



Whipple Consulting Engineers, Inc.

March 29, 2016  
W.O. No. 2015-1560

City Of Spokane, Engineering Services  
808 W. Spokane Falls Blvd  
Spokane, WA 99201-3343

Attn: Inga Note, P.E.

Re: **Copper River (Holy Names) – Residential Development –  
2911 W Fort George Wright Drive, Elliot Drive & Fort George Wright Drive  
Expanded Trip Generation & Distribution Letter  
With Signal Warrant Analysis and Level of Service at access**

Dear Inga;

This Trip Generation and Distribution Letter (TGDL) is for the proposed Residential development located to the east of the intersection of Fort George Wright Drive & Elliot Drive. This letter will establish the anticipated trip generation and distribution for the development as shown on Figure 2, Preliminary Plat. This report will follow the standards for traffic letters as required by the City of Spokane.

### **PROJECT DESCRIPTION**

The project proposal is to develop approximately 68 acres +/- . The existing convent will remain and be re-tasked as a Congregate Care facility. The Copper River Apartment project is proposing to consist of a 232 unit apartment complex on 15.45 acres. The Catholic Charities Family Apartment complex is proposing to develop a 75 unit apartment complex on 5.00 acres. The Catholic Charities Senior Facility is proposing to consist of a 75 unit building on 5 acres. The proposed park is centrally located and is anticipated to be maintained by the development and used by the residents. The future development area is not being developed at this time. The conservation area is to remain undeveloped.

Land Use	Buildings	Units	Parcel Size (ac)	ITE LUC
Convent (Existing)	4	40	4.00	LUC# 253
New Use Congregate Care				
Copper River Apartments	10	240	15.45	LUC# 220
Catholic Charities(CCS) - Family	4	75	5.00	LUC# 220
Catholic Charities(CCS) - Senior	1	75	5.00	LUC# 252
Park		-	1.50	NA
Future Development	Unknown	TBD	3.00	TBD
Conservation (Spokane River)		-	33.51	NA
<b>Total</b>	-	422	67.46	-

## **VICINITY / SITE PLAN**

The site is currently zoned as Residential High Density (RHD-55). The subject property is located on the SE ¼ of Section 11 and the SW ¼ of Section of 12, T25N R42E W.M., within the City of Spokane, Washington. The parcel numbers for the subject property is 25116.0053. The surrounding area is generally institutional with Spokane Falls Community College.

## **TRIP GENERATION AND DISTRIBUTION**

### **Trip Types**

The proposed use is residential apartments; ITE has developed data regarding various trip types that all developments experience. These are found in several places, however, for this analysis the *Trip Generation Manual 9<sup>th</sup> Edition* as well as the *Trip Generation Handbook* were used to develop the criteria for this analysis.

Generally, all existing and proposed developments will be made up of one or more of the following four trip types: new (destination) trips, pass-by trips, diverted trips, and shared (internal trips). In order to better understand the trip types available for land access a description of each specific trip type follows.

**New (Destination) Trips** - These types of trips occur only to access a specific land use such as a new retail development or a new residential subdivision. These types of trips will travel to and from the new site and a single other destination such as home or work. This is the only trip type that will result in a net increase in the total amount of traffic within the study area. The reason primarily is that these trips represent planned trips to a specific destination that never took trips to that part of the City prior to the development being constructed and occupied. This project will develop new trips.

**Pass-by Trips** - These trips represent vehicles which currently use adjacent roadways providing primary access to new land uses or projects and are trips of convenience. These trips, however, have an ultimate destination other than the project in question. They should be viewed as customers who stop in on their way home from work. An example would be on payday, where an individual generally drives by their bank every day without stopping, except on payday. On that day, this driver would drive into the bank, perform the prerequisite banking and then continue on home. In this example, the trip started from work with a destination of home, however on the way, the driver stopped at the grocery store/latte stand and/or bank directly adjacent to their path. Pass-by trips are most always associated with commercial/retail types of development along major roadways. Therefore, for this project pass-by trips will not be considered.

**Diverted (Linked) Trips** - These trips occur when a vehicle takes a different route than normal to access a specific facility. Diverted trips are similar to pass-by trips, but diverted trips occur from roadways which do not provide direct access to the site. Instead, one or more streets must be utilized to get to and from the site. For this project, no diverted trips are anticipated.

**Shared Trips** - These are trips which occur on the site where a vehicle/consumer will stop at more than one place on the site. For example, someone destined for a certain shop at a commercial site may stop at a bank just before or after they visit the shop that they went to the site to visit. This trip type reduces the number of new trips generated on the public road system and is most commonly used for commercial developments. Since the project has only one land use and no cross access driveways with other land uses, no shared trips were considered.

### Trip Generation Characteristics for the Proposed Project

As noted earlier, trip generation rates for the AM and PM peak hours are determined by the use of the *Trip Generation Manual, 9<sup>th</sup> Edition* published by the Institute of Transportation Engineers (ITE). The purpose of the *Trip Generation Manual* is to compile and quantify empirical data into trip generation rates for specific land uses within the US, UK and Canada.

The existing land use listed is a 40 unit transitional housing as part of the existing Holy Names Convent. This facility is proposed to change to a 40 unit congregate care facility. For the proposed 40 unit facility, Land Use Code (LUC) 253 Congregate Care Facility was used to establish the number of potential trips generated by the proposed land use. The trip generation rates and the anticipated number of AM & PM peak hour trips for the proposed land use are shown on Table 1.

**Table 1-Trip Generation Rates for LUC # 253 – Congregate Care Facility**

Dwelling Units	AM Peak Hour Trips			PM Peak Hour Trips		
	Vol. @ 0.06/ Unit	Directional Distribution		Vol. @ 0.17/ Unit	Directional Distribution	
		59% In	41% Out		55% In	45% Out
40	3	2	1	7	4	3
Average Daily Trip Ends (ADT)						
Dwelling Units	Rate	ADT				
40	2.02	81				

For the proposed 232 unit Copper River Apartment Complex, Land Use Code (LUC) 220 Apartment was used to establish the number of potential trips generated by the proposed land use. The trip generation rates and the anticipated number of AM & PM peak hour trips for the proposed land use are shown on Table 2.

**Table 2-Trip Generation Rates for LUC # 220 – Apartment**

Dwelling Units	AM Peak Hour Trips			PM Peak Hour Trips		
	Vol. @ 0.51/ Unit	Directional Distribution		Vol. @ 0.62/ Unit	Directional Distribution	
		20% In	80% Out		65% In	35% Out
240	123	25	98	149	97	52
<b>Average Daily Trip Ends (ADT)</b>						
Dwelling Units	Rate	ADT				
240	6.65	1,596				

For the proposed 75 unit Catholic Charities Family Apartment Complex, Land Use Code (LUC) 220 Apartment was used to establish the number of potential trips generated by the proposed land use. The trip generation rates and the anticipated number of AM & PM peak hour trips for the proposed land use are shown on Table 3.

**Table 3-Trip Generation Rates for LUC # 220 – Apartment (Family)**

Dwelling Units	AM Peak Hour Trips			PM Peak Hour Trips		
	Vol. @ 0.51/ Unit	Directional Distribution		Vol. @ 0.62/ Unit	Directional Distribution	
		20% In	80% Out		65% In	35% Out
75	39	8	31	47	31	16
<b>Average Daily Trip Ends (ADT)</b>						
Dwelling Units	Rate	ADT				
75	6.65	499				

For the proposed 75 unit Senior Living Facility, Land Use Code (LUC) 252 Senior Adult Housing was used to establish the number of potential trips generated by the proposed land use. The trip generation rates and the anticipated number of AM & PM peak hour trips for the proposed land use are shown on Table 4.

**Table 4-Trip Generation Rates for LUC # 252 – Senior Adult Housing**

Dwelling Units	AM Peak Hour Trips			PM Peak Hour Trips		
	Vol. @ 0.20/ Unit	Directional Distribution		Vol. @ 0.25/ Unit	Directional Distribution	
		34% In	66% Out		54% In	46% Out
75	15	5	10	19	10	9
<b>Average Daily Trip Ends (ADT)</b>						
Occupied Beds	Rate	ADT				
75	3.44	258				

### Trip Summary Proposed Land Uses

**Table 5 –Trip Generation Summary**

Land Use Code	AM Peak Hour Trips			PM Peak Hour Trips		
	Vol. / LUC	Directional Distribution		Vol. / LUC	Directional Distribution	
		In	Out		In	Out
LUC 253 Congregate Care Facility	3	2	1	7	4	3
LUC 220 Apartment	123	25	98	149	97	52
LUC 220 Apartment (Family)	39	8	31	47	31	16
LUC 252 Senior Adult Housing	15	5	10	19	10	9
<b>Total</b>	<b>180</b>	<b>40</b>	<b>140</b>	<b>222</b>	<b>142</b>	<b>80</b>
<b>Average Daily Trip Ends (ADT)</b>						
Land Use	Rate/ LUC	ADT				
LUC 253 Congregate Care Facility	-	81				
LUC 220 Apartment	-	1,596				
LUC 220 Apartment (Family)	-	499				
LUC 252 Senior Adult Housing	-	258				
<b>Difference</b>		<b>2,434</b>				

As shown in Table 5, the land uses of the proposed development is anticipated to generate 180 trips in the AM peak hour, with 40 trips entering the site and 140 trips exiting the site. In the PM peak hour the land uses of the proposed development is anticipated to generate 222 trips with 142 trips entering the site and 80 trips exiting the site. The land use of the proposed development is anticipated to generate 2,434 average daily trips to/from the site.

### **TRIP DISTRIBUTION**

As shown on the site plan, the site will be accessed by a proposed roadway that connects to Fort George Wright Drive at the intersection with Elliot Drive. (Please see Figure 2 Preliminary Site Plan). It is anticipated that the residents of the site will generally use the following roadways:

**Fort George Wright Drive** is generally an east/west, two-way, 4-lane Principle Arterial that extends north from Government Way to the Spokane River and the TJ Meenach Bridge and turns into the TJ Meenach Drive which connects into Northwest Boulevard. Fort George Wright Drive serves primarily institutional land uses and residential land uses. The posted speed limit on Fort George Wright Drive is 35 MPH.

**Government Way** is generally a north/south, two-way 2-, 3- & 4-lane principal arterial (COS & County) that extends north from Sunset Boulevard through Greenwood Drive as a 4-lane roadway, where Government Way transitions into a 2-lane roadway until Riverbend Street where Government Way transitions into a 3-lane roadway to Sand Ridge Avenue, and back to a 2-lane roadway before going through Fort George Wright Drive and turning westward where Government Way turns into Trails Road at the Aubrey White Park Drive. Government Way

serves a mixture of residential, commercial, and institutional land uses. The speed limit on Government Way from Sunset Boulevard to Fort George Wright Drive is posted at 30 MPH. From Fort George Wright Drive to Aubrey L. White Parkway the posted Speed limit is 45 MPH.

Considering many factors such as the surrounding transportation facilities, typical commuting patterns, existing development in the area, and Average Daily Traffic counts, traffic for the proposed development is anticipated as follows. 60% of the trips are anticipated to go to/from the northeast via Fort George Wright Drive, and 40% of trips will go to/from the southwest via Fort George Wright Drive, to Government Way where 25% of trips will go to/from the Southeast toward the City Center and 15% of trips will go to/from the northwest toward Airway Heights.

### **Traffic Impact Fee**

A voluntary impact fee for the City of Spokane is considered here. The City of Spokane code has established transportation impact fees under Spokane Municipal Code Title 17 Chapter 17D.030. The proposed project is within the Northwest Service Area and as such is subject to the current Impact Fee Schedule (included in the appendix) the following table calculates the anticipated Impact fee for the proposed project.

**Table 6 – Existing Land Use Impact Fee**

Land Use	LUC	Quantity	Unit of Measure	Fee per unit	Fee
Congregate Care Facility	253	7	PM Trips	\$634.00	\$4,438.00
Multi-Family (3 levels+)	220	240	Dwelling Units	\$296.33	\$71,119.20
Multi-Family (3 levels+)	220	75	Dwelling Units	\$296.33	\$22,224.75
Assisted Living	252	75	Dwelling Units	\$129.72	\$9,729.00
Total	-		-	-	\$107,510.95

As shown in Table 6 the proposed project under the current fee schedule is anticipated to generate an impact fee of \$107,510.95. The fee per unit used was from the attached Impact Fee Schedule.

### **Level of Service and Signal Warrants – Fort George Wright Drive & Elliott Drive**

In considering the intersection performance of the intersection of Fort George Wright Drive & Elliot Drive we have completed this report. As there is a renewed interest in this intersection as the property owned by the Sisters of Holy Names looks to be developed. This report will evaluate the current intersection, level of service, Intersection safety, and future impacts that may be anticipated with adjacent development.

#### Intersection History

In the Year 2010 David Evans & Associates were contracted by Spokane Falls Community College (SFCC) to evaluate the intersection as Elliot Drive provides the main access to the back of the SFCC campus and parking lots. Additionally the opposing driveway to Elliot Drive provides access to the SFCC Northeast Campus, as well as to the Sisters of Holy Names property. Based upon our experience SFCC has worked over the past decades to ensure that the students and faculty of the college have a safe means of entering and exiting their campus through the existing driveway access along Fort George Wright Drive.

#### Intersection Level of Service

The intersection of Fort George Wright Drive & Elliot Drive has been analyzed for level of service using the HCS 2010 software in the PM Peak hour. The results of the analysis are as shown in Table 7.

**Table 7 –PM Peak Hour Level of Service**

Fort George Wright Drive & Elliot Drive	Development		PM Peak Hour	
	Years	Project %	Delay (sec)	LOS
Existing Intersection	0	0%	29.7	D
Intersection with NB, SB & WB Left Turn lanes	3.5	70%	48.2	E
Intersection with NB, SB & WB Left Turn lanes	3.75	75%	50.3	F
Intersection with NB, SB & WB Left Turn lanes	5	100%	66.7	F
Signalized Intersection with left turn lanes	5	100%	4.8	A

As shown in Table 7 the intersection is currently operating at an acceptable level of service as an unsignalized intersection. With the development of the project in conjunction with a widening of Fort George Wright Drive to allow for left turn lanes on the, North and Southbound approaches as well as a left turn lane on the westbound approach the intersection is anticipated to cross the acceptable level of service threshold at 75% of the project which is anticipated to occur in 3.75 years.

With full buildup of the development the left turn lane treatments no longer maintains an acceptable level of service. Therefore a signal at the intersection would improve level of service to an acceptable level.

#### Signal Warrant Analysis

WCE has completed a signal warrant analysis, per the 2009 MUTCD, for the existing and future condition of the intersection; copies of the analysis are attached. For the existing analysis the

intersection was counted and analyzed for signal warrants to provide a baseline. The existing warrant analysis found that the intersection met two (2) MUTCD signalization warrants:

- Warrant 6 Coordinated Signal System
- Warrant 8 Roadway Network

For the distribution of the project a localized distribution was established based upon the AM and PM peak hour movements of a residential development. The analysis then projected the Holy Names residential project over a 24 hour period. For the year 2022 a 1% background growth rate was applied to the existing volumes, and the project trips. These traffic volumes were then used for the warrant analysis. The warrant analysis found that in the year 2022 with the project that the following three (3) warrants for signalization may be met:

- Warrant 3 Peak Hour
- Warrant 6 Coordinated Signal System
- Warrant 8 Roadway Network

#### Left Turn Treatment of Fort George Wright Drive

As the proposed development anticipates 83 PM Peak hour southbound left turning trips, onto the new parkway, at full buildout and that the threshold study utilized left turn lanes at the intersection. We recommend that the development provide an initial left turn treatment project with the kickoff of the project. The left turn treatments would include north and southbound left turn lanes on Fort George Wright Drive as the left turn lanes would provide a drive refuge. And would ensure a safe access into a from the proposed development.

#### CONCLUSIONS AND RECOMMENDATIONS

It is anticipated that this project will generate 180 AM peak hour trips and 222 PM peak hour trips. Based upon the threshold study it was determined that with the initial left turn treatments on Fort George Wright Drive and at the project access, that the project can be developed by 75% (132 AM Trips & 162 PM Trips) before the intersection would fall below an acceptable level of service. Beyond, 75% of the Development the intersection would need to be signalized to maintain adequate Level of Service.

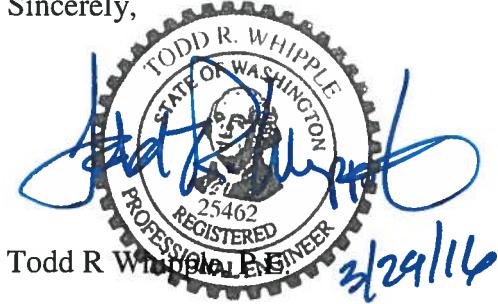
The anticipated impact fee for the development per City of Spokane impact fee schedule is anticipated to be \$107,510.95. The signal warrant analysis concluded that with the proposed development, the intersection of Fort George Wright Drive & Elliot Drive will warrant signalization.

Based upon the number of anticipated trips, and the distribution of those trips, we believe that the proposed project will have an impact on the transportation system at the intersection of Fort George Wright Drive & Elliot Drive. Therefore, we recommend that the project include with its development an initial left turn treatment project to widen Fort George Wright drive to include north and southbound left turn lanes.

We also recommend that as the development reaches 75% of its development that the project consider the installation of a traffic signal at the intersection of Fort George Wright Drive & Elliot Drive as a part of a development agreement, and that the City of Spokane Place the signal on the Transportation Improvement Plan (TIP). So that the anticipated impact fee from the development may be applied to the left turn treatment and traffic signal. We further recommend that the project be allowed to move forward with further traffic analysis to be conducted at 75% of the development or the permitting of the 162<sup>nd</sup> PM peak hour.

Should you have any questions related to this document please do not hesitate to call at (509) 893-2617.

Sincerely,



The circular seal contains the text "TODD R. WHIPPLE" at the top, "STATE OF WASHINGTON" in the center, "PROFESSIONAL ENGINEER" around the bottom, and "25462" in the center of the bottom arc. A handwritten signature "Todd R Whipple" is written over the seal, and the date "3/29/16" is written below it.

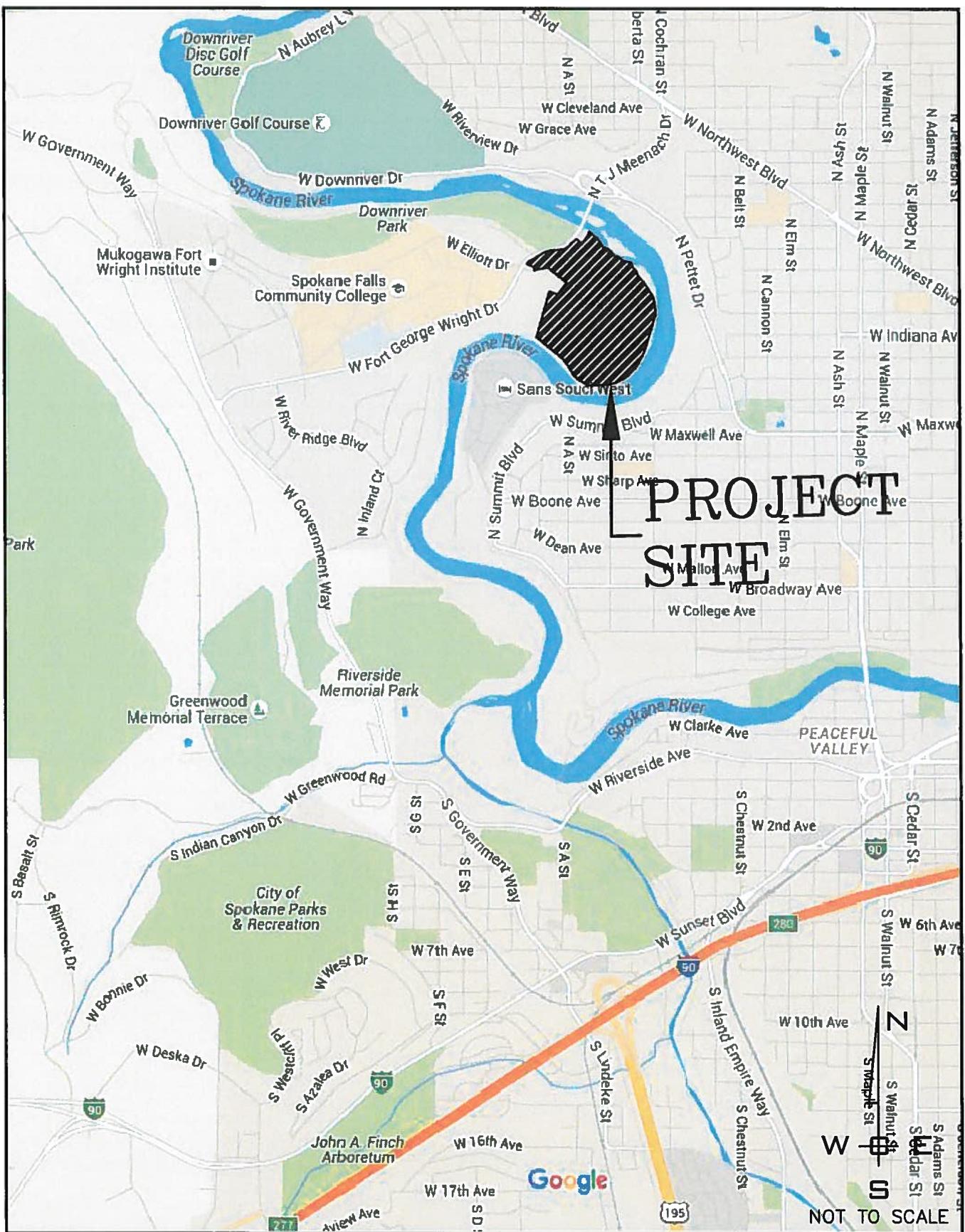
TRW/bng

encl. Appendix (Vicinity Map, Preliminary Site Plan, Trip Dist. %,)

cc: Sponsor  
File

# **APPENDIX**

- 1.Vicinity Map
- 2.Site Plan
- 3.Trip Distribution by Percentage
- 4.Traffic Impact Fee Schedule
- 5.Traffic Counts
- 6.Level of Service Calculations
- 7.Existing Warrant Analysis
- 8.Future Warrant Analysis



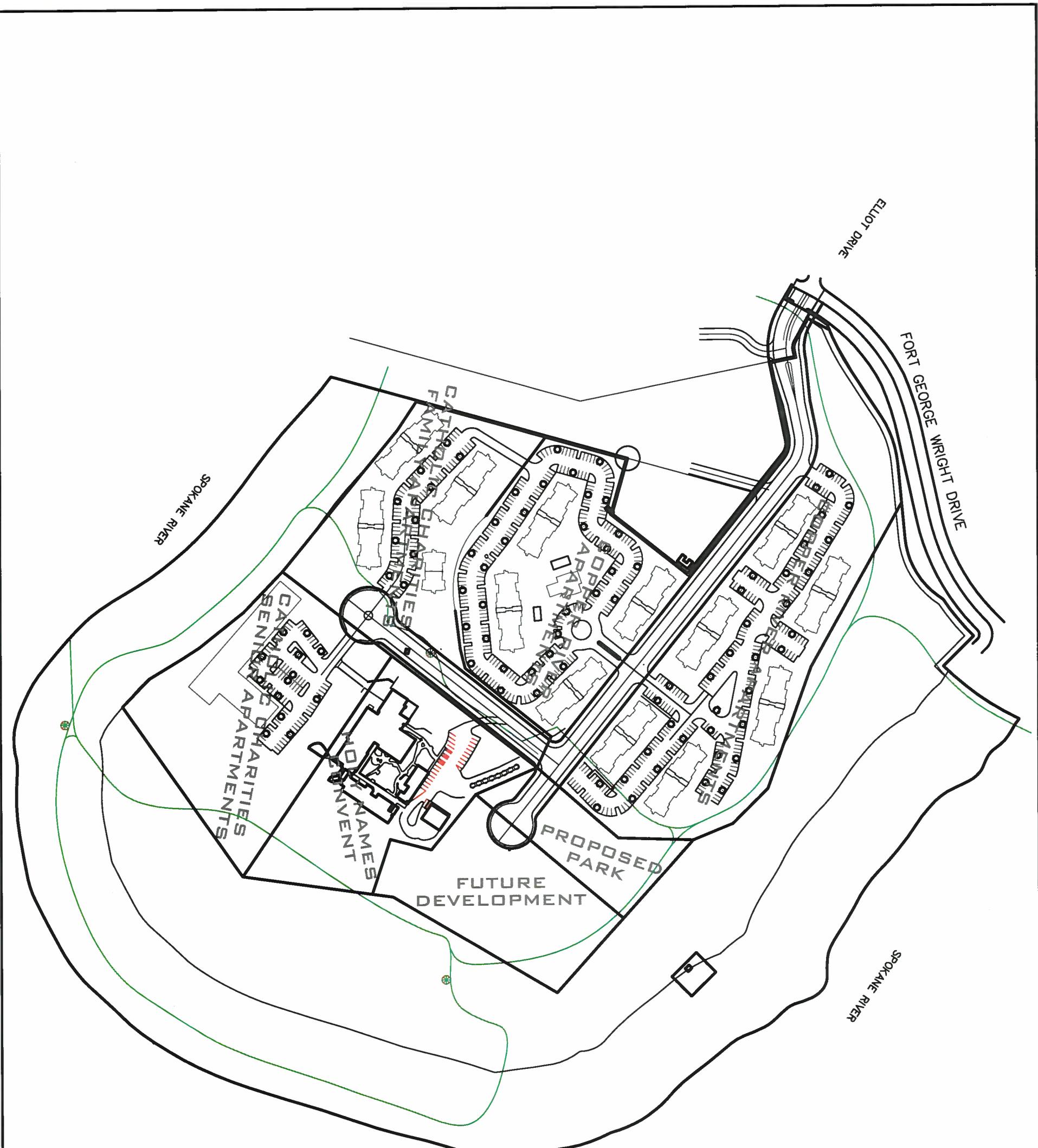
PROJ #: 15-1560  
DATE: 12/29/15  
DRAWN: BNG  
APPROVED: TRW

**TRIP GENERATION & DISTRIBUTION  
HOLY NAMES-RESIDENTIAL  
FT. GEORGE WRIGHT DR. & ELLIOT DR.  
SPOKANE, WASHINGTON**

**FIGURE 1**

**VICINITY MAP**

**WCE**  
WHIPPLE CONSULTING ENGINEERS  
CIVIL AND TRANSPORTATION ENGINEERING  
2528 NORTH SULLIVAN ROAD  
SPOKANE VALLEY, WASHINGTON 99216  
PH: 509-893-2617 FAX: 509-926-0227



NOT TO SCALE  
N E S W

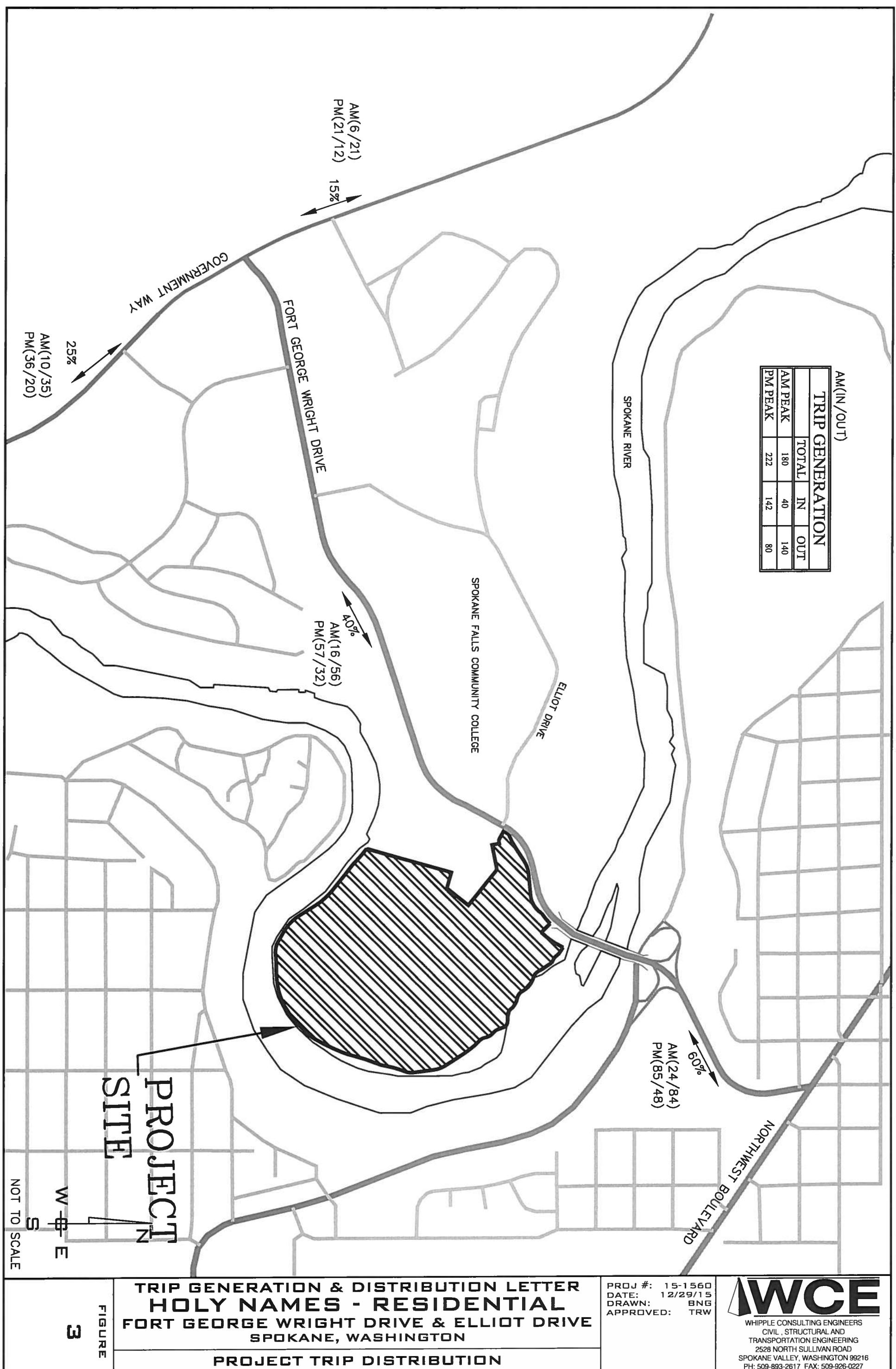
N  
FIGURE

TRIP GENERATION & DISTRIBUTION LETTER  
**HOLY NAMES - RESIDENTIAL**  
FORT GEORGE WRIGHT DRIVE & ELLIOT DRIVE  
SPOKANE, WASHINGTON

PRELIMINARY SITE PLAN

PROJ #: 15-1560  
DATE: 12/29/15  
DRAWN: BNG  
APPROVED: TRW

**WCE**  
WHIPPLE CONSULTING ENGINEERS  
CIVIL, STRUCTURAL AND  
TRANSPORTATION ENGINEERING  
2528 NORTH SULLIVAN ROAD  
SPOKANE VALLEY, WASHINGTON 99216  
PH: 509-893-2617 FAX: 509-926-0227





Northwest Service Area

## Transportation Impact Fee Schedule

Land Use	ITE Land Use Code	Unit of Measure	Fee per Unit*
<b>COST PER TRIP</b>			
<b>Residential</b>			
Single Family	210	dwelling	\$749.20
Multi Family (2 Levels or Less)	221	dwelling	\$483.49
Multi Family (3 Levels or More)	232	dwelling	\$298.33
Nursing Home	253	bed	\$100.24
Retirement Community	255	dwelling	\$170.99
Assisted Living	620	dwelling	\$129.72
<b>Commercial - Services</b>			
Hotel (3 Levels or More)	310	room	\$497.50
Hotel/Motel	320	room	\$398.31
Movie Theater	444	sq ft/GFA	\$1.88
Health Club	492	sq ft/GFA	\$1.73
Day Care	565	sq ft/GFA	\$3.97
Bank	912	sq ft/GFA	\$3.58
<b>Commercial - Institutional</b>			
Elementary School/Jr. High School	522	student	\$47.58
High School	530	student	\$44.18
University/College	550	student	\$133.14
Religious Institute	560	sq ft/GFA	\$0.43
Library	590	sq ft/GFA	\$1.55
Hospital	610	sq ft/GFA	\$0.97
<b>Commercial - Restaurant</b>			
Quality Restaurant	931	sq ft/GFA	\$3.00
High Turnover Restaurant	932	sq ft/GFA	\$4.03
Fast Food Restaurant	934	sq ft/GFA	\$7.19
Espresso Stand**	-	sq ft/GFA	\$4.30
Drinking Establishment	925	sq ft/GFA	\$2.70

Land Use	ITE Land Use Code	Unit of Measure	Fee per Unit*
<b>BASE RATE PER PM TRIP</b>			
<b>\$634</b>			
<b>COST PER TRIP</b>			
<b>Commercial - Retail</b>			
Free-Standing Discount Superstore	813	sq ft/GFA	\$1.15
Specialty Retail Center	814	sq ft/GLA	\$0.66
Hardware/Paint Store	816	sq ft/GFA	\$1.18
Nursery/Garden Center	817	sq ft/GFA	\$1.18
Shopping Center	820	sq ft/GLA	\$0.83
Car Sales - New/Used	841	sq ft/GFA	\$1.76
Tire Store	848	Service bay	\$1,292.75
Supermarket	850	sq ft/GFA	\$3.26
Convenience Market	851	sq ft/GFA	\$7.20
Pharmacy	881	sq ft/GFA	\$1.91
Furniture Store	890	sq ft/GFA	\$0.08
Video Rental	896	sq ft/GFA	\$2.95
Quick Lubrication Vehicle Shop	941	Service Bay	\$2,105.89
Auto Parts & Service Center	943	sq ft/GFA	\$1.68
Service Station/Minimart/Carwash	853	VFP	\$5,128.32
<b>Industrial</b>			
Light Industry/High Technology	110	sq ft/GFA	\$1.08
Heavy Industrial	120	sq ft/GFA	\$0.73
Industrial Park	132	sq ft/GFA	\$0.93
Manufacturing	140	sq ft/GFA	\$0.80
Warehouse/Storage	150	sq ft/GFA	\$0.61
<b>Commercial - Administrative Office</b>			
General Office	710	sq ft/GFA	\$1.45
Medical Office / Clinic	720	sq ft/GFA	\$3.16
Office Park	750	sq ft/GFA	\$1.44

VFP- Vehicle Fueling Positions (Maximum number of vehicles that can be fueled simultaneously)

GLA= Gross Leasible Area

GFA= Gross Floor Area

ITE = Institute of Transportation Engineers

\* Fee per Unit are reduced, where applicable, to account for "pass-by" trips

\*\* No ITE rates in ITE Trip Generation Manual, 8th Edition - Referenced Starbucks Study March, 2002

PROJECT: Inland - Holy Names  
 JOB NO. 15-1560  
 INTERSECTION: Ft. George Wright & Elliott Dr/Driveway

DATE OF COUNT: 1/12/2016  
 Counter Analyst  
**RMA**

APPROACH	MOVEMENT	15 Minute Period Beginning @										PM PEAK HOURS			
		3:30 PM pass	3:45 PM pass	4:00 PM pass	4:15 PM pass	4:30 PM pass	4:45 PM pass	5:00 PM pass	5:15 PM pass	5:30 PM pass	5:45 PM pass	6:00 PM pass	6:15 PM pass		
Eastbound	Left					7	5	5	15	10	8				
	Through														
	Right				1			2							
	App. Total	0	0	0	0	8	0	5	0	17	0	8	0	0	0
	Pct Trucks				0	0	0	0	0	0	0	0	0	0	0
	Left	2		3				1							
Westbound	Through														
	Right			12	11	8	6	4			2				
	App. Total	0	0	0	0	14	0	8	0	7	0	2	0	0	0
	Pct Trucks			0	0	0	0	0	0	0	0	0	0	0	0
	Left														
	Through	240	3	236	2	241	2	235	1	237	1	187	1		
Northbound	Right						1								
	App. Total	0	0	0	0	240	3	236	2	242	2	235	1	187	1
	Pct Trucks			0	0	0.012	0.008	0.008	0.008	0.004	0.004	0.004	0.004	0.005	
	Left			2		1	1								
	Through			94	2	136	1	127	1	127	1	130		115	2
	Right			1		3		2		3		3		2	
Southbound	App. Total	0	0	0	0	97	2	140	1	130	1	132	1	134	0
	Pct Trucks			0.02	0.007	0.007	0.008	0.008	0.008	0.008	0	0.017			
	Total Intersection Volume	0	0	0	0	359	5	395	3	385	3	391	2	385	1
	Intersection Pct Trucks			1.4%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.5%	0.3%	0.9%	

Intersection Total	Pct
One Hour Volumes	
Trucks	
3:30 PM	364 1.4%
3:45 PM	762 1.0%
4:00 PM	1150 1.0%
4:15 PM	1543 0.8%
4:30 PM	1565 0.6%
4:45 PM	1484 0.6%

Notes:


PROJECT:  
JOB NO.  
15-1560  
INTERSECTION:  
Fr. George Wright &

Data Transfer  
Intersection No.  
1

DATE OF COUNT: 1/12/2016

Elliott Dr/Driveway

Counter Analyst

RMA

APPROACH	MOVEMENT	4:30 PM		4:45 PM		5:00 PM		5:15 PM		TOTAL	P.H.F.	Pct Trucks
		pass	trk	pass	trk	pass	trk	pass	trk			
Eastbound	Left	5	5	5	5	15	15	10	10	35	0.58	0%
	Through									0		
	Right					2				2	0.25	0%
	App. Total	5	0	5	0	17	0	10	0	37	0.54	
	Pct Trucks	0	0	0	0	0	0	0	0			
Westbound	Left	3			1					4	0.33	0%
	Through									0		
	Right	11	8	6	4					29	0.66	0%
	App. Total	14	0	8	0	7	0	4	0	33	0.59	
	Pct Trucks	0	0	0	0	0	0	0	0			
Northbound	Left									0		
	Through	236	2	241	2	235	1	237	1	955	0.98	1%
	Right			1						1	0.25	0%
	App. Total	236	2	242	2	235	1	237	1	956	0.98	
	Pct Trucks	0	0.008403	0.008197	0.004237	0.004202						
Southbound	Left	1	1	2		1		1		5	0.63	0%
	Through	136	1	127	1	127	1	130		523	0.95	1%
	Right	3		2		3		3		11	0.92	0%
	App. Total	140	1	130	1	132	1	134	0	539	0.96	
	Pct Trucks	0.007092	0.007634	0.007519	0.007519	0.007519	0	0	0			
Total Intersection Volume		395	3	385	3	391	2	385	1	1565	0.98	
Intersection Pct Trucks		0.8%		0.8%		0.8%		0.5%		0.3%		

Pedestrian Calls

APPROACH	MOVEMENT	4:30 PM		4:45 PM		5:00 PM		5:15 PM		TOTAL	Pct bike	Pct ped
		ped	bike	ped	bike	ped	bike	ped	bike			
Eastbound	Through									0		
Westbound	Through									0		
N orthbound	Through									0		
Southbound	Through									0		
App. Total	0	0	0	0	0	0	0	0	0	0		

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

Elliott Dr. :  
 W. of Ft. Wright :  
 30 MPH :

Site: Ft. Wright Dr.  
 7/20/2015  
 Monday

#### Daily Volume

Interval Start	WB	EB	Combined	Interval Start	WB	EB	Combined
12:00 AM	-	-	-	12:00 PM	-	-	-
12:15 AM	-	-	-	12:15 PM	-	-	-
12:30 AM	-	-	-	12:30 PM	-	-	-
12:45 AM	-	-	-	12:45 PM	-	-	-
1:00 AM	-	-	-	1:00 PM	-	12	-
1:15 AM	-	-	-	1:15 PM	-	-	-
1:30 AM	-	-	-	1:30 PM	7	6	13
1:45 AM	-	-	-	1:45 PM	5	1	6
2:00 AM	-	-	-	2:00 PM	2	10	15
2:15 AM	-	-	-	2:15 PM	1	3	4
2:30 AM	-	-	-	2:30 PM	4	6	10
2:45 AM	-	-	-	2:45 PM	3	3	6
3:00 AM	-	-	-	3:00 PM	5	29	1
3:15 AM	-	-	-	3:15 PM	16	1	17
3:30 AM	-	-	-	3:30 PM	6	1	7
3:45 AM	-	-	-	3:45 PM	2	0	2
4:00 AM	-	-	-	4:00 PM	3	18	4
4:15 AM	-	-	-	4:15 PM	4	0	4
4:30 AM	-	-	-	4:30 PM	8	2	10
4:45 AM	-	-	-	4:45 PM	3	2	5
5:00 AM	-	-	-	5:00 PM	2	5	0
5:15 AM	-	-	-	5:15 PM	2	3	5
5:30 AM	-	-	-	5:30 PM	0	1	1
5:45 AM	-	-	-	5:45 PM	1	1	2
6:00 AM	-	-	-	6:00 PM	0	6	2
6:15 AM	-	-	-	6:15 PM	4	0	4
6:30 AM	-	-	-	6:30 PM	2	0	2
6:45 AM	-	-	-	6:45 PM	0	1	1
7:00 AM	-	-	-	7:00 PM	0	1	0
7:15 AM	-	-	-	7:15 PM	0	0	0
7:30 AM	-	-	-	7:30 PM	0	0	0
7:45 AM	-	-	-	7:45 PM	1	0	1
8:00 AM	-	-	-	8:00 PM	4	4	0
8:15 AM	-	-	-	8:15 PM	0	0	0
8:30 AM	-	-	-	8:30 PM	0	0	0
8:45 AM	-	-	-	8:45 PM	0	1	1
9:00 AM	-	-	-	9:00 PM	0	1	0
9:15 AM	-	-	-	9:15 PM	0	0	0
9:30 AM	-	-	-	9:30 PM	1	0	1
9:45 AM	-	-	-	9:45 PM	0	0	0
10:00 AM	-	-	-	10:00 PM	0	2	2
10:15 AM	-	-	-	10:15 PM	2	1	3
10:30 AM	-	-	-	10:30 PM	0	0	0
10:45 AM	-	-	-	10:45 PM	0	0	0
11:00 AM	-	-	-	11:00 PM	0	0	0
11:15 AM	-	-	-	11:15 PM	0	0	0
11:30 AM	-	-	-	11:30 PM	0	0	0
11:45 AM	-	-	-	11:45 PM	0	0	0

#### Volume Totals

	WB	EB	Combined
12:00 AM - 12:00 PM	0	0	0
12:00 PM - 12:00 AM	88 (66.2%)	45 (33.8%)	133
24 Hours	88 (66.2%)	45 (33.8%)	133

#### Peak Hours

	WB	EB	Combined
12:00 AM - 12:00 PM	-	-	-
Volume	-	-	-
Factor	-	-	-
12:00 PM - 12:00 AM	2:45 PM	2:00 PM	2:30 PM
Volume	30	15	39
Factor	0.47	0.63	0.57

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

ELIOTT DR.  
 W. OF FT. WRIGHT  
 30 MPH

Site: FT. WRIGHT DR.  
 7/21/2015  
 Tuesday

Daily Volume

Interval Start	WB	EB	Combined	Interval Start	WB	EB	Combined
12:00 AM	0	1	0	12:00 PM	3	25	4
12:15 AM	0	0	0	12:15 PM	4	6	10
12:30 AM	0	0	0	12:30 PM	10	4	14
12:45 AM	1	1	2	12:45 PM	8	9	17
1:00 AM	1	1	0	1:00 PM	11	26	3
1:15 AM	0	0	0	1:15 PM	4	1	5
1:30 AM	0	0	0	1:30 PM	5	3	8
1:45 AM	0	0	0	1:45 PM	6	4	10
2:00 AM	0	0	0	2:00 PM	2	9	3
2:15 AM	0	0	0	2:15 PM	4	4	8
2:30 AM	0	0	0	2:30 PM	3	2	5
2:45 AM	0	0	0	2:45 PM	0	4	4
3:00 AM	0	0	0	3:00 PM	6	18	5
3:15 AM	0	0	0	3:15 PM	5	0	5
3:30 AM	0	0	0	3:30 PM	4	2	6
3:45 AM	0	1	1	3:45 PM	3	1	4
4:00 AM	0	3	2	4:00 PM	6	19	1
4:15 AM	0	3	3	4:15 PM	0	2	2
4:30 AM	2	2	4	4:30 PM	8	0	8
4:45 AM	1	0	1	4:45 PM	5	1	6
5:00 AM	0	0	0	5:00 PM	6	8	3
5:15 AM	0	1	1	5:15 PM	1	6	7
5:30 AM	0	1	1	5:30 PM	0	2	2
5:45 AM	0	3	3	5:45 PM	1	3	4
6:00 AM	0	1	1	6:00 PM	0	3	2
6:15 AM	0	1	1	6:15 PM	1	0	1
6:30 AM	1	1	2	6:30 PM	0	2	2
6:45 AM	0	5	5	6:45 PM	2	0	2
7:00 AM	0	0	2	7:00 PM	1	6	1
7:15 AM	0	12	12	7:15 PM	3	2	5
7:30 AM	0	4	4	7:30 PM	2	1	3
7:45 AM	0	8	8	7:45 PM	0	0	0
8:00 AM	0	4	8	8:00 PM	4	14	1
8:15 AM	0	4	4	8:15 PM	3	0	3
8:30 AM	1	15	16	8:30 PM	4	0	4
8:45 AM	3	40	43	8:45 PM	3	1	4
9:00 AM	2	7	6	9:00 PM	1	1	0
9:15 AM	1	3	4	9:15 PM	0	0	0
9:30 AM	2	7	9	9:30 PM	0	0	0
9:45 AM	2	4	6	9:45 PM	0	0	0
10:00 AM	3	21	3	10:00 PM	0	1	0
10:15 AM	1	2	3	10:15 PM	0	1	1
10:30 AM	3	4	7	10:30 PM	1	0	1
10:45 AM	14	13	27	10:45 PM	0	0	0
11:00 AM	12	26	5	11:00 PM	0	0	0
11:15 AM	3	5	8	11:15 PM	0	0	0
11:30 AM	6	1	7	11:30 PM	0	0	0
11:45 AM	5	3	8	11:45 PM	0	0	0

Volume Totals

	WB	EB	Combined
12:00 AM - 12:00 PM	64 (27.2%)	171 (72.8%)	235
12:00 PM - 12:00 AM	130 (60.7%)	84 (39.3%)	214
24 Hours	194 (43.2%)	255 (56.8%)	449

Peak Hours

	WB	EB	Combined
12:00 AM - 12:00 PM	10:45 AM	8:00 AM	8:00 AM
Volume	35	67	71
Factor	0.63	0.42	0.41
12:00 PM - 12:00 AM	12:15 PM	12:00 PM	12:15 PM
Volume	33	23	55
Factor	0.75	0.64	0.81

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

Elliott DR. :  
 W. OF FT. WRIGHT :  
 30 MPH :

Site: FT. WRIGHT DR.  
 7/22/2015  
 Wednesday

#### Daily Volume

Interval Start	WB	EB	Combined	Interval Start	WB	EB	Combined
12:00 AM	0	2	0	1	0	3	
12:15 AM	1	0	0	1			
12:30 AM	1	0	0	1			
12:45 AM	0	1	0	1			
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0			
1:30 AM	0	0	0	0			
1:45 AM	0	0	0	0			
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0			
2:30 AM	0	0	0	0			
2:45 AM	0	0	0	0			
3:00 AM	0	0	0	1	0	1	
3:15 AM	0	0	0	0			
3:30 AM	0	0	0	0			
3:45 AM	0	1	0	1			
4:00 AM	0	2	1	9	1	11	
4:15 AM	0	6	0	6			
4:30 AM	2	1	0	3			
4:45 AM	0	1	0	1			
5:00 AM	0	0	0	3	0	3	
5:15 AM	0	0	0	0			
5:30 AM	0	1	0	1			
5:45 AM	0	2	0	2			
6:00 AM	0	0	1	4	1	4	
6:15 AM	0	1	0	1			
6:30 AM	0	0	0	0			
6:45 AM	0	2	0	2			
7:00 AM	0	1	6	27	6	28	
7:15 AM	0	8	0	8			
7:30 AM	0	7	0	7			
7:45 AM	1	6	0	7			
8:00 AM	0	7	4	43	4	50	
8:15 AM	2	8	0	10			
8:30 AM	2	7	0	9			
8:45 AM	3	24	0	27			
9:00 AM	2	5	11	28	13	33	
9:15 AM	1	3	0	4			
9:30 AM	1	8	0	9			
9:45 AM	1	6	0	7			
10:00 AM	1	18	2	27	3	45	
10:15 AM	3	5	0	8			
10:30 AM	6	6	0	12			
10:45 AM	8	14	0	22			
11:00 AM	6	16	9	15	15	31	
11:15 AM	6	0	0	6			
11:30 AM	2	1	0	3			
11:45 AM	2	5	0	7			
Volume Totals							
				WB	EB	Combined	
12:00 AM - 12:00 PM				51 (24.4%)	158 (75.6%)	209	
12:00 PM - 12:00 AM				137 (64.3%)	76 (35.7%)	213	
24 Hours				188 (44.5%)	234 (55.5%)	422	
Peak Hours							
				WB	EB	Combined	
12:00 AM - 12:00 PM				10:30 AM	8:15 AM	8:15 AM	
Volume				26	50	59	
Factor				0.81	0.52	0.55	
12:00 PM - 12:00 AM				12:15 PM	12:00 PM	12:15 PM	
Volume				39	24	58	
Factor				0.81	0.86	0.76	

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA 99224  
 (509) 979-3331

ELLIOTT DR. :  
 W. OF FT. WRIGHT :  
 30 MPH :

Site: FT. WRIGHT DR.  
 7/23/2015  
 Thursday

#### Daily Volume

Interval Start	WB	EB	Combined	Interval Start	WB	EB	Combined
12:00 AM	0	0	1	12:00 PM	6	71	73
12:15 AM	0	0	0	12:15 PM	7	5	12
12:30 AM	0	0	0	12:30 PM	1	7	8
12:45 AM	0	0	0	12:45 PM	17	9	26
1:00 AM	0	0	0	1:00 PM	9	21	10
1:15 AM	0	0	0	1:15 PM	2	3	5
1:30 AM	0	0	0	1:30 PM	4	2	6
1:45 AM	0	0	0	1:45 PM	6	2	8
2:00 AM	0	0	0	2:00 PM	2	11	13
2:15 AM	0	0	0	2:15 PM	4	1	5
2:30 AM	0	0	0	2:30 PM	3	3	6
2:45 AM	0	0	0	2:45 PM	2	2	4
3:00 AM	0	0	3	3:00 PM	1	18	19
3:15 AM	0	0	0	3:15 PM	4	2	6
3:30 AM	0	0	0	3:30 PM	11	3	14
3:45 AM	0	3	3	3:45 PM	2	1	3
4:00 AM	0	2	7	4:00 PM	0	12	12
4:15 AM	0	6	6	4:15 PM	1	1	2
4:30 AM	2	1	3	4:30 PM	4	3	7
4:45 AM	0	0	0	4:45 PM	7	2	9
5:00 AM	0	0	3	5:00 PM	4	8	12
5:15 AM	0	1	1	5:15 PM	2	3	5
5:30 AM	0	0	0	5:30 PM	1	2	3
5:45 AM	0	2	2	5:45 PM	1	1	2
6:00 AM	0	1	5	6:00 PM	0	4	1
6:15 AM	0	1	1	6:15 PM	1	0	1
6:30 AM	1	1	2	6:30 PM	1	0	1
6:45 AM	0	1	1	6:45 PM	2	1	3
7:00 AM	0	0	3	7:00 PM	1	4	5
7:15 AM	0	8	8	7:15 PM	0	0	0
7:30 AM	0	7	7	7:30 PM	2	0	2
7:45 AM	0	5	5	7:45 PM	1	0	1
8:00 AM	1	6	55				
8:15 AM	1	5	6				
8:30 AM	1	12	13				
8:45 AM	3	34	37				
9:00 AM	2	12	10	12:00 AM - 12:00 PM	72 (32.0%)	153 (68.0%)	225
9:15 AM	2	8	10	12:00 PM - 12:00 AM	109 (63.0%)	64 (37.0%)	173
9:30 AM	8	5	13	24 Hours	181 (45.5%)	217 (54.5%)	398
9:45 AM	0	4	4				
10:00 AM	3	28	3				
10:15 AM	7	2	9				
10:30 AM	4	4	8				
10:45 AM	14	10	24				
11:00 AM	13	23	2				
11:15 AM	4	3	7				
11:30 AM	4	4	8				
11:45 AM	2	1	3				

#### Volume Totals

	WB	EB	Combined
12:00 AM - 12:00 PM	72 (32.0%)	153 (68.0%)	225
12:00 PM - 12:00 AM	109 (63.0%)	64 (37.0%)	173
24 Hours	181 (45.5%)	217 (54.5%)	398

#### Peak Hours

	WB	EB	Combined
12:00 AM - 12:00 PM	10:15 AM	8:30 AM	8:30 AM
Volume		38	72
Factor		0.68	0.49
12:00 PM - 12:00 AM	12:15 PM	12:00 PM	12:15 PM
Volume		34	56
Factor		0.50	0.54

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 N. OF ELLIOTT DR. :  
 35 MPH :

Site: FT.WRIGHT DR.  
 7/20/2015  
 Monday

Daily Volume, per Channel (Volume factor 0.500)

SB			
Interval Start	Interval Start		
12:00 AM	-	12:00 PM	-
12:15 AM	-	12:15 PM	-
12:30 AM	-	12:30 PM	-
12:45 AM	-	12:45 PM	-
1:00 AM	-	1:00 PM	-
1:15 AM	-	1:15 PM	161
1:30 AM	-	1:30 PM	162
1:45 AM	-	1:45 PM	152
2:00 AM	-	2:00 PM	156
2:15 AM	-	2:15 PM	155
2:30 AM	-	2:30 PM	184
2:45 AM	-	2:45 PM	239
3:00 AM	-	3:00 PM	196
3:15 AM	-	3:15 PM	255
3:30 AM	-	3:30 PM	250
3:45 AM	-	3:45 PM	252
4:00 AM	-	4:00 PM	268
4:15 AM	-	4:15 PM	294
4:30 AM	-	4:30 PM	294
4:45 AM	-	4:45 PM	292
5:00 AM	-	5:00 PM	288
5:15 AM	-	5:15 PM	300
5:30 AM	-	5:30 PM	254
5:45 AM	-	5:45 PM	171
6:00 AM	-	6:00 PM	146
6:15 AM	-	6:15 PM	192
6:30 AM	-	6:30 PM	134
6:45 AM	-	6:45 PM	106
7:00 AM	-	7:00 PM	112
7:15 AM	-	7:15 PM	120
7:30 AM	-	7:30 PM	95
7:45 AM	-	7:45 PM	95
8:00 AM	-	8:00 PM	94
8:15 AM	-	8:15 PM	79
8:30 AM	-	8:30 PM	114
8:45 AM	-	8:45 PM	62
9:00 AM	-	9:00 PM	80
9:15 AM	-	9:15 PM	83
9:30 AM	-	9:30 PM	54
9:45 AM	-	9:45 PM	63
10:00 AM	-	10:00 PM	53
10:15 AM	-	10:15 PM	68
10:30 AM	-	10:30 PM	70
10:45 AM	-	10:45 PM	78
11:00 AM	-	11:00 PM	124
11:15 AM	-	11:15 PM	188
11:30 AM	-	11:30 PM	92
11:45 AM	-	11:45 PM	60

24 Hour Total 6685

12:00 AM - 12:00 PM

12 Hour Count 0  
 Peak Hour -  
 Peak Volume -  
 Factor -

12:00 PM - 12:00 AM

12 Hour Count 6685  
 Peak Hour 4:30 PM  
 Peak Volume 1174  
 Factor 0.98

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 N. OF ELLIOTT DR. :  
 35 MPH :

Site: FT.WRIGHT DR.  
 7/21/2015  
 Tuesday

Daily Volume, per Channel (Volume factor 0.500)

SB				
Interval Start		Interval Start		
12:00 AM	62	162		
12:15 AM	46	12:00 PM	182	695
12:30 AM	32	12:15 PM	146	
12:45 AM	22	12:30 PM	180	
1:00 AM	26	12:45 PM	187	
1:15 AM	28	1:00 PM	180	702
1:30 AM	25	1:15 PM	196	
1:45 AM	28	1:30 PM	172	
2:00 AM	17	1:45 PM	154	
2:15 AM	17	2:00 PM	168	763
2:30 AM	16	2:15 PM	206	
2:45 AM	15	2:30 PM	165	
3:00 AM	14	2:45 PM	204	
3:15 AM	21	3:00 PM	203	891
3:30 AM	13	3:15 PM	198	
3:45 AM	10	3:30 PM	240	
4:00 AM	10	3:45 PM	250	
4:15 AM	19	4:00 PM	276	1156
4:30 AM	18	4:15 PM	298	
4:45 AM	24	4:30 PM	318	
5:00 AM	24	4:45 PM	264	
5:15 AM	42	5:00 PM	310	1129
5:30 AM	20	5:15 PM	358	
5:45 AM	34	5:30 PM	258	
6:00 AM	28	5:45 PM	203	
6:15 AM	48	6:00 PM	197	607
6:30 AM	86	6:15 PM	147	
6:45 AM	60	6:30 PM	143	
7:00 AM	74	6:45 PM	120	
7:15 AM	102	7:00 PM	146	482
7:30 AM	115	7:15 PM	108	
7:45 AM	126	7:30 PM	120	
8:00 AM	108	7:45 PM	108	
8:15 AM	93	8:00 PM	116	449
8:30 AM	117	8:15 PM	101	
8:45 AM	150	8:30 PM	128	
9:00 AM	115	8:45 PM	104	
9:15 AM	104	9:00 PM	84	316
9:30 AM	120	9:15 PM	102	
9:45 AM	109	9:30 PM	80	
10:00 AM	137	9:45 PM	50	
10:15 AM	123	10:00 PM	50	233
10:30 AM	130	10:15 PM	80	
10:45 AM	164	10:30 PM	51	
11:00 AM	160	10:45 PM	52	
11:15 AM	118	11:00 PM	66	185
11:30 AM	154	11:15 PM	56	
11:45 AM	168	11:30 PM	35	
		11:45 PM	28	

24 Hour Total 10900

**12:00 AM - 12:00 PM**

12 Hour Count 3292  
 Peak Hour 11:00 AM  
 Peak Volume 600  
 Factor 0.89

**12:00 PM - 12:00 AM**

12 Hour Count 7608  
 Peak Hour 4:30 PM  
 Peak Volume 1250  
 Factor 0.87

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

-T. WRIGHT DR. :  
 N. OF ELLIOTT DR. :  
 35 MPH :

Site: FT.WRIGHT DR.  
 7/22/2015  
 Wednesday

Daily Volume, per Channel (Volume factor 0.500)

SB		
Interval Start		Interval Start
12:00 AM	35	106
12:15 AM	16	
12:30 AM	26	
12:45 AM	29	
1:00 AM	22	96
1:15 AM	32	
1:30 AM	24	
1:45 AM	18	
2:00 AM	7	37
2:15 AM	8	
2:30 AM	10	
2:45 AM	12	
3:00 AM	15	45
3:15 AM	14	
3:30 AM	5	
3:45 AM	11	
4:00 AM	8	55
4:15 AM	12	
4:30 AM	14	
4:45 AM	21	
5:00 AM	28	116
5:15 AM	19	
5:30 AM	34	
5:45 AM	35	
6:00 AM	48	251
6:15 AM	50	
6:30 AM	93	
6:45 AM	60	
7:00 AM	86	429
7:15 AM	94	
7:30 AM	118	
7:45 AM	131	
8:00 AM	108	464
8:15 AM	86	
8:30 AM	122	
8:45 AM	148	
9:00 AM	126	492
9:15 AM	102	
9:30 AM	116	
9:45 AM	148	
10:00 AM	112	599
10:15 AM	138	
10:30 AM	170	
10:45 AM	179	
11:00 AM	122	551
11:15 AM	148	
11:30 AM	146	
11:45 AM	135	

24 Hour Total

11164

**12:00 AM - 12:00 PM**

12 Hour Count	3241
Peak Hour	10:30 AM
Peak Volume	619
Factor	0.86

**12:00 PM - 12:00 AM**

12 Hour Count	7923
Peak Hour	4:15 PM
Peak Volume	1318
Factor	0.92

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 N. OF ELLIOTT DR. :  
 35 MPH :

Site: FT.WRIGHT DR.  
 7/23/2015  
 Thursday

Daily Volume, per Channel (Volume factor 0.500)

SB		
Interval Start		Interval Start
12:00 AM	36	128
12:15 AM	45	
12:30 AM	23	
12:45 AM	24	
1:00 AM	24	78
1:15 AM	21	
1:30 AM	16	
1:45 AM	17	
2:00 AM	10	33
2:15 AM	12	
2:30 AM	8	
2:45 AM	3	
3:00 AM	12	48
3:15 AM	14	
3:30 AM	10	
3:45 AM	12	
4:00 AM	6	48
4:15 AM	20	
4:30 AM	12	
4:45 AM	10	
5:00 AM	11	112
5:15 AM	35	
5:30 AM	34	
5:45 AM	32	
6:00 AM	40	231
6:15 AM	50	
6:30 AM	70	
6:45 AM	71	
7:00 AM	84	398
7:15 AM	86	
7:30 AM	120	
7:45 AM	108	
8:00 AM	102	452
8:15 AM	82	
8:30 AM	118	
8:45 AM	150	
9:00 AM	98	481
9:15 AM	142	
9:30 AM	116	
9:45 AM	125	
10:00 AM	134	603
10:15 AM	153	
10:30 AM	126	
10:45 AM	190	
11:00 AM	138	619
11:15 AM	180	
11:30 AM	154	
11:45 AM	147	

24 Hour Total 9589

**12:00 AM - 12:00 PM**

12 Hour Count 3231  
 Peak Hour 10:45 AM  
 Peak Volume 662  
 Factor 0.87

**12:00 PM - 12:00 AM**

12 Hour Count 6358  
 Peak Hour 4:30 PM  
 Peak Volume 1306  
 Factor 0.93

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 N. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR.  
 7/20/2015  
 Monday

Daily Volume, per Channel (Volume factor 0.500)

NB		
Interval Start	Interval Start	
12:00 AM	-	-
12:15 AM	-	-
12:30 AM	-	-
12:45 AM	-	-
1:00 AM	-	-
1:15 AM	-	409
1:30 AM	-	128
1:45 AM	-	139
2:00 AM	-	142
2:15 AM	-	147
2:30 AM	-	500
2:45 AM	-	118
3:00 AM	-	129
3:15 AM	-	106
3:30 AM	-	128
3:45 AM	-	560
4:00 AM	-	136
4:15 AM	-	153
4:30 AM	-	143
4:45 AM	-	128
5:00 AM	-	556
5:15 AM	-	138
5:30 AM	-	140
5:45 AM	-	150
6:00 AM	-	166
6:15 AM	-	672
6:30 AM	-	177
6:45 AM	-	128
7:00 AM	-	163
7:15 AM	-	166
7:30 AM	-	165
7:45 AM	-	554
8:00 AM	-	146
8:15 AM	-	96
8:30 AM	-	332
8:45 AM	-	78
9:00 AM	-	96
9:15 AM	-	7:30 PM
9:30 AM	-	60
9:45 AM	-	8:45 PM
10:00 AM	-	70
10:15 AM	-	272
10:30 AM	-	64
10:45 AM	-	8:30 PM
11:00 AM	-	74
11:15 AM	-	8:45 PM
11:30 AM	-	64
11:45 AM	-	9:00 PM
		57
		226
		9:15 PM
		64
		9:30 PM
		55
		9:45 PM
		50
		10:00 PM
		46
		10:15 PM
		36
		10:30 PM
		30
		10:45 PM
		34
		11:00 PM
		14
		11:15 PM
		20
		11:30 PM
		28
		11:45 PM
		19

24 Hour Total 4308

**12:00 AM - 12:00 PM**

12 Hour Count 0  
 Peak Hour -  
 Peak Volume -  
 Factor -

**12:00 PM - 12:00 AM**

12 Hour Count 4308  
 Peak Hour 5:00 PM  
 Peak Volume 672  
 Factor 0.95

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 N. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR.  
 7/21/2015  
 Tuesday

Daily Volume, per Channel (Volume factor 0.500)

NB		
Interval Start		Interval Start
12:00 AM	16	46
12:15 AM	6	
12:30 AM	11	
12:45 AM	13	
1:00 AM	11	34
1:15 AM	7	
1:30 AM	7	
1:45 AM	9	
2:00 AM	4	20
2:15 AM	3	
2:30 AM	7	
2:45 AM	6	
3:00 AM	14	51
3:15 AM	9	
3:30 AM	7	
3:45 AM	21	
4:00 AM	28	131
4:15 AM	21	
4:30 AM	40	
4:45 AM	42	
5:00 AM	65	387
5:15 AM	102	
5:30 AM	128	
5:45 AM	92	
6:00 AM	88	536
6:15 AM	110	
6:30 AM	148	
6:45 AM	190	
7:00 AM	142	748
7:15 AM	175	
7:30 AM	203	
7:45 AM	228	
8:00 AM	148	622
8:15 AM	144	
8:30 AM	154	
8:45 AM	176	
9:00 AM	106	487
9:15 AM	126	
9:30 AM	124	
9:45 AM	131	
10:00 AM	98	458
10:15 AM	88	
10:30 AM	128	
10:45 AM	144	
11:00 AM	128	528
11:15 AM	134	
11:30 AM	126	
11:45 AM	140	
<b>24 Hour Total</b>		8918

**12:00 AM - 12:00 PM**

12 Hour Count 4048  
 Peak Hour 7:15 AM  
 Peak Volume 754  
 Factor 0.83

**12:00 PM - 12:00 AM**

12 Hour Count 4870  
 Peak Hour 4:30 PM  
 Peak Volume 659  
 Factor 0.91

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

- FT. WRIGHT DR. :  
 N. OF ELLIOTT DR. :  
 35 MPH :  
 :

Site: FT. WRIGHT DR.  
 7/22/2015  
 Wednesday

Daily Volume, per Channel (Volume factor 0.500)

NB		
Interval Start		Interval Start
12:00 AM	23	52
12:15 AM	7	
12:30 AM	14	
12:45 AM	8	
1:00 AM	7	32
1:15 AM	10	
1:30 AM	7	
1:45 AM	8	
2:00 AM	10	30
2:15 AM	7	
2:30 AM	7	
2:45 AM	6	
3:00 AM	7	54
3:15 AM	15	
3:30 AM	17	
3:45 AM	15	
4:00 AM	23	120
4:15 AM	32	
4:30 AM	25	
4:45 AM	40	
5:00 AM	56	356
5:15 AM	74	
5:30 AM	135	
5:45 AM	91	
6:00 AM	78	501
6:15 AM	106	
6:30 AM	141	
6:45 AM	176	
7:00 AM	152	719
7:15 AM	184	
7:30 AM	209	
7:45 AM	174	
8:00 AM	136	585
8:15 AM	149	
8:30 AM	128	
8:45 AM	172	
9:00 AM	118	495
9:15 AM	118	
9:30 AM	131	
9:45 AM	128	
10:00 AM	108	442
10:15 AM	116	
10:30 AM	106	
10:45 AM	112	
11:00 AM	99	455
11:15 AM	105	
11:30 AM	115	
11:45 AM	136	

24 Hour Total 8586

**12:00 AM - 12:00 PM**

12 Hour Count 3841  
 Peak Hour 6:45 AM  
 Peak Volume 721  
 Factor 0.86

**12:00 PM - 12:00 AM**

12 Hour Count 4745  
 Peak Hour 4:45 PM  
 Peak Volume 585  
 Factor 0.82

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 N. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR.  
 7/23/2015  
 Thursday

Daily Volume, per Channel (Volume factor 0.500)

NB		
Interval Start		Interval Start
12:00 AM	20	47
12:15 AM	13	
12:30 AM	8	
12:45 AM	6	
1:00 AM	14	39
1:15 AM	9	
1:30 AM	8	
1:45 AM	8	
2:00 AM	4	36
2:15 AM	10	
2:30 AM	8	
2:45 AM	14	
3:00 AM	11	48
3:15 AM	8	
3:30 AM	15	
3:45 AM	14	
4:00 AM	18	117
4:15 AM	35	
4:30 AM	32	
4:45 AM	32	
5:00 AM	54	362
5:15 AM	92	
5:30 AM	134	
5:45 AM	82	
6:00 AM	75	479
6:15 AM	98	
6:30 AM	148	
6:45 AM	158	
7:00 AM	148	717
7:15 AM	192	
7:30 AM	199	
7:45 AM	178	
8:00 AM	132	611
8:15 AM	146	
8:30 AM	146	
8:45 AM	187	
9:00 AM	117	466
9:15 AM	124	
9:30 AM	105	
9:45 AM	120	
10:00 AM	102	440
10:15 AM	108	
10:30 AM	120	
10:45 AM	110	
11:00 AM	119	464
11:15 AM	127	
11:30 AM	110	
11:45 AM	108	

24 Hour Total 7606

**12:00 AM - 12:00 PM**

12 Hour Count 3826  
 Peak Hour 7:00 AM  
 Peak Volume 717  
 Factor 0.90

**12:00 PM - 12:00 AM**

12 Hour Count 3780  
 Peak Hour 12:15 PM  
 Peak Volume 551  
 Factor 0.94

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 S. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR  
 7/20/2015  
 Monday

Daily Volume, per Channel (Volume factor 0.500)

SB		Interval Start	Interval Start	
		12:00 AM	-	
		12:15 AM	-	
		12:30 AM	-	
		12:45 AM	-	
		1:00 AM	-	
		1:15 AM	-	
		1:30 AM	-	
		1:45 AM	-	
		2:00 AM	-	
		2:15 AM	-	
		2:30 AM	-	
		2:45 AM	-	
		3:00 AM	-	
		3:15 AM	-	
		3:30 AM	-	
		3:45 AM	-	
		4:00 AM	-	
		4:15 AM	-	
		4:30 AM	-	
		4:45 AM	-	
		5:00 AM	-	
		5:15 AM	-	
		5:30 AM	-	
		5:45 AM	-	
		6:00 AM	-	
		6:15 AM	-	
		6:30 AM	-	
		6:45 AM	-	
		7:00 AM	-	
		7:15 AM	-	
		7:30 AM	-	
		7:45 AM	-	
		8:00 AM	-	
		8:15 AM	-	
		8:30 AM	-	
		8:45 AM	-	
		9:00 AM	-	
		9:15 AM	-	
		9:30 AM	-	
		9:45 AM	-	
		10:00 AM	-	
		10:15 AM	-	
		10:30 AM	-	
		10:45 AM	-	
		11:00 AM	-	
		11:15 AM	-	
		11:30 AM	-	
		11:45 AM	-	
		24 Hour Total	4298	

**12:00 AM - 12:00 PM**

12 Hour Count 0  
 Peak Hour -  
 Peak Volume -  
 Factor -

**12:00 PM - 12:00 AM**

12 Hour Count 4298  
 Peak Hour 5:00 PM  
 Peak Volume 691  
 Factor 0.95

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 S. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR  
 7/21/2015  
 Tuesday

Daily Volume, per Channel (Volume factor 0.500)

SB		
Interval Start		Interval Start
12:00 AM	18	47
12:15 AM	5	
12:30 AM	11	
12:45 AM	13	
1:00 AM	10	34
1:15 AM	6	
1:30 AM	9	
1:45 AM	9	
2:00 AM	3	18
2:15 AM	4	
2:30 AM	7	
2:45 AM	4	
3:00 AM	14	45
3:15 AM	10	
3:30 AM	4	
3:45 AM	17	
4:00 AM	28	125
4:15 AM	20	
4:30 AM	34	
4:45 AM	43	
5:00 AM	66	400
5:15 AM	100	
5:30 AM	134	
5:45 AM	100	
6:00 AM	84	536
6:15 AM	106	
6:30 AM	159	
6:45 AM	187	
7:00 AM	144	719
7:15 AM	177	
7:30 AM	184	
7:45 AM	214	
8:00 AM	152	577
8:15 AM	139	
8:30 AM	140	
8:45 AM	146	
9:00 AM	98	467
9:15 AM	112	
9:30 AM	122	
9:45 AM	135	
10:00 AM	95	462
10:15 AM	98	
10:30 AM	118	
10:45 AM	151	
11:00 AM	125	536
11:15 AM	132	
11:30 AM	131	
11:45 AM	148	
<b>24 Hour Total</b>		9379

**12:00 AM - 12:00 PM**

12 Hour Count 3966  
 Peak Hour 7:15 AM  
 Peak Volume 727  
 Factor 0.85

**12:00 PM - 12:00 AM**

12 Hour Count 5413  
 Peak Hour 4:30 PM  
 Peak Volume 767  
 Factor 0.92

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 S. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR  
 7/22/2015  
 Wednesday

Daily Volume, per Channel (Volume factor 0.500)

SB		
Interval Start		Interval Start
12:00 AM	22	52
12:15 AM	11	
12:30 AM	13	
12:45 AM	6	
1:00 AM	10	34
1:15 AM	11	
1:30 AM	7	
1:45 AM	6	
2:00 AM	10	30
2:15 AM	8	
2:30 AM	7	
2:45 AM	5	
3:00 AM	6	54
3:15 AM	16	
3:30 AM	20	
3:45 AM	12	
4:00 AM	26	122
4:15 AM	29	
4:30 AM	21	
4:45 AM	46	
5:00 AM	54	418
5:15 AM	94	
5:30 AM	160	
5:45 AM	110	
6:00 AM	74	552
6:15 AM	122	
6:30 AM	167	
6:45 AM	189	
7:00 AM	172	776
7:15 AM	204	
7:30 AM	227	
7:45 AM	173	
8:00 AM	142	553
8:15 AM	148	
8:30 AM	125	
8:45 AM	138	
9:00 AM	136	510
9:15 AM	121	
9:30 AM	121	
9:45 AM	132	
10:00 AM	124	480
10:15 AM	142	
10:30 AM	92	
10:45 AM	122	
11:00 AM	102	509
11:15 AM	125	
11:30 AM	128	
11:45 AM	154	

24 Hour Total 9584

**12:00 AM - 12:00 PM**  
 12 Hour Count 4090  
 Peak Hour 6:45 AM  
 Peak Volume 792  
 Factor 0.87

**12:00 PM - 12:00 AM**  
 12 Hour Count 5494  
 Peak Hour 4:45 PM  
 Peak Volume 740  
 Factor 0.85

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 S. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR  
 7/23/2015  
 Thursday

Daily Volume, per Channel (Volume factor 0.500)

SB		
Interval Start		Interval Start
12:00 AM	20	44
12:15 AM	11	
12:30 AM	10	
12:45 AM	3	
1:00 AM	14	40
1:15 AM	11	
1:30 AM	6	
1:45 AM	9	
2:00 AM	3	34
2:15 AM	10	
2:30 AM	9	
2:45 AM	12	
3:00 AM	12	44
3:15 AM	8	
3:30 AM	15	
3:45 AM	9	
4:00 AM	18	107
4:15 AM	25	
4:30 AM	33	
4:45 AM	31	
5:00 AM	48	354
5:15 AM	89	
5:30 AM	133	
5:45 AM	84	
6:00 AM	82	487
6:15 AM	87	
6:30 AM	148	
6:45 AM	170	
7:00 AM	147	690
7:15 AM	186	
7:30 AM	199	
7:45 AM	158	
8:00 AM	132	564
8:15 AM	136	
8:30 AM	134	
8:45 AM	162	
9:00 AM	108	423
9:15 AM	104	
9:30 AM	102	
9:45 AM	109	
10:00 AM	98	417
10:15 AM	100	
10:30 AM	116	
10:45 AM	103	
11:00 AM	111	463
11:15 AM	136	
11:30 AM	112	
11:45 AM	104	

24 Hour Total 6748

**12:00 AM - 12:00 PM**

12 Hour Count 3667  
 Peak Hour 6:45 AM  
 Peak Volume 702  
 Factor 0.88

**12:00 PM - 12:00 AM**

12 Hour Count 3081  
 Peak Hour 4:30 PM  
 Peak Volume 735  
 Factor 0.77

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 S. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR.  
 7/20/2015  
 Monday

Daily Volume, per Channel (Volume factor 0.500)

NB		
Interval Start	Interval Start	
12:00 AM	-	-
12:15 AM	-	-
12:30 AM	-	-
12:45 AM	-	-
1:00 AM	-	-
1:15 AM	-	-
1:30 AM	-	-
1:45 AM	-	-
2:00 AM	-	-
2:15 AM	-	-
2:30 AM	-	-
2:45 AM	-	-
3:00 AM	-	-
3:15 AM	-	-
3:30 AM	-	-
3:45 AM	-	-
4:00 AM	-	-
4:15 AM	-	-
4:30 AM	-	-
4:45 AM	-	-
5:00 AM	-	-
5:15 AM	-	-
5:30 AM	-	-
5:45 AM	-	-
6:00 AM	-	-
6:15 AM	-	-
6:30 AM	-	-
6:45 AM	-	-
7:00 AM	-	-
7:15 AM	-	-
7:30 AM	-	-
7:45 AM	-	-
8:00 AM	-	-
8:15 AM	-	-
8:30 AM	-	-
8:45 AM	-	-
9:00 AM	-	-
9:15 AM	-	-
9:30 AM	-	-
9:45 AM	-	-
10:00 AM	-	-
10:15 AM	-	-
10:30 AM	-	-
10:45 AM	-	-
11:00 AM	-	-
11:15 AM	-	-
11:30 AM	-	-
11:45 AM	-	-
<b>24 Hour Total</b>		6887

**12:00 AM - 12:00 PM**

12 Hour Count 0  
 Peak Hour -  
 Peak Volume -  
 Factor -

**12:00 PM - 12:00 AM**

12 Hour Count 6887  
 Peak Hour 4:30 PM  
 Peak Volume 1262  
 Factor 0.97

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

R WRIGHT DR. :  
 S. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR.  
 7/21/2015  
 Tuesday

Daily Volume, per Channel (Volume factor 0.500)

NB		
Interval Start		Interval Start
12:00 AM	62	168
12:15 AM	48	156
12:30 AM	36	196
12:45 AM	22	192
1:00 AM	28	184
1:15 AM	26	204
1:30 AM	26	188
1:45 AM	32	166
2:00 AM	14	61
2:15 AM	16	179
2:30 AM	16	208
2:45 AM	15	204
3:00 AM	14	224
3:15 AM	21	218
3:30 AM	12	253
3:45 AM	8	277
4:00 AM	7	294
4:15 AM	20	345
4:30 AM	17	344
4:45 AM	22	298
5:00 AM	22	351
5:15 AM	46	418
5:30 AM	21	286
5:45 AM	33	248
6:00 AM	29	198
6:15 AM	48	164
6:30 AM	90	156
6:45 AM	58	131
7:00 AM	77	140
7:15 AM	110	112
7:30 AM	114	122
7:45 AM	127	116
8:00 AM	111	119
8:15 AM	94	114
8:30 AM	110	128
8:45 AM	150	102
9:00 AM	124	88
9:15 AM	104	103
9:30 AM	114	74
9:45 AM	105	53
10:00 AM	122	46
10:15 AM	126	74
10:30 AM	131	50
10:45 AM	157	50
11:00 AM	143	11:00 PM
11:15 AM	114	69
11:30 AM	146	52
11:45 AM	164	11:30 PM
		318
		185
		220
		185
		28

24 Hour Total

11401

**12:00 AM - 12:00 PM**  
 12 Hour Count 3252  
 Peak Hour 11:00 AM  
 Peak Volume 567  
 Factor 0.86

**12:00 PM - 12:00 AM**  
 12 Hour Count 8149  
 Peak Hour 4:30 PM  
 Peak Volume 1411  
 Factor 0.84

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA. 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 S. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR.  
 7/22/2015  
 Wednesday

Daily Volume, per Channel (Volume factor 0.500)

		NB			
Interval Start		Interval Start			
12:00 AM	34	104	12:00 PM	151	659
12:15 AM	18		12:15 PM	160	
12:30 AM	31		12:30 PM	158	
12:45 AM	21		12:45 PM	190	
1:00 AM	24	98	1:00 PM	181	633
1:15 AM	28		1:15 PM	155	
1:30 AM	28		1:30 PM	140	
1:45 AM	18		1:45 PM	157	
2:00 AM	6	37	2:00 PM	157	841
2:15 AM	8		2:15 PM	174	
2:30 AM	12		2:30 PM	242	
2:45 AM	11		2:45 PM	268	
3:00 AM	16	47	3:00 PM	188	853
3:15 AM	12		3:15 PM	216	
3:30 AM	5		3:30 PM	221	
3:45 AM	14		3:45 PM	228	
4:00 AM	6	47	4:00 PM	260	1216
4:15 AM	10		4:15 PM	336	
4:30 AM	13		4:30 PM	302	
4:45 AM	18		4:45 PM	318	
5:00 AM	28	115	5:00 PM	328	1109
5:15 AM	18		5:15 PM	297	
5:30 AM	33		5:30 PM	276	
5:45 AM	36		5:45 PM	208	
6:00 AM	55	251	6:00 PM	214	680
6:15 AM	42		6:15 PM	174	
6:30 AM	94		6:30 PM	164	
6:45 AM	60		6:45 PM	128	
7:00 AM	85	442	7:00 PM	116	428
7:15 AM	96		7:15 PM	116	
7:30 AM	129		7:30 PM	94	
7:45 AM	132		7:45 PM	102	
8:00 AM	101	435	8:00 PM	110	433
8:15 AM	84		8:15 PM	114	
8:30 AM	106		8:30 PM	89	
8:45 AM	144		8:45 PM	120	
9:00 AM	114	453	9:00 PM	95	310
9:15 AM	98		9:15 PM	82	
9:30 AM	106		9:30 PM	67	
9:45 AM	135		9:45 PM	66	
10:00 AM	103	531	10:00 PM	62	190
10:15 AM	123		10:15 PM	42	
10:30 AM	152		10:30 PM	44	
10:45 AM	153		10:45 PM	42	
11:00 AM	115	496	11:00 PM	98	237
11:15 AM	125		11:15 PM	57	
11:30 AM	132		11:30 PM	46	
11:45 AM	124		11:45 PM	36	

24 Hour Total 10645

**12:00 AM - 12:00 PM**

12 Hour Count 3056  
 Peak Hour 10:30 AM  
 Peak Volume 545  
 Factor 0.89

**12:00 PM - 12:00 AM**

12 Hour Count 7589  
 Peak Hour 4:15 PM  
 Peak Volume 1284  
 Factor 0.96

MIKE McCLUSKEY - WEE COUNT LLC  
 1110 E. EXCELSIOR RD.  
 SPOKANE WA 99224  
 (509) 979-3331

FT. WRIGHT DR. :  
 S. OF ELLIOTT DR. :  
 35 MPH :

Site: FT. WRIGHT DR.  
 7/23/2015  
 Thursday

Daily Volume, per Channel (Volume factor 0.500)

		NB			
Interval Start			Interval Start		
12:00 AM	38	125	12:00 PM	154	660
12:15 AM	38		12:15 PM	150	
12:30 AM	26		12:30 PM	148	
12:45 AM	23		12:45 PM	208	
1:00 AM	20	72	1:00 PM	208	674
1:15 AM	22		1:15 PM	160	
1:30 AM	14		1:30 PM	147	
1:45 AM	16		1:45 PM	159	
2:00 AM	9	29	2:00 PM	157	770
2:15 AM	10		2:15 PM	185	
2:30 AM	7		2:30 PM	200	
2:45 AM	3		2:45 PM	228	
3:00 AM	12	45	3:00 PM	200	902
3:15 AM	11		3:15 PM	220	
3:30 AM	9		3:30 PM	238	
3:45 AM	13		3:45 PM	244	
4:00 AM	4	45	4:00 PM	257	1179
4:15 AM	20		4:15 PM	288	
4:30 AM	11		4:30 PM	312	
4:45 AM	10		4:45 PM	322	
5:00 AM	12	114	5:00 PM	369	1228
5:15 AM	36		5:15 PM	352	
5:30 AM	33		5:30 PM	286	
5:45 AM	33		5:45 PM	219	
6:00 AM	42	240	6:00 PM	212	662
6:15 AM	60		6:15 PM	166	
6:30 AM	68		6:30 PM	152	
6:45 AM	70		6:45 PM	132	
7:00 AM	78	398	7:00 PM	136	433
7:15 AM	88		7:15 PM	117	
7:30 AM	124		7:30 PM	104	
7:45 AM	108		7:45 PM	76	
8:00 AM	95	403	8:00 PM	100	100
8:15 AM	70				
8:30 AM	113				
8:45 AM	125				
9:00 AM	98	437			
9:15 AM	120				
9:30 AM	96				
9:45 AM	123				
10:00 AM	102	490			
10:15 AM	120				
10:30 AM	108				
10:45 AM	160				
11:00 AM	122	538			
11:15 AM	151				
11:30 AM	136				
11:45 AM	129				

24 Hour Total 9544

**12:00 AM - 12:00 PM**

12 Hour Count 2936  
 Peak Hour 10:45 AM  
 Peak Volume 569  
 Factor 0.89

**12:00 PM - 12:00 AM**

12 Hour Count 6608  
 Peak Hour 4:30 PM  
 Peak Volume 1355  
 Factor 0.92

**Intersection**

Int Delay, s/veh 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	35	0	2	4	0	29	0	955	1	5	523	1
Future Vol, veh/h	35	0	2	4	0	29	0	955	1	5	523	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	0	2	4	0	30	0	974	1	5	534	1

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	1031	1520	267	1252
Stage 1	544	544	-	975
Stage 2	487	976	-	975
Critical Hdwy	7.54	6.54	6.94	7.54
Critical Hdwy Stg 1	6.54	5.54	-	6.54
Critical Hdwy Stg 2	6.54	5.54	-	5.54
Follow-up Hdwy	3.52	4.02	3.32	3.52
Pot Cap-1 Maneuver	187	118	731	129
Stage 1	491	517	-	270
Stage 2	531	327	-	328
Platoon blocked, %				
Mov Cap-1 Maneuver	175	117	731	128
Mov Cap-2 Maneuver	175	117	-	117
Stage 1	491	512	-	270
Stage 2	501	327	-	328
703				

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.7	15.3	0	0.1
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1029	-	-	183	382	703	-	-
HCM Lane V/C Ratio	-	-	-	0.206	0.088	0.007	-	-
HCM Control Delay (s)	0	-	-	29.7	15.3	10.2	0	-
HCM Lane LOS	A	-	-	D	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.3	0	-	-

3.5 yrs

## Intersection

Int Delay, s/veh 2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	36	0	2	26	0	63	0	989	40	63	542	1
Future Vol, veh/h	36	0	2	26	0	63	0	989	40	63	542	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	0	2	27	0	64	0	1009	41	64	553	1

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	1187	1732	277	1435	1713	525	554	0	0	1050	0	0
Stage 1	682	682	-	1030	1030	-	-	-	-	-	-	-
Stage 2	505	1050	-	405	683	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	144	87	720	94	89	497	1012	-	-	659	-	-
Stage 1	406	448	-	250	309	-	-	-	-	-	-	-
Stage 2	518	302	-	593	447	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	116	79	720	87	80	497	1012	-	-	659	-	-
Mov Cap-2 Maneuver	116	79	-	87	80	-	-	-	-	-	-	-
Stage 1	406	404	-	250	309	-	-	-	-	-	-	-
Stage 2	451	302	-	534	404	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	48.2	28	0	1.1
HCM LOS	E	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1012	-	-	121	87	497	659	-	-
HCM Lane V/C Ratio	-	-	-	0.32	0.305	0.129	0.098	-	-
HCM Control Delay (s)	0	-	-	48.2	63.6	13.3	11.1	-	-
HCM Lane LOS	A	-	-	E	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.3	1.1	0.4	0.3	-	-

3.75 Yas

## Intersection

Int Delay, s/veh 3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	36	0	2	27	0	65	0	991	43	67	543	1
Future Vol, veh/h	36	0	2	27	0	65	0	991	43	67	543	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	0	2	28	0	66	0	1011	44	68	554	1

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	1197	1746	278	1447	1725	528	555	0	0	1055	0	0
Stage 1	691	691	-	1033	1033	-	-	-	-	-	-	-
Stage 2	506	1055	-	414	692	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	141	85	719	92	88	495	1011	-	-	656	-	-
Stage 1	401	444	-	249	308	-	-	-	-	-	-	-
Stage 2	517	301	-	586	443	-	-	-	-	-	-	-
Platoon blocked, %							-	-	-	-	-	-
Mov Cap-1 Maneuver	112	76	719	84	79	495	1011	-	-	656	-	-
Mov Cap-2 Maneuver	112	76	-	84	79	-	-	-	-	-	-	-
Stage 1	401	398	-	249	308	-	-	-	-	-	-	-
Stage 2	448	301	-	524	397	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	50.3	29.3	0	1.2
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1011	-	-	117	84	495	656	-	-
HCM Lane V/C Ratio	-	-	-	0.331	0.328	0.134	0.104	-	-
HCM Control Delay (s)	0	-	-	50.3	67.5	13.4	11.1	-	-
HCM Lane LOS	A	-	-	F	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.3	1.2	0.5	0.3	-	-

## Intersection

Int Delay, s/veh 6.5

Movement	EBL	EBT	EBR	WBL	WTB	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	35	0	2	39	0	81	0	955	61	91	523	1
Future Vol, veh/h	35	0	2	39	0	81	0	955	61	91	523	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	0	2	40	0	83	0	1023	65	98	560	1

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	1268	1845	281	1531
Stage 1	756	756	-	1056
Stage 2	512	1089	-	1056
Critical Hdwy	7.54	6.54	6.94	7.54
Critical Hdwy Stg 1	6.54	5.54	-	6.54
Critical Hdwy Stg 2	6.54	5.54	-	5.54
Follow-up Hdwy	3.52	4.02	3.32	3.52
Pot Cap-1 Maneuver	125	74	716	80
Stage 1	366	414	-	241
Stage 2	513	290	-	300
Platoon blocked, %				
Mov Cap-1 Maneuver	91	63	716	70
Mov Cap-2 Maneuver	91	63	-	66
Stage 1	366	350	-	241
Stage 2	425	290	-	300

Approach	EB	WB	NB	SB
HCM Control Delay, s	66.7	71	0	1.7
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1006	-	-	96	166	636	-	-
HCM Lane V/C Ratio	-	-	-	0.413	0.738	0.153	-	-
HCM Control Delay (s)	0	-	-	66.7	71	11.7	-	-
HCM Lane LOS	A	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.7	4.6	0.5	-	-

HCM 2010 Signalized Intersection Summary  
1: Fort George Wright Drive & Elliott Drive/Driveway

2022 PM W- Proj. Signal

3/21/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘		↑ ↗	↑ ↘		↑ ↗	↑ ↘		↑ ↗	↑ ↘	
Traffic Volume (veh/h)	35	0	2	39	0	81	0	955	61	91	523	1
Future Volume (veh/h)	35	0	2	39	0	81	0	955	61	91	523	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	38	0	2	40	0	83	0	1023	65	98	560	1
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	0	185	322	0	185	158	2315	147	441	2483	4
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.00	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1310	0	1583	1409	0	1583	845	3380	215	516	3625	6
Grp Volume(v), veh/h	38	0	2	40	0	83	0	536	552	98	273	288
Grp Sat Flow(s), veh/h/ln	1310	0	1583	1409	0	1583	845	1770	1825	516	1770	1862
Q Serve(g_s), s	1.3	0.0	0.1	1.2	0.0	2.2	0.0	6.2	6.2	4.8	2.6	2.6
Cycle Q Clear(g_c), s	3.5	0.0	0.1	1.2	0.0	2.2	0.0	6.2	6.2	11.0	2.6	2.6
Prop In Lane	1.00			1.00			1.00	1.00	0.12	1.00		0.00
Lane Grp Cap(c), veh/h	248	0	185	322	0	185	158	1212	1250	441	1212	1275
V/C Ratio(X)	0.15	0.00	0.01	0.12	0.00	0.45	0.00	0.44	0.44	0.22	0.23	0.23
Avail Cap(c_a), veh/h	771	0	819	885	0	819	649	2238	2308	741	2238	2355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	17.7	18.3	0.0	18.7	0.0	3.2	3.2	5.7	2.7	2.7
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.2	0.0	1.7	0.0	0.3	0.2	0.3	0.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.5	0.0	0.0	0.5	0.0	1.1	0.0	3.1	3.2	0.7	1.2	1.3
LnGrp Delay(d), s/veh	20.6	0.0	17.8	18.5	0.0	20.4	0.0	3.5	3.5	6.0	2.8	2.8
LnGrp LOS	C		B	B		C		A	A	A	A	A
Approach Vol, veh/h		40			123			1088			659	
Approach Delay, s/veh		20.5			19.8			3.5			3.2	
Approach LOS		C			B			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.6		9.8		35.6		9.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		57.5		23.5		57.5		23.5				
Max Q Clear Time (g_c+1), s		8.2		5.5		13.0		4.2				
Green Ext Time (p_c), s		18.7		0.6		18.1		0.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			4.8									
HCM 2010 LOS			A									

Whipple Consulting Engineers  
Signal Warrant Worksheet

Warrant 1 Eight-Hour Vehicular Volume

Year: 2015

24 hour Volumetric Count Data    Tuesday July 21, 2015

Hour	Minor-Street		Major	NB	SB
	Eastbound	Westbound	North-South		
0:00	1	0	215	168	47
1:00	0	0	146	112	34
2:00	0	0	79	61	18
3:00	1	2	100	55	45
4:00	7	3	191	66	125
5:00	5	8	522	122	400
6:00	8	12	761	225	536
7:00	26	18	1147	428	719
8:00	67	17	1042	465	577
9:00	20	15	914	447	467
10:00	22	16	998	536	462
11:00	14	18	1103	567	536
12:00	21	20	1267	712	555
13:00	11	21	1296	744	552
14:00	13	23	1464	812	652
15:00	8	25	1591	972	619
16:00	4	32	1970	1281	689
17:00	14	32	1974	1303	671
18:00	4	19	1172	649	523
19:00	4	14	860	490	370
20:00	3	13	788	463	325
21:00	0	9	554	318	236
22:00	1	6	358	220	138
23:00	0	4	268	185	83

Whipple Consulting Engineers  
Signal Warrant Worksheet

Signal Warrant Summary	Year:	2015 Existing
Intersection:	<b>Fort George Wright Drive (FGWD) &amp; Elliot Drive</b>	
Major Street:	<b>FGWD</b>	Minor Street: <b>Elliot Drive</b>
# of Lanes:	<b>2</b>	# of Lanes: <b>1</b>
Speed Limit:	<b>35</b>	Speed Limit: <b>35</b>

<b>Warrant 1</b> Eight Hour Vehicular Volume	<b>2015</b>
Condition A	Minimum Vehicular Volume
Condition B	Interuption of Continuous Traffic
Condition A + B	Combination of Warrants
	<b>Not Satisfied</b>
<b>Warrant 2</b> Four Hour Vehicular Volumes	<b>Not Satisfied</b>
<b>Warrant 3</b> Peak Hour	
Condition A1	Not Satisfied
Condition A2	Not Satisfied
Condition A3	Not Satisfied
Condition B	Not Satisfied
	<b>Not Satisfied</b>
<b>Warrant 4</b> Pedestrian Volume	
Condition A	Not Satisfied
Condition B	Not Satisfied
	<b>Not Satisfied</b>
<b>Warrant 5</b> School Crossing	<b>Not Satisfied</b>
<b>Warrant 6</b> Coordinated Signal System	
Condition A	Not Satisfied
Condition B	Satisfied
	<b>Satisfied</b>
<b>Warrant 7</b> Crash Experience	
Condition A	Not Satisfied
Condition B	Not Satisfied
Condition C	Not Satisfied
	<b>Not Satisfied</b>
<b>Warrant 8</b> Roadway Network	
Characteristic Condition A	Yes
Characteristic Condition B	Yes
Characteristic Condition C	Yes
Volume Condition A	Satisfied
Volume Condition B	Not Satisfied
	<b>Satisfied</b>

Whipple Consulting Engineers  
Signal Warrant Worksheet

Warrant 1 Eight-Hour Vehicular Volume

Year: 2015

Condition A – Minimum Vehicular Volume									
Number of lanes for moving traffic on each		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one-direction)			
Major Street	Minor Street	100% <sup>a</sup>	80% <sup>b</sup>	70% <sup>c</sup>	56% <sup>d</sup>	100% <sup>a</sup>	80% <sup>b</sup>	70% <sup>c</sup>	56% <sup>d</sup>
1.....	1.....	500	400	350	280	150	120	105	84
2 or more...	1.....	600	480	420	336	150	120	105	84
2 or more...	2 or more...	600	480	420	336	200	160	140	112
1.....	2 or more...	500	400	350	280	200	160	140	112

Condition B – Interruption of Continuous Traffic									
moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				minor-street approach (one-direction only)			
Major Street	Minor Street	100% <sup>a</sup>	80% <sup>b</sup>	70% <sup>c</sup>	56% <sup>d</sup>	100% <sup>a</sup>	80% <sup>b</sup>	70% <sup>c</sup>	56% <sup>d</sup>
1.....	1.....	750	600	525	420	75	80	53	42
2 or more...	1.....	900	720	630	504	75	60	53	42
2 or more...	2 or more...	900	720	630	504	100	80	70	56
1.....	2 or more...	750	600	525	420	100	80	70	56

<sup>a</sup> Basic minimum hourly volume

<sup>b</sup> Used for combination of Conditions A and B after adequate trial of other remedial measures

<sup>c</sup> May be used when the major-street speeds exceeds 70 km/h or exceeds 40 mph or in an isolated community with a population of less than 10,000

<sup>d</sup> May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major street speeds exceeds 7 km/h or exceeds 40 mph or in an isolated community with a population of less than 10,000.

24 Hour Volumetric Count Data located on Page 3

#### Condition A - Minimum Vehicular Volume

The vehicles per hour given in both of the 100 percent columns of condition A in table 4C-1 exist on the major-street and the higher volume minor-street approaches, respectively, to the intersection

Major-street exceeds	600 veh	for 8 hr	from	5	AM	to	9	PM
Minor-street exceeds	150 veh	for 8 hr	from	-	AM	to	-	PM
<b>Condition A</b>					<b>Not</b>	<b>Satisfied</b>		

#### Condition B - Interruption of Countiuos Traffic

The vehicles per hour given in both of the 100 percent columns of condition B in table 4c-1 exist on the major-street and the higher-volume minor street approaches, respectively to the intersection.

Major-street exceeds	900 veh	for 8 hr	from	7	AM	to	6	PM
Minor-street exceeds	75 veh	for 8 hr	from	-	PM	to	-	PM
<b>Condition B</b>					<b>Not</b>	<b>Satisfied</b>		

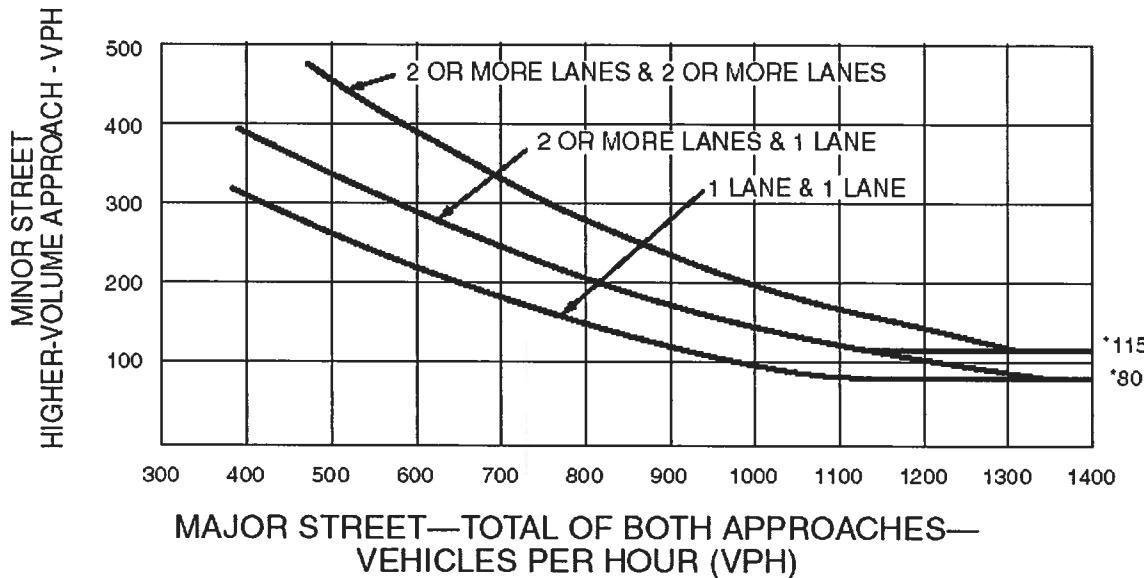
#### Condition C - Combination of A & B (speed exceeds 70 km/h or exceeds 40 mph)

Not applicable

Warrant 2 Four-Hour Vehicular Volume

Year: 2015

**Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume**



\*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

The need for a traffic control signal shall be considered if an engineer study finds that for each of any 4 hours of an average day, plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (on direction only) all fall above the applicable curve in figure 4c-1 for the existing combination of approach lanes On the Minor street the higher volume shall not be required to be on the same approach during each of these 4 hours

Volumetric Count Data (Truncated 24 Count)

Hour	Minor-Street		Major North-South	PLOT
	Eastbound	Westbound		
7:00	26	18	1147	no
8:00	67	17	1042	no
9:00	20	15	914	no
10:00	22	16	998	no
-	-	-	-	
15:00	8	25	1591	no
16:00	4	32	1970	no
17:00	14	32	1974	no
18:00	4	19	1172	no

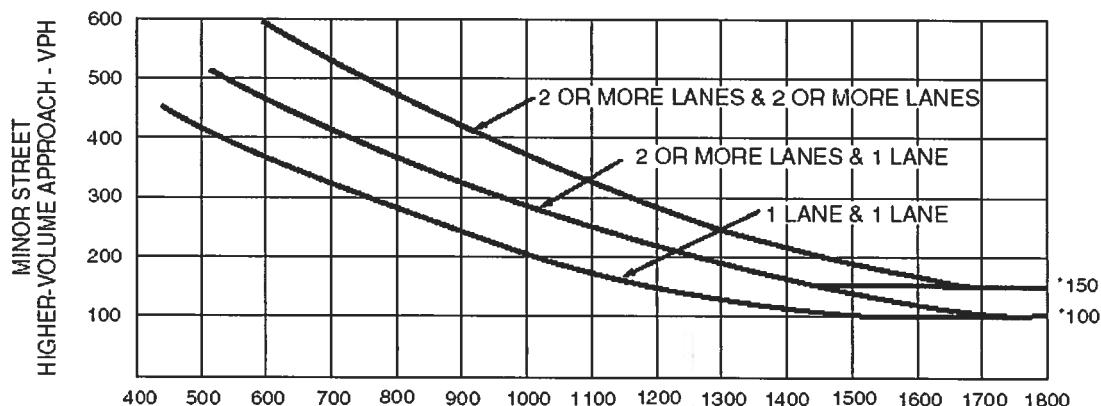
When plotted on the graph above: plots must fall above the 2 lane & 1 lane.

Warrant 2

Not Satisfied

Warrant 3 Peak Hour \_\_\_\_\_ Year: 2015 \_\_\_\_\_

**Figure 4C-3. Warrant 3, Peak Hour**



**MAJOR STREET—TOTAL OF BOTH APPROACHES—  
VEHICLES PER HOUR (VPH)**

\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

**Condition A**

**Requirement 1**

The total stopped time delay experienced by the traffic of on one minor-street approach (one direction only) controlled by a stop sign equals or exceeds: 4 vehicle-hours (240 s) for a one lane approach; or 5 vehicle hours (300 s) for a two-lane approach.

(all)

NO

**Requirement 2**

the volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes.

NO

**Requirement 3**

The total entering volume during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

YES

Condition A      Not Satisfied

**Condition B**

The plotted point peak hour (any four consecutive 15 minute period) plots above the applicable curve

Hour	Minor-Street		Major North-South
	Eastbound	Westbound	
16:30	37	33	1495

Condition B      Not Satisfied

Warrant 3      Not Satisfied

**Warrant 4 Pedestrian Volume**

Year: 2015

The Pedestrian volume signal warrant shall not be applied at locations where the distance to the nearest traffic control signal along the major street is less than 90 m (300 ft), unless the proposed traffic control signal will not restrict the progressive movement of traffic.

**Condition A**

The pedestrian volume crossing the major street at an intersection or midblock location during an average day is 100 or more for each of any 4 hours or 190 or more during any

**Condition A** **Not Satisfied**

**Condition B**

There are fewer than 60 gaps per hour in the traffic stream of adequate length to allow pedestrians to cross during the same period when the pedestrian volume criterion is satisfied

**Condition B** --  
**Warrant 4** **Not Satisfied**

**Warrant 5 School Crossing**

Is there a school near the intersection?	(all)	<b>Yes</b>	NO
Are there more than 20 students in the highest crossing hour?		Yes	NO
Have other remedial measures been installed?		Yes	NO

**Warrant 5** **Not Satisfied**

**Warrant 6 Coordinated Signal System**

(Either or)

**Condition A**

On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.

**Condition B**

On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.

**Warrant 6** **Satisfied**

Whipple Consulting Engineers  
Signal Warrant Worksheet

Warrant 7 Crash Experience

Year:

2015

---

**Condition A** (Any)

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency

**Condition B**

Five or More reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash

**Condition C**

For each of any 8 hours of an average day, the vehicles per hour (vph) given in both of the 80 % columns of condition A in Table 4C-1, or the vph in both of the 80 % columns of conditions B in Table 4C-1 exists on the major-street and the higher-volume minor-street approach , respectively, to the intersection, or the volume of pedestrian traffic is not less than 80% of the requirements specified in the pedestrian Volume Warrant. These major-street and minor street volumes shall be for the same approach during each of the 8 hours.

**Warrant 7**

Not Satisfied

Warrant 8 Roadway Network

**Major Route Characteristics**

Fort George Wright Drive

It is part of the street or highway system that serves as the principal roadway network for through traffic flow

YES NO

It includes rural or suburban highways outside, entering, or traversing a City  
It appears as a major route on an official plan, such as a major street plan  
in an urban area traffic and transportation study.

YES NO

YES NO

**Condition A**

(Any)

The intersection has a total existing, or immediately projected entering volume of at least 1,000 vph during the peak hour of a typical weekday and has 5-year projected traffic volumes, based on an engineering study that meet one or more of Warrants 1,2, and 3 during an average weekday

**Condition B**

The intersection has a total existing or immediately projected entering volume of at least 1,000 vph for each of any 5 hours of a normal business day (Saturday or Sunday)

**Warrant 8**

Cond. A Satisfied

Whipple Consulting Engineers  
Signal Warrant Worksheet

Warrant 1 Eight-Hour Vehicular Volume

Year: 2022 Future W/Project

24 hour Volumetric Count Data    Tuesday July 21, 2015

Hour	Minor-Street		Major North-South
	Eastbound	Westbound	
0:00	1	3	229
1:00	0	0	156
2:00	0	0	83
3:00	1	4	105
4:00	7	22	209
5:00	5	22	549
6:00	8	34	802
7:00	27	88	1206
8:00	70	196	1106
9:00	21	69	979
10:00	23	73	1107
11:00	15	56	1228
12:00	22	135	1456
13:00	12	93	1529
14:00	14	159	1632
15:00	8	110	1858
16:00	4	75	2267
17:00	15	178	2157
18:00	4	61	1263
19:00	4	56	966
20:00	3	34	973
21:00	0	9	593
22:00	1	16	387
23:00	0	5	282

| |  
 232  
 156  
 83  
 110  
 238  
 576  
 845  
 1321  
 1372  
 1069  
 1203  
 1299  
 1613  
 1633  
 1805  
 1976  
 2346  
 2350  
 1328  
 1026  
 1010  
 602  
 404  
 286

Local Distribution from existing residential land use				EXISTING		
	IN	Out		IN	Out	
0:00	1	1	2	0:00	1%	1% 3%
1:00	1	0	1	1:00	1%	0% 1%
2:00	0	0	0	2:00	0%	0% 0%
3:00	0	1	1	3:00	0%	1% 1%
4:00	3	7	10	4:00	4%	10% 14%
5:00	0	5	5	5:00	0%	7% 7%
6:00	1	8	9	6:00	1%	11% 13%
7:00	0	26	26	7:00	0%	37% 37%
8:00	4	67	71 AM PH	8:00	6%	94% 100%
9:00	7	20	27	9:00	10%	28% 38%
10:00	22	21	43	10:00	31%	30% 61%
11:00	26	14	40	11:00	37%	20% 56%
12:00	25	23	48	12:00	52%	48% 100%
13:00	26	11	37	13:00	70%	30% 100%
14:00	9	13	22	14:00	39%	57% 96%
15:00	18	8	26	15:00	78%	35% 113%
16:00	19	4	23 PM PH	16:00	83%	17% 100%
17:00	8	14	22	17:00	35%	61% 96%
18:00	3	4	7	18:00	13%	17% 30%
19:00	6	4	10	19:00	26%	17% 43%
20:00	14	2	16	20:00	61%	9% 70%
21:00	1	0	1	21:00	4%	0% 4%
22:00	1	1	2	22:00	4%	4% 9%
23:00	0	0	0	23:00	0%	0% 0%

land use Residential	Project Holy Names	Background Project	
AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
189	238	0	0
100% Percentage of trips to use new Parkway	35% Percentage of trips to use		
189	238	0	0
Major IN	Minor Out	Major IN	Minor WB Out
0:00	3	0:00	0 0
1:00	3	1:00	0 0
2:00	0	2:00	0 0
3:00	0	3:00	0 0
4:00	8	4:00	0 0
5:00	0	5:00	0 0
6:00	3	6:00	0 0
7:00	0	7:00	0 0
8:00	11	8:00	0 0
9:00	19	9:00	0 0
10:00	59	10:00	0 0
11:00	69	11:00	0 0
12:00	124	12:00	0 0
13:00	167	13:00	0 0
14:00	93	14:00	0 0
15:00	186	15:00	0 0
16:00	197	16:00	0 0
17:00	83	17:00	0 0
18:00	31	18:00	0 0
19:00	62	19:00	0 0
20:00	145	20:00	0 0
21:00	10	21:00	0 0
22:00	10	22:00	0 0
23:00	0	23:00	0 0

2016 Existing	Growth Rate			2022 W-O Proj W-bknd	2022 W- Proj w-bknd				
	2022 W-O Proj W-bknd				2022 W- Proj w-bknd				
	Minor	Major	North-South		Minor	Major	North-South		
Eastbound	Westbound	North-South	Eastbound	Westbound	North-South	Eastbound	Westbound		
0:00	1	0	215	1	0	226	1	3	229
1:00	0	0	146	0	0	153	0	0	156
2:00	0	0	79	0	0	83	0	0	83
3:00	1	2	100	1	2	105	1	4	105
4:00	7	3	181	7	3	201	7	22	209
5:00	5	8	522	5	9	549	5	22	549
6:00	8	12	761	8	13	800	8	34	802
7:00	26	18	1147	27	19	1206	27	88	1206
8:00	67	17	1042	70	18	1085	70	196	1106
9:00	20	15	914	21	15	961	21	69	979
10:00	22	16	998	23	17	1049	23	73	1107
11:00	14	18	1103	15	19	1159	15	56	1228
12:00	21	20	1267	22	21	1332	22	135	1456
13:00	11	21	1296	12	22	1362	12	93	1529
14:00	13	23	1464	14	25	1539	14	159	1632
15:00	8	25	1591	8	27	1672	8	110	1858
16:00	4	32	1970	4	33	2070	4	75	2267
17:00	14	32	1974	15	33	2075	15	178	2157
18:00	4	19	1172	4	20	1232	4	61	1263
19:00	4	14	860	4	14	904	4	56	966
20:00	3	13	788	3	13	828	3	34	973
21:00	0	9	554	0	9	582	0	9	593
22:00	1	6	358	1	6	376	1	16	387
23:00	0	4	268	0	5	282	0	5	282

Whipple Consulting Engineers  
Signal Warrant Worksheet

Signal Warrant Summary		Year:	2022 Future W/Project
Intersection:	<b>Fort George Wright Drive (FGWD) &amp; Elliot Drive</b>		
Major Street:	<b>FGWD</b>	Minor Street:	<b>Elliot Drive</b>
# of Lanes:	<b>2</b>	# of Lanes:	<b>1</b>
Speed Limit:	<b>35</b>	Speed Limit:	<b>35</b>

<b>Warrant 1</b> Eight Hour Vehicular Volume	<b>2015</b>
Condition A	Minimum Vehicular Volume
Condition B	Interuption of Continuous Traffic
Condition A + B	Combination of Warrants
	<b>Not Satisfied</b>
<b>Warrant 2</b> Four Hour Vehicular Volumes	<b>Not Satisfied</b>
<b>Warrant 3</b> Peak Hour	
Condition A1	Not Satisfied
Condition A2	Not Satisfied
Condition A3	Satisfied
Condition B	Satisfied
	<b>Satisfied</b>
<b>Warrant 4</b> Pedestrian Volume	
Condition A	Not Satisfied
Condition B	Not Satisfied
	<b>Not Satisfied</b>
<b>Warrant 5</b> School Crossing	<b>Not Satisfied</b>
<b>Warrant 6</b> Coordinated Signal System	
Condition A	Not Satisfied
Condition B	Satisfied
	<b>Satisfied</b>
<b>Warrant 7</b> Crash Experience	
Condition A	Not Satisfied
Condition B	Not Satisfied
Condition C	Not Satisfied
	<b>Not Satisfied</b>
<b>Warrant 8</b> Roadway Network	
Characteristic Condition A	Yes
Characteristic Condition B	Yes
Characteristic Condition C	Yes
Volume Condition A	Satisfied
Volume Condition B	Not Satisfied
	<b>Satisfied</b>

Warrant 1 Eight-Hour Vehicular Volume

Year: 2022 Future W/Project

Condition A – Minimum Vehicular Volume									
Number of lanes for moving traffic on each		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one-direction)			
Major Street	Minor Street	100% <sup>a</sup>	80% <sup>b</sup>	70% <sup>c</sup>	56% <sup>d</sup>	100% <sup>a</sup>	80% <sup>b</sup>	70% <sup>c</sup>	56% <sup>d</sup>
1.....	1.....	500	400	350	280	150	120	105	84
2 or more...	1.....	600	480	420	336	150	120	105	84
2 or more...	2 or more...	600	480	420	336	200	160	140	112
1.....	2 or more...	500	400	350	280	200	160	140	112

Condition B – Interruption of Continuous Traffic									
moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				minor-street approach (one-direction only)			
Major Street	Minor Street	100% <sup>a</sup>	80% <sup>b</sup>	70% <sup>c</sup>	56% <sup>d</sup>	100% <sup>a</sup>	80% <sup>b</sup>	70% <sup>c</sup>	56% <sup>d</sup>
1.....	1.....	750	600	525	420	75	80	53	42
2 or more...	1.....	900	720	630	504	75	60	53	42
2 or more...	2 or more...	900	720	630	504	100	80	70	56
1.....	2 or more...	750	600	525	420	100	80	70	56

<sup>a</sup> Basic minimum hourly volume

<sup>b</sup> Used for combination of Conditions A and B after adequate trial of other remedial measures

<sup>c</sup> May be used when the major-street speeds exceeds 70 km/h or exceeds 40 mph or in an isolated community with a population of less than 10,000

<sup>d</sup> May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major street speeds exceeds 7 km/h or exceeds 40 mph or in an isolated community with a population of less than 10,000.

24 Hour Volumetric Count Data located on Page 3

#### Condition A- Minimum Vehicular Volume

The vehicles per hour given in both of the 100 percent columns of condition A in table 4C-1 exist on the major-street and the higher volume minor-street approaches, respectively, to the intersection

Major-street exceeds	600 veh	for 8 hr	from	6	AM	to	8	PM
Minor-street exceeds	150 veh	for 8 hr	from	-	AM	to	-	PM
<b>Condition A</b>								
						<b>Not</b>	<b>Satisfied</b>	

#### Condition B - Interruption of Countious Traffic

The vehicles per hour given in both of the 100 percent columns of condition B in table 4c-1 exist on the major-street and the higher-volume minor street approaches, respectively to the intersection.

Major-street exceeds	900 veh	for 8 hr	from	7	AM	to	8	PM
Minor-street exceeds	75 veh	for 8 hr	from	-	AM	to	-	PM
<b>Condition B</b>								
						<b>Not</b>	<b>Satisfied</b>	

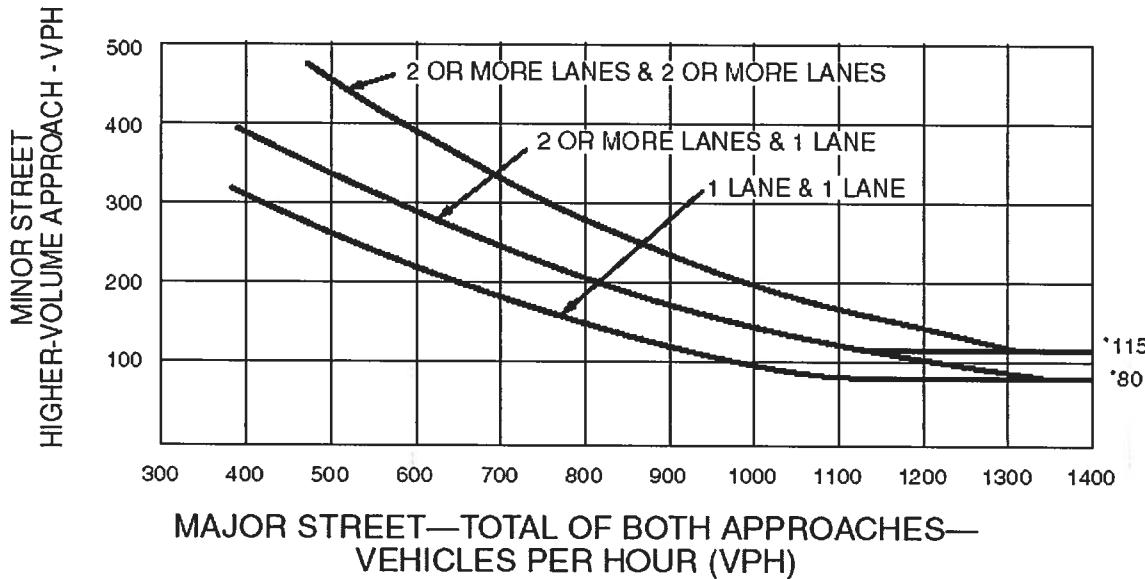
#### Condition C - Combination of A & B (speed exceeds 70 km/h or exceeds 40 mph)

Not applicable

Warrant 2 Four-Hour Vehicular Volume

Year: 2022 Future W/Project

**Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume**



\*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

The need for a traffic control signal shall be considered if an engineer study finds that for each of any 4 hours of an average day, plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (on direction only) all fall above the the applicable curve in figure 4c-1 for the existing combination of approach lanes On the Minor street the higher volume shall not be required to be on the same approach during each of these 4 hours

Volumetric Count Data (Truncated 24 Count)

Hour	Minor-Street		Major North-South	PLOT
	Eastbound	Westbound		
7:00	27	88	1206	no
8:00	70	196	1106	no
9:00	21	69	979	no
10:00	23	73	1107	no
-	-	-	-	
15:00	8	110	1858	no
16:00	4	75	2267	no
17:00	15	178	2157	no
18:00	4	61	1263	no

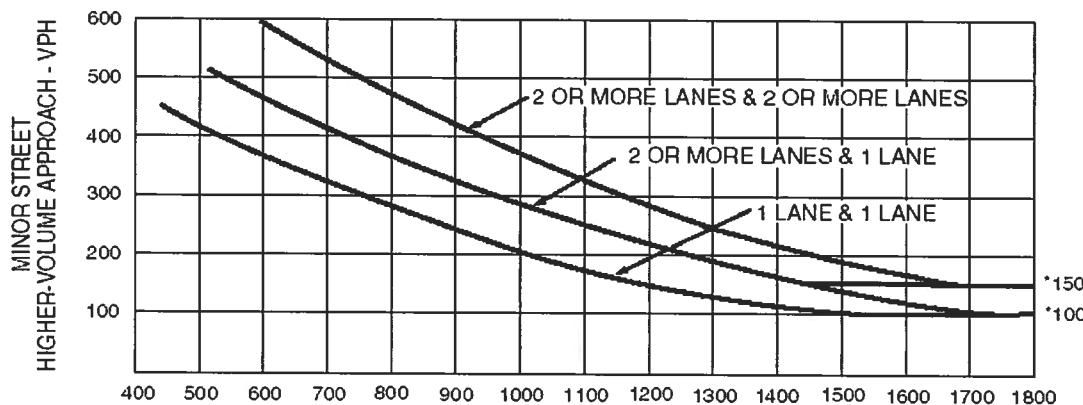
When plotted on the graph above: plots must fall above the 2 lane & 1 lane.

**Warrant 2**

**Not Satisfied**

Warrant 3 Peak Hour \_\_\_\_\_ Year: 2022 Future W/Project \_\_\_\_\_

**Figure 4C-3. Warrant 3, Peak Hour**



**MAJOR STREET—TOTAL OF BOTH APPROACHES—  
VEHICLES PER HOUR (VPH)**

\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

**Condition A**

**Requirement 1**

The total stopped time delay experienced by the traffic of on one minor-street approach (one direction only) controlled by a stop sign equals or exceeds: 4 vehicle-hours (240 s) for a one lane approach; or 5 vehicle hours (300 s) for a two-lane approach.

(all)

**Requirement 2**

the volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes.

NO

**Requirement 3**

The total entering volume during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

YES

Condition A Not Satisfied

**Condition B**

The plotted point peak hour (any four consecutive 15 minute period) plots above the applicable curve

Hour	Minor-Street		Major
	Eastbound	Westbound	North-South
17:00	15	178	2157

Condition B Satisfied

Warrant 3 Satisfied

**Warrant 4 Pedestrian Volume**

Year:

2022 Future W/Project

The Pedestrian volume signal warrant shall not be applied at locations where the distance to the nearest traffic control signal along the major street is less than 90 m (300 ft), unless the proposed traffic control signal will not restrict the progressive movement of traffic.

**Condition A**

The pedestrian volume crossing the major street at an intersection or midblock location during an average day is 100 or more for each of any 4 hours or 190 or more during any

**Condition A**

**Not Satisfied**

**Condition B**

There are fewer than 60 gaps per hour in the traffic stream of adequate length to allow pedestrians to cross during the same period when the pedestrian volume criterion is satisfied

**Condition B**  
**Warrant 4**

**Not Satisfied**

**Warrant 5 School Crossing**

Is there a school near the intersection?	(all)	<b>Yes</b>	NO
Are there more than 20 students in the highest crossing hour?		Yes	NO
Have other remedial measures been installed?		Yes	NO

**Warrant 5**                    **Not Satisfied**

**Warrant 6 Coordinated Signal System**

(Either or)

**Condition A**

On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.

**Condition B**

On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.

**Warrant 6**                    **Satisfied**

Whipple Consulting Engineers  
Signal Warrant Worksheet

Warrant 7 Crash Experience

Year: 2022 Future W/Project

**Condition A** (Any)

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency

**Condition B**

Five or More reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash

**Condition C**

For each of any 8 hours of an average day, the vehicles per hour (vph) given in both of the 80 % columns of condition A in Table 4C-1, or the vph in both of the 80 % columns of conditions B in Table 4C-1 exists on the major-street and the higher-volume minor-street approach , respectively, to the intersection, or the volume of pedestrian traffic is not less than 80% of the requirements specified in the pedestrian Volume Warrant. These major-street and minor street volumes shall be for the same approach during each of the 8 hours.

**Warrant 7**

**Not Satisfied**

Warrant 8 Roadway Network

<b>Major Route Characteristics</b>	<u>Fort George Wright Drive</u>	<b>YES</b>	<b>NO</b>
It is part of the street or highway system that serves as the principal roadway network for through traffic flow		<b>YES</b>	<b>NO</b>
It includes rural or suburban highways outside, entering, or traversing a City	<b>YES</b>	<b>NO</b>	
It appears as a major route on an official plan, such as a major street plan in an urban area traffic and transportation study.	<b>YES</b>	<b>NO</b>	

**Condition A** (Any)

The intersection has a total existing, or immediately projected entering volume of at least 1,000 vph during the peak hour of a typical weekday and has 5-year projected traffic volumes, based on an engineering study that meet one or more of Warrants 1,2, and 3 during an average weekday

**Condition B**

The intersection has a total existing or immediately projected entering volume of at least 1,000 vph for each of any 5 hours of a normal business day (Saturday or Sunday)

**Warrant 8**

**Cond. A Satisfied**