

STATE OF WISCONSIN

Convenience Store/Gas Station Trip Generation Study

September 26, 2022



Prepared for:
Wisconsin Department of Transportation



CONVENIENCE STORE/GAS STATION TRIP GENERATION STUDY

WISCONSIN - STATEWIDE
WISCONSIN DEPARTMENT OF TRANSPORTATION

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Chapter 1 – EXECUTIVE SUMMARY

PART A – PROJECT BACKGROUND

The Wisconsin Department of Transportation (WisDOT) contracted with MSA Professional Services, Inc. (MSA) to collect trip generation data and use that data to recommend new trip generation rates for future use for Convenience Store/Gas Station developments in Wisconsin.

Study sites were selected from across the state based on recommendations from WisDOT Region Traffic Staff and reviewed by MSA and the WisDOT Traffic Impact Analysis (TIA) Users' Group. Study sites were based on land use codes (LUCs) for Gasoline/Service Station with Convenience Market (945) and Super Convenience Market/Gas Station (960) from the *ITE Trip Generation Manual, 10th Edition (TGM 10)*¹. The following criteria was applied to site selection:

- Locations with at least six vehicle fueling positions (VFPs), preferably eight
- Rural areas were to have a population of less than 5,000 in the adjacent area; Urban areas were to have a population of 5,000 or greater
- Tourist areas were to have a summer annual average daily traffic (AADT) that was 50% or more than the off-peak season. Such areas included Minocqua, Eagle River, Lake Geneva, and Wisconsin Dells.
- Freeway locations were to be within 0.5-miles of an interchange

Sites containing other land uses within the Convenience Market/Gas Station development (e.g., sites with a fast-food restaurant, diner, coffee house, bakery/donut shop, etc.) were excluded from the list of potential study sites as they would introduce additional variables into the analysis. The study site also needed direct driveway access to the main roadway network rather than a shared access; this would assist in the automated data collection process. Table 1-1 includes a summary of sites where data was collected.

Table 1-1, Summary of Sites

Region	Total	Location				Area	
		Freeway		Non-Freeway		Rural	Urban
		Non-Tourist	Tourist	Non-Tourist	Tourist		
NC	14	3	2	4	5	7	7
NE	17	7	3	5	2	11	6
NW	12	3	1	2	6	7	5
SE	21	9	3	8	1	4	17
SW	24	9	3	11	1	10	14
Total	88	31	12	30	15	39	49

¹ At the time this study was scoped and contracted, an 11th Edition of the *TGM* was known to be released at some time in the future but an exact date was not known. Subsequent LUC changes in the *TGM 11* (definitions, rates, etc.) were therefore unknown. This study was originally written in terms of the then current *TGM* (10th Edition).

PART B – STATISTICAL ANALYSIS SUMMARY

The site characteristics (variables) identified in the criteria previously listed were used to check for correlation between the variable and the peak periods in which data was collected. Pearson’s *r* was used to measure the strength of a linear association between two variables.

Based on the strength of the characteristic’s statistical association and subsequent discussion with Region Traffic Staff and the TIA User’s Group, equations were developed and were used to compare which combination of characteristics would most accurately calculate development trip generation. Study site characteristics were used as inputs for the equations and their results were compared to the collected site data. The deviations between calculated trips and actual observed trips were calculated and are summarized in Table 1-2 through Table 1-5².

Table 1-2, AM Peak Deviation from Actual Trips

% Difference from Observed Data (+/-)	AM Trips - Number of Sites within Difference Range							
	TGM Classifications			Study-Derived Classifications				
	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	VFP + GFA Class.	GFA Class. + Metro 100,000	GFA Class. + Metro 300,000	VFP + GFA Class. + Metro 300,000	VFP + GFA Class. ≥ < Metro 300,000
+/- 0 - 50 Trips	10	37	10	45	46	51	45	47
+/- 50 - 100 Trips	17	26	17	25	25	16	24	25
+/- 100 - 200 Trips	32	23	20	16	13	18	17	14
+/- 200 - 300 Trips	23	---	21	---	2	1	---	---
+/- 300 Trips	4	---	18	---	---	---	---	---
Total > 100 Trips	59	23	59	16	15	19	17	14

Table 1-3, PM Peak Deviation from Actual Trips

% Difference from Observed Data (+/-)	PM Trips - Number of Sites within Difference Range							
	TGM Classifications			Study-Derived Classifications				
	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	VFP + GFA Class.	GFA Class. + Metro 100,000	GFA Class. + Metro 300,000	VFP + GFA Class. + Metro 300,000	VFP + GFA Class. ≥ < Metro 300,000
+/- 0 - 50 Trips	30	37	23	49	37	41	46	44
+/- 50 - 100 Trips	24	32	12	24	28	24	26	30
+/- 100 - 200 Trips	28	17	32	13	20	20	14	12
+/- 200 - 300 Trips	4	---	9	---	1	1	---	---
+/- 300 Trips	---	---	10	---	---	---	---	---
Total > 100 Trips	32	17	51	13	21	21	14	12

² Data derived from TGM 10 LUC 960 uses the Midwest filtered rates for all sites for simplicity of comparison; the unfiltered rate is higher, which would result in larger trip generation values. LUC 960 is not available in TGM 11.

Table 1-4, Friday Peak Deviation from Actual Trips

% Difference from Observed Data (+/-)	Friday Trips - Number of Sites within Difference Range							
	TGM Classifications			Study-Derived Classifications				
	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	VFP + GFA Class.	GFA Class. + Metro 100,000	GFA Class. + Metro 300,000	VFP + GFA Class. + Metro 300,000	VFP + GFA Class. ≥ < Metro 300,000
+/- 0 - 50 Trips	19	23	6	34	29	23	25	35
+/- 50 - 100 Trips	13	25	7	18	20	18	24	17
+/- 100 - 200 Trips	26	17	24	12	15	22	16	12
+/- 200 - 300 Trips	8	---	18	1	1	2	---	1
+/- 300 Trips	---	1	11	1	1	1	1	1
Total > 100 Trips	34	18	53	14	17	25	17	14

Table 1-5, Saturday Peak Deviation from Actual Trips

% Difference from Observed Data (+/-)	Saturday Trips - Number of Sites within Difference Range							
	TGM Classifications			Study-Derived Classifications				
	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	VFP + GFA Class.	GFA Class. + Metro 100,000	GFA Class. + Metro 300,000	VFP + GFA Class. + Metro 300,000	VFP + GFA Class. ≥ < Metro 300,000
+/- 0 - 50 Trips	20	18	18	26	25	31	23	29
+/- 50 - 100 Trips	18	21	15	21	22	14	23	18
+/- 100 - 200 Trips	25	20	15	17	15	18	18	17
+/- 200 - 300 Trips	2	6	6	1	4	2	1	1
+/- 300 Trips	1	1	12	1	---	1	1	1
Total > 100 Trips	28	27	33	19	19	21	20	19

The results shown in Table 1-2 through Table 1-5 indicated the equations for VFP + GFA Classifications (subcategorized as above and below 300,000) generally had the highest number of sites in which the deviation in calculated trips was below 100 (absolute value, under estimating and over estimating). Additional review revealed the equations for above/below 300,000 population also had the least number of sites that were under calculated for trip generation. The equation for VFP + GFA Classifications (without population thresholds) also performed strong as well.

PART C – RECOMMENDATIONS

AM & PM Trip Peak Hour Generation

Based on the performance both in raw trip generation calculation and lowest number of sites underestimated, the VFP + GFA Classification (with subcategories for populations ≥ < 300,000) is recommended for use in calculation of AM and PM peak hour trip generation for all Convenience Store/Gas Station (LUC 945) sites in the state of Wisconsin. Equations to be used in the trip generation calculations are shown in Table 1-6.

Table 1-6, Statewide Trip Generation Rates, AM and PM Peak Hours

Peak Hour	Equation	
	Population < 300,000	Population ≥ 300,000
AM	$T = 5.91(VFP) + 63.51(GFA_{class}) - 44.79$	$T = 12.68(VFP) + 54.28(GFA_{class}) - 108.66$
PM	$T = 5.91(VFP) + 60.09(GFA_{class}) - 12.15$	$T = 7.88(VFP) + 75.75(GFA_{class}) - 65.54$

Where,

T = Peak hour trip generation, vehicles per hour (vph)

VFP = Total number of vehicle fueling positions³

GFA_{class} = Category of C-Store GFA, enter 1, 2, or 3

1: < 4,000 SF

2: 4,000 – 5,999 SF

3: ≥ 6,000 SF

AM & PM = Peak Hour of Adjacent Street

Friday & Saturday Peak Hour Trip Generation

Based on the raw trip generation calculation performance and feedback from the TIA Users’ Group, the VFP + GFA Classification (without subcategories for populations) is recommended for use in calculation of Friday and Saturday peak hour trip generation for all Convenience Store/Gas Station (LUC 945) sites in the state of Wisconsin. Equations to be used in the trip generation calculations are shown in Table 1-7.

Table 1-7, Statewide Trip Generation Rates, Friday and Saturday Peak Hours

Peak Hour	Equation
Friday	$T = 7.71(VFP) + 73.71(GFA_{class}) - 29.06$
Saturday	$T = 6.76(VFP) + 76.48(GFA_{class}) - 19.33$

Where,

T = Peak hour trip generation, vehicles per hour (vph)

VFP = Total number of vehicle fueling positions³

GFA_{class} = Category of C-Store GFA, enter 1, 2, or 3

1: < 4,000 SF

2: 4,000 – 5,999 SF

3: ≥ 6,000 SF

Friday & Saturday = Peak Hour of Generator

Weekday Daily Trip Generation

Based on use of the VFP + GFA Classification (with subcategories for populations ≥ < 300,000) for weekday AM and PM peak periods, the same models, combined with the 75% 12-hour distribution assumption, were used for creation of weekday daily trip generation equations. Equations to be utilized for weekday daily trip generation are shown in Table 1-8. The 12-hour distribution is discussed in more detail in Chapter 4, Part B.

³ Diesel and non-diesel VFPs combined; not including diesel VFPs that when in use, would prevent the use of the non-diesel VFPs

Table 1-8, Statewide Trip Generation Rates, Weekday Daily Trips

<i>Population</i>	<i>Equation</i>
< 300,000	$T = 80.61(VFP) + 898.30(GFA_{Class}) - 354.83$
≥ 300,000	$T = 144.00(VFP) + 834.76(GFA_{Class}) - 1035.89$

Where,

T = Weekday daily trip generation, vehicles per day (vpd)

VFP = Total number of vehicle fueling positions⁴

GFA_{Class} = Category of C-Store GFA, enter 1, 2, or 3

1: < 4,000 SF

2: 4,000 – 5,999 SF

3: ≥ 6,000 SF

Equations were generated based on weekday data excluding Friday⁵. It is recommended that the Region Traffic Staff be consulted prior to utilization of these equations for a Friday period.

Peak Directional Distributions

Inbound versus outbound directional distributions were calculated based on a review of the Wisconsin site data. Values to be used in association with the trip generation equations are shown in Table 1-9.

Table 1-9, Statewide Directional Distributions

<i>Peak Hour</i>	<i>% Inbound</i>	<i>% Outbound</i>
AM	51%	49%
PM	50%	50%
Friday	51%	49%
Saturday	50%	50%

The [2010 Wisconsin ArcGIS Population Map](#)⁶ used for Saturation Flow Rate estimation should be referenced for determining whether the population of the proposed site is less than or greater than 300,000. Since the populations referenced in the ArcGIS map are from 2010 and many of the municipal population areas continue to expand and in many cases merge with other municipalities; new developments adjacent to the 300,000 population regions could potentially be considered part of the larger regional population. It is recommended that language similar to the below be included in future policy guidance from the Department.

Region Traffic Staff should be consulted before proceeding with calculations for developments that are proposed for areas near a 300,000 urban population area. WisDOT Region Traffic Staff reserve the right to modify the population coefficient based on development location, updated population data, and regional growth patterns.

⁴ Diesel and non-diesel VFPs combined; not including diesel VFPs that when in use, would prevent the use of the non-diesel VFPs

⁵ Fridays are not typically aggregated in weekday count data due to the influence of weekend travel patterns.

⁶ <http://arcg.is/1GqGa>, accessed July 2022

Until a future study is completed, or additional interim guidance is provided, the number of DFPs should continue to be based on the total number of pumps available (diesel and non-diesel combined⁷). This will provide a slightly conservative number of generated truck trips for the site. Given the relatively low number of DFPs at a typical development that is not a Truck Stop, the impact to the number of expected trips should be fairly low.

Due to the evolving nature of the Convenience Store/Gas Station land use, future studies are recommended which account for the changing business models. As new sites are constructed, convenience stores are becoming larger and stand-alone diesel fueling islands more common. Sites with shared land uses (e.g., incorporating a fast-food restaurant or coffee shop) are also appearing. Future studies should investigate how these additional variables impact trip generation as these development changes become more regular.

TGM 11 LUC 944 & 950

Current WisDOT interim guidance includes procedures for Gasoline/Service Station, LUC 944⁸ and Truck Stop, LUC 950⁹ developments. Both LUCs remain in the *TGM 11*; however, this study did not directly focus on these LUCs. Recommended procedures for these LUCs are as follows:

Gasoline/Service Station, LUC 944

The number of sites indirectly included in this study with a GFA < 2,000 SF is very small (two sites total). Sites that were associated to discount club (e.g., Costco), home improvement superstore, or supermarket type of developments were not included in this study, due to the *TGM 11* retaining LUC 944, their mixed/shared-use development nature, and their associated higher percentage of linked trips. It is recommended that *TGM 11* LUC 944 rates be used for developments of this size moving forward. Region Traffic Staff should be consulted for developments of this type that will be associated with discount club or similar land uses for the determination of an appropriate linked trip rate application.

Truck Stop, LUC 950

Previous use of this LUC was associated with the presence of stand-alone diesel VFPs. Equations developed as part of this study include *all* VFPs able to be utilized simultaneously, regardless of the presence of stand-alone diesel VFPs. Based on the outcome of this study, it is recommended that LUC 950 be only used for developments that derive the majority of their business from truckers/large commercial vehicle traffic.

⁷ Not including diesel VFPs that when in use, would prevent the use of the non-diesel VFPs

⁸ For GFA < 2,000 SF

⁹ For stand-alone diesel fueling positions

Chapter 2 – INTRODUCTION

PART A – PURPOSE OF STUDY

The Wisconsin Department of Transportation (WisDOT) wanted to develop trip generation rates for AM, PM, and Saturday peak periods for Convenience Store/Gas Station developments, which were derived from Wisconsin locations rather than a national database, as concerns were raised that trip generation rates for this type of development are different in Wisconsin. The goal of the study is to provide more accurate trip generation calculations for new and remodeled Convenience Market/Gas Station site developments throughout Wisconsin. WisDOT contracted with MSA Professional Services, Inc. (MSA) to collect trip generation data and use that data to recommend new trip generation rates for future use.

PART B – WISDOT INTERIM GUIDANCE

Following the release of the *ITE Trip Generation Manual, 10th Edition (TGM 10)* and its introduction of the Super Convenience Market/Gas Station (Land Use Code (LUC) 960), WisDOT provided interim guidance for trip generation of Convenience Market/Gas Station developments. The interim guidance revealed that rates for the LUCs in the *TGM 10* may not accurately project the operations of similar developments within the state of Wisconsin. For instance, rural versus urban, freeway versus non-freeway, tourist versus non-tourist characteristics should factor into calculating the trip generation of those respective sites.

Guidance prescribes that vehicle fueling positions (VFP) (rather than gross floor area (GFA) of the convenience store or the number of employees) is to be utilized as the independent variable for calculating trip generation rates from *TGM 10*. Depending on the size of the convenience store and the number of vehicle fueling pumps (positions) provided, practitioners are to select one of the following LUCs from the *TGM 10* to calculate the expected development trips:

- Convenience Market with Gasoline Pumps, LUC 853
- Gasoline/Service Station, LUC 944
- Gasoline /Service Station with Convenience Market, LUC 945
- Truck Stop, LUC 950
- Super Convenience Market/Gas Station, LUC 960

Based on the proposed GFA and number of VFPs, one of the above LUCs were to be utilized when calculating the expected development trips. Excerpts from the WisDOT Interim Guidance are provided below regarding which LUC was to be utilized under which conditions.

Table 1 ITE Land Use Code Selection

Size (GFA) of Convenience Market	# Fueling Positions	Applicable ITE Land Use Code
≥ 2,000 square feet	<10	853
< 2,000 square feet	Any	944
2,000 to 3,000 square feet	≥ 10	945
≥ 3,000 square feet	≥ 10	Varies by Location, See Table 2

Notes:

- **GFA:** Gross Floor Area
- Use number of vehicle fueling positions as the independent variable
- Do not count diesel fueling positions that, when in use, would prevent the use of non-diesel fueling positions
- For stand-alone diesel fueling positions separated from other fueling positions, use Truck Stop (ITE 950) trip generation rate with number of diesel-fueling positions as the independent variable. Use the applicable trip generation rate as defined above for all other fueling positions. For example, if the development consists of a 2,500 square foot convenience market, with a total of 16 fueling positions (12 non-diesel, 4 stand-alone diesel), the vehicle fueling position trip generation rate for ITE 945 would be applicable for the 12 non-diesel fueling stations and the vehicle fueling position trip generation rate for ITE 950 would be applicable for the 4 stand-alone diesel positions.
- Obtain authorization from the WisDOT regional traffic contact prior to utilizing rates other than those specified above

Table 2 Applicable ITE Land Use Codes for Super Convenience Market/Gas Station

	Applicable ITE Land Use Code			
	Non-Tourist Freeway Location	Non-Tourist Non-Freeway Location	Tourist Freeway Location	Tourist Non-Freeway Location
Rural Area	960 Midwest	945	960 Midwest	945
Urban Area	960	960 Midwest	960	945

Notes:

- **GFA:** Gross Floor Area
- **Rural Area:** Within or near an isolated community with a population of < 5,000
- **Urban Area:** Within or near an area with a population of ≥ 5,000
- **Tourist Area:** Location where summer AADT is ≥ 50% of AADT the rest of the year (e.g., Minocqua, Eagle River, Lake Geneva, Wisconsin Dells)
- **Freeway Locations:** Locations are typically within ½ mile of an interchange. Consider locations near expressways (WIS 29, US 151, US 53, etc.) as non-freeway locations.
- **960 Midwest:** Trip generation rate based on data sources located only within the Midwest region
- Use number of vehicle fueling positions as the independent variable
- Do not count diesel fueling positions that, when in use, would prevent the use of non-diesel fueling positions
- For stand-alone diesel fueling positions separated from other fueling positions, use Truck Stop (ITE 950) trip generation rate with number of diesel-fueling positions as the independent variable. Use the applicable trip generation rate as defined above for all other fueling positions. For example, if the development consists of a 2,500 square foot convenience market, with a total of 16 fueling positions (12 non-diesel, 4 stand-alone diesel), the vehicle fueling position trip generation rate for ITE 945 would be applicable for the 12 non-diesel fueling stations and the vehicle fueling position trip generation rate for ITE 950 would be applicable for the 4 stand-alone diesel positions.
- Obtain authorization from the WisDOT regional traffic contact prior to utilizing rates other than those specified above.

PART C – TRIP GENERATION MANUAL, 11TH EDITION

In fall of 2021, ITE released the 11th Edition of the *TGM (TGM 11)*. Among the updates for the new edition, the LUCs for vehicle fueling developments were reorganized. The LUCs 853, 945, and 960 from *TGM 10* were combined into a single, revised 945 Convenience Store/Gas Station LUC. Within the new 945 LUC, several subcategories were added to allow for multi-variable evaluation with single-variable data plots. Before selecting an independent variable, the practitioner must select one of two subcategories, either GFA of the convenience store or VFP, as indicated in the ranges shown in Table 2-1.

Table 2-1, TGM 11 LUC 945 Subcategories

<i>GFA (per 1,000-square feet)</i>	<i>VFP</i>
2 – 4 SF	2 – 8
4 – 5.5 SF	9 – 15
5.5 – 10 SF	16 – 24

These subcategories are then used to generate single variable data plots, based on whichever variable was not used for the initial subcategory. For instance, if a GFA subcategory was selected, then the data plot would show VFP as the independent variable, and vice versa.

As described in the sections that follow, elements from *TGM 10*, WisDOT Interim Guidance, and *TGM 11* will be referenced and compared to the site data collected for this study and ultimately used to determine an appropriate trip generation methodology for Convenience Market/Gas Station developments in Wisconsin.

PART D – WISCONSIN STUDY SITE SELECTION

Study sites were selected from across the state based on recommendations from WisDOT Region Traffic Staff and reviewed by MSA and the WisDOT Traffic Impact Analysis (TIA) Users' Group. Study sites were based on LUCs for Gasoline/Service Station with Convenience Market (945) and Super Convenience Market/Gas Station (960) from the *TGM 10*¹⁰. The following criteria was applied to site selection:

- Locations with at least six VFPs, preferably eight
- Rural areas were to have a population of less than 5,000 in the adjacent area; Urban areas were to have a population of 5,000 or greater
- Tourist areas were to have a summer annual average daily traffic (AADT) that was 50% or more than the off-peak season. Such areas included Minocqua, Eagle River, Lake Geneva, and Wisconsin Dells.
- Freeway locations were to be within 0.5-miles of an interchange

Sites containing other land uses within the Convenience Market/Gas Station development (e.g., sites with a fast-food restaurant, diner, coffee house, bakery/donut shop, etc.) were excluded from the list of potential study sites as they would introduce additional variables into the analysis. The study site also

¹⁰ At the time this study was scoped and contracted, an 11th Edition of the *TGM* was known to be released at some time in the future but an exact date was not known. Subsequent LUC changes in the *TGM 11* (definitions, rates, etc.) were therefore unknown. This study was originally written in terms of the then current *TGM* (10th Edition).

needed direct driveway access to the main roadway network rather than a shared access; this would assist in the automated data collection process.

