

TRAFFIC MEMORANDUM

for

BROOKS LANDING SUBDIVISION

Tuck Road

City of Loganville, Walton County, Georgia

TPA Job No. 1-25-0044



4317 Park Drive, Suite 400
Norcross, Georgia 30093
(770) 416-7511



FOR THE FIRM
Travis Pruitt & Associates, Inc.

Issued: 2/17/2025



Trip Generation Memorandum-Brooks Landing

Purpose

The purpose of this memorandum is to determine the roadway classification for Tuck Road based on the criteria established by Walton County in Land Development Ordinance Section 9-1-100 and whether or not the requirements of the City of Loganville Code of Ordinances section 119-221(b) for the proposed development of the Brooks Landing Subdivision as a Planned Urban Village are met. The subdivision will be annexed into the City of Loganville. The Brooks Landing Subdivision will be annexed into the City of Loganville and will be subject to the City’s Ordinances.

The City of Loganville Code of Ordinances requires in section 119-221(b) that a Planned Urban Village (PUV) development must have access to at least one arterial or major collector. The proposed reclassification of Tuck Road from a local road to a major collector will satisfy this requirement.

Tuck Road is approximately 0.5 miles of 2-lane, asphalt-paved rural roadway that connects SR 20 to Tom Brooks Road. Tuck Road is stop-controlled as the minor approach at the two-way stop-controlled intersection with SR 20. Tuck Road is stop-controlled at the all-way stop-controlled intersection of Tuck Road and Tom Brooks Road. Tuck Road is located within right-of-way that is owned by Walton County and the roadway is maintained by Walton County.

Existing Conditions

GDOT classified Tuck Road as a local road in the Project Concept Report for P.I. Number 0016387 for the SR 20 from CS 660/Sharon Church Road to SR 10/US 78 – Widening & Roundabout.

Based on a 24-hour count that was performed on January 30, 2025, with the data collection point located on Tuck Road to the east of the intersection of Tuck Road and Tom Brooks Road, the daily volume on Tuck Road is 2,823 vehicles per day. Of the total 2,823 vehicles on Tuck Road, 1,282 vehicles (45.4%) were eastbound, and 1,541 vehicles (54.6%) were westbound. The AM Peak Hour volume was determined to occur between 8:00 AM and 9:00 AM with a total of 172 vehicles, while the PM Peak Hour volume was determined to occur between 5:00 PM and 6:00 PM with a total of 279 vehicles.

In accordance with the table in Section 9-1-100 of the Land Development Ordinance of Walton County, Georgia, the daily volume of 2,823 vehicles per day classifies Tuck Road as a Major Collector Road which has a range of 2,501 to 9,999 ADT. Figure 1 below shows the classifications from section 9-1-100 A.2 of the Land Development Ordinance.

Figure 1. Street Classification from Land Development Ordinance of Walton County, Georgia

Classification	Average Daily Trips (ADT)
Local Road	250 or Less
Minor Collector	251 to 2,500
Major Collector	2,501 to 9,999
Arterial	10,000 or More

GDOT Programmed Improvements

GDOT P.I. Number 0016387 for the SR 20 from CS 660/Sharon Church Road to SR 10/US 78 – Widening & Roundabout includes the conversion of the intersection of SR 20 and Sharon Church Road from an existing two-way stop-controlled intersection to a roundabout. Sharon Church Road will also be realigned to intersect SR 20



approximately 100 feet further south than its existing intersection location. The project includes the realignment of Tuck Road from its current intersection with SR 20 to serve as the eastbound approach to the four-legged roundabout at Sharon Church Road and SR 20, which is approximately 550 feet north of Tuck Road’s existing intersection with SR 20. The project is scheduled for completion in 2027.

Proposed Development

The proposed development includes 99 single-family detached houses, 60 single-family attached houses, and 16,000 square feet of strip retail plaza on 67.69 acres on Tax Parcels C0040009, LG060189 and C0040009A00. The development will be annexed into the City of Loganville and rezoned for a Planned Urban Village. The development will include public roads, open space and amenities, utilities, and stormwater management. Vehicular access to the site will be provided by two (2) two-way roadway connections on Tuck Road. The first roadway will serve as the northbound approach to the existing stop-controlled intersection of Tuck Road and Tom Brooks Road. The second road will intersect Tuck Road approximately 840LF east of intersection #1 and 1,640LF west of the existing intersection of Tuck Road / SR 20. The proposed development is shown in the attached Concept Plan.

Per the requirements of The City of Loganville Code of Ordinance section 119-221(d)(2)a, no more than 25% of the full buildout of each land use may be developed in any given phase. Phase 1 is anticipated to be constructed and occupied within 2 years. This will coincide with the completion of the GDOT programmed improvements which includes the reconstruction of Tuck Road and the roundabout at its intersection with SR 20.

Trip Generation

The accepted procedure for determining the trips generated by the development of a property based on the land use and intensity is to apply the rates or equations developed by the Institute of Transportation Engineers (ITE) as published in the Trip Generation Manual – 11th Edition. The rates or equations in this informational report are calculated from nationally collected data. This method was used to establish the trip generation for the proposed development.

The results of the trip generation for the full buildout of the Brooks Landing Project are given in Table 1.

Table 1. Trip Generation Results-Full Buildout

Trip Generation									
Land Use (ITE Code)	Intensity	Independent Variable	ADT	AM Peak Hour			PM Peak Hour		
			2-Way	Enter	Exit	Total	Enter	Exit	Total
Single-Family Detached Housing (210)	99	Dwelling Units	1,000	18	56	74	62	36	98
Single-Family Attached Housing (215)	60	Dwelling Units	407	6	20	26	19	13	32
Strip Retail Plaza (822)	16	1000 Sq. Ft. GFA	905	24	15	39	54	55	109
Total			2,312	48	91	139	135	104	239

Phase 1 of the development will include no more than 25% of the proposed units per the Planned Urban Village District (PUV) requirements outlined in the City of Loganville Code of Ordinance Section 119-221(d)(2)a. Table 2 shows the calculated trip generation that corresponds to 25% of the intensities at full buildout.



Table 2. Trip Generation Results-25% Buildout (Phase 1)

Trip Generation									
Land Use (ITE Code)	Intensity	Independent Variable	ADT	AM Peak Hour			PM Peak Hour		
			2-Way	Enter	Exit	Total	Enter	Exit	Total
Single-Family Detached Housing (210)	24	Dwelling Units	271	5	15	20	16	10	26
Single-Family Attached Housing (215)	15	Dwelling Units	64	1	1	2	3	2	5
Strip Retail Plaza (822)	4	1000 Sq. Ft. GFA	398	9	7	16	20	21	41
Total			733	15	23	38	39	33	72

Analysis

For Phase 1 of the development, in which no more than 25% of each land use will be developed, the existing trip distribution on Tuck Road (45%EB/55%WB) is applied to the ingress and egress traffic to and from the development. With the total Phase 1 ADT of 733 vehicles per day, 330 new daily trips (45% of 733 ADT) will enter and exit the site through the two new subdivision entrances to and from the east—towards SR 20. This results in 165 ingress trips and 165 egress trips per day to and from the east. In Phase 1, the remaining 55% of the ADT will be distributed to the west on Tom Brooks Road and to the north on Tuck Road. The traffic assignment is assumed to have a split of 20% to and from the north on Tuck Road and 35% to and from the west on Tom Brooks Road. The resulting ADTs for Phase 1 are calculated to be 147 trips to and from the north on Tuck Road (73 ingress trips and 74 egress trips per day) and 257 trips to and from the west on Tom Brooks Road (128 ingress trips and 129 egress trips).

In the Phase 1 condition, the addition of the proposed 733 vehicles per day to the existing volume of 2,823 vehicles results in 3,556 vehicles per day on Tuck Road. These Phase 1 trips are anticipated to occur after 2027 when the GDOT programmed improvements are fully constructed.

For the full buildout of the development, the existing trip distributions on Tuck Road (45%EB/55%WB) is applied to the ingress and egress traffic to and from the development. With the total full-buildout ADT of 2,312 vehicles per day, 1,040 new daily trips (45% of 2,312 ADT) will enter and exit the site through the two new subdivision entrances to and from the east—towards SR 20. This results in 520 ingress trips and 520 egress trips per day to and from the east. In the full-buildout of the development, the remaining 55% of the ADT will be distributed to the west on Tom Brooks Road and to the north on Tuck Road. The traffic assignment is assumed to have a split of 20% to and from the north on Tuck Road and 35% to and from the west on Tom Brooks Road. The resulting ADTs for the full-buildout are calculated to be 462 trips to and from the north on Tuck Road (231 ingress trips and 231 egress trips per day) and 809 trips to and from the west on Tom Brooks Road (405 ingress trips and 405 egress trips).

In the full build out condition, the addition of the proposed 2,312 vehicles per day to the existing volume of 2,823 vehicles results in 5,136 vehicles per day on Tuck Road.



Conclusions

The proposed land uses and intensities of 60 single-family detached houses, 99 single-family attached houses, and 16,000 square feet of strip retail plaza will generate 2,823 total trips. When this trip volume is added to the existing Tuck Road daily traffic volume of 2,823 vehicles, the total is 5,136 vehicles per day. This volume falls between the ADT range of 2,501 and 9,999 which maintains the classification of Tuck Road as a major collector with or without the development of the proposed subdivision.

With the reclassification of Tuck Road from a local road to a major collector based on the existing and proposed traffic volumes, the access management requirements in Walton County Code of Ordinances Section 9-1-110 shall not apply.

Additionally, with the reclassification of Tuck Road from a local road to a major collector, Tuck Road meets the City of Loganville requirements in section 119-221(b) which requires that the proposed site must have access to at least one arterial or major collector road.

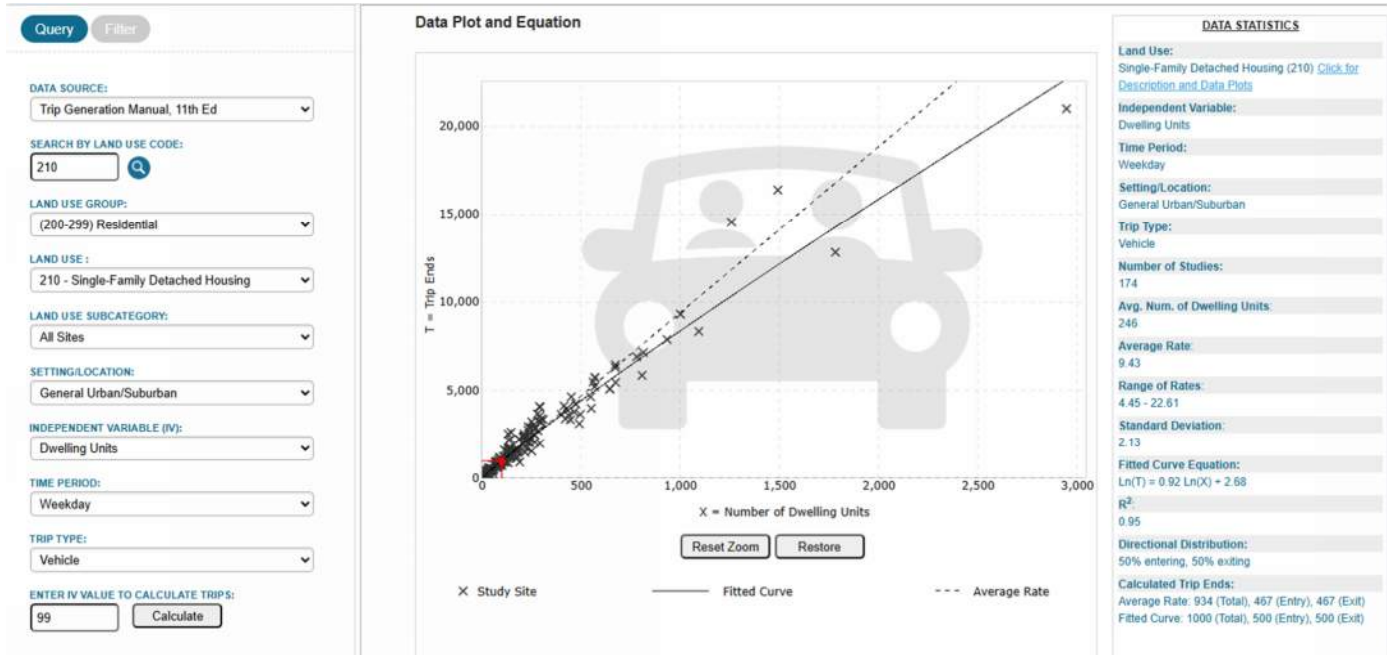
Please consider this memorandum as a formal request to consider the reclassification of Tuck Road from a local road to a major collector in future updates to the Walton County Comprehensive Plan and subsequently by the City of Loganville.



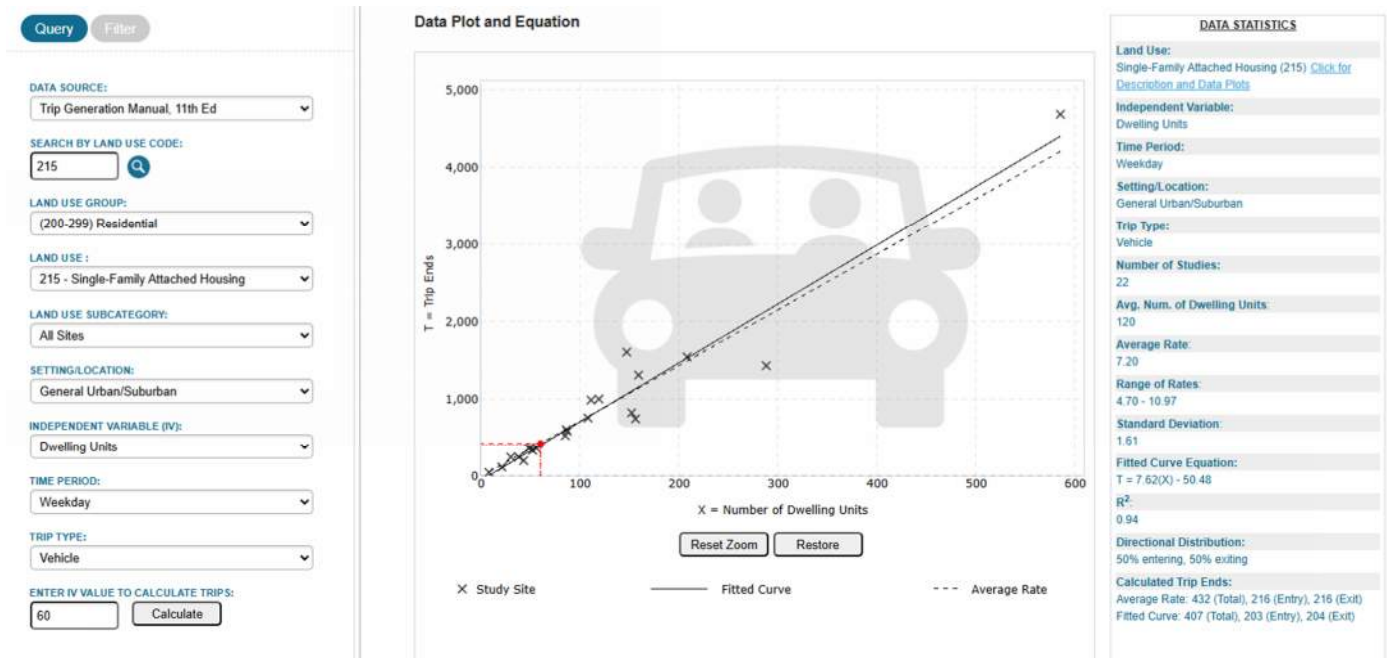
ITE Trip Generation Web-based App Output

Weekday Average Daily Traffic:

Single-Family Detached Housing

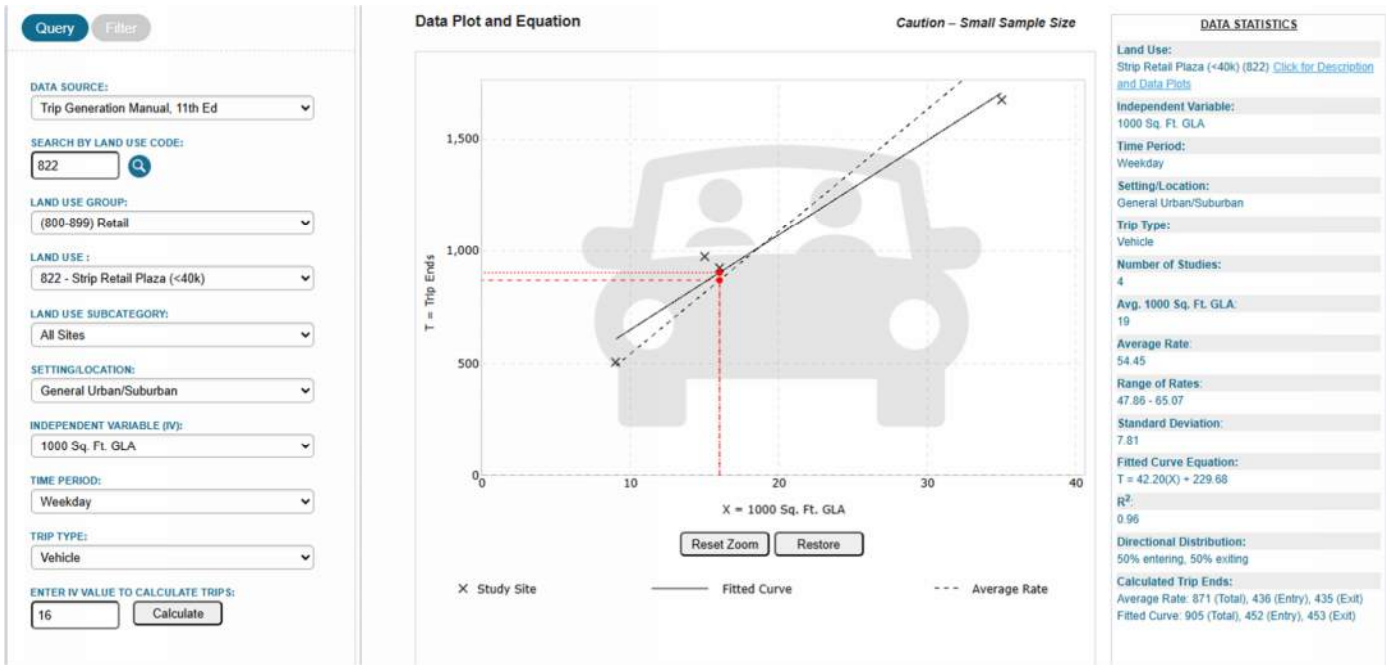


Single-Family Attached Housing



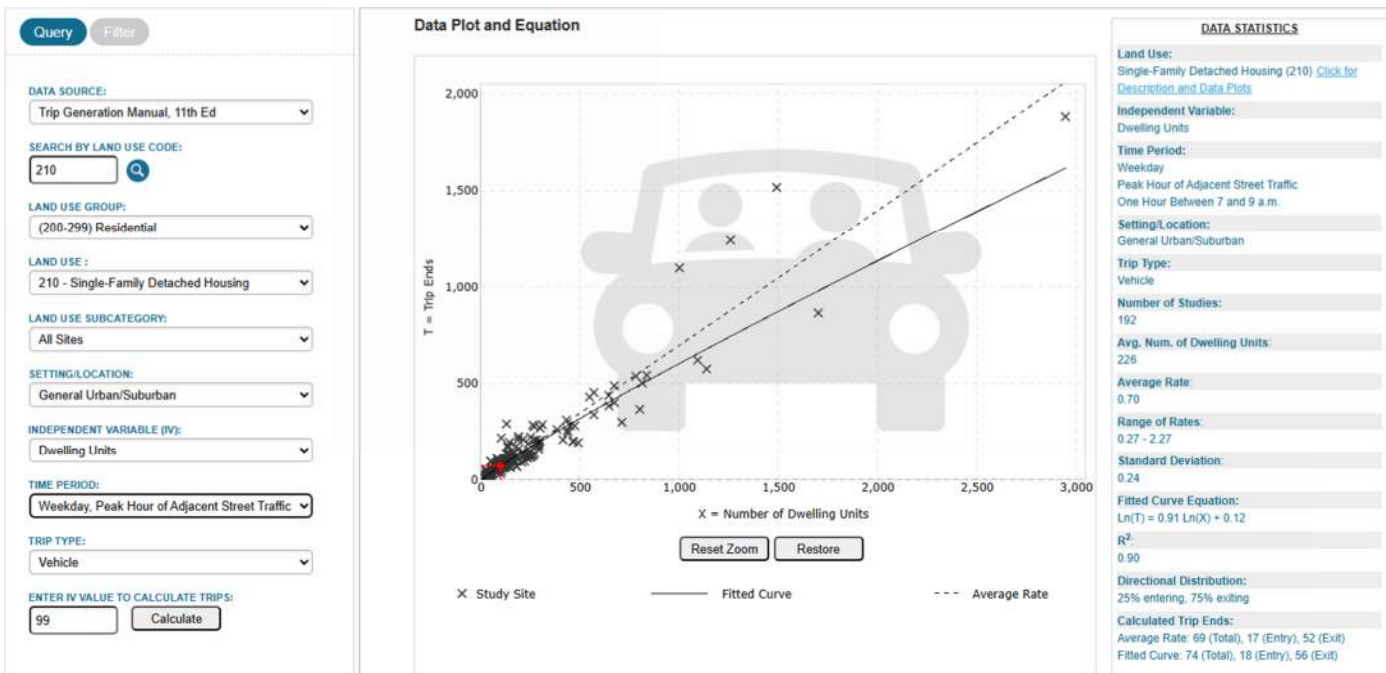


Retail Strip Plaza



Weekday Peak Hour AM:

Single-Family Detached Housing





Single-Family Attached Housing

Query **Filter**

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
215

LAND USE GROUP:
(200-299) Residential

LAND USE:
215 - Single-Family Attached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

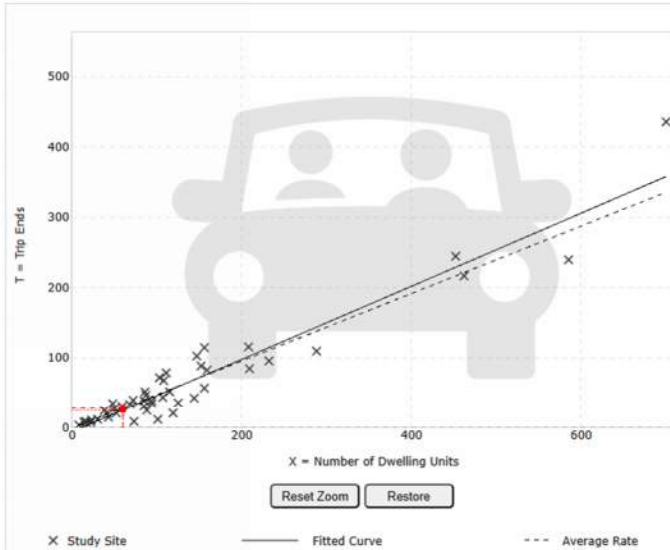
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
60 **Calculate**

Data Plot and Equation



DATA STATISTICS

Land Use:	Single-Family Attached Housing (215) Click for Description and Data Plots
Independent Variable:	Dwelling Units
Time Period:	Weekday Peak Hour of Adjacent Street Traffic One Hour Between 7 and 9 a.m.
Setting/Location:	General Urban/Suburban
Trip Type:	Vehicle
Number of Studies:	46
Avg. Num. of Dwelling Units:	135
Average Rate:	0.48
Range of Rates:	0.12 - 0.74
Standard Deviation:	0.14
Fitted Curve Equation:	$T = 0.52(X) - 5.70$
R ² :	0.92
Directional Distribution:	25% entering, 75% exiting
Calculated Trip Ends:	Average Rate: 29 (Total), 7 (Entry), 22 (Exit) Fitted Curve: 26 (Total), 6 (Entry), 20 (Exit)

Retail Strip Plaza

Query **Filter**

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
822

LAND USE GROUP:
(800-899) Retail

LAND USE:
822 - Strip Retail Plaza (<40k)

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

INDEPENDENT VARIABLE (IV):
1000 Sq. Ft. GLA

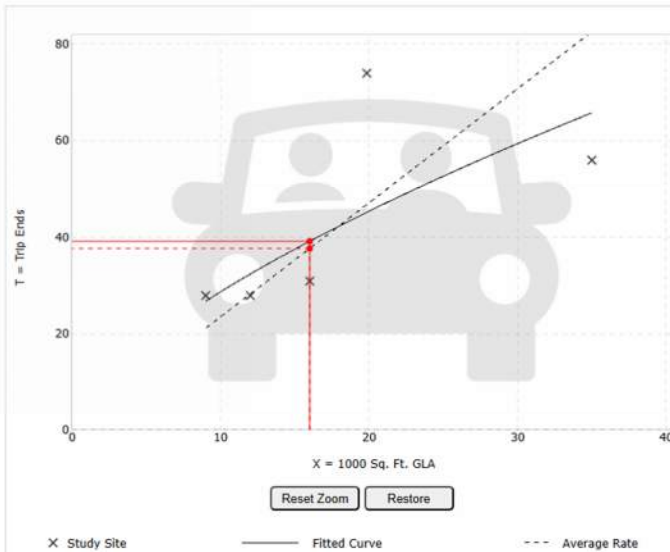
TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
16 **Calculate**

Data Plot and Equation

Caution - Small Sample Size



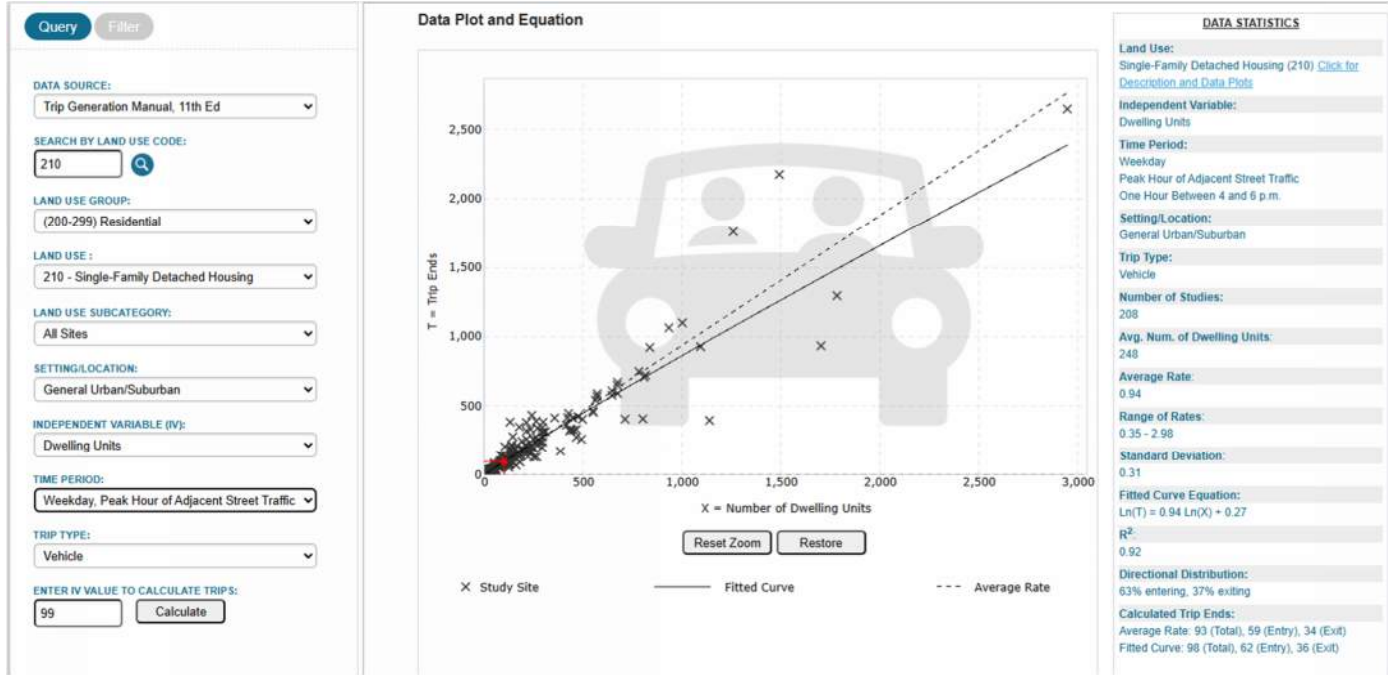
DATA STATISTICS

Land Use:	Strip Retail Plaza (<40k) (822) Click for Description and Data Plots
Independent Variable:	1000 Sq. Ft. GLA
Time Period:	Weekday Peak Hour of Adjacent Street Traffic One Hour Between 7 and 9 a.m.
Setting/Location:	General Urban/Suburban
Trip Type:	Vehicle
Number of Studies:	5
Avg. 1000 Sq. Ft. GLA:	18
Average Rate:	2.36
Range of Rates:	1.60 - 3.73
Standard Deviation:	0.94
Fitted Curve Equation:	$Ln(T) = 0.66 Ln(X) + 1.84$
R ² :	0.57
Directional Distribution:	60% entering, 40% exiting
Calculated Trip Ends:	Average Rate: 38 (Total), 23 (Entry), 15 (Exit) Fitted Curve: 39 (Total), 24 (Entry), 15 (Exit)

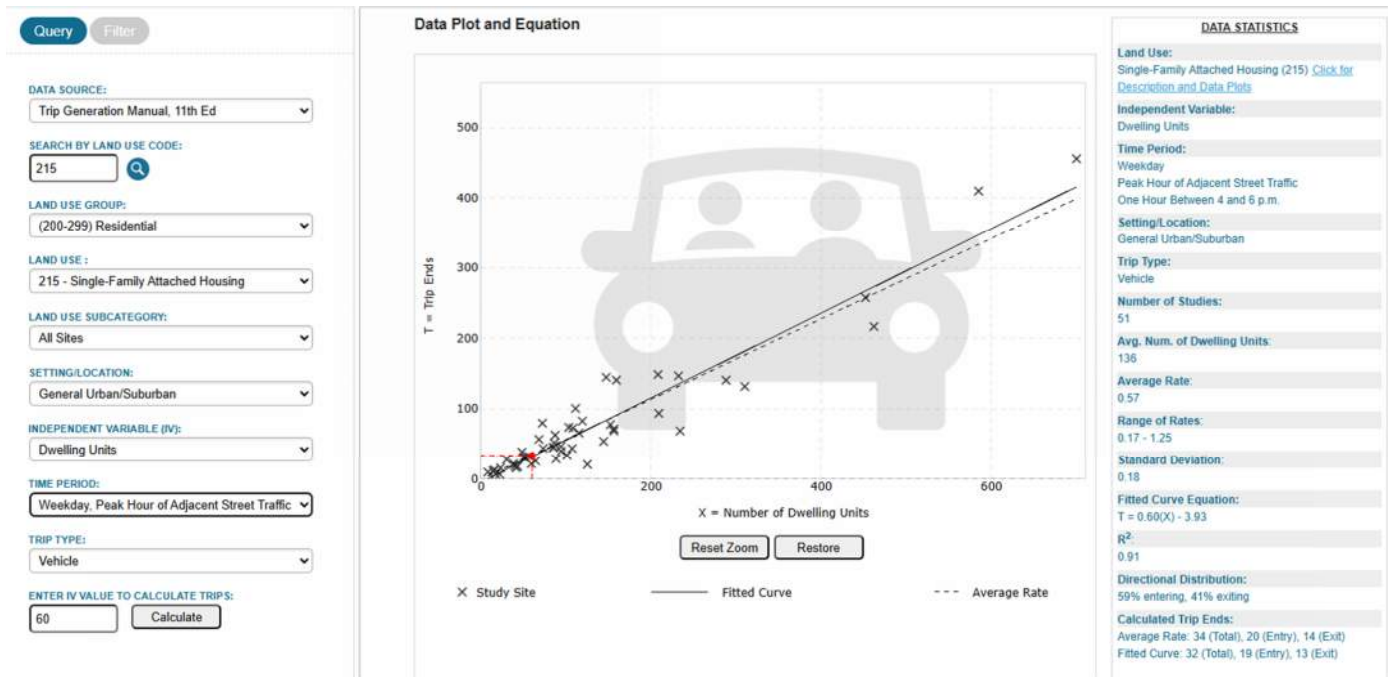


Weekday Peak Hour PM:

Single-Family Detached Housing

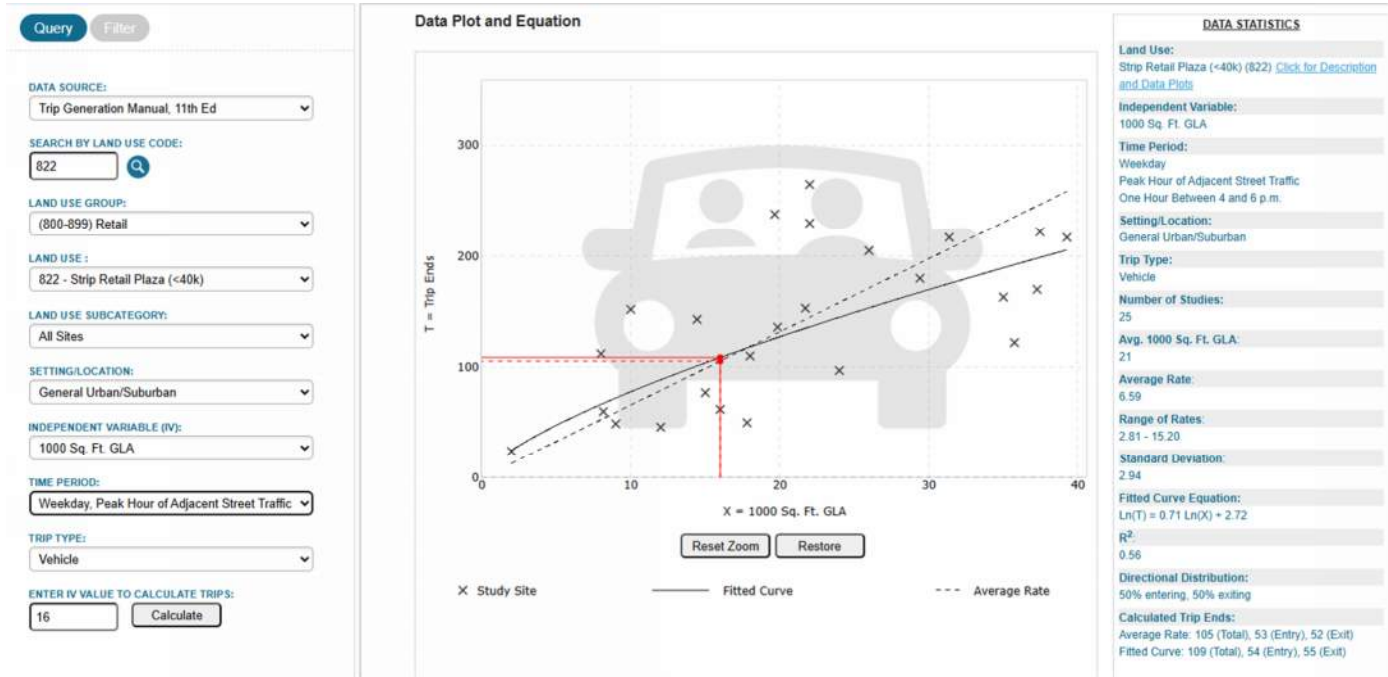


Single-Family Attached Housing





Retail Strip Plaza





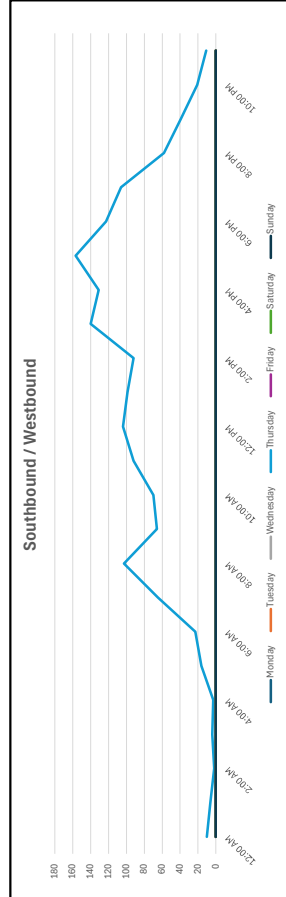
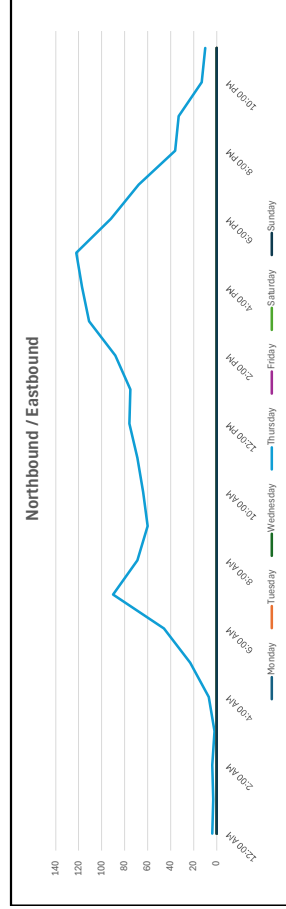
Traffic Counts (January 30, 2025)



Vehicle Volume Report - Hourly

Site Description: TUCKER RD WEST OF SR-20
 Site Number: 1
 Start Date: 1/30/2025
 End Date: 1/30/2025

Time	Monday 2/3/25			Tuesday 2/4/25			Wednesday 2/5/25			Thursday 1/30/25			Friday 1/31/25			Saturday 2/1/25			Sunday 2/2/25			3 Day Avg Tue-Thu			5 Day Avg Mon-Fri			7 Day Avg Mon-Sun		
	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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9:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6:00 AM - 9:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3:00 PM - 6:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6:00 AM - 7:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12:00 AM - 12:00 AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Percent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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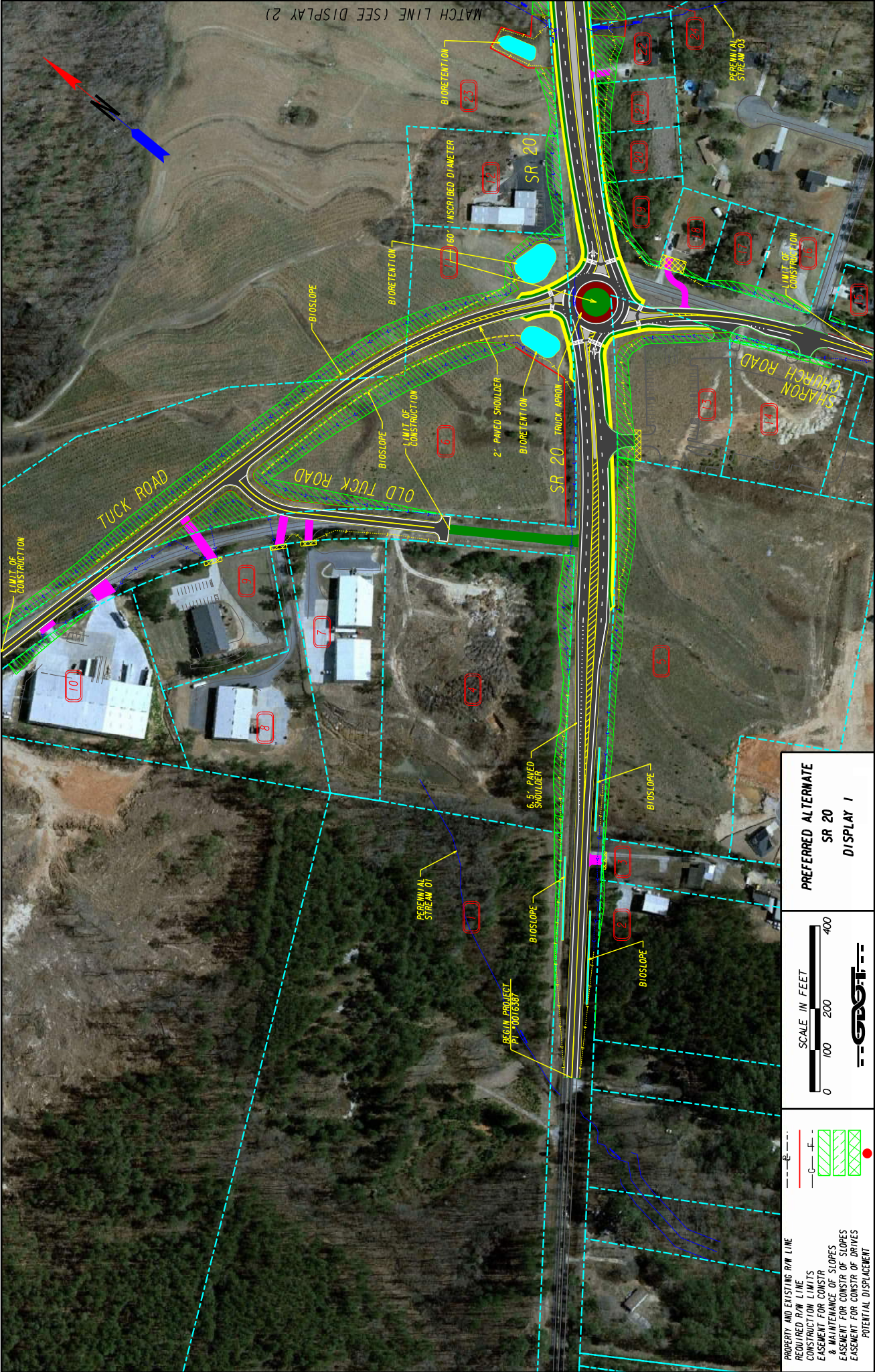


Concept Plan



GDOT Concept Plan

MATCH LINE (SEE DISPLAY 2)



PREFERRED ALTERNATE
SR 20
DISPLAY 1



- PROPERTY AND EXISTING RAW LINE
- REQUIRED RAW LINE
- CONSTRUCTION LIMITS
- EASEMENT FOR CONSTR
- & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTR OF SLOPES
- EASEMENT FOR CONSTR OF DRYVES
- POTENTIAL DISPLACEMENT