No Indoor Seating	SQ. FEET	x/1000*65.81	x/1000*67.44	x/1000*459.20	x/1000*67.44	x/1000*459.20
936	Coffee/Donut Shop without Drive-Through Window	SQ. FEET	x/1000*101.14	x/1000*36.31	x/1000*1011.40	x/1000*59.01	x/1000*590.10
937	Coffee/Donut Shop with Drive-Through Window	SQ. FEET	x/1000*97.96	x/1000*43.38	x/1000*820.38	x/1000*87.70	x/1000*877.00
941	Quick Lubrication Vehicle Shop	SERVICE BAYS	x*4.00	x*4.60	x*40.00	x*4.50	x*42.00
942	Automobile Care Center	SQ. FEET	x/1000*2.83	x/1000*3.51	x/1000*35.10	x/1000*2.37	x/1000*23.72
943	Automobile Parts and Service Center	SQ. FEET	x/1000*2.75	x/1000*2.62	x/1000*16.28	x/1000*6.62	x/1000*66.20
947	Self Service Car Wash	WASH STALLS	x*8.00	x*8.00	x*108	x*15.25	x*132.80
948	Automated Car Wash	TUNNEL	x*77.50	x*77.50	x*775.00	x*41	x*410.00
950	Truck Stop	SQ. FEET	x/1000*34.60	x/1000*36.44	x/1000*455.53	x/1000*36.44	x/1000*455.53
960	Super Convenience Market/Gas Station (> 3,000 SF)	SQ. FEET	x/1000*83.14	x/1000*69.28	x/1000*837.58	x/1000*63.80	x/1000*700.00
971	Brewery Tap Room	SQ. FEET	x/1000*0.93	x/1000*10.93	x/1000*61.69	x/1000*22.97	x/1000*122.03
W09	Banquet Hall	SEATS	x*0.16	x*0.3	x*2.86	x*0.33	x*2.81
X01	Service Station With Gas Only	STATIONS	x*71	x*92	x*1012	x*92	x*1012
X02	Service Station With Gas & Service Bays	STATIONS	x*81	x*86	x*781	x*86	x*781
X04	Service Station With Gas & Car Wash	STATIONS	x*108	x*94	x*1174	x*108	x*1174
Y01	Water Tower	TOWERS	x*2	x*2	x*4	x*2	x*4
Y02	Water Treatment Facility	PRKNG SLOTS	x*1	x*1	x*4	x*1	x*4



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Y03	Maintenance Yard	EMPLOYEES	x*2	x*2	x*4	x*2	x*4
Y07	Ice Cream Parlor (Sit-Down, no take out)	SQ. FEET	x/1000*71.428	x/1000*71.428	x/1000*521.428	x/1000*71.428	x/1000*546.428
Y09	Firehouse	EMPLOYEES	x*2	x*2	x*4	x*2	x*4
Y10	State Police Headquarters	SQ. FEET	x/1000*1.01	x/1000*1.962	x/1000*11.679	x/1000*1.01	x/1000*4.279
Y14	Parking Lot	SPACES	x*1	x*1	x*10	x*1	x*10
Y15	Farm Stand/Market	FACILITY	x*20	x*38	x*375	x*52	x*480
Y16	Emergency Entrance	LOT	x*1	x*1	x*4	x*1	x*2
Y17	Parking Lot (Long Term Parking)	PRK SPACES	x*0.053	x*0.052	x*0.695	x*0.053	x*0.534
Y18	Funeral Home	FACILITY	x*20	x*24	x*124	x*16	x*53
Y23	Cellular Tower	TOWERS	x*2	x*2	x*4	x*2	x*4
Y27	Car Rental	FACILITY	x*20	x*21	x*140	x*21	x*140
Y31	Auction Facility	PRK SPACES	x*1	x*1	x*2.52	x*1	x*2.52
Y32	Rita's Water Ice	FACILITY	x*55	x*55	x*435	x*70	x*545
Y33	Motorcycle Dealer	SQ. FEET	x/1000*0.604	x/1000*1.02	x/1000*6.4175	x/1000*1.1875	x/1000*7.395
Y40	Cultural Center	SEATS	x*0.16	x*0.2	x*1.5	x*0.33	x*2.81
Y52	General Office Building (<200,000 SF)	SQ. FEET	1.47*(x/1000)	1.42*(x/1000)	EXP(0.97*LN(x/1000)+2.50)	0.53*(x/1000)	2.21*(x/1000)
Y53	Specialty Retail Center	SQ. FEET	4.91*(x/1000)+115.59	(x/1000)*5.02	(x/1000)*44.32	4.91*(x/1000)+115.59	(x/1000)*42.04
Y55	Recreation Parking Lot	PRK SPACES	x*0.25	x*0.25	x*0.25	x*0.90	x*0.90
Y56	Boat Sales / Service Facility	SQ. FEET	x/1000*0.604	x/1000*1.02	x/1000*6.4175	x/1000*1.1875	x/1000*7.395
Y60	Automobile New & Used Sales	SQ. FEET	x/1000*2.22	x/1000*2.80	x/1000*32.30	x/1000*4.02	x/1000*29.74
Y61	Convenience Store with Drive-Thru Restaurant (<3,000 SF)	SQ. FEET	x/1000*50.63	x/1000*59.51	x/1000*624.20	x/1000*59.51	x/1000*624.20
Y62	Convenience Store with Drive-Thru Restaurant (>=3,000 SF)	SQ. FEET	x/1000*99.77	x/1000*83.14	x/1000*1005.10	x/1000*76.56	x/1000*840.00
Y63	Movie Theater without Matinee (XXX) - 9th Edition	SCREENS	x*9.5	x*37.83	x*220.0	x*64.5	x*376.0
Y64	Mobile Kitchen	FACILITY	x*35	x*108	x*758	x*117	x*533