Attempts were made to select sites evenly across each region based on the site characteristics mentioned previously; however, this was not always possible, as population centers, tourism destinations, and location relative to freeways are not evenly distributed among all the regions. Table 2-2 includes a summary of sites where data was collected.

Table 2-2, Summary of Sites

<i>Region</i>	<i>Total</i>	<i>Location</i>				<i>Area</i>	
		<i>Freeway</i>		<i>Non-Freeway</i>		<i>Rural</i>	<i>Urban</i>
		<i>Non-Tourist</i>	<i>Tourist</i>	<i>Non-Tourist</i>	<i>Tourist</i>		
NC	14	3	2	4	5	7	7
NE	17	7	3	5	2	11	6
NW	12	3	1	2	6	7	5
SE	21	9	3	8	1	4	17
SW	24	9	3	11	1	10	14
Total	88	31	12	30	15	39	49

Chapter 3 – METHODOLOGY

PART A – DATA COLLECTION

At each of the approved sites, data collection primarily included 12-hour (6:00 AM to 6:00 PM) weekday site trips (inbound and outbound). For the sites identified:

- Up to 30 locations also included Friday PM peak hour data collection (3:00 PM to 7:00 PM), primarily in tourist areas
- Up to 45 locations also included Saturday peak hour data (10:00 AM to 2:00 PM), primarily in tourist areas

Vehicular trip data was collected via video recording between June 2021 and May 2022. Recorded video data was then processed by Miovision (a data collection company) to establish the number of inbound and outbound trips. A select number of sites were processed and verified manually, due to camera angles or other unique site constraints.

Physical site visits, GIS/Google Earth aerial imagery, and/or data provided by WisDOT were used to collect additional site information; including, convenience store size (gross floor area), the number of non-diesel and diesel fueling positions, presence of a carwash, and if competition exists within a 0.5-mile radius of the study site. Site data, including volume and peak hour summaries are included in Appendix A.

Depending on the site characteristics and where data collection cameras were able to be set up, site trips were processed based on vehicle classifications, as shown in Table 3-1.

Table 3-1, Site Trip Vehicle Classifications

<i>Miovision Classification</i>	<i>FHWA Classification</i>	<i>General Description</i>	<i>Study Impact</i>
Lights	Classes 1 – 3	Motorcycles, cars, pick-ups, vans, SUVs	Assumed to use non-diesel VFPs
Mediums	Classes 4 – 7	Single-unit trucks, busses, motorhomes	Assumed to use diesel VFPs
Articulated Trucks	Classes 8 – 13	Trucks with two or more units (tractor + trailer)	

The vehicle classifications, as shown in Table 3-1, were primarily useful for sites with distinct stand-alone diesel VFP islands, and if data was able to be collected independent of the non-diesel VFPs. Sites which did not have stand-alone diesel islands were excluded from classifications and were processed as general inbound/outbound trips only. Sites which allowed for direct access to stand-alone diesel VFP trip generation were utilized to generate sample diesel VFP rates. Sites which had stand-alone diesel VFP islands were processed with classifications to allow for diesel and non-diesel VFP rates to be reviewed in the event cameras were not able to directly capture usage of the stand-alone VFPs.

Per WisDOT policy, diesel VFPs were not counted that when in use, would block non-diesel VFPs.

PART B – DATA AGGREGATION

All collected trip data was aggregated into an Excel-based spreadsheet for processing. This spreadsheet is then used to power a dashboard which allows the user to select a trip generation rate output based on the various site characteristics, such as:

- Location (Region)
- Freeway versus non-freeway
- Tourist area versus non-tourist area
- Rural versus urban area
- Presence of diesel fueling options
- Metro area population
- Presence of a carwash
- Presence of competition within 0.5-miles
- Desired peak period
 - AM
 - PM
 - Friday
 - Saturday

PART C – DATA REDUCTION

As shown in Table 2-2, data was initially collected at a total of 88 sites. Two sites were removed following further review and discussion with WisDOT based on the following reasons:

<i>Site Removed</i>	<i>Reason</i>
SE-106, SE - Fleet Farm Delavan, I-43 & WIS 50	Store branded station with regular special promotions which result in a linked trip factor not present with other sites
SE-118, SE - Mobil Genoa City, US 12 & 125th	Additional land uses found sharing the same space with the convenience store

The location of these sites is shown in Figure 3-1.

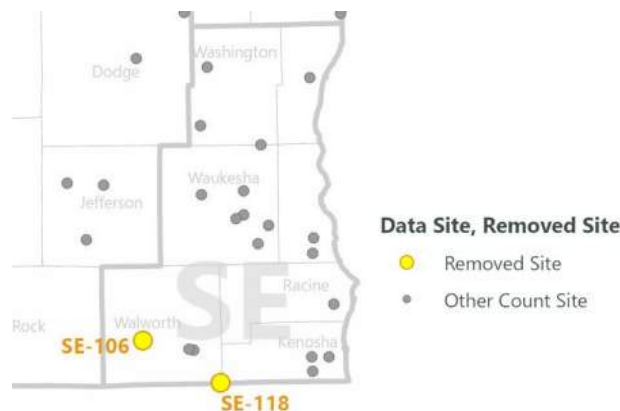


Figure 3-1, Location of Removed Sites

An analysis was performed to determine if any of the remaining 86 sites were statistical outliers and should be removed from the dataset prior to calculating trip generation rates. Using a box and whisker plot, the trip generation data was compared by peak hour periods. As shown in Figure 3-2, the site data fell within the upper and lower bounds of the analysis; therefore, the data did not reveal other sites that would be classified as outliers.

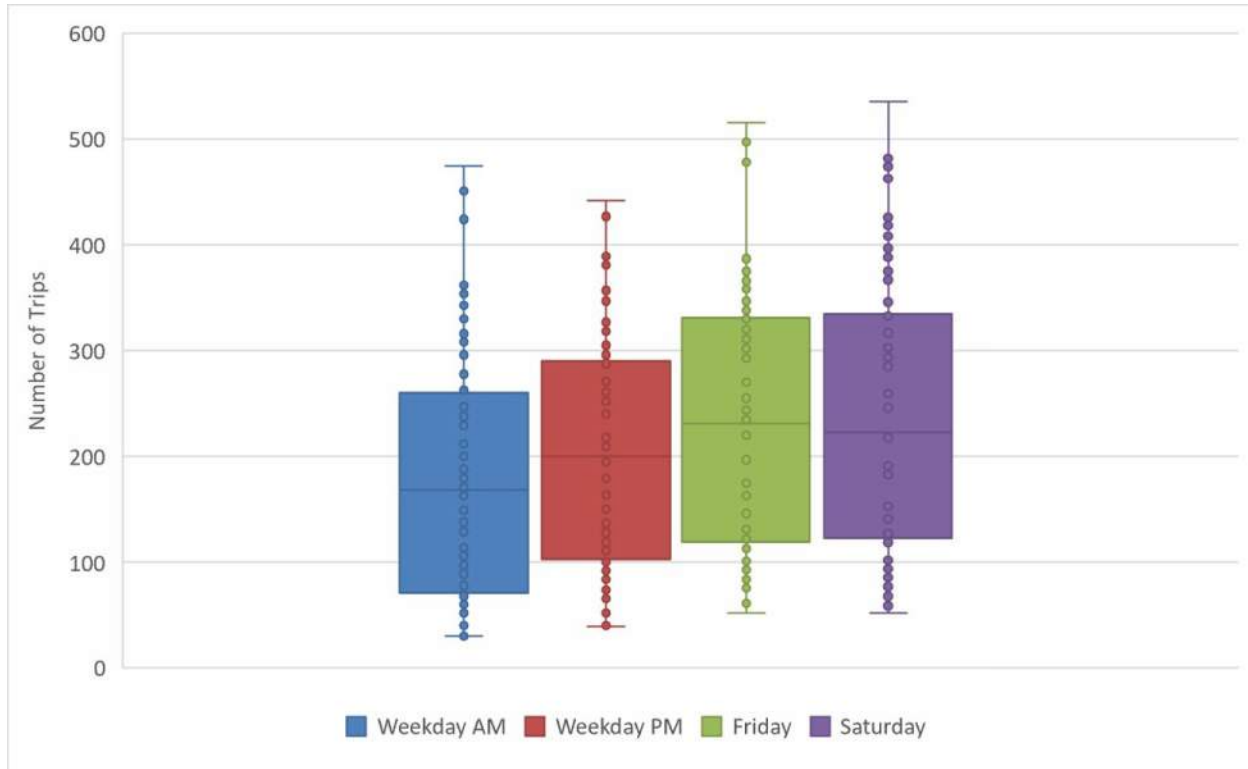


Figure 3-2, Box and Whisker Plot Reviewing for Outlier Sites

The locations of the 86 sites are shown in Figure 3-3. As a reference, a geographical breakdown of site locations is shown for the following characteristics:

- Freeway/Non-Freeway Figure 3-4
- Tourism Figure 3-5
- Rural/Urban Figure 3-6
- Diesel Availability Figure 3-7

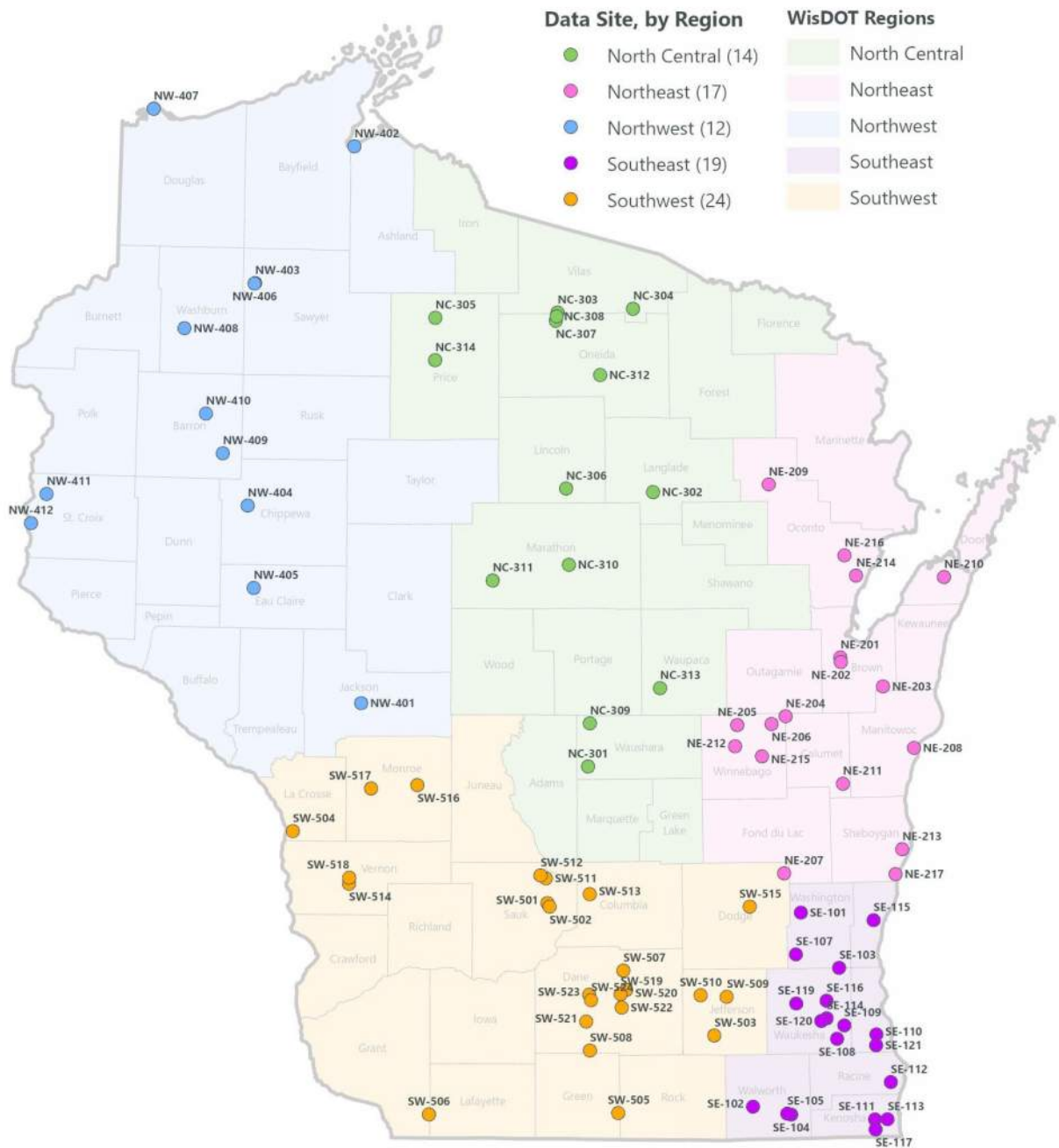


Figure 3-3, Site Locations by Region

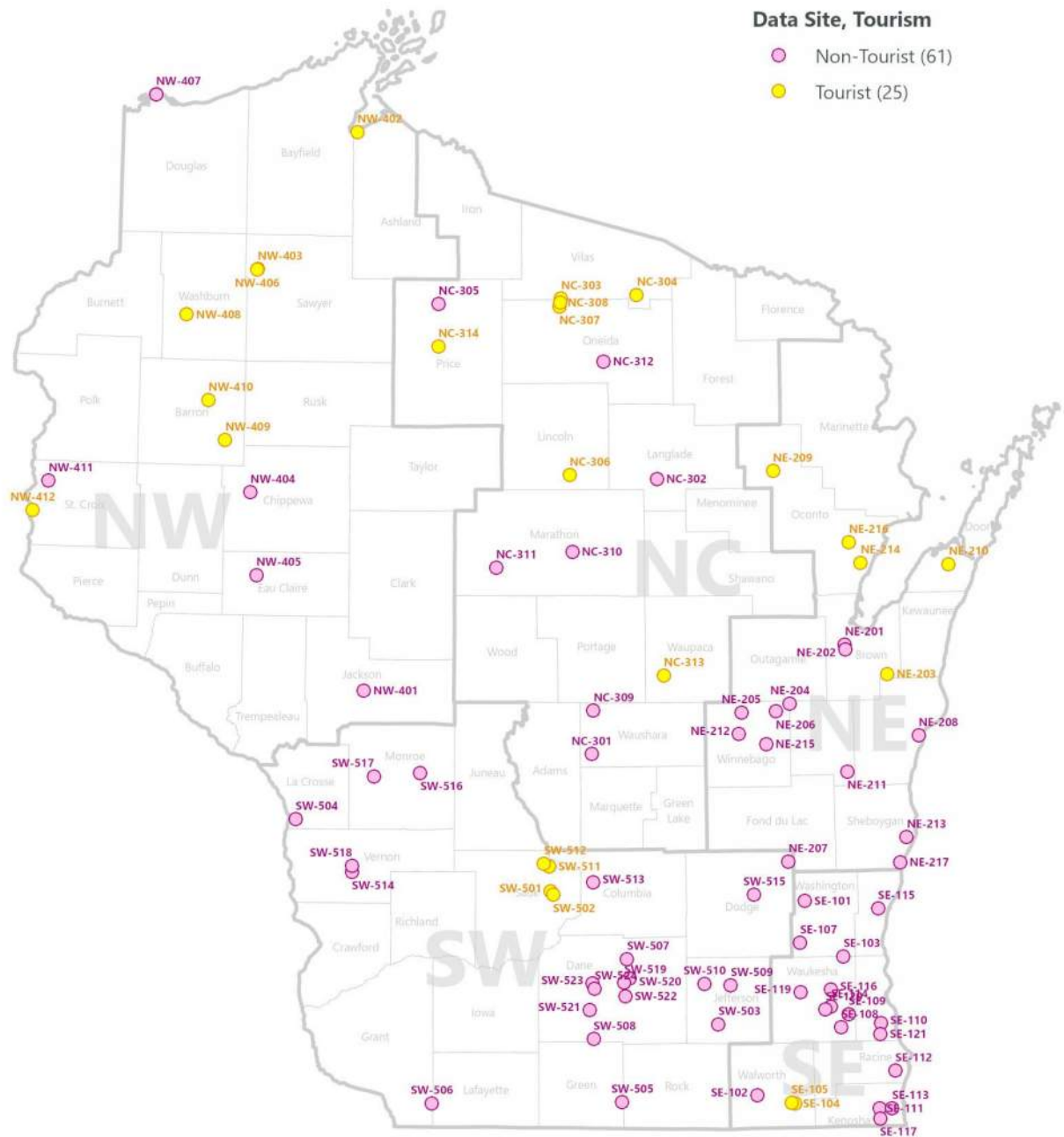


Figure 3-5, Site Locations by Tourism

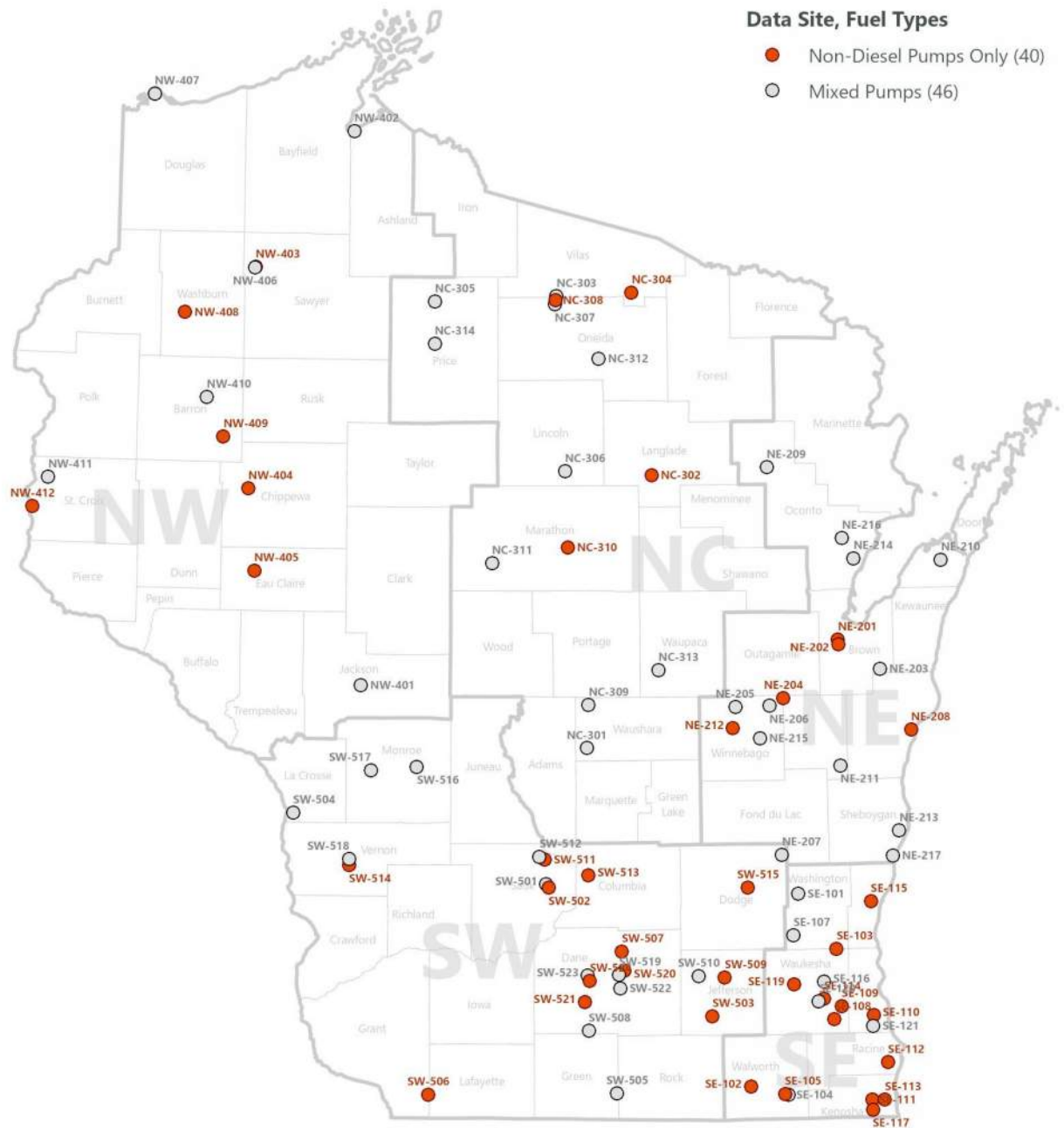


Figure 3-7, Site Locations by Diesel Availability

While the data was in the early stages of analysis, a request was made to classify the study sites by metro area populations. Metro area population categories were established by WisDOT, as shown in Table 3-2. Study site locations by the metro area population regions are shown in Figure 3-8. Geographic boundaries of the metro areas were created based on [2010 WisDOT ArcGIS population data](#)¹¹.

Table 3-2, Metro Area Population Categories

<i>Metro Area Description</i>	<i>Population</i>	<i>Metro Area</i>
Milwaukee & Madison	> 300,000	1
Green Bay & Appleton	200,001 – 300,000	2
Kenosha & Racine	120,001 – 200,000	3
Superior ¹² , Eau Claire, & La Crosse	100,001 – 120,000	4
Sheboygan, Wausau, & Oshkosh	50,001 – 100,000	5
Other	≤ 50,000	6

¹¹ <http://arcg.is/1GqGa>, accessed July 2022

¹² Includes Duluth, MN area

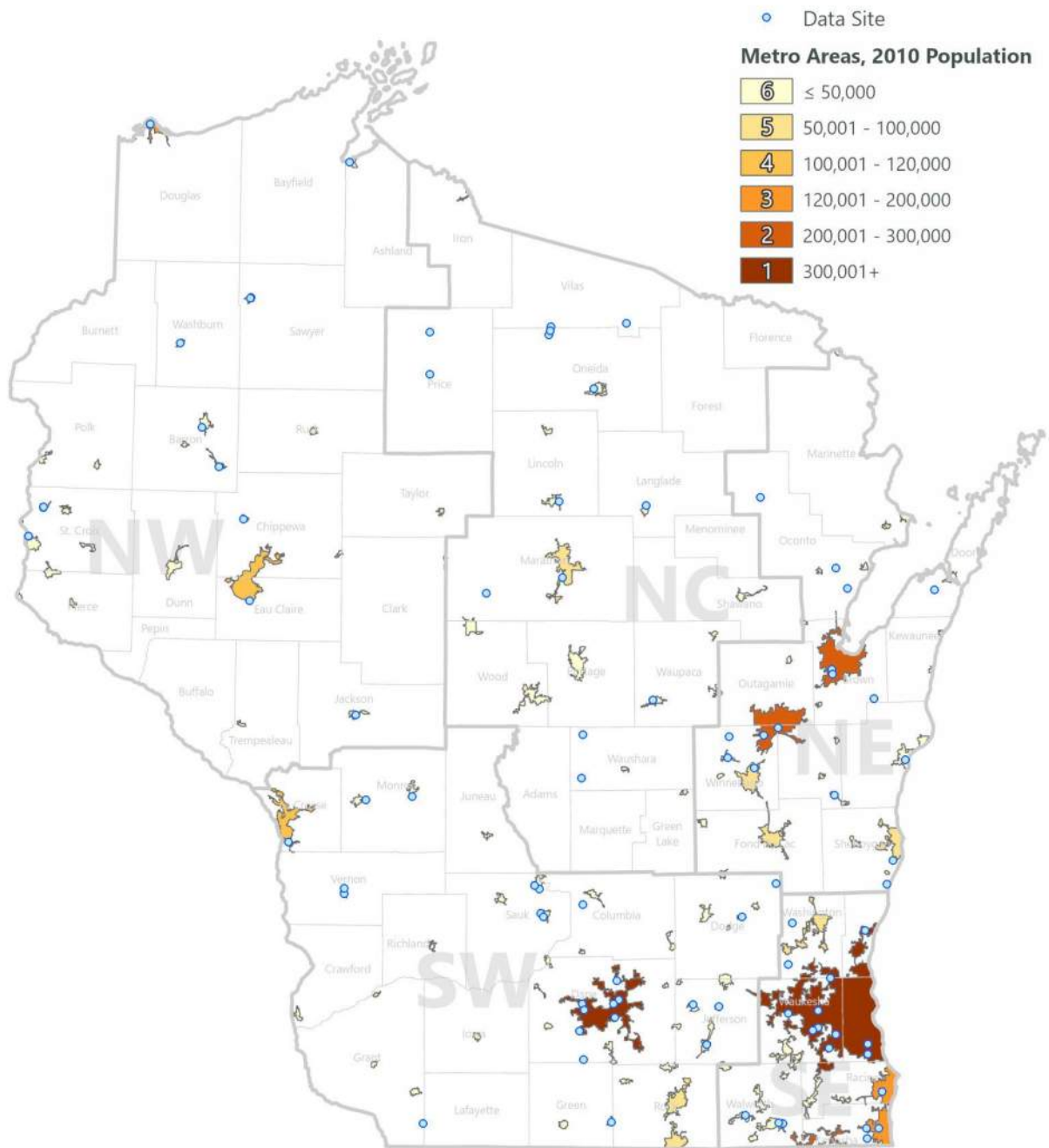


Figure 3-8, Site Locations by Metro Population

PART D – INITIAL STATISTICAL ANALYSES

The site characteristics (variables) identified earlier were used to check for correlation between the variable and the four peak periods in which data was collected (AM, PM, Friday, and Saturday). Pearson’s *r* was used to measure the strength of a linear association between two variables. Three types of correlations are possible, as shown in Figure 3-9: positive, negative, and no correlation.

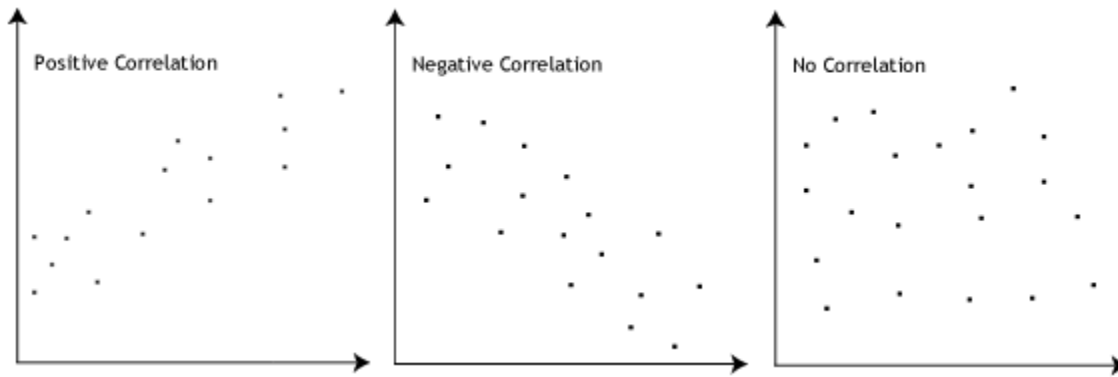


Figure 3-9, Correlation Types, image courtesy of <https://statistics.laerd.com>

The degree of correlation varies from -1.0 to 1.0, with values near zero having the least correlation, as shown in Table 3-3.

Table 3-3, Correlation Interpretations, source: Pavez Ahammad

Size of Correlation		Interpretation
0.90 to 1.00	(-0.90 to -1.00)	Very high positive (negative) correlation
0.70 to 0.90	(-0.70 to -0.90)	High positive (negative) correlation
0.50 to 0.70	(-0.50 to -0.70)	Moderate positive (negative) correlation
0.30 to 0.50	(-0.30 to -0.50)	Low positive (negative) correlation
0.00 to 0.30	(0.00 to -0.30)	Negligible correlation

Based on data review and discussion with WisDOT Region Traffic Staff, another variable to analyze GFA was introduced to the study. Similar to what is used in the *TGM 11*, as described in Chapter 2, the GFA was grouped into several ranges to determine which best fit the data collected, shown in Table 3-4. GFA classifications were added to the variables considered for further statistical analysis.

Table 3-4, GFA Size Ranges

GFA Range, SF	Number of Sites		GFA Range, SF	Number of Sites		GFA Range, SF	Number of Sites	
< 3,000	15	17%	< 4,000	24	28%	< 4,000	24	28%
3,000 – 5,999	44	52%	4,000 – 5,999	35	41%	4,000 – 6,999	44	51%
≥ 6,000	27	31%	≥ 6,000	27	31%	≥ 7,000	18	21%
Total	86	100%	Total	86	100%	Total	86	100%

Correlations were reviewed for each of the GFA classifications, as shown in Table 3-5 through Table 3-7.

Table 3-5, Correlations for < 3k SF, 3-5.9k SF, ≥ 6k SF Classification Divisions

	<i>AM Peak</i>	<i>PM Peak</i>	<i>Friday Peak</i>	<i>Saturday Peak</i>
GFA Classifications	0.6199	0.6305	0.5817	0.5366

Table 3-6, Correlations for < 4k SF, 4-5.9k SF, ≥ 6k SF Classification Divisions

	<i>AM Peak</i>	<i>PM Peak</i>	<i>Friday Peak</i>	<i>Saturday Peak</i>
GFA Classifications	0.6806	0.6774	0.6635	0.6120

Table 3-7, Correlations for < 4k SF, 4-6.9k SF, ≥ 7k SF Classification Divisions

	<i>AM Peak</i>	<i>PM Peak</i>	<i>Friday Peak</i>	<i>Saturday Peak</i>
GFA Classifications	0.5343	0.5095	0.4716	0.4389

The classification division of < 4,000 SF, 4,000 – 5,999 SF, ≥ 6,000 SF had the highest correlations as well as the most even distribution amongst the number of sites.

Table 3-8 shows a summary of the resulting correlation results for the previously identified variables and the added GFA Classifications variable.

Table 3-8, Variable Correlation¹³

	<i>AM Peak</i>	<i>PM Peak</i>	<i>Friday Peak</i>	<i>Saturday Peak</i>
VFP	0.6802	0.6448	0.6021	0.5341
GFA per 1,000 SF	0.5833	0.5760	0.5351	0.5036
Competition	0.0947	0.1259	0.2015	0.2028
Carwash	0.4310	0.4486	0.3666	0.3503
Tourist	0.0102	0.0663	0.1103	0.2878
Freeway	-0.0813	-0.0582	0.0178	-0.0279
Rural/Urban	0.1349	0.1262	0.0478	-0.0243
Non-Diesel vs. Mixed	-0.0422	-0.0419	-0.0492	0.0067
Metro Area Population	0.2158	0.1577	0.0461	-0.1090
Population	0.0551	0.0242	0.0045	-0.1170
GFA Categories	0.6806	0.6774	0.6635	0.6120

As shown in Table 3-8, the variables of VFP, GFA, and GFA Classifications have the highest correlations. Whether the site had a carwash was strong enough to also consider for further analysis. The variables

¹³ *Metro Area Population* is based on the regions shown in Table 3-2. *Population* is based on the recent population of the site's municipality.

with the strongest correlations were then reviewed within statistical modeling, which compared the *p*-value and *R*²-values. The results from the statistical modeling are shown in Table 3-9. If an independent variable within the model had a *p*-value greater than 0.05, it was considered to not be a good model. Further, the higher the *R*²-value, the stronger the model would be for trip generation calculation.

Table 3-9, Significant Models for Each Period, *R*² Values

	<i>AM Peak</i>	<i>PM Peak</i>	<i>Friday Peak</i>	<i>Saturday Peak</i>
VFP	0.4626	0.4157	0.3625	0.2853
GFA	0.3402	0.3317	0.2863	0.2536
VFP + GFA	0.4827	0.4430	0.3847	0.3112
VFP + GFA + Carwash	NG	NG	NG	NG
VFP + Carwash	NG	NG	NG	NG
GFA + Carwash	NG	NG	NG	NG
VFP + GFA Classifications	0.5547	0.5238	0.4877	0.3982

- Best model
- 2nd Best Model
- 3rd Best Model
- NG Not a good model, *p* > 0.05

The variable of the presence of a carwash was not strong enough to use on its own, so it was modeled in conjunction with other common variables. Combined with other variables, the car wash characteristic was found to not be suitable for use in modeling due to its *p*-values. The results in Table 3-9 show that the VFP + GFA Classifications (multivariable equation) provides the best model for all peak periods, as it consistently has the strongest *R*²-values. VFP + GFA (multivariable equation) and VFP (solo variable) are strong as well.

Initial correlation and regression summaries are included in Appendix B.

Equations developed from the strongest regression models shown in Table 3-9 were utilized to compare calculated trip generation results to the actual number of trips counted at each of the study sites. A summary of how the calculated trip generation compared to the actual site data is shown in Table 3-10 through Table 3-13.

Table 3-10, AM Peak Percent Deviation from Actual Trips

% Difference from Observed Data (+/-)	<i>AM Trips</i>		
	<i>Number of Sites within % Difference Range</i>		
	<i>VFP</i>	<i>VFP + GFA</i>	<i>VFP + GFA Class.</i>
< 25%	33	36	42
25 - 49%	23	22	21
50 - 74%	8	8	6
75 - 99%	5	5	3
≥ 100%	17	15	14

Table 3-11, PM Peak Percent Deviation from Actual Trips

% Difference from Observed Data (+/-)	PM Trips Number of Sites within % Difference Range		
	VFP	VFP + GFA	VFP + GFA Class.
< 25%	39	42	44
25 - 49%	23	20	23
50 - 74%	6	8	3
75 - 99%	5	3	4
≥ 100%	13	13	12

Table 3-12, Friday Peak Percent Deviation from Actual Trips

% Difference from Observed Data (+/-)	Friday Trips Number of Sites within % Difference Range		
	VFP	VFP + GFA	VFP + GFA Class.
< 25%	27	30	39
25 - 49%	19	18	11
50 - 74%	7	4	4
75 - 99%	3	6	6
≥ 100%	10	8	6

Table 3-13, Saturday Peak Percent Deviation from Actual Trips

% Difference from Observed Data (+/-)	Saturday Trips Number of Sites within % Difference Range		
	VFP	VFP + GFA	VFP + GFA Class.
< 25%	22	25	28
25 - 49%	23	22	20
50 - 74%	4	2	5
75 - 99%	4	7	3
≥ 100%	13	10	10

The results show that the VFP + GFA Classification model consistently has the largest number of sites within 25% of the observed site trip generation. The results also show that the VFP + GFA Classification model generally has the lowest number of sites with calculated trip generation that is off by greater than 100%.

The full results from these comparisons are shown in Appendix C.

PART E – DIESEL TRIP GENERATION RATE

Statistical Analyses

As mentioned in Chapter 3, vehicle trip data included vehicle classifications. Any vehicle within the category of FHWA Class 4 and above (Miovision “Mediums” and “Articulated Trucks”) was assumed to be a diesel vehicle at sites in which direct recording of stand-alone diesel vehicle fueling positions (DFP) was not able to be obtained.

An observed trend for new convenience store/gas station developments is to have stand-alone diesel fueling islands (DFPs)¹⁴ especially if they will be located along a roadway with a higher-than-average truck volume. Because of this trend, WisDOT Region Traffic Staff were also interested in investigating the possibility of a trip generation rate equation derived from DFPs. A diesel variable was reviewed for correlation versus the other site variables to determine reasonableness for use as an independent variable. Correlations are shown in Table 3-14.

Table 3-14, Diesel Correlations¹⁵

	<i>AM Peak Trucks</i>	<i>PM Peak Trucks</i>
Diesel VFP	0.6184	0.6589
GFA per 1,000 SF	0.3623	0.2873
Competition	0.0978	0.0100
Carwash	0.2727	0.1788
Region	0.0810	0.0643
Tourist	-0.0479	-0.1645
Freeway	0.1680	0.2318
Rural/Urban	0.2359	0.1057
Metro Area Population	0.4091	0.3719
Population	0.2023	0.0194

As shown in Table 3-14, Diesel VFP has the highest correlation for both AM and PM peak periods. The metro area population variable was also strong enough to consider for further model analysis. Results from the statistical modeling analyses are shown in Table 3-15.

Table 3-15, Diesel Models for Each Period, R² Values¹⁶

	<i>AM Peak</i>	<i>PM Peak</i>
Diesel-VFP	0.3825	0.4341
GFA	0.1312	NA
GFA + Metro	0.2328	NA

Best model
 NA Not applicable for this peak period

¹⁴ Not all new facilities are constructed with stand-alone DFPs

¹⁵ Metro Area Population is based on the regions shown in Table 3-2. Population is based on the recent population of the site’s municipality.

¹⁶ NA is due to low correlation factors for the peak period

The results in Table 3-15 show that the DFP variable provides the best statistical model. Correlation and regression summaries for diesel versus non-diesel rate modeling are included in Appendix D.

Rate Application

Current interim WisDOT procedures stipulate the use of trip generation rates from LUC 950 (Truck Stop) for sites with stand-alone diesel islands. VFP is the only variable option currently provided in the *TGM 11*. In *TGM 10*, the LUC references only one study site; *TGM 11* has four study sites for the AM peak and seven study sites for the PM peak. Using the vehicle classification assumption discussed previously, for when camera locations did not allow for direct viewing of the stand-alone DFPs, this study has data for up to 40 sites¹⁷.

Table 3-16 provides a summary of the number of sites available for the AM and PM peaks, based on the number of DFPs. It should be noted that up to 45 of the 86 sites had stand-alone DFP islands. If the site did not have truck traffic during the peak hour to be used for potential analysis, the site was removed from consideration during that peak. As observed, newer site developments in Wisconsin with stand-alone DFPs typically have at least four DFPs.

Table 3-16, Sites with DFPs for Analysis

<i>Number of DFPs</i>	<i>Number of Sites</i>	
	<i>AM Peak</i>	<i>PM Peak</i>
2+	45	40
3+	29	27
4+	14	14
5+	8	8
6+	2	2

As shown in Figure 3-10 through Figure 3-14, as the number of DFPs increases the number of study sites decrease. Subsequently, the number of sites per region and population center also significantly decrease.

Regarding the number of DFPs, historical practice has been to count the total number of pumps; however, having two diesel pumps across an aisle from each other do not necessarily mean two vehicles can refuel simultaneously. Some developments encounter queues for diesel vehicle fueling. Technically, these trips have already been generated regardless of if the vehicle is able to immediately refuel. Since the scope of the study did not include surveying the ability for DFPs to be used simultaneously, such data was not collected during the site visits. Further, not all of the stand-alone DFP islands are visible from the site video that was collected or online resources such as Google Street View. For those that are visible in online resources, simultaneous usage would only be able to be estimated.

Since current development trends show an increase in the number of DFPs per site, additional data needs to be collected at more recently constructed sites (with 5 and 6+ DFPs) in order to confirm the impact of the lesser represented sites. As Figure 3-13 and Figure 3-14 show, sites with five or more DFPs are limited to the southern portion of the state, and sites with six or more DFPs are solely in the southeastern region. Additional data would be needed to get a better representation of other regions of the state. Due to the limitations of the available data and number of assumptions necessary in order to apply the current data

¹⁷ Sites with data for both AM and PM peak periods

into full statistical models, further analysis in order to develop a DFP rate is not recommended to be completed as part of this study.

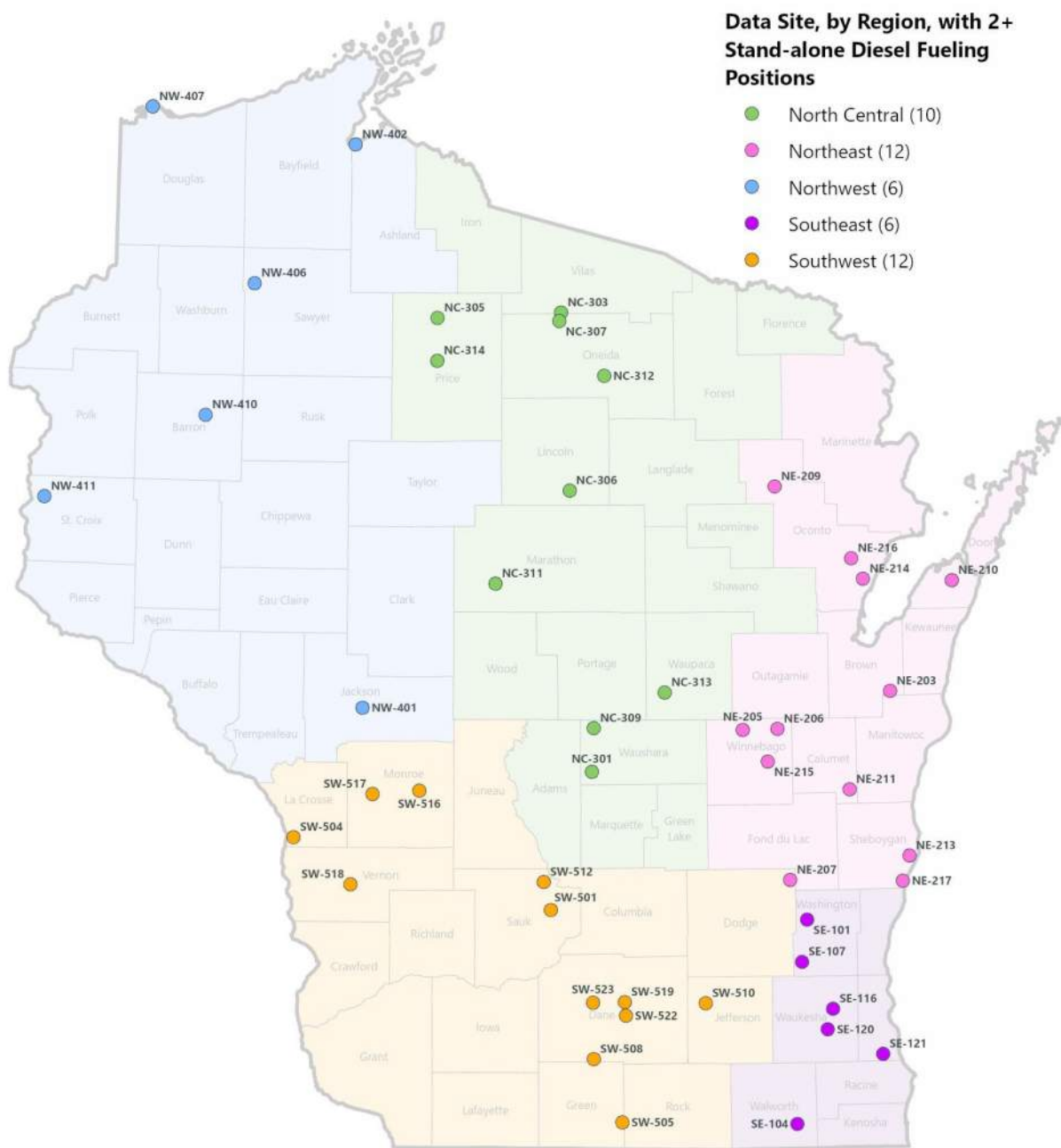


Figure 3-10, Sites with Two or More DFPs

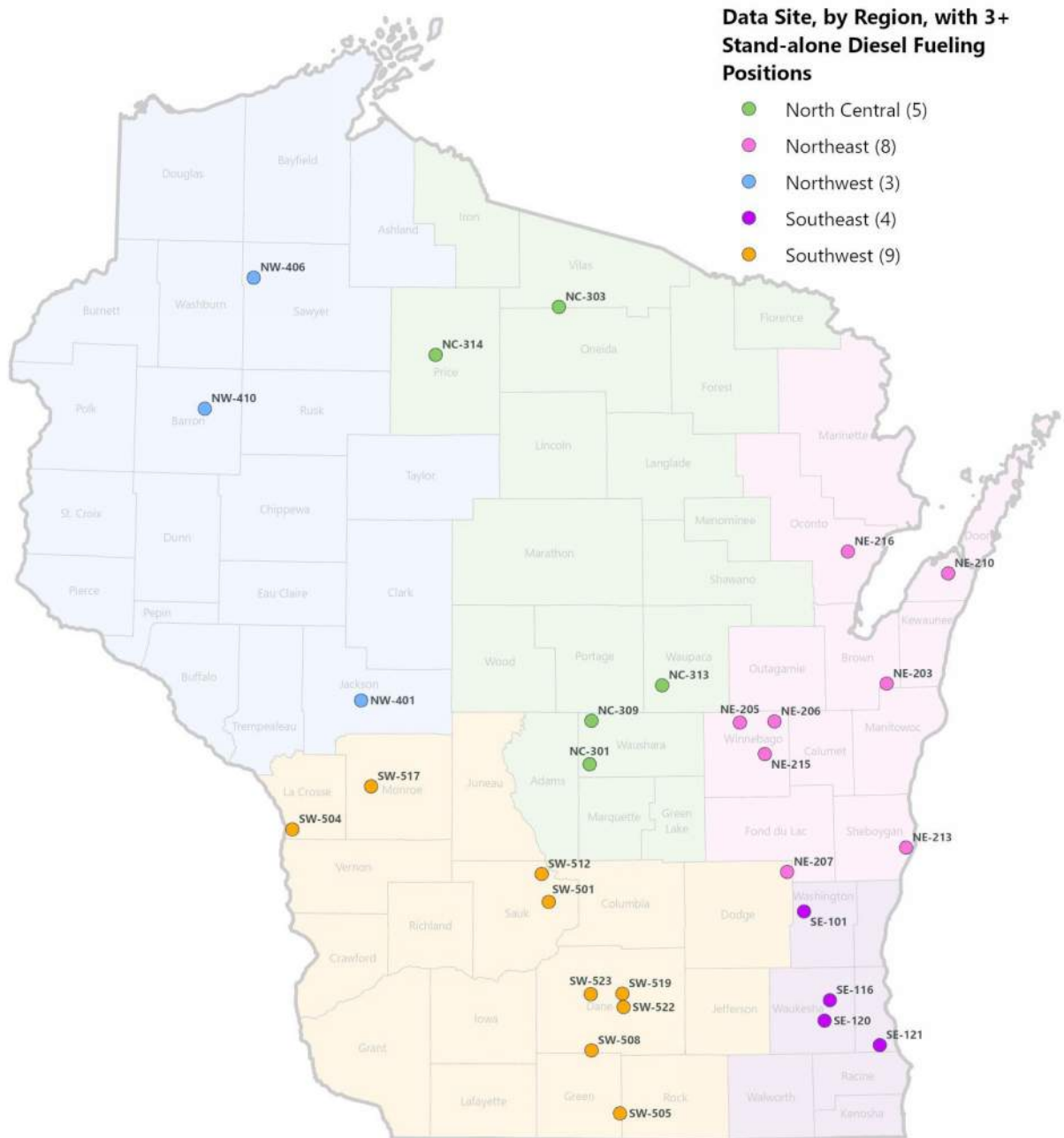


Figure 3-11, Sites with Three or More DFPs

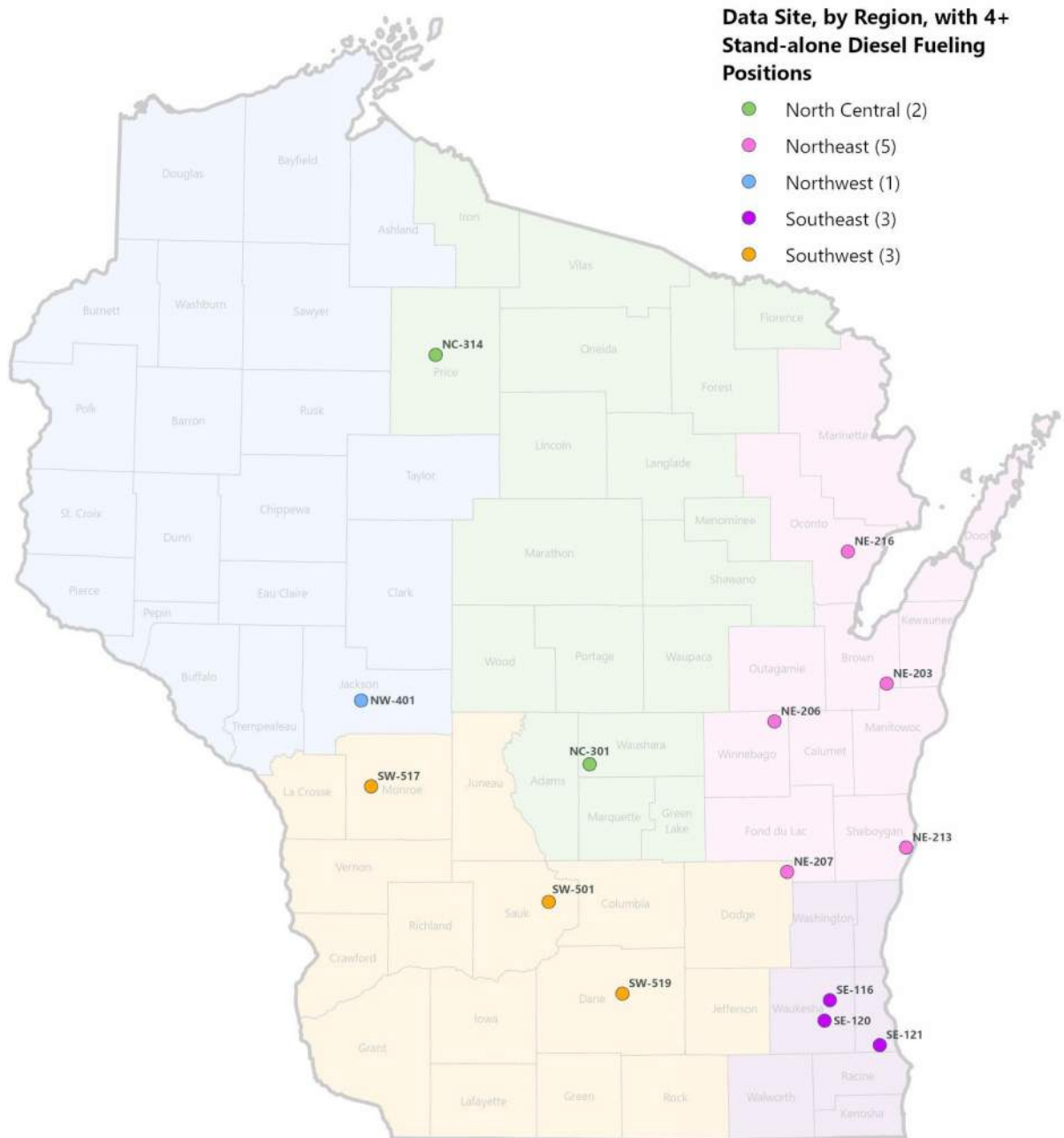


Figure 3-12, Sites with Four or More DFPs

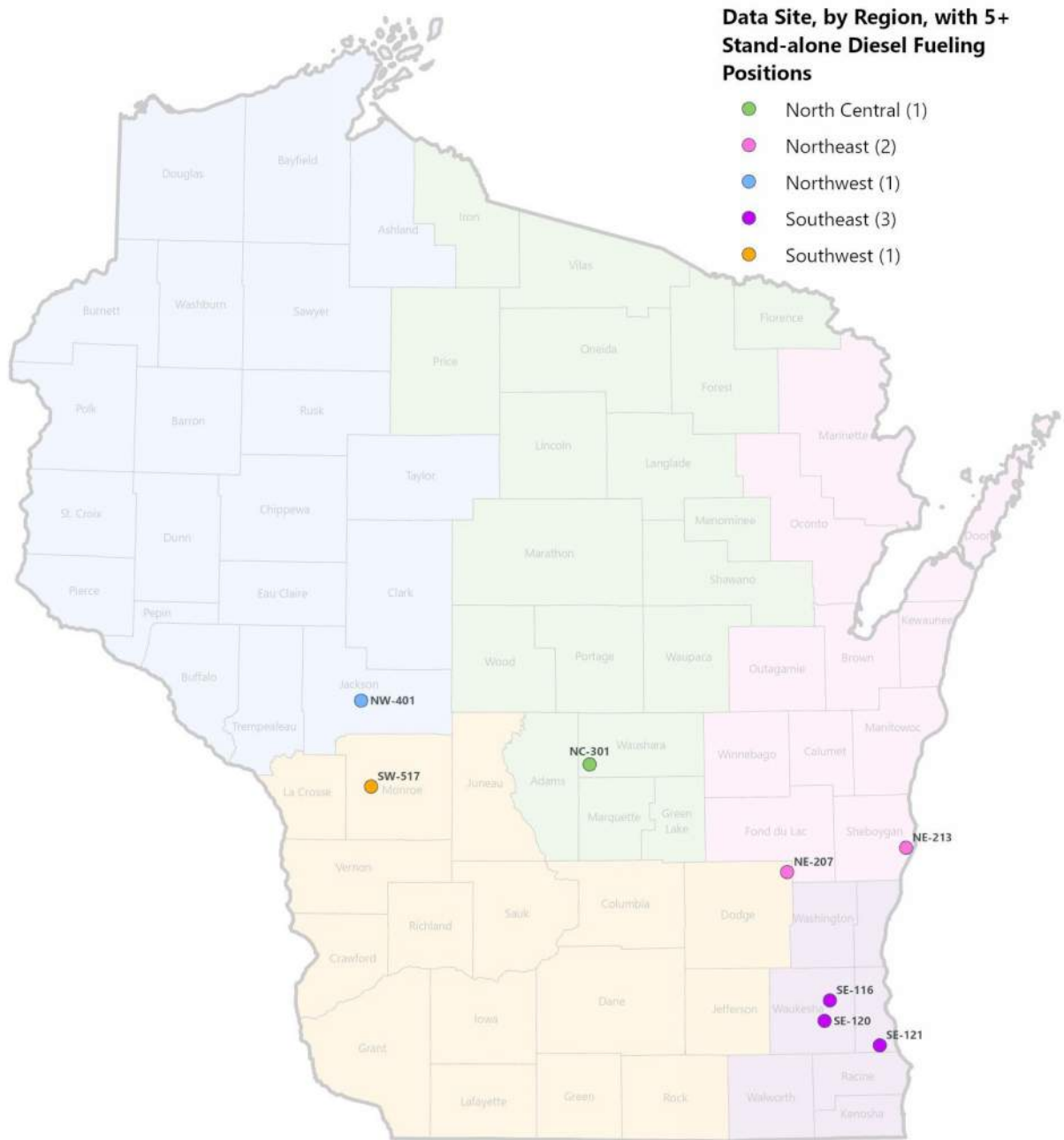


Figure 3-13, Sites with Five or More DFPs

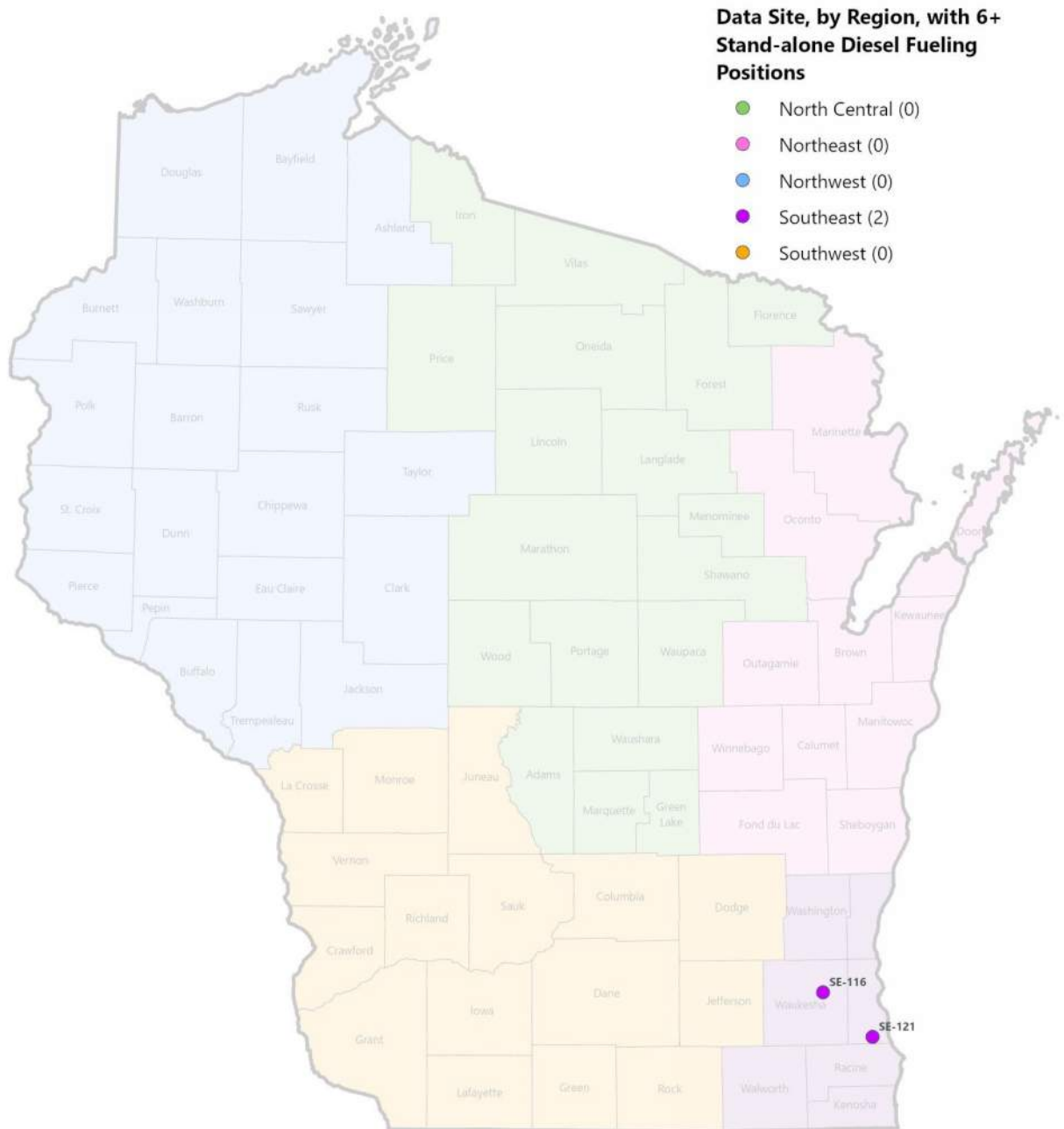


Figure 3-14, Sites with Six or More DFPs

PART F – STAKEHOLDER REVIEW & STATISTICAL REFINEMENT

During discussions with WisDOT Region Traffic Staff, including a population threshold in the equations was suggested, as it may better represent the operational differences WisDOT staff has observed at urban locations versus less dense, more suburban developments.

Based on historical experience and general metro area population distributions, staff recommended the 100,000 and 300,000 population thresholds be evaluated further for their impacts to the models with the strongest statistical significance.

The recommended population thresholds, combined with the results of the initial analyses were used to further review and refine the statistical analyses in order to create more accurate models for use in trip generation calculation. The refined variables and subsequent statistical model analysis and their results are discussed in the following chapters.

Chapter 4 – TRIP GENERATION RATES

PART A – STATEWIDE RATES

Based on the initial analysis from the 86 sites and WisDOT Region Traffic Staff recommendations, multivariable combinations were further investigated. The AM and PM peaks showed the greatest statistical impact in initial analyses and also had the greatest amount of site data for review; thus, additional refinement analyses focused on the AM and PM peak periods. Saturday peaks were also included, as the scope of the study sought to create equations for weekday AM, PM, and Saturday peak periods. The results from the statistical model analyses are shown in Table 4-1. If a model’s *p*-values were greater than 0.05, it was considered to not be a good model for use as an independent variable. The higher the *R*²-value, the stronger the variable would be for trip generation calculation.

Table 4-1, Revised Significant Factors for Each Period, *R*² Values¹⁸

	<i>AM Peak</i>	<i>PM Peak</i>	<i>Friday</i>	<i>Saturday</i>
VFP	0.4626	0.4157	0.3625	0.2853
GFA	0.3402	0.3317	0.2863	0.2536
VFP + GFA	0.4827	0.4430	0.3847	0.3112
VFP + GFA Classifications	0.5547	0.5238	0.4877	0.3982
GFA + VFP Classifications	0.4111	0.3875	0.3400	0.2850
VFP + Metro 100,000	0.4537	0.4027	0.3424	0.2829
VFP + Metro 300,000	0.4528	0.4017	0.3423	0.2730
GFA + Metro 100,000	0.3684	0.3452	0.2867	0.2300
GFA + Metro 300,000	0.3562	0.3276	0.2792	0.2302
GFA Class. + Metro 100,000	0.4851	0.4678	0.4341	0.3574
GFA Class. + Metro 300,000	0.4852	0.4596	0.4404	0.3553
GFA Class. + Metro 300,000 + VFP	0.5598	0.5198	0.4854	0.3891
VFP + GFA Class. (< 300,000)	0.4770	0.4469	0.4481	0.3935
VFP + GFA Class. (≥ 300,000)	0.7134	0.6940	0.9938	0.8267

- Best model
- 2nd Best Model
- 3rd Best Model
- Not a good model, *p* > 0.05

The results in Table 4-1 show that the VFP + GFA Classifications ≥ 300,000¹⁹ (multivariable equation) consistently has the strongest *R*²-values. While the < 300,000 component’s *R*²-values aren’t quite as

¹⁸ *R*²-values shown for several models are also shaded red as their *p*-value indicates this is not a statistically desirable model. However, they were investigated further due the *p*-value’s close proximity to the 0.05 threshold or from stakeholder interest in a complete comparison of the models.

¹⁹ The greater than and less than are considered as part of the same model, but require splitting in order to complete statistical analyses.

strong, when considered together, they provide one of the strongest sets of R^2 -values. The VFP + GFA Classifications (multivariable equation) is also strong as well.

Final correlation and regression summaries are included in Appendix E.

Equations developed from the strongest regression models from Table 4-1 were utilized to compare calculated trip generation results to the number of actual trips counted at each of the study sites.

A summary of how the calculated trip generation compared to the actual site data is shown in Table 4-2 through Table 4-5²⁰. Equations used for the comparisons are included in Appendix F.

Table 4-2, AM Peak Deviation from Actual Trips

% Difference from Observed Data (+/-)	AM Trips - Number of Sites within Difference Range							
	TGM Classifications			Study-Derived Classifications				
	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	VFP + GFA Class.	GFA Class. + Metro 100,000	GFA Class. + Metro 300,000	VFP + GFA Class. + Metro 300,000	VFP + GFA Class. ≥ < Metro 300,000
+/- 0 - 50 Trips	10	37	10	45	46	51	45	47
+/- 50 - 100 Trips	17	26	17	25	25	16	24	25
+/- 100 - 200 Trips	32	23	20	16	13	18	17	14
+/- 200 - 300 Trips	23	---	21	---	2	1	---	---
+/- 300 Trips	4	---	18	---	---	---	---	---
Total > 100 Trips	59	23	59	16	15	19	17	14

Table 4-3, PM Peak Deviation from Actual Trips

% Difference from Observed Data (+/-)	PM Trips - Number of Sites within Difference Range							
	TGM Classifications			Study-Derived Classifications				
	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	VFP + GFA Class.	GFA Class. + Metro 100,000	GFA Class. + Metro 300,000	VFP + GFA Class. + Metro 300,000	VFP + GFA Class. ≥ < Metro 300,000
+/- 0 - 50 Trips	30	37	23	49	37	41	46	44
+/- 50 - 100 Trips	24	32	12	24	28	24	26	30
+/- 100 - 200 Trips	28	17	32	13	20	20	14	12
+/- 200 - 300 Trips	4	---	9	---	1	1	---	---
+/- 300 Trips	---	---	10	---	---	---	---	---
Total > 100 Trips	32	17	51	13	21	21	14	12

Table 4-4, Friday Peak Deviation from Actual Trips

% Difference from Observed Data (+/-)	Friday Trips - Number of Sites within Difference Range							
	TGM Classifications			Study-Derived Classifications				
	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	VFP + GFA Class.	GFA Class. + Metro 100,000	GFA Class. + Metro 300,000	VFP + GFA Class. + Metro 300,000	VFP + GFA Class. ≥ < Metro 300,000
+/- 0 - 50 Trips	19	23	6	34	29	23	25	35
+/- 50 - 100 Trips	13	25	7	18	20	18	24	17
+/- 100 - 200 Trips	26	17	24	12	15	22	16	12
+/- 200 - 300 Trips	8	---	18	1	1	2	---	1
+/- 300 Trips	---	1	11	1	1	1	1	1
Total > 100 Trips	34	18	53	14	17	25	17	14

²⁰ Data derived from TGM 10 LUC 960 uses the Midwest filtered rates for all sites for simplicity of comparison; the unfiltered rate is higher, which would result in larger trip generation values. LUC 960 is not available in TGM 11.

Table 4-5, Saturday Peak Deviation from Actual Trips

% Difference from Observed Data (+/-)	Saturday Trips - Number of Sites within Difference Range							
	TGM Classifications			Study-Derived Classifications				
	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	VFP + GFA Class.	GFA Class. + Metro 100,000	GFA Class. + Metro 300,000	VFP + GFA Class. + Metro 300,000	VFP + GFA Class. ≥ < Metro 300,000
+/- 0 - 50 Trips	20	18	18	26	25	31	23	29
+/- 50 - 100 Trips	18	21	15	21	22	14	23	18
+/- 100 - 200 Trips	25	20	15	17	15	18	18	17
+/- 200 - 300 Trips	2	6	6	1	4	2	1	1
+/- 300 Trips	1	1	12	1	---	1	1	1
Total > 100 Trips	28	27	33	19	19	21	20	19

The results shown in Table 4-2 through Table 4-5 indicated the equations for VFP + GFA Classifications (subcategorized as above and below 300,000) generally had the highest number of sites in which the deviation in calculated trips was below 100 (absolute value, under estimating and over estimating). Additional review revealed the equations for above/below 300,000 population also had the least number of sites that were under calculated for trip generation. The equation for VFP + GFA Classifications (without population thresholds) also performed strong as well.

The full results of these comparisons are shown in Appendix F.

PART B – 12-HOUR DISTRIBUTIONS

As mentioned in Chapter 3, inbound and outbound site traffic data was collected for 12-hour periods. A summary of each site’s traffic data is shown in Appendix A. Data was not collected for 24-hour periods to establish daily site traffic as part of this study. To establish daily site trip generation, an assumption of distributions for the balance of the day was made and applied to the 12-hours of data that was collected.

Table 4-6 includes a comparison of 12-hour distributions, from 6 AM to 6 PM, from similar LUCs in the TGM 10 and TGM 11, as well as WisDOT historical data from LUC 946.

Table 4-6, Percentage of Entering and Exiting Traffic from 6 AM to 6PM

TGM Edition	LUC		Source	% Inbound	% Outbound
9 ²¹	946	Gas Station with Convenience Store & Car Wash	WisDOT	75.8%	77.9%
10 ²²	853	Convenience Market with Gasoline Pumps	ITE	69.7%	69.7%
	944	Gasoline/Service Station	ITE	70.1%	68.8%
	945	Gasoline/Service Station with Convenience Market	ITE	74.1%	72.3%
	950	Truck Stop	ITE	69.9%	70.0%
	960	Super Convenience Market/Gas Station	ITE	70.3%	69.6%
11 ²³	945	Convenience Store/Gas Station, 2-4 k GFA	ITE	70.1%	69.4%
		Convenience Store/Gas Station, 4-10 k GFA	ITE	72.6%	72.4%

²¹ <https://wisconsindot.gov/dtsdManuals/traffic-ops/manuals-and-standards/12hour-traffic-dist.xlsx>, accessed May 2022

²² <https://www.ite.org/pub/D223841E-B9D0-DF79-64B4-D8EA2AE7AEDE>, accessed May 2022

²³ ITE TripGen Web-based App, TGM Appendices, accessed May 2022

While the LUC 946 data is older than LUCs included in *TGM 10* or *TGM 11*, it is reflective of Wisconsin-specific data. Since the purpose of this study is to establish Wisconsin-based trip generation rates, the source of the data was important in establishing a value to project Wisconsin distributions as part of this study. A value of 75% was therefore assumed and was applied to the 12-hour counts collected, which is based on a rounded average of the inbound and outbound percentages for LUC 946. The average 12-hour distribution percentages for all sites is shown in Table 4-7.

Table 4-7, Average Weekday 12-hour Distributions

<i>Hour Starting</i>	<i>% Inbound</i>	<i>% Outbound</i>
6:00 AM	5.37%	5.17%
7:00 AM	6.48%	6.22%
8:00 AM	5.75%	5.75%
9:00 AM	5.55%	5.49%
10:00 AM	5.61%	5.57%
11:00 AM	6.48%	6.35%
12:00 PM	7.02%	7.11%
1:00 PM	6.05%	6.11%
2:00 PM	6.16%	6.30%
3:00 PM	6.76%	6.85%
4:00 PM	7.06%	7.13%
5:00 PM	6.70%	6.94%

In the absence of 24-hour site data, the 75% distribution assumption, as approved by the TIA Users' Group, was utilized to expand the existing data to establish daily trip generation equations for weekdays. Equations for generating weekday trips and additional discussion is included in Chapter 5.

Full regression summaries for the daily trip generation models are included in Appendix G.

Chapter 5 – SUMMARY & RECOMMENDATIONS

PART A – SUMMARY

Previous policy and current interim policy stipulate the number of VFPs be utilized as the independent variable when calculating trip generation for convenience store/gas station developments.

Data gathered as part of this study took several variables into account, to investigate whether the use of a different independent variable or a combination of variables (multivariable equation) would better represent developments in Wisconsin. Statistical analysis indicated that combining VFP + GFA Classification, with a subcategory of +/- 300,000 Metro Area Population, as a multivariable equation had the strongest correlation. The same equation, but without the subcategory for population performed strong as well.

As for the diesel analysis, based on the LUC description, the intended use of LUC 950 appears to be for truck-based sites and not for mixed diesel and non-diesel sites as collected for this study. A diesel trip generation rate is not recommended to be derived from the data used in this study due to limitations in the number of sites available and the method of determining the number of DFPs.

PART B – RECOMMENDATIONS

AM & PM Trip Peak Hour Generation

Based on the performance both in raw trip generation calculation and lowest number of sites underestimated, the VFP + GFA Classification (with subcategories for populations \geq < 300,000) is recommended for use in calculation of AM and PM peak hour trip generation for all Convenience Store/Gas Station (LUC 945) sites in the state of Wisconsin. Equations to be used in the trip generation calculations are shown in Table 5-1.

Table 5-1, Statewide Trip Generation Rates, AM and PM Peak Hours

Peak Hour	Equation	
	Population < 300,000	Population \geq 300,000
AM	$T = 5.91(VFP) + 63.51(GFA_{class}) - 44.79$	$T = 12.68(VFP) + 54.28(GFA_{class}) - 108.66$
PM	$T = 5.91(VFP) + 60.09(GFA_{class}) - 12.15$	$T = 7.88(VFP) + 75.75(GFA_{class}) - 65.54$

Where,

T = Peak hour trip generation, vehicles per hour (vph)

VFP = Total number of vehicle fueling positions²⁴

GFA_{class} = Category of C-Store GFA, enter 1, 2, or 3

1: < 4,000 SF

2: 4,000 – 5,999 SF

3: \geq 6,000 SF

AM & PM = Peak Hour of Adjacent Street

²⁴ Diesel and non-diesel VFPs combined; not including diesel VFPs that when in use, would prevent the use of the non-diesel VFPs

Friday & Saturday Peak Hour Trip Generation

Based on the raw trip generation calculation performance and feedback from the TIA Users’ Group, the VFP + GFA Classification (*without* subcategories for populations) is recommended for use in calculation of Friday and Saturday peak hour trip generation for all Convenience Store/Gas Station (LUC 945) sites in the state of Wisconsin. Equations to be used in the trip generation calculations are shown in Table 5-2.

Table 5-2, Statewide Trip Generation Rates, Friday and Saturday Peak Hours

<i>Peak Hour</i>	<i>Equation</i>
Friday	$T = 7.71(VFP) + 73.71(GFA_{Class}) - 29.06$
Saturday	$T = 6.76(VFP) + 76.48(GFA_{Class}) - 19.33$

Where,

T = Peak hour trip generation, vehicles per hour (vph)

VFP = Total number of vehicle fueling positions²⁵

GFA_{Class} = Category of C-Store GFA, enter 1, 2, or 3

1: < 4,000 SF

2: 4,000 – 5,999 SF

3: ≥ 6,000 SF

Friday & Saturday = Peak Hour of Generator

Weekday Daily Trip Generation

Based on use of the VFP + GFA Classification (with subcategories for populations ≥ < 300,000) for weekday AM and PM peak periods, the same models, combined with the 75% 12-hour distribution assumption, were used for creation of weekday daily trip generation equations. Equations to be utilized for weekday daily trip generation are shown in Table 5-3.

Table 5-3, Statewide Trip Generation Rates, Weekday Daily Trips

<i>Population</i>	<i>Equation</i>
< 300,000	$T = 80.61(VFP) + 898.30(GFA_{Class}) - 354.83$
≥ 300,000	$T = 144.00(VFP) + 834.76(GFA_{Class}) - 1035.89$

Where,

T = Weekday daily trip generation, vehicles per day (vpd)

VFP = Total number of vehicle fueling positions²⁵

GFA_{Class} = Category of C-Store GFA, enter 1, 2, or 3

1: < 4,000 SF

2: 4,000 – 5,999 SF

3: ≥ 6,000 SF

Equations were generated based on weekday data excluding Friday²⁶. It is recommended that the Region Traffic Staff be consulted prior to utilization of these equations for a Friday period.

²⁵ Diesel and non-diesel VFPs combined; not including diesel VFPs that when in use, would prevent the use of the non-diesel VFPs

²⁶ Fridays are not typically aggregated in weekday count data due to the influence of weekend travel patterns

Peak Directional Distributions

Inbound versus outbound directional distributions were calculated based on a review of the Wisconsin site data. Values to be used in association with the trip generation equations are shown in Table 5-4.

Table 5-4, Statewide Directional Distributions

<i>Peak Hour</i>	<i>% Inbound</i>	<i>% Outbound</i>
AM	51%	49%
PM	50%	50%
Friday	51%	49%
Saturday	50%	50%

The [2010 Wisconsin ArcGIS Population Map](#)²⁷ used for Saturation Flow Rate estimation should be referenced for determining whether the population of the proposed site is less than or greater than 300,000. Since the populations referenced in the ArcGIS map are from 2010 and many of the municipal population areas continue to expand and in many cases merge with other municipalities; new developments adjacent to the 300,000 population regions could potentially be considered part of the larger regional population. It is recommended that language similar to the below be included in future policy guidance from the Department.

Region Traffic Staff should be consulted before proceeding with calculations for developments that are proposed for areas near a 300,000 urban population area. WisDOT Region Traffic Staff reserve the right to modify the population coefficient based on development location, updated population data, and regional growth patterns.

Until a future study is completed, or additional interim guidance is provided, the number of DFPs should continue to be based on the total number of pumps available (diesel and non-diesel combined²⁸). This will provide a slightly conservative number of generated truck trips for the site. Given the relatively low number of DFPs at a typical development that is not a Truck Stop, the impact to the number of expected trips should be fairly low.

Due to the evolving nature of the Convenience Store/Gas Station land use, future studies are recommended which account for the changing business models. As new sites are constructed, convenience stores are becoming larger and stand-alone diesel fueling islands more common. Sites with shared land uses (e.g., incorporating a fast-food restaurant or coffee shop) are also appearing. Future studies should investigate how these additional variables impact trip generation as these development changes become more regular.

TGM 11 LUC 944 & 950

Current WisDOT interim guidance includes procedures for Gasoline/Service Station, LUC 944²⁹ and Truck Stop, LUC 950³⁰ developments. Both LUCs remain in the *TGM 11*; however, this study did not directly focus on these LUCs. Recommended procedures for these LUCs are as follows:

²⁷ <http://arcg.is/1GqGa>, accessed July 2022

²⁸ Not including diesel VFPs that when in use, would prevent the use of the non-diesel VFPs

²⁹ For GFA < 2,000 SF

³⁰ For stand-alone diesel fueling positions

Gasoline/Service Station, LUC 944

The number of sites indirectly included in this study with a GFA < 2,000 SF is very small (two sites total). Sites that were associated to discount club (e.g., Costco), home improvement superstore, or supermarket type of developments were not included in this study, due to the *TGM 11* retaining LUC 944, their mixed/shared-use development nature, and their associated higher percentage of linked trips. It is recommended that *TGM 11* LUC 944 rates be used for developments of this size moving forward. Region Traffic Staff should be consulted for developments of this type that will be associated with discount club or similar land uses for the determination of an appropriate linked trip rate application.

Truck Stop, LUC 950

Previous use of this LUC was associated with the presence of stand-alone diesel VFPs. Equations developed as part of this study include *all* VFPs able to be utilized simultaneously, regardless of the presence of stand-alone diesel VFPs. Based on the outcome of this study, it is recommended that LUC 950 be only used for developments that derive the majority of their business from truckers/large commercial vehicle traffic.

PART C – FUTURE CONSIDERATIONS

Several follow-up studies could be considered to ensure practitioners are using the best data when establishing trip generation for developments in Wisconsin:

1. Current guidance does not specify whether a “usage factor” should be applied when calculating the number of DFPs per site. Historical practice has been to count the total number of pumps; however, having two pumps across an aisle from each other do not necessarily mean two vehicles can refuel simultaneously. A future study should include how these pumps are used – if simultaneous refueling can occur with DFPs located across the aisle from one another, and if so, how often it occurs.
2. The results from this study and the interim use of LUC 950 for the stand-alone diesel island component of convenience store/gas station developments highlight that national data for LUC 950 may also may not be appropriate even for dedicated truck stop facilities in Wisconsin. Unlike LUC 960 (*TGM 10*) and LUC 945 (*TGM 11*), LUC 950 does not include any Midwest study sites. Given the observations from this study’s data, it is likely that Wisconsin-based rates for a Truck Stop are lower than the national data. A future study should be completed to determine how trip generation from Wisconsin truck stop sites vary from the national data.
3. Similar to other commercial or services land uses, convenience store/gas stations are continually changing and adapting their services to new market trends to attempt to capture more market share. A significant number of sites selected in this study (approximately 40%) have a dozen or less fueling positions. Over 80% have convenience stores of 7,000 or less square feet of GFA. Current market trends are now constructing stations with 20 or more non-diesel VFPs and at least four or more DFPs. Additionally, convenience store GFAs are nearing 10,000-square feet in size. At the rate new stations are being constructed or existing stations converted into newer, larger facilities; the larger sites will soon be the majority. With greater square footage, convenience stores are evolving into mini grocery stores. The convenience/food services are becoming more of the destination than refueling. Stand-alone diesel islands are becoming mini truck stops, particularly with the inclusion of overnight parking stalls. The trip generation rates for these

newer facilities will need to be updated to match, further investigating the viability of a separate DFP rate. Due to the rapid evolution of convenience store services and vehicle servicing needs, a regular evaluation interval may be necessary in order for the most accurate data to be used in determining network improvements. A follow-up study should include sites that are representative of the most current construction trends.

4. Shared/mixed-use developments are another land use type growing in popularity in Wisconsin. These developments contain not only a convenience store/gas station, but commonly also a fast food or fast casual restaurant or coffee shop development on-site. Due to data collection limitations, these sites were excluded from the current study. However, given the number of sites across the state, a follow-up study for this development type could be considered in the future for better understanding of their mixed-use rates.
5. Similar to the LUC 950, while LUC 944 does have a Midwest filter, albeit a low number of study sites, a follow-up study could be completed to better understand how trip generation for this LUC may vary from the nationally sourced data. Since convenience stores with GFA < 2,000 SF appear to be diminishing, more attention is recommended on the discount club (e.g., Costco) developments which have little or no convenience items for sale with their VFPs.

Appendix A
Site Statistics

Site Summary, Overview

ID	Region	County	Municipality	DOT Site Name	Location	Highway	Area	ITE Land Use Codes (10th Gen.)	Store Size (Sq Ft)	Non-Diesel Fueling Positions	Diesel Fueling Positions	Total VFP	Car Wash Yes/No	# of Gas Stations within 1/2 mile
NC-301	NC	Waushara	Coloma	NC - BP - Coloma - STH 21 west of I-39	Freeway (Non-Tourist)	STH 21 West of IH 39	Rural	960	5,500	10	5	15	No	0
NC-302	NC	Langlade	Antigo	NC - Antigo #451 - US 45 at STH 64 (455 St Hwy 64)	Non-Freeway (Non-Tourist)	STH 64	Urban	960	6,000	16	0	16	Yes	3
NC-303	NC	Vilas	Arbor Vitae	NC - BP - Arbor Vitae - US 51	Non-Freeway (Tourist)	US 51	Urban	960	8,900	16	3	19	Yes	0
NC-304	NC	Vilas	Eagle River	NC - Eagle River #131 (201 West Wall St)	Non-Freeway (Tourist)	West Wall St	Rural	960	7,500	16	0	16	Yes	3
NC-305	NC	Price	Fifield	NC - Marathon- Fifield - STH 70	Non-Freeway (Non-Tourist)	STH 70	Rural	945	2,600	8	2	10	No	0
NC-306	NC	Lincoln	Merrill	NC - Merrill #241 (300 S Pine Ridge Ave)	Freeway (Tourist)	IH 51	Urban	960	5,000	20	2	22	No	1
NC-307	NC	Oneida	Minocqua	NC-Krist Food Mart/Citgo - Minocqua - US 51 (208 Oneida St)	Non-Freeway (Tourist)	US 51	Rural	960	3,800	12	2	14	No	1
NC-308	NC	Oneida	Minocqua	NC - Minocqua #159 - US 51 at STH 70 (8690 Hwy 51 N)	Non-Freeway (Tourist)	US 51	Urban	960	7,500	16	0	16	Yes	0
NC-309	NC	Waushara	Plainfield	NC - BP - Plainfield - STH 73 off I-39	Freeway (Non-Tourist)	STH 73 off IH 39	Rural	945	1,900	6	3	9	No	1
NC-310	NC	Marathon	Wausau	NC - Wausau BP - Bus 51	Freeway (Non-Tourist)	IH 39	Urban	960	3,500	12	0	12	No	0
NC-311	NC	Marathon	Stratford	NC - Cenex - Stratford, STH 97	Non-Freeway (Non-Tourist)	STH 97	Rural	960	4,500	8	2	10	No	2
NC-312	NC	Oneida	Rhineland	NC - Shell - Rhineland - STH 47 at CTH K	Non-Freeway (Non-Tourist)	STH 47 at CHT K	Urban	960	5,300	8	2	10	No	0
NC-313	NC	Waupaca	Waupaca	NC - Waupaca #888 (106 County Rd QQ)	Freeway (Tourist)	STH 54 & CTH QQ	Urban	960	7,700	20	3	23	Yes	3
NC-314	NC	Price	Phillips	NC - Phillips #1067 (1424 N Lake Ave)	Non-Freeway (Tourist)	STH 13	Rural	960	5,800	20	4	24	Yes	0
NE-201	NE	Brown	Ashwaubenon	NE - Ashwaubenon #125 (940 Waube Ln)	Freeway (Non-Tourist)	IH 41	Urban	960	7,400	16	0	16	No	1
NE-202	NE	Brown	De Pere	De Pere - Kwik Trip #127 (746 Main Ave)	Non-Freeway (Non-Tourist)	Main Ave	Urban	945	4,100	8	0	8	No	1
NE-203	NE	Brown	Denmark	NE - Denmark #1015 (111 Bohemia Dr)	Freeway (Tourist)	STH 96 E of IH 43	Rural	960	7,000	14	4	18	Yes	1
NE-204	NE	Outagamie	Appleton	NE - Appleton #678 (3232 S Oneida St)	Freeway (Non-Tourist)	IH 441	Urban	960	4,300	12	0	12	No	1
NE-205	NE	Winnebago	Larsen	NE - Larsen #628 (5600 County Rd II)	Freeway (Non-Tourist)	IH 45	Rural	960	5,500	10	3	13	No	0
NE-206	NE	Winnebago	Neenah	NE-Speedway, Neenah: IH 41 & CTH II	Freeway (Non-Tourist)	IH 41	Urban	960	5,100	16	4	20	No	0
NE-207	NE	Dodge	Lomira	NE - Exxon, Lomira, I-41 & WIS 67/CTH H	Freeway (Non-Tourist)	IH 41	Rural	945	2,900	8	5	13	No	2
NE-208	NE	Manitowoc	Manitowoc	NE - Manitowoc KwikTrip#611 (formerly Tobacco Outlet): 2102 Washington St (US151)	Non-Freeway (Non-Tourist)	US 151	Urban	945	2,500	8	0	8	No	1
NE-209	NE	Oconto	Mountain	NE - R-Store/BP Mountain	Non-Freeway (Tourist)	STH 32 & CTH W	Rural	945	3,600	6	2	8	No	0
NE-210	NE	Door	Sturgeon Bay	NE-BP STH 57 South Sturgeon Bay (7513 42 State Hwy)	Non-Freeway (Tourist)	STH 57	Rural	960	2,900	8	3	11	No	0
NE-211	NE	Calumet	New Holstein	NE - New Holstein #644 (1517 Wisconsin Ave)	Non-Freeway (Non-Tourist)	STH 57/32	Rural	960	5,600	16	2	18	Yes	0
NE-212	NE	Winnebago	Winneconne	NE - Winneconne #612: WIS 116 (915 E Main St)	Non-Freeway (Non-Tourist)	STH 116	Rural	960	4,500	16	0	16	No	0
NE-213	NE	Sheboygan	Sheboygan	NE - Sheboygan #139 (7002 Sauk Trail Rd)	Freeway (Non-Tourist)	IH 43 & Sauk Trail	Rural	960	5,000	8	5	13	No	1
NE-214	NE	Oconto	Abrams	NE - CTH J, north of Green Bay (Brookside)	Freeway (Tourist)	US 41	Rural	960	5,500	12	2	14	No	0
NE-215	NE	Winnebago	Oshkosh	NE-BP Pantry Oshkosh (3700 Jackson Street, Oshkosh)	Non-Freeway (Non-Tourist)	Jackson Street	Urban	960	5,800	8	3	11	Yes	1
NE-216	NE	Oconto	Lena	NE - Lena #587 (5908 Duame Rd)	Freeway (Tourist)	US 141 & STH 22	Rural	960	6,500	10	4	14	No	0
NE-217	NE	Sheboygan	Cedar Grove	NE - Citgo: Cedar Grove: IH 43 & WIS 32	Freeway (Non-Tourist)	IH 43 & STH 32	Rural	960	8,000	8	2	10	No	0
NW-401	NW	Jackson	Black River Falls	NW - Black River Falls #648 (751 State Hwy 54)	Freeway (Non-Tourist)	STH 54	Rural	960	9,500	14	5	19	No	2
NW-402	NW	Ashland	Ashland	NW - Ashland #110 (1814 Lakeshore Dr W)	Non-Freeway (Tourist)	US 2 & STH 112	Urban	960	9,900	20	2	22	Yes	2
NW-403	NW	Sawyer	Hayward	NW - Mobil, Hayward, 15771 USH 63	Non-Freeway (Tourist)	US 63	Rural	945	3,000	8	0	8	Yes	5
NW-404	NW	Chippewa	Bloomer	NW - Bloomer, STH 40 & 19th Ave., Holiday Gas	Freeway (Non-Tourist)	STH 40	Rural	960	3,000	12	0	12	No	1
NW-405	NW	Eau Claire	Eau Claire	NW - Eau Claire Holiday Station (5511 WI-93, Eau Claire WI)	Freeway (Non-Tourist)	STH-93	Urban	960	3,400	10	0	10	No	1
NW-406	NW	Sawyer	Hayward	NW - Hayward #327, USH 63 & STH 27 (15831 US Hwy 63)	Non-Freeway (Tourist)	US 63 & STH 27	Rural	960	4,000	16	3	19	No	5
NW-407	NW	Douglas	Superior	NW - Superior #203 (1419 Banks Ave)	Non-Freeway (Non-Tourist)	US 2	Urban	960	4,500	20	2	22	Yes	1
NW-408	NW	Washburn	Spooner	NW - Spooner #329, USH 63 & STH 70 (201 W Maple St)	Non-Freeway (Tourist)	STH 70	Rural	960	5,000	16	0	16	No	1
NW-409	NW	Barron	Chetek	NW - Chetek #602 (324 2nd St)	Non-Freeway (Tourist)	2nd & Mill St	Rural	960	5,900	16	0	16	No	2
NW-410	NW	Barron	Rice Lake	NW - Rice Lake #476 (2851 Decker Dr)	Freeway (Tourist)	US 53	Urban	960	6,900	12	3	15	Yes	0
NW-411	NW	St Croix	Somerset	NW - Somerset #1074, STH 35 & Church Hill Road (726 Highway 35)	Non-Freeway (Non-Tourist)	STH 35 & 64	Rural	960	5,100	20	2	22	Yes	1
NW-412	NW	St Croix	Hudson	NW - N. Hudson #935 (740 6th St N)	Non-Freeway (Tourist)	STH 35	Urban	960	7,200	20	0	20	Yes	1
SE-101	SE	Washington	Allenton	SE - Mobil Allenton, I-41 & WIS 33	Freeway (Non-Tourist)	IH 41 & STH 33	Rural	960	4,835	10	3	13	Yes	1
SE-102	SE	Walworth	Delavan	SE - Delavan #1046, WIS 50 & Wright (408 S Wright Street)	Freeway (Tourist)	STH 50	Urban	960	8,000	20	0	20	Yes	2
SE-103	SE	Washington	Germantown	SE - Speedway Germantown, I-41 & CTH Q	Freeway (Non-Tourist)	IH 41 & CTH Q	Urban	960	3,400	12	0	12	No	2
SE-104	SE	Walworth	Lake Geneva	SE - Mobil Lake Geneva, WIS 50 & Edwards	Freeway (Tourist)	STH 50	Urban	960	4,100	8	2	10	No	1
SE-105	SE	Walworth	Lake Geneva	SE - Lake Geneva #219 (710 Williams St)	Non-Freeway (Tourist)	Williams St	Urban	960	6,500	12	0	12	Yes	1
* SE-106	SE	Walworth	Delavan	SE - Fleet Farm Delavan, I-43 & WIS 50	Freeway (Tourist)	IH 43 & STH 50	Urban	960	5,400	16	0	16	Yes	2
SE-107	SE	Washington	Erin	SE - BP Erin, WIS 83 & WIS 167	Non-Freeway (Non-Tourist)	STH 83 & STH 167	Rural	960	3,600	8	2	10	No	0
SE-108	SE	Waukesha	Muskego	SE - Muskego #664 (S79W18884 Janesville Rd)	Non-Freeway (Non-Tourist)	Janesville Rd	Urban	960	5,000	16	0	16	No	0
SE-109	SE	Waukesha	New Berlin	SE - Speedway, New Berlin, I-43 & Moorland	Freeway (Non-Tourist)	IH 43	Urban	945	2,900	12	0	12	No	0
SE-110	SE	Milwaukee	Oak Creek	SE - BP Oak Creek CTH BB & CTH V	Freeway (Non-Tourist)	IH 41	Urban	945	2,200	12	0	12	No	1
SE-111	SE	Kenosha	Kenosha	SE - Mobil Kenosha, I-94 & WIS 50 SE Quad	Freeway (Non-Tourist)	IH 41/94 & STH 50	Urban	945	2,850	12	0	12	No	5
SE-112	SE	Racine	Racine	SE - Speedway Racine WIS 20 & Emmertson	Non-Freeway (Non-Tourist)	STH 20	Urban	945	2,900	12	0	12	No	2
SE-113	SE	Kenosha	Kenosha	SE - Speedway Kenosha, WIS 50 & 60th	Non-Freeway (Non-Tourist)	STH 50 & 60th	Urban	960	4,200	10	0	10	No	1
SE-114	SE	Waukesha	Waukesha	SE - Speedway Waukesha, WIS 59 & Sunset	Non-Freeway (Non-Tourist)	STH 59	Urban	960	4,400	16	0	16	Yes	0
SE-115	SE	Ozaukee	Saukville	SE - Saukville #879 (750 E Green Bay Ave)	Freeway (Non-Tourist)	IH 43 & STH 33	Rural	960	5,600	20	0	20	Yes	1
SE-116	SE	Waukesha	Waukesha	SE - Pewaukee/Waukesha #396, CTH F & CTH M (Redford Blvd)	Non-Freeway (Non-Tourist)	CTH F & CTH M	Urban	960	7,400	23	6	29	Yes	0
SE-117	SE	Kenosha	Pleasant Prairie	SE - Pleasant Prairie #296 (10215 120th Ave)	Freeway (Non-Tourist)	IH 94 & STH 165	Urban	960	6,600	24	0	24	Yes	1
* SE-118	SE	Walworth	Genoa City	SE - Mobil Genoa City, US 12 & 125th	Non-Freeway (Non-Tourist)	US 12	Rural	960	12,100	12	3	15	No	1
^ SE-119	SE	Waukesha	Delafield	SE - Delafield #972 (2694 Sun Valley Dr)	Freeway (Non-Tourist)	STH 83	Urban	960	8,000	16	0	16	No	0
^ SE-120	SE	Waukesha	Waukesha	SE - Waukesha #970 (2106 S West Ave)	Non-Freeway (Non-Tourist)	STH 59	Urban	960	7,700	18	5	23	Yes	0
^ SE-121	SE	Milwaukee	Oak Creek	SE - Oak Creek #422 (9535 S 13th St)	Freeway (Non-Tourist)	IH 41/94 & STH 100	Urban	960	6,500	26	8	34	Yes	2
SW-501	SW	Sauk	Baraboo	SW - Baraboo - Amoco at 33 and 136	Freeway (Tourist)	STH 33 & STH 136	Urban	960	9,300	12	4	16	No	1

Site Summary, Overview

ID	Region	County	Municipality	DOT Site Name	Location	Highway	Area	ITE Land Use Codes (10th Gen.)	Store Size (Sq Ft)	Non-Diesel Fueling Positions	Diesel Fueling Positions	Total VFP	Car Wash Yes/No	# of Gas Stations within 1/2 mile
SW-502	SW	Sauk	Baraboo	SW - Baraboo - Caseys on CTH W	Non-Freeway (Tourist)	CTH W	Urban	945	2,500	8	0	8	No	1
SW-503	SW	Jefferson	Fort Atkinson	SW - Fort Atkinson -Caseys	Non-Freeway (Non-Tourist)	USH 12	Urban	945	4,400	8	0	8	No	2
SW-504	SW	La Crosse	La Crosse	SW - La Crosse #750 (4828 Mormon Coulee Rd)	Non-Freeway (Non-Tourist)	Hwy 14/61	Urban	960	6,300	16	3	19	Yes	1
SW-505	SW	Green	Brodhead	SW - Brodhead #1021 (2107 1st Center Ave)	Non-Freeway (Non-Tourist)	STH 11	Rural	960	8,000	20	3	23	Yes	0
SW-506	SW	Grant	Cuba City	Cuba City - KwikTrip#339 (212 S Main Street)	Non-Freeway (Non-Tourist)	Main St	Rural	945	4,000	8	0	8	No	1
SW-507	SW	Dane	Windsor	SW - Windsor/Deforest Speedway	Freeway (Non-Tourist)	STH 19 E of IH 39/90	Urban	960	3,300	12	0	12	No	2
SW-508	SW	Dane	Belleville	SW - Casey's Belleville, STH 69	Non-Freeway (Non-Tourist)	STH 69	Rural	960	4,500	10	3	13	No	0
SW-509	SW	Jefferson	Johnson Creek	SW - Johnson Creek #487 (465 Village Walk Ln)	Freeway (Non-Tourist)	STH 26 S of IH 94	Rural	960	6,000	20	0	20	No	2
SW-510	SW	Jefferson	Lake Mills	SW - Lake Mills - #306 (105 W Tyrarena Park Rd)	Freeway (Non-Tourist)	IH 94	Urban	960	5,800	16	3	19	No	1
SW-511	SW	Sauk	Lake Delton	SW - Lake Delton - Exxon - Off USH 12 (local streets, shared driveway)	Freeway (Tourist)	USH 12	Rural	945	2,500	8	0	8	No	3
SW-512	SW	Sauk	Lake Delton	SW - Lake Delton/Wisconsin Dells #583 (532 W Munroe Ave)	Freeway (Tourist)	IH 90	Rural	960	4,200	8	3	11	No	1
SW-513	SW	Columbia	Portage	SW - Portage BP - STH 33 W of IH 90/94	Freeway (Non-Tourist)	STH 33 W of IH 90/94	Rural	945	1,700	8	0	8	No	0
SW-514	SW	Vernon	Viroqua	SW - Viroqua - KwikTrip#758, 603 S. Main St	Non-Freeway (Non-Tourist)	USH 14	Rural	945	2,300	8	0	8	No	1
SW-515	SW	Dodge	Horicon	Horicon - Kwik Trip #782 (716 E Lake Street)	Non-Freeway (Non-Tourist)	STH 33	Rural	945	2,600	8	0	8	No	0
SW-516	SW	Monroe	Tomah	SW - Tomah - Mobil on Gopher Ave	Freeway (Non-Tourist)	IH 90 & STH 131	Urban	945	2,800	8	2	10	No	0
SW-517	SW	Monroe	Sparta	SW - Sparta BP - Travel Center with Scale	Freeway (Non-Tourist)	IH 90 & STH 16	Urban	960	5,900	10	5	15	No	0
SW-518	SW	Vernon	Viroqua	SW - Viroqua #757 (1301 N Main St)	Non-Freeway (Non-Tourist)	USH 14	Rural	960	6,400	10	2	12	Yes	0
^ SW-519	SW	Dane	Madison	SW - Madison #960 (401 N Third St)	Non-Freeway (Non-Tourist)	STH 113	Urban	960	7,600	16	4	20	Yes	1
^ SW-520	SW	Dane	Madison	SW - Madison #961 (3528 E Washington Ave)	Non-Freeway (Non-Tourist)	USH 151	Urban	960	5,700	16	0	16	Yes	1
^ SW-521	SW	Dane	Verona	SW - Verona #1075 (233 Wildcat Way)	Freeway (Non-Tourist)	Wildcat Way	Urban	960	10,800	24	0	24	Yes	0
^ SW-522	SW	Dane	Monona	SW - Monona Speedway (2500 Royal Ave)	Freeway (Non-Tourist)	USH 12/18	Urban	960	4,500	10	3	13	No	1
^ SW-523	SW	Dane	Middleton	SW - Middleton Mobil (8613 University Green)	Non-Freeway (Non-Tourist)	USH 14	Urban	960	4,400	12	3	15	Yes	1
^ SW-524	SW	Dane	Madison	SW - Kellys Market (33 Junction Ct)	Freeway (Non-Tourist)	USH 12/14	Urban	960	4,500	12	0	12	Yes	0

* Site removed from analysis, (2)
 ^ Site added after original selection, (9)

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Mobil Allenton, I-41 & WIS 33

Site Information

Site ID: SE-101

Municipality	Allenton		WisDOT Region	SE
County	Washington		Area	Rural
Location	Freeway (Non-Tourist)		Highway	IH 41 & STH 33
ITE Land Use Code (10th Ed.)	960		No. Driveway Entrances	2
Store Size (Sq Ft)	4835		Car Wash	Yes
No. Diesel Fueling (VFP)	10		Diesel Fueling (VFP)	3
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Wednesday, June 9, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	18	17	35	10	11	21						
7:00 AM	30	32	62	31	31	62						
8:00 AM	17	19	36	20	21	41						
9:00 AM	30	26	56	35	32	67						
10:00 AM	30	24	54	30	28	58				46	45	91
11:00 AM	29	33	62	32	34	66				42	47	89
12:00 PM	26	27	53	32	29	61				45	48	93
1:00 PM	39	41	80	30	30	60				46	42	88
2:00 PM	37	35	72	22	28	50						
3:00 PM	54	53	107	34	31	65	49	52	101			
4:00 PM	38	38	76	44	38	82	38	36	74			
5:00 PM	38	40	78	41	47	88	48	49	97			
6:00 PM							41	40	81			
TOTAL	386	385	771	361	360	721	176	177	353	179	182	361
DISTRIBUTION	50%	50%		50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	2.81%	2.82%
7:00 AM	6.12%	6.34%
8:00 AM	3.71%	4.03%
9:00 AM	6.53%	5.84%
10:00 AM	6.02%	5.23%
11:00 AM	6.12%	6.74%
12:00 PM	5.82%	5.64%
1:00 PM	6.93%	7.15%
2:00 PM	5.92%	6.34%
3:00 PM	8.84%	8.46%
4:00 PM	8.23%	7.65%
5:00 PM	7.93%	8.76%

WEEKDAY AVE:	373.5	372.5	746
DISTRIBUTION	50%	50%	

Total 12-hour Trips	374	373	746
Adjust to 24-hour trips*	498	497	995

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	31	32	63						
DISTRIBUTION	49%	51%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	45	43	88						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:45 PM	-	5:45 PM						
AM PEAK HOUR - GENERATOR	32	34	66						
DISTRIBUTION	48%	52%							
PEAK HOUR	10:30 AM	-	11:30 AM						
PM PEAK HOUR - GENERATOR	43	46	89						
DISTRIBUTION	48%	52%							
PEAK HOUR	3:15 PM	-	4:15 PM						
PEAK HOUR GENERATOR				49	52	101	48	45	93
DISTRIBUTION				49%	51%		52%	48%	
PEAK HOUR				3:00 PM	-	4:00 PM	10:45 AM	-	11:45 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	13.0	18.2	13.7	18.4	20.9	19.2
Vehicle Fueling Positions (VFP)	4.8	6.8	5.1	6.8	7.8	7.2

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Delavan #1046, 408 S Wright Street**

Site Information

Site ID: SE-102

Municipality	Delavan		WisDOT Region	SE
County	Walworth	Area		Urban
Location	Freeway (Tourist)			
Highway	STH 50			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	8000			
No. Driveway Entrances	2	Car Wash	Yes	
Non-Diesel Fueling (VFP)	20	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	2			



Count Information

1st Day of Count	Wednesday, October 20, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	96	89	185	103	90	193						
7:00 AM	145	138	283	127	115	242						
8:00 AM	116	108	224	113	113	226						
9:00 AM	115	119	234	95	94	189						
10:00 AM	94	86	180	110	103	213				139	137	276
11:00 AM	132	107	239	150	119	269				168	152	320
12:00 PM	169	147	316	183	161	344				172	147	319
1:00 PM	118	119	237	105	105	210				160	157	317
2:00 PM	109	108	217	100	90	190						
3:00 PM	126	111	237	142	138	280	160	147	307			
4:00 PM	129	128	257	127	116	243	152	137	289			
5:00 PM	159	138	297	116	101	217	164	134	298			
6:00 PM							125	116	241			
TOTAL	1508	1398	2906	1471	1345	2816	601	534	1135	639	593	1232
DISTRIBUTION	52%	48%		52%	48%		53%	47%		52%	48%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.01%	4.89%
7:00 AM	6.85%	6.92%
8:00 AM	5.77%	6.04%
9:00 AM	5.29%	5.82%
10:00 AM	5.14%	5.17%
11:00 AM	7.10%	6.18%
12:00 PM	8.86%	8.42%
1:00 PM	5.61%	6.12%
2:00 PM	5.26%	5.41%
3:00 PM	6.75%	6.81%
4:00 PM	6.45%	6.67%
5:00 PM	6.92%	6.53%

WEEKDAY AVE:	1489.5	1371.5	2861
DISTRIBUTION	52%	48%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1490	1372	2861
1986	1829	3815

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	136	127	263						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	135	126	261						
DISTRIBUTION	52%	48%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	171	138	309						
DISTRIBUTION	55%	45%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	176	154	330						
DISTRIBUTION	53%	47%							
PEAK HOUR	12:00 PM	-	1:00 PM						
PEAK HOUR GENERATOR				166	145	311	178	157	335
DISTRIBUTION				53%	47%		53%	47%	
PEAK HOUR				4:30 PM	-	5:30 PM	12:45 PM	-	1:45 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	32.9	32.6	38.6	41.3	38.9	41.9
Vehicle Fueling Positions (VFP)	13.2	13.1	15.5	16.5	15.6	16.8

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Speedway Germantown, I-41 & CTH Q*

Site Information

Site ID: *SE-103*

Municipality	<i>Germantown</i>		
County	<i>Washington</i>	WisDOT Region	<i>SE</i>
Location	<i>Freeway (Non-Tourist)</i>	Area	<i>Urban</i>
Highway	<i>IH 41 & CTH Q</i>		
ITE Land Use Code (10th Ed.)	<i>960</i>		
Store Size (Sq Ft)	<i>3400</i>		
No. Driveway Entrances	<i>3</i>	Car Wash	<i>No</i>
Non-Diesel Fueling (VFP)	<i>12</i>	Diesel Fueling (VFP)	<i>0</i>
No. of Gas Stations within 1/2 mile	<i>2</i>		



Count Information

1st Day of Count	<i>Wednesday, June 23, 2021</i>
Days Counted	<i>Wednesday - Thursday</i>

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	55	55	110	71	74	145						
7:00 AM	62	61	123	82	78	160						
8:00 AM	75	71	146	64	61	125						
9:00 AM	78	74	152	73	75	148						
10:00 AM	85	91	176	73	71	144				0	0	0
11:00 AM	98	97	195	93	95	188				0	0	0
12:00 PM	101	97	198	84	87	171				0	0	0
1:00 PM	87	81	168	75	79	154				0	0	0
2:00 PM	77	75	152	70	78	148						
3:00 PM	88	79	167	100	86	186	0	0	0			
4:00 PM	81	69	150	97	87	184	0	0	0			
5:00 PM	89	83	172	94	90	184	0	0	0			
6:00 PM							0	0	0			
TOTAL	976	933	1909	976	961	1937	0	0	0	0	0	0
<i>DISTRIBUTION</i>	<i>51%</i>	<i>49%</i>		<i>50%</i>	<i>50%</i>							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.84%	5.11%
7:00 AM	5.53%	5.50%
8:00 AM	5.34%	5.23%
9:00 AM	5.80%	5.90%
10:00 AM	6.07%	6.41%
11:00 AM	7.34%	7.60%
12:00 PM	7.11%	7.29%
1:00 PM	6.22%	6.34%
2:00 PM	5.65%	6.06%
3:00 PM	7.22%	6.53%
4:00 PM	6.84%	6.18%
5:00 PM	7.03%	6.85%

WEEKDAY AVE:	976	947	1923
<i>DISTRIBUTION</i>	<i>51%</i>	<i>49%</i>	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
976	947	1923
1301	1263	2564

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	82	81	163						
<i>DISTRIBUTION</i>	<i>50%</i>	<i>50%</i>							
<i>PEAK HOUR</i>	<i>7:15 AM</i>	<i>-</i>	<i>8:15 AM</i>						
PM PEAK HOUR - ADJ. STREET	92	87	179						
<i>DISTRIBUTION</i>	<i>51%</i>	<i>49%</i>							
<i>PEAK HOUR</i>	<i>5:00 PM</i>	<i>-</i>	<i>6:00 PM</i>						
AM PEAK HOUR - GENERATOR	100	95	195						
<i>DISTRIBUTION</i>	<i>51%</i>	<i>49%</i>							
<i>PEAK HOUR</i>	<i>11:30 AM</i>	<i>-</i>	<i>12:30 PM</i>						
PM PEAK HOUR - GENERATOR	100	89	189						
<i>DISTRIBUTION</i>	<i>53%</i>	<i>47%</i>							
<i>PEAK HOUR</i>	<i>11:45 AM</i>	<i>-</i>	<i>12:45 PM</i>						
PEAK HOUR GENERATOR				0	0	0	0	0	0
<i>DISTRIBUTION</i>									
<i>PEAK HOUR</i>									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday	Weekday	Weekday	Friday	Saturday	Saturday
Gross Floor Area (GFA)	47.9	52.6	57.4	55.6	0.0	0.0
Vehicle Fueling Positions (VFP)	13.6	14.9	16.3	15.8	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Mobil Lake Geneva, WIS 50 & Edwards

Site Information

Site ID: SE-104

Municipality	Lake Geneva		
County	Walworth	WisDOT Region	SE
Location	Freeway (Tourist)	Area	Urban
Highway	STH 50		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	4100		
No. Driveway Entrances	4	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	2
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Thursday, June 17, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	109	15	124						
7:00 AM	0	0	0	121	27	148						
8:00 AM	0	0	0	122	31	153						
9:00 AM	0	0	0	114	41	155						
10:00 AM	0	0	0	117	50	167				106	112	218
11:00 AM	0	0	0	135	58	193				109	103	212
12:00 PM	0	0	0	134	42	176				90	94	184
1:00 PM	0	0	0	134	54	188				122	124	246
2:00 PM	0	0	0	117	59	176						
3:00 PM	0	0	0	118	60	178	134	64	198			
4:00 PM	0	0	0	122	58	180	157	72	229			
5:00 PM	0	0	0	133	67	200	173	68	241			
6:00 PM							103	44	147			
TOTAL	0	0	0	1476	562	2038	567	248	815	427	433	860
DISTRIBUTION				72%	28%		70%	30%		50%	50%	

Average Weekly Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.54%	2.00%
7:00 AM	6.15%	3.60%
8:00 AM	6.20%	4.14%
9:00 AM	5.79%	5.47%
10:00 AM	5.95%	6.67%
11:00 AM	6.86%	7.74%
12:00 PM	6.81%	5.60%
1:00 PM	6.81%	7.21%
2:00 PM	5.95%	7.87%
3:00 PM	6.00%	8.01%
4:00 PM	6.20%	7.74%
5:00 PM	6.76%	8.94%

WEEKDAY AVE:	738	281	1019
DISTRIBUTION	72%	28%	

Total 12-hour Trips	1476	562	2038
Adjust to 24-hour trips*	1968	749	2717

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	122	31	153						
DISTRIBUTION	80%	20%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	133	67	200						
DISTRIBUTION	67%	34%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	147	58	205						
DISTRIBUTION	72%	28%							
PEAK HOUR	11:15 AM	-	12:15 PM						
PM PEAK HOUR - GENERATOR	133	67	200						
DISTRIBUTION	67%	34%							
PEAK HOUR	5:00 PM	-	6:00 PM						
PEAK HOUR GENERATOR				179	65	244	122	124	246
DISTRIBUTION				73%	27%		50%	50%	
PEAK HOUR				4:45 PM	-	5:45 PM	1:00 PM	-	2:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	37.3	48.8	50.0	48.8	59.5	60.0
Vehicle Fueling Positions (VFP)	15.3	20.0	20.5	20.0	24.4	24.6

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Lake Geneva #219 (710 Williams St)

Site Information

Site ID: SE-105

Municipality	Lake Geneva		
County	Walworth	WisDOT Region	SE
Location	Non-Freeway (Tourist)	Area	Urban
Highway	STHlliams St		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	6500		
No. Driveway Entrances	3	Car Wash	Yes
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Thursday, June 17, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	145	92	237						
7:00 AM	0	0	0	172	122	294						
8:00 AM	0	0	0	182	135	317						
9:00 AM	0	0	0	173	131	304						
10:00 AM	0	0	0	192	125	317				183	174	357
11:00 AM	0	0	0	180	140	320				161	164	325
12:00 PM	0	0	0	218	169	387				168	162	330
1:00 PM	0	0	0	185	130	315				139	152	291
2:00 PM	0	0	0	136	119	255						
3:00 PM	0	0	0	152	119	271	173	175	348			
4:00 PM	0	0	0	174	130	304	168	176	344			
5:00 PM	0	0	0	152	130	282	146	142	288			
6:00 PM							139	131	270			
TOTAL	0	0	0	2061	1542	3603	626	624	1250	651	652	1303
DISTRIBUTION				57%	43%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.28%	4.47%
7:00 AM	6.26%	5.93%
8:00 AM	6.62%	6.57%
9:00 AM	6.30%	6.37%
10:00 AM	6.99%	6.08%
11:00 AM	6.55%	6.81%
12:00 PM	7.93%	8.22%
1:00 PM	6.73%	6.32%
2:00 PM	4.95%	5.79%
3:00 PM	5.53%	5.79%
4:00 PM	6.33%	6.32%
5:00 PM	5.53%	6.32%

WEEKDAY AVE:	1030.5	771	1801.5
DISTRIBUTION	57%	43%	

Total 12-hour Trips*	2061	1542	3603
Adjust to 24-hour trips*	2748	2056	4804

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	182	135	317						
DISTRIBUTION	57%	43%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	176	146	322						
DISTRIBUTION	55%	45%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	214	160	374						
DISTRIBUTION	57%	43%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	229	160	389						
DISTRIBUTION	59%	41%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				180	183	363	184	183	367
DISTRIBUTION				50%	50%		50%	50%	
PEAK HOUR				3:30 PM	-	4:30 PM	10:15 AM	-	11:15 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	48.8	49.5	57.5	59.8	55.8	56.5
Vehicle Fueling Positions (VFP)	26.4	26.8	31.2	32.4	30.3	30.6

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Fleet Farm Delavan, I-43 & WIS 50*

Site Information

Site ID: SE-106

Municipality	Delavan			
County	Walworth	WisDOT Region	SE	
Location	Freeway (Tourist)		Area	Urban
Highway	IH 43 & STH 50			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	5,400			
No. Driveway Entrances	2	Car Wash	Yes	
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	2			



Count Information

1st Day of Count	Thursday, June 17, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	3	3	6						
7:00 AM	0	0	0	8	9	17						
8:00 AM	0	0	0	11	10	21						
9:00 AM	0	0	0	24	24	48						
10:00 AM	0	0	0	18	19	37				50	53	103
11:00 AM	0	0	0	26	22	48				41	39	80
12:00 PM	0	0	0	25	22	47				33	35	68
1:00 PM	0	0	0	28	35	63				47	49	96
2:00 PM	0	0	0	37	35	72						
3:00 PM	0	0	0	31	34	65	38	40	78			
4:00 PM	0	0	0	23	20	43	28	29	57			
5:00 PM	0	0	0	24	19	43	34	34	68			
6:00 PM							26	26	52			
TOTAL	0	0	0	258	252	510	126	129	255	171	176	347
DISTRIBUTION				51%	49%		49%	51%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	0.87%	0.89%
7:00 AM	2.33%	2.68%
8:00 AM	3.20%	2.98%
9:00 AM	6.98%	7.14%
10:00 AM	5.23%	5.65%
11:00 AM	7.56%	6.55%
12:00 PM	7.27%	6.55%
1:00 PM	8.14%	10.42%
2:00 PM	10.76%	10.42%
3:00 PM	9.01%	10.12%
4:00 PM	6.69%	5.95%
5:00 PM	6.98%	5.65%

WEEKDAY AVE:	129	126	255
DISTRIBUTION	51%	49%	

Total 12-hour Trips	258	252	510
Adjust to 24-hour trips*	344	336	680

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	11	12	23						
DISTRIBUTION	48%	52%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	23	20	43						
DISTRIBUTION	53%	47%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	26	27	53						
DISTRIBUTION	49%	51%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	34	41	75						
DISTRIBUTION	45%	55%							
PEAK HOUR	2:15 PM	-	3:15 PM						
PEAK HOUR GENERATOR				38	40	78	56	51	107
DISTRIBUTION				49%	51%		52%	48%	
PEAK HOUR				3:00 PM	-	4:00 PM	12:45 PM	-	1:45 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	4.3	8.0	9.8	13.9	14.4	19.8
Vehicle Fueling Positions (VFP)	1.4	2.7	3.3	4.7	4.9	6.7

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

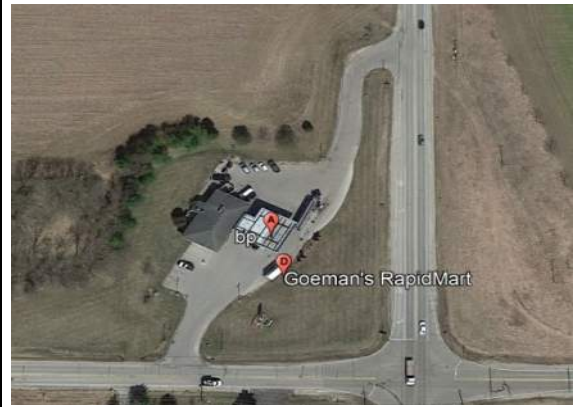
Site Summary

Site Name: **BP Erin, WIS 83 & WIS 167**

Site Information

Site ID: **SE-107**

Municipality	Erin		WisDOT Region	SE
County	Washington		Area	Rural
Location	Non-Freeway (Non-Tourist)			
Highway	STH 83 & STH 167			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	3600			
No. Driveway Entrances	2	Car Wash	No	
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	2	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Wednesday, June 9, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	83	85	168	75	75	150						
7:00 AM	70	69	139	67	60	127						
8:00 AM	57	59	116	50	61	111						
9:00 AM	37	38	75	46	41	87						
10:00 AM	50	51	101	46	49	95				47	44	91
11:00 AM	61	61	122	63	59	122				75	66	141
12:00 PM	67	65	132	50	51	101				53	51	104
1:00 PM	56	57	113	40	42	82				72	62	134
2:00 PM	55	56	111	53	52	105						
3:00 PM	71	71	142	62	66	128	64	75	139			
4:00 PM	94	93	187	79	74	153	83	79	162			
5:00 PM	76	80	156	59	62	121	58	62	120			
6:00 PM							45	45	90			
TOTAL	777	785	1562	690	692	1382	250	261	511	247	223	470
DISTRIBUTION	50%	50%		50%	50%		49%	51%		53%	47%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	8.08%	8.12%
7:00 AM	7.00%	6.55%
8:00 AM	5.47%	6.09%
9:00 AM	4.24%	4.01%
10:00 AM	4.91%	5.08%
11:00 AM	6.34%	6.09%
12:00 PM	5.98%	5.89%
1:00 PM	4.91%	5.03%
2:00 PM	5.52%	5.48%
3:00 PM	6.80%	6.96%
4:00 PM	8.84%	8.48%
5:00 PM	6.90%	7.21%

WEEKDAY AVE:	733.5	738.5	1472
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
734	739	1472
978	985	1963

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	70	68	138						
DISTRIBUTION	51%	49%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	87	84	171						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	83	85	168						
DISTRIBUTION	49%	51%							
PEAK HOUR	6:15 AM	-	7:15 AM						
PM PEAK HOUR - GENERATOR	87	84	171						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:00 PM	-	5:00 PM						
PEAK HOUR GENERATOR				83	80	163	75	66	141
DISTRIBUTION				51%	49%		53%	47%	
PEAK HOUR				3:30 PM	-	4:30 PM	11:00 AM	-	12:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	38.3	47.5	46.7	47.5	45.3	39.2
Vehicle Fueling Positions (VFP)	13.8	17.1	16.8	17.1	16.3	14.1

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Muskego #664 (S79W18884 Janesville Rd)



Site Information

Site ID: SE-108

Municipality	Muskego		
County	Waukesha	WisDOT Region	SE
Location	Non-Freeway (Non-Tourist)	Area	Urban
Highway	Janesville Rd		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5000		
No. Driveway Entrances	3	Car Wash	No
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	0		

Count Information

1st Day of Count	Wednesday, October 20, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	152	118	270	173	114	287						
7:00 AM	219	130	349	196	116	312						
8:00 AM	155	96	251	168	87	255						
9:00 AM	146	98	244	154	114	268						
10:00 AM	90	95	185	108	84	192				171	135	306
11:00 AM	138	111	249	141	106	247				176	124	300
12:00 PM	194	181	375	162	143	305				174	142	316
1:00 PM	128	111	239	94	100	194				165	132	297
2:00 PM	107	97	204	134	122	256						
3:00 PM	121	109	230	132	143	275	129	140	269			
4:00 PM	156	149	305	119	117	236	172	163	335			
5:00 PM	150	150	300	163	132	295	151	151	302			
6:00 PM							106	101	207			
TOTAL	1756	1445	3201	1744	1378	3122	558	555	1113	686	533	1219
DISTRIBUTION	55%	45%		56%	44%		50%	50%		56%	44%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.96%	6.16%
7:00 AM	8.89%	6.54%
8:00 AM	6.92%	4.86%
9:00 AM	6.43%	5.63%
10:00 AM	4.24%	4.76%
11:00 AM	5.98%	5.77%
12:00 PM	7.63%	8.61%
1:00 PM	4.76%	5.61%
2:00 PM	5.16%	5.82%
3:00 PM	5.42%	6.70%
4:00 PM	5.89%	7.07%
5:00 PM	6.71%	7.49%

WEEKDAY AVE:	1750	1411.5	3161.5
DISTRIBUTION	55%	45%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	1750	1412	3162
Outbound	2333	1882	4215
Total			4215

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	208	123	331						
DISTRIBUTION	63%	37%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	152	147	299						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	194	141	335						
DISTRIBUTION	58%	42%							
PEAK HOUR	6:30 AM	-	7:30 AM						
PM PEAK HOUR - GENERATOR	183	160	343						
DISTRIBUTION	53%	47%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				172	163	335	186	147	333
DISTRIBUTION				51%	49%		56%	44%	
PEAK HOUR				4:00 PM	-	5:00 PM	10:45 AM	-	11:45 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	66.2	59.8	67.0	68.6	67.0	66.6
Vehicle Fueling Positions (VFP)	20.7	18.7	20.9	21.4	20.9	20.8

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Speedway, New Berlin, I-43 & Moorland*

Site Information

Site ID: SE-109

Municipality	New Berlin			
County	Waukesha	WisDOT Region	SE	
Location	Freeway (Non-Tourist)		Area	Urban
Highway	IH 43			
ITE Land Use Code (10th Ed.)	945			
Store Size (Sq Ft)	2900			
No. Driveway Entrances	2	Car Wash	No	
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Wednesday, June 23, 2021
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	68	67	135	66	65	131						
7:00 AM	68	69	137	70	67	137						
8:00 AM	51	52	103	68	73	141						
9:00 AM	52	47	99	57	55	112						
10:00 AM	60	61	121	60	63	123				0	0	0
11:00 AM	65	60	125	65	59	124				0	0	0
12:00 PM	82	83	165	51	55	106				0	0	0
1:00 PM	59	60	119	57	62	119				0	0	0
2:00 PM	77	82	159	66	61	127						
3:00 PM	73	73	146	79	76	155	0	0	0			
4:00 PM	84	83	167	62	65	127	0	0	0			
5:00 PM	80	80	160	67	71	138	0	0	0			
6:00 PM							0	0	0			
TOTAL	819	817	1636	768	772	1540	0	0	0	0	0	0
DISTRIBUTION	50%	50%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.33%	6.23%
7:00 AM	6.52%	6.42%
8:00 AM	5.62%	5.90%
9:00 AM	5.15%	4.81%
10:00 AM	5.67%	5.85%
11:00 AM	6.14%	5.62%
12:00 PM	6.29%	6.51%
1:00 PM	5.48%	5.76%
2:00 PM	6.76%	6.75%
3:00 PM	7.18%	7.03%
4:00 PM	6.90%	6.99%
5:00 PM	6.95%	7.13%

WEEKDAY AVE:	793.5	794.5	1588
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
794	795	1588
1058	1059	2117

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	76	76	152						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	74	76	150						
DISTRIBUTION	49%	51%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	76	76	152						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - GENERATOR	83	84	167						
DISTRIBUTION	50%	50%							
PEAK HOUR	2:30 PM	-	3:30 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street	Any hour between 7:00 AM - 9:00 AM
PM Peak Hour - Adjacent Street	Any hour between 4:00 PM - 6:00 PM
AM Peak Hour - Generator	Any hour in the AM
PM Peak Hour - Generator	Any hour in the PM
Peak Hour Generator	Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	52.4	51.7	52.4	57.6	0.0	0.0
Vehicle Fueling Positions (VFP)	12.7	12.5	12.7	13.9	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Oak Creek BP (1225 W Rawson Ave)**

Site Information

Site ID: SE-110

Municipality	Oak Creek			
County	Milwaukee	WisDOT Region	SE	
Location	Freeway (Non-Tourist)		Area	Urban
Highway	IH 41			
ITE Land Use Code (10th Ed.)	945			
Store Size (Sq Ft)	2200			
No. Driveway Entrances	3	Car Wash	No	
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Wednesday, July 7, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	40	38	78	45	38	83						
7:00 AM	35	34	69	35	34	69						
8:00 AM	30	34	64	38	43	81						
9:00 AM	26	26	52	33	33	66						
10:00 AM	36	35	71	24	20	44				36	36	72
11:00 AM	31	33	64	33	30	63				35	32	67
12:00 PM	43	43	86	43	38	81				35	38	73
1:00 PM	30	34	64	40	49	89				33	35	68
2:00 PM	34	28	62	50	57	107						
3:00 PM	37	40	77	39	33	72	47	49	96			
4:00 PM	33	38	71	45	46	91	52	49	101			
5:00 PM	38	35	73	36	40	76	44	54	98			
6:00 PM							47	37	84			
TOTAL	413	418	831	461	461	922	190	189	379	139	141	280
DISTRIBUTION	50%	50%		50%	50%		50%	50%		50%	50%	

Average Weekly Hourly Distributions

Hour	% IN	% OUT
6:00 AM	7.29%	6.48%
7:00 AM	6.01%	5.80%
8:00 AM	5.84%	6.57%
9:00 AM	5.06%	5.03%
10:00 AM	5.15%	4.69%
11:00 AM	5.49%	5.38%
12:00 PM	7.38%	6.91%
1:00 PM	6.01%	7.08%
2:00 PM	7.21%	7.25%
3:00 PM	6.52%	6.23%
4:00 PM	6.69%	7.17%
5:00 PM	6.35%	6.40%

WEEKDAY AVE:	437	439.5	876.5
DISTRIBUTION	50%	50%	

Inbound	Outbound	Total
437	440	877
583	586	1169

Total 12-hour Trips
Adjust to 24-hour trips*

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	38	41	79						
DISTRIBUTION	48%	52%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	41	43	84						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	43	42	85						
DISTRIBUTION	51%	49%							
PEAK HOUR	6:15 AM	-	7:15 AM						
PM PEAK HOUR - GENERATOR	44	43	87						
DISTRIBUTION	51%	49%							
PEAK HOUR	12:15 PM	-	1:15 PM						
PEAK HOUR GENERATOR				59	60	119	39	44	83
DISTRIBUTION				50%	50%		47%	53%	
PEAK HOUR				4:30 PM	-	5:30 PM	12:15 PM	-	1:15 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	35.9	38.2	38.6	39.5	54.1	37.7
Vehicle Fueling Positions (VFP)	6.6	7.0	7.1	7.3	9.9	6.9

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Kenosha Mobil (7511 118th Ave)

Site Information

Site ID: SE-111

Municipality	Kenosha	WisDOT Region	SE
County	Kenosha	Area	Urban
Location	Freeway (Non-Tourist)		
Highway	IH 41/94 & STH 50		
ITE Land Use Code (10th Ed.)	945		
Store Size (Sq Ft)	2850		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	5		



Count Information

1st Day of Count	Wednesday, June 30, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	19	21	40	15	16	31						
7:00 AM	19	21	40	16	13	29						
8:00 AM	17	17	34	19	20	39						
9:00 AM	16	17	33	32	29	61						
10:00 AM	26	28	54	19	21	40				26	31	57
11:00 AM	23	23	46	30	25	55				33	33	66
12:00 PM	28	25	53	32	37	69				39	36	75
1:00 PM	23	23	46	34	30	64				30	32	62
2:00 PM	22	20	42	32	34	66						
3:00 PM	31	31	62	38	39	77	34	35	69			
4:00 PM	33	31	64	24	22	46	37	38	75			
5:00 PM	40	37	77	42	42	84	32	33	65			
6:00 PM							21	24	45			
TOTAL	297	294	591	333	328	661	124	130	254	128	132	260
<i>DISTRIBUTION</i>	50%	50%		50%	50%		49%	51%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.05%	4.46%
7:00 AM	4.17%	4.10%
8:00 AM	4.29%	4.46%
9:00 AM	5.71%	5.55%
10:00 AM	5.36%	5.91%
11:00 AM	6.31%	5.79%
12:00 PM	7.14%	7.48%
1:00 PM	6.79%	6.39%
2:00 PM	6.43%	6.51%
3:00 PM	8.21%	8.44%
4:00 PM	6.79%	6.39%
5:00 PM	9.76%	9.53%

WEEKDAY AVE:	315	311	626
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips*	315	311	626
Adjust to 24-hour trips*	420	415	835

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	22	23	45						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	41	40	81						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	31	30	61						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	41	40	81						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	5:00 PM	-	6:00 PM						
PEAK HOUR GENERATOR				40	44	84	40	37	77
<i>DISTRIBUTION</i>				48%	52%		52%	48%	
PEAK HOUR				4:30 PM	-	5:30 PM	11:45 AM	-	12:45 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	15.8	28.4	21.4	28.4	29.5	27.0
Vehicle Fueling Positions (VFP)	3.8	6.8	5.1	6.8	7.0	6.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

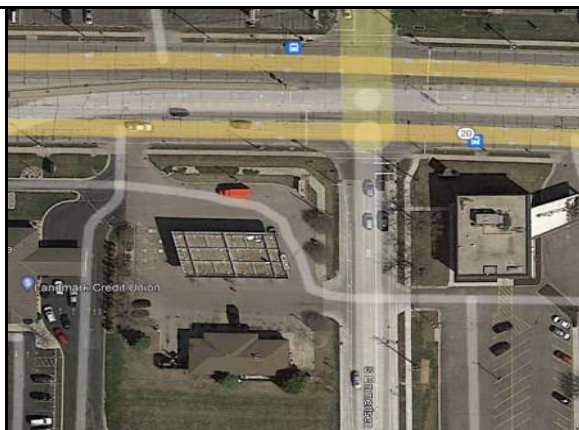
Site Summary

Site Name: *Racine Speedway (6209 Washington)*

Site Information

Site ID: SE-112

Municipality	Racine		WisDOT Region	SE
County	Racine		Area	Urban
Location	Non-Freeway (Non-Tourist)		Highway	STH 20
ITE Land Use Code (10th Ed.)	945		Store Size (Sq Ft)	2900
No. Driveway Entrances	2	Car Wash	No	
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	2			



Count Information

1st Day of Count	Wednesday, June 30, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	67	105	172	54	57	111						
7:00 AM	69	114	183	72	65	137						
8:00 AM	70	120	190	75	95	170						
9:00 AM	70	110	180	68	79	147						
10:00 AM	66	118	184	74	82	156				102	94	196
11:00 AM	68	116	184	81	101	182				99	105	204
12:00 PM	84	143	227	88	91	179				90	95	185
1:00 PM	71	123	194	84	90	174				65	70	135
2:00 PM	81	125	206	63	74	137						
3:00 PM	92	148	240	86	95	181	100	107	207			
4:00 PM	69	141	210	82	93	175	108	110	218			
5:00 PM	77	142	219	100	103	203	82	95	177			
6:00 PM							55	71	126			
TOTAL	884	1505	2389	927	1025	1952	345	383	728	356	364	720
DISTRIBUTION	37%	63%		47%	53%		47%	53%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.01%	4.80%
7:00 AM	5.84%	5.31%
8:00 AM	6.00%	6.37%
9:00 AM	5.72%	5.60%
10:00 AM	5.80%	5.93%
11:00 AM	6.17%	6.43%
12:00 PM	7.12%	6.94%
1:00 PM	6.42%	6.31%
2:00 PM	5.96%	5.90%
3:00 PM	7.37%	7.20%
4:00 PM	6.25%	6.94%
5:00 PM	7.33%	7.26%

WEEKDAY AVE:	905.5	1265	2170.5
DISTRIBUTION	42%	58%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
906	1265	2171
1207	1687	2894

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	73	108	181						
DISTRIBUTION	40%	60%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	93	125	218						
DISTRIBUTION	43%	57%							
PEAK HOUR	4:45 PM	-	5:45 PM						
AM PEAK HOUR - GENERATOR	82	114	196						
DISTRIBUTION	42%	58%							
PEAK HOUR	11:15 AM	-	12:15 PM						
PM PEAK HOUR - GENERATOR	93	125	218						
DISTRIBUTION	43%	57%							
PEAK HOUR	4:45 PM	-	5:45 PM						
PEAK HOUR GENERATOR				108	119	227	113	108	221
DISTRIBUTION				48%	52%		51%	49%	
PEAK HOUR				4:15 PM	-	5:15 PM	11:15 AM	-	12:15 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	62.4	75.2	67.6	75.2	78.3	76.2
Vehicle Fueling Positions (VFP)	15.1	18.2	16.3	18.2	18.9	18.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Kenosha Speedway (5959 75th St)**

Site Information

Site ID: SE-113

Municipality	Kenosha		WisDOT Region	SE
County	Kenosha		Area	Urban
Location	Non-Freeway (Non-Tourist)			
Highway	STH 50 & 60th			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	4200			
No. Driveway Entrances	2	Car Wash	No	
Non-Diesel Fueling (VFP)	10	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Wednesday, June 30, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	64	62	126	78	74	152						
7:00 AM	85	78	163	88	81	169						
8:00 AM	103	102	205	81	87	168						
9:00 AM	86	97	183	99	92	191						
10:00 AM	96	97	193	90	91	181				101	108	209
11:00 AM	107	119	226	123	120	243				109	105	214
12:00 PM	122	130	252	120	117	237				146	140	286
1:00 PM	118	107	225	133	144	277				130	146	276
2:00 PM	126	138	264	110	117	227						
3:00 PM	119	134	253	137	132	269	147	155	302			
4:00 PM	131	135	266	135	155	290	163	165	328			
5:00 PM	135	133	268	135	147	282	127	168	295			
6:00 PM							110	140	250			
TOTAL	1292	1332	2624	1329	1357	2686	547	628	1175	486	499	985
DISTRIBUTION	49%	51%		49%	51%		47%	53%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.06%	3.79%
7:00 AM	4.95%	4.43%
8:00 AM	5.27%	5.27%
9:00 AM	5.29%	5.27%
10:00 AM	5.32%	5.24%
11:00 AM	6.58%	6.67%
12:00 PM	6.92%	6.89%
1:00 PM	7.18%	7.00%
2:00 PM	6.75%	7.11%
3:00 PM	7.33%	7.42%
4:00 PM	7.61%	8.09%
5:00 PM	7.73%	7.81%

WEEKDAY AVE:	1310.5	1344.5	2655
DISTRIBUTION	49%	51%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1311	1345	2655
1747	1793	3540

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	94	94	188						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:30 AM	-	8:30 AM						
PM PEAK HOUR - ADJ. STREET	141	155	296						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	128	127	255						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	141	155	296						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:15 PM	-	5:15 PM						
PEAK HOUR GENERATOR				162	175	337	146	140	286
DISTRIBUTION				48%	52%		51%	49%	
PEAK HOUR				3:45 PM	-	4:45 PM	12:00 PM	-	1:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	44.8	70.5	60.7	70.5	80.2	68.1
Vehicle Fueling Positions (VFP)	18.8	29.6	25.5	29.6	33.7	28.6

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

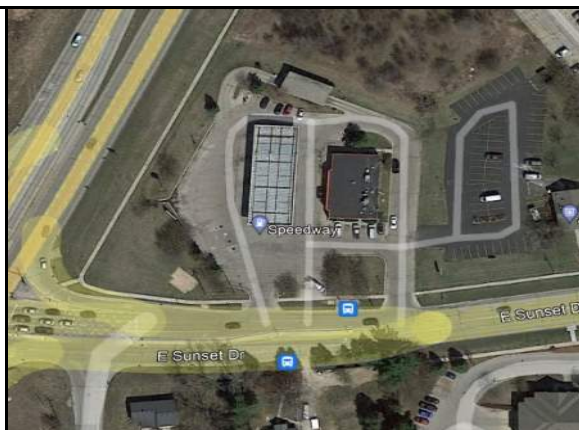
Site Summary

Site Name: **Waukesha Speedway (1600 E Sunset Dr)**

Site Information

Site ID: SE-114

Municipality	Waukesha		WisDOT Region	SE
County	Waukesha		Area	Urban
Location	Non-Freeway (Non-Tourist)		Highway	STH 59
ITE Land Use Code (10th Ed.)	960		Store Size (Sq Ft)	4400
No. Driveway Entrances	2	Car Wash	Yes	
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Thursday, June 24, 2021
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	61	55	116	55	56	111						
7:00 AM	86	72	158	75	64	139						
8:00 AM	45	44	89	65	65	130						
9:00 AM	50	53	103	58	51	109						
10:00 AM	50	49	99	60	65	125				0	0	0
11:00 AM	39	38	77	59	60	119				0	0	0
12:00 PM	52	54	106	69	59	128				0	0	0
1:00 PM	58	55	113	48	48	96				0	0	0
2:00 PM	41	42	83	51	58	109						
3:00 PM	60	68	128	44	49	93	0	0	0			
4:00 PM	69	70	139	57	66	123	0	0	0			
5:00 PM	50	61	111	47	48	95	0	0	0			
6:00 PM							0	0	0			
TOTAL	661	661	1322	688	689	1377	0	0	0	0	0	0
DISTRIBUTION	50%	50%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.45%	6.17%
7:00 AM	8.95%	7.56%
8:00 AM	6.12%	6.06%
9:00 AM	6.00%	5.78%
10:00 AM	6.12%	6.33%
11:00 AM	5.45%	5.44%
12:00 PM	6.73%	6.28%
1:00 PM	5.89%	5.72%
2:00 PM	5.11%	5.56%
3:00 PM	5.78%	6.50%
4:00 PM	7.01%	7.56%
5:00 PM	5.39%	6.06%

WEEKDAY AVE:	674.5	675	1349.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	675	675	1350
Outbound	899	900	1799

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	81	68	149						
DISTRIBUTION	54%	46%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	63	71	134						
DISTRIBUTION	47%	53%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	81	68	149						
DISTRIBUTION	54%	46%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - GENERATOR	63	71	134						
DISTRIBUTION	47%	53%							
PEAK HOUR	4:15 PM	-	5:15 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	33.9	30.5	33.9	30.5	0.0	0.0
Vehicle Fueling Positions (VFP)	9.3	8.4	9.3	8.4	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

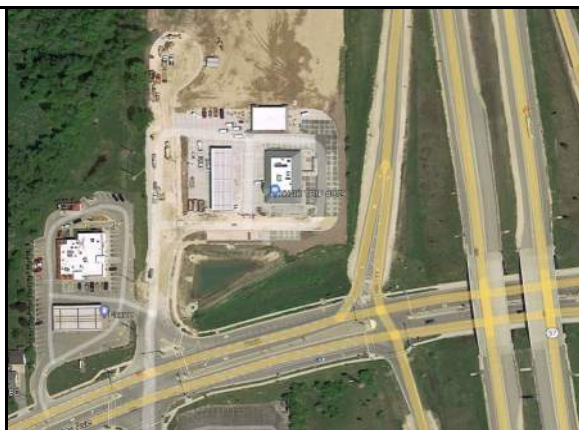
Site Summary

Site Name: **Saukville #879 (750 E Green Bay Ave)**

Site Information

Site ID: SE-115

Municipality	Saukville		
County	Ozaukee	WisDOT Region	SE
Location	Freeway (Non-Tourist)	Area	Rural
Highway	IH 43 & STH 33		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5600		
No. Driveway Entrances	2	Car Wash	Yes
Non-Diesel Fueling (VFP)	20	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Wednesday, June 9, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	177	184	361	164	170	334						
7:00 AM	162	172	334	173	178	351						
8:00 AM	140	139	279	177	168	345						
9:00 AM	152	151	303	160	159	319						
10:00 AM	140	130	270	149	154	303				204	211	415
11:00 AM	166	153	319	141	136	277				198	201	399
12:00 PM	175	185	360	184	194	378				179	177	356
1:00 PM	145	145	290	198	182	380				173	177	350
2:00 PM	151	155	306	156	167	323						
3:00 PM	176	167	343	166	158	324	195	188	383			
4:00 PM	184	186	370	187	192	379	168	171	339			
5:00 PM	164	176	340	154	155	309	160	160	320			
6:00 PM							139	140	279			
TOTAL	1932	1943	3875	2009	2013	4022	662	659	1321	754	766	1520
DISTRIBUTION	50%	50%		50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.49%	6.71%
7:00 AM	6.38%	6.64%
8:00 AM	6.03%	5.82%
9:00 AM	5.94%	5.88%
10:00 AM	5.50%	5.38%
11:00 AM	5.84%	5.48%
12:00 PM	6.83%	7.19%
1:00 PM	6.53%	6.20%
2:00 PM	5.84%	6.10%
3:00 PM	6.51%	6.16%
4:00 PM	7.06%	7.17%
5:00 PM	6.05%	6.28%

WEEKDAY AVE:	1970.5	1978	3948.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1971	1978	3949
2627	2637	5265

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	168	175	343						
DISTRIBUTION	49%	51%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	184	197	381						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	192	176	368						
DISTRIBUTION	52%	48%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	184	197	381						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:15 PM	-	5:15 PM						
PEAK HOUR GENERATOR				194	199	393	203	215	418
DISTRIBUTION				49%	51%		49%	51%	
PEAK HOUR				3:30 PM	-	4:30 PM	10:30 AM	-	11:30 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	61.3	68.0	65.7	68.0	70.2	74.6
Vehicle Fueling Positions (VFP)	17.2	19.1	18.4	19.1	19.7	20.9

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Waukesha #396 (VW229N2086 Redford Bl**

Site Information

Site ID: **SE-116**

Municipality	Waukesha		
County	Waukesha	WisDOT Region	SE
Location	Non-Freeway (Non-Tourist)	Area	Urban
Highway	CTH F & CTH M		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	7400		
No. Driveway Entrances	2	Car Wash	Yes
Non-Diesel Fueling (VFP)	23	Diesel Fueling (VFP)	6
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Wednesday, October 20, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	238	216	454	220	213	433						
7:00 AM	240	240	480	231	217	448						
8:00 AM	205	220	425	230	231	461						
9:00 AM	191	188	379	177	185	362						
10:00 AM	164	164	328	146	155	301				114	119	233
11:00 AM	214	205	419	202	190	392				132	128	260
12:00 PM	244	241	485	251	249	500				138	140	278
1:00 PM	147	160	307	160	172	332				147	144	291
2:00 PM	148	149	297	204	197	401						
3:00 PM	165	175	340	167	180	347	209	215	424			
4:00 PM	194	195	389	169	166	335	226	226	452			
5:00 PM	167	174	341	180	181	361	178	171	349			
6:00 PM							130	149	279			
TOTAL	2317	2327	4644	2337	2336	4673	743	761	1504	531	531	1062
DISTRIBUTION	50%	50%		50%	50%		49%	51%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	7.38%	6.90%
7:00 AM	7.59%	7.35%
8:00 AM	7.01%	7.25%
9:00 AM	5.93%	6.00%
10:00 AM	5.00%	5.13%
11:00 AM	6.70%	6.35%
12:00 PM	7.98%	7.88%
1:00 PM	4.95%	5.34%
2:00 PM	5.67%	5.57%
3:00 PM	5.35%	5.71%
4:00 PM	5.85%	5.81%
5:00 PM	5.59%	5.71%

WEEKDAY AVE:	2327	2331.5	4658.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	2327	2332	4659
Outbound	3103	3109	6211

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	238	237	475						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:30 AM	-	8:30 AM						
PM PEAK HOUR - ADJ. STREET	182	181	363						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	256	253	509						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	248	255	503						
DISTRIBUTION	49%	51%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				237	241	478	156	152	308
DISTRIBUTION				50%	50%		51%	49%	
PEAK HOUR				3:45 PM	-	4:45 PM	12:45 PM	-	1:45 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	64.2	49.1	68.8	68.0	64.6	41.6
Vehicle Fueling Positions (VFP)	16.4	12.5	17.6	17.3	16.5	10.6

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Pleasant Prairie #296 (10215 120th Ave)*

Site Information

Site ID: *SE-117*

Municipality	Pleasant Prairie	
County	Kenosha	WisDOT Region
Location	Freeway (Non-Tourist)	Area
Highway	IH 94 & STH 165	
ITE Land Use Code (10th Ed.)	960	
Store Size (Sq Ft)	6600	
No. Driveway Entrances	2	Car Wash
Non-Diesel Fueling (VFP)	24	Diesel Fueling (VFP)
No. of Gas Stations within 1/2 mile	1	



Count Information

1st Day of Count	Wednesday, June 30, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	122	121	243	127	128	255						
7:00 AM	148	130	278	145	134	279						
8:00 AM	107	120	227	118	119	237						
9:00 AM	105	95	200	114	119	233						
10:00 AM	97	93	190	115	108	223				145	103	248
11:00 AM	120	113	233	124	125	249				147	159	306
12:00 PM	165	177	342	156	161	317				134	123	257
1:00 PM	122	124	246	129	127	256				123	141	264
2:00 PM	118	114	232	153	151	304						
3:00 PM	133	145	278	158	157	315	160	154	314			
4:00 PM	177	164	341	163	166	329	180	182	362			
5:00 PM	136	150	286	171	166	337	168	178	346			
6:00 PM							101	99	200			
TOTAL	1550	1546	3096	1673	1661	3334	609	613	1222	549	526	1075
DISTRIBUTION	50%	50%		50%	50%		50%	50%		51%	49%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.79%	5.82%
7:00 AM	6.82%	6.17%
8:00 AM	5.24%	5.59%
9:00 AM	5.10%	5.00%
10:00 AM	4.93%	4.70%
11:00 AM	5.68%	5.57%
12:00 PM	7.47%	7.90%
1:00 PM	5.84%	5.87%
2:00 PM	6.31%	6.20%
3:00 PM	6.77%	7.06%
4:00 PM	7.91%	7.72%
5:00 PM	7.14%	7.39%

WEEKDAY AVE:	1611.5	1603.5	3215
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1612	1604	3215
2149	2138	4287

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	142	138	280						
DISTRIBUTION	51%	49%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	177	173	350						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	168	155	323						
DISTRIBUTION	52%	48%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	177	173	350						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:15 PM	-	5:15 PM						
PEAK HOUR GENERATOR				191	184	375	167	155	322
DISTRIBUTION				51%	49%		52%	48%	
PEAK HOUR				3:30 PM	-	4:30 PM	10:30 AM	-	11:30 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	42.4	53.0	48.9	53.0	56.8	48.8
Vehicle Fueling Positions (VFP)	11.7	14.6	13.5	14.6	15.6	13.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

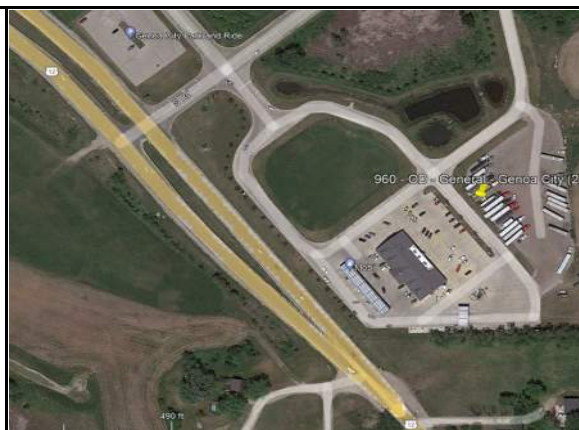
Site Summary

Site Name: **Genoa City Mobil (229 S Rd)**

Site Information

Site ID: **SE-118**

Municipality	Genoa City		WisDOT Region	SE
County	Walworth		Area	Rural
Location	Non-Freeway (Non-Tourist)			
Highway	US 12			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	12,100			
No. Driveway Entrances	2	Car Wash	No	
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	3	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Wednesday, July 7, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	92	94	186	120	98	218						
7:00 AM	93	92	185	89	86	175						
8:00 AM	87	102	189	101	102	203						
9:00 AM	106	103	209	101	111	212						
10:00 AM	95	119	214	128	144	272				150	148	298
11:00 AM	139	148	287	132	132	264				180	188	368
12:00 PM	138	152	290	131	137	268				173	171	344
1:00 PM	152	127	279	139	129	268				157	147	304
2:00 PM	128	123	251	117	122	239						
3:00 PM	121	130	251	143	139	282	139	152	291			
4:00 PM	122	129	251	129	140	269	144	146	290			
5:00 PM	115	128	243	153	150	303	173	184	357			
6:00 PM							165	162	327			
TOTAL	1388	1447	2835	1483	1490	2973	621	644	1265	660	654	1314
DISTRIBUTION	49%	51%		50%	50%		49%	51%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.54%	4.90%
7:00 AM	4.75%	4.55%
8:00 AM	4.91%	5.21%
9:00 AM	5.41%	5.46%
10:00 AM	5.83%	6.72%
11:00 AM	7.08%	7.15%
12:00 PM	7.03%	7.38%
1:00 PM	7.60%	6.54%
2:00 PM	6.40%	6.26%
3:00 PM	6.90%	6.87%
4:00 PM	6.56%	6.87%
5:00 PM	7.00%	7.10%

WEEKDAY AVE:	1435.5	1468.5	2904
DISTRIBUTION	49%	51%	

Total 12-hour Trips	1436	1469	2904
Adjust to 24-hour trips*	1914	1958	3872

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	94	102	196						
DISTRIBUTION	48%	52%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	134	139	273						
DISTRIBUTION	49%	51%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	138	146	284						
DISTRIBUTION	49%	51%							
PEAK HOUR	10:45 AM	-	11:45 AM						
PM PEAK HOUR - GENERATOR	152	141	293						
DISTRIBUTION	52%	48%							
PEAK HOUR	12:45 PM	-	1:45 PM						
PEAK HOUR GENERATOR				173	184	357	180	188	368
DISTRIBUTION				48%	52%		49%	51%	
PEAK HOUR				5:00 PM	-	6:00 PM	11:00 AM	-	12:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	16.2	22.6	23.5	24.2	29.5	30.4
Vehicle Fueling Positions (VFP)	13.1	18.2	18.9	19.5	23.8	24.5

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

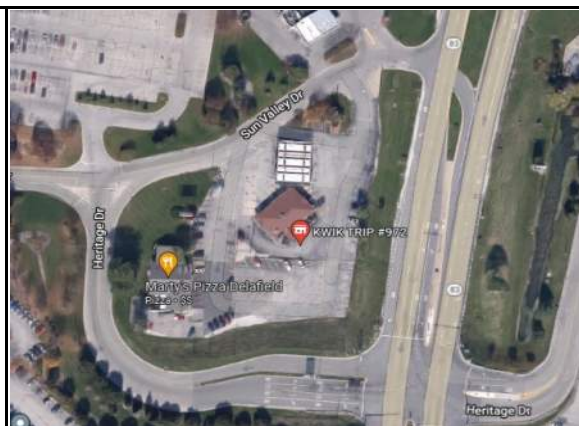
Site Summary

Site Name: **Delafield #972 (2694 Sun Valley Dr)**

Site Information

Site ID: **SE-119**

Municipality	Delafield		
County	Waukesha	WisDOT Region	SE
Location	Freeway (Non-Tourist)	Area	Urban
Highway	STH 83		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	8000		
No. Driveway Entrances	3	Car Wash	No
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Wednesday, May 4, 2022
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	118	51	169	104	94	198						
7:00 AM	155	115	270	150	148	298						
8:00 AM	180	145	325	146	144	290						
9:00 AM	147	136	283	141	134	275						
10:00 AM	119	121	240	117	141	258				0	0	0
11:00 AM	151	139	290	137	107	244				0	0	0
12:00 PM	170	126	296	159	171	330				0	0	0
1:00 PM	166	162	328	145	131	276				0	0	0
2:00 PM	135	117	252	161	162	323						
3:00 PM	163	169	332	164	176	340	0	0	0			
4:00 PM	191	164	355	195	188	383	0	0	0			
5:00 PM	194	182	376	173	182	355	0	0	0			
6:00 PM							0	0	0			
TOTAL	1889	1627	3516	1792	1778	3570	0	0	0	0	0	0
DISTRIBUTION	54%	46%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.52%	3.19%
7:00 AM	6.21%	5.79%
8:00 AM	6.64%	6.37%
9:00 AM	5.87%	5.95%
10:00 AM	4.81%	5.77%
11:00 AM	5.87%	5.42%
12:00 PM	6.70%	6.54%
1:00 PM	6.34%	6.45%
2:00 PM	6.03%	6.15%
3:00 PM	6.66%	7.60%
4:00 PM	7.86%	7.75%
5:00 PM	7.48%	8.02%

WEEKDAY AVE:	1840.5	1702.5	3543
DISTRIBUTION	52%	48%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	1841	1703	3543
Outbound	2454	2270	4724

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	163	145	308						
DISTRIBUTION	53%	47%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	194	195	389						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:45 PM	-	5:45 PM						
AM PEAK HOUR - GENERATOR	162	147	309						
DISTRIBUTION	52%	48%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	194	195	389						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:45 PM	-	5:45 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	38.5	48.6	38.6	48.6	0.0	0.0
Vehicle Fueling Positions (VFP)	19.3	24.3	19.3	24.3	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Waukesha #970 (2106 S West Ave)**

Site Information

Site ID: SE-120

Municipality	Waukesha		
County	Waukesha	WisDOT Region	SE
Location	Non-