*The units of measure is the quantity that should be substituted for the "X" in the equations. It should be noted that the actual SF should be entered into these equations unlike the equations in the ITE books which are based upon 1,000 SF.

Example: A 125,000 sf shopping center will generate the following PM peak hour trips (X would equal 125,000):

Number of PM peak hour trips = $EXP(0.66*LN(X/1000)+3.40) = EXP(0.66*LN(125,000/1000)+3.40) = EXP(0.66*LN(125)+3.40) = EXP(0.66*4.828+3.40) = EXP(6.586) = 725$



State of New Jersey

DEPARTMENT OF TRANSPORTATION

P.O. Box 600

Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

FRANCIS K. O'CONNOR
Commissioner

TAHESHA L. WAY
Lt. Governor

September 18, 2025

Paul Going, P.E.
TPD, Inc.
30 Independence Boulevard, Suite 110
Warren, NJ 07059

RE: Letter of No Interest (L100010370)
Proposed Retail Store Tenant
457 Route 10 EB, MP 22.74
Block 157; Lots 5
West Orange Township
Essex County, New Jersey

Dear Mr. Going,

Reference is made to your letter dated August 25, 2025, concerning the above captioned project. The Department has reviewed the information submitted with the Letter of No Interest request. Based on the submitted information, the Department has determined that Proposed Retail Store Tenant will not generate a "significant increase in traffic" and a new access permit is not required.

If in the future there is an additional expansion or new use on the site causing the Department to make a new determination on whether there is a significant increase in traffic during the peak hour trip generation, it will require that a new access permit be applied for by the current owner(s) or future owner(s) of the property.

Please note that the above conclusions were based upon the information provided and any changes to these plans, or the proposed size and type of development, may change the conclusions reached by the Department.

Please be advised that any physical changes to any of the Route 10 EB driveways may cause a new permit to be required despite that the proposed expansion does not constitute a significant increase in traffic.

The State Highway Access Management Act and the State Highway Access Management Code describe activities, which require an access permit according to N.J.S.A. 27:7-92(a) and N.J.A.C. 16:47-8.1(a). They also describe changes or expansions in use, and significant increase in traffic which would require a new permit as per N.J.S.A. 27:7-95(a) and N.J.A.C. 16:47-8.1(a). These citations may clarify the conclusions that we reached.

If you have any questions concerning the above matters, please contact me at (609) 963-2630 or Rahmiati.Anthony@dot.nj.gov.

Sincerely,

Rahmiati Anthony

Rahmiati Anthony
Project Management Specialist 2
Office of Major Access Permit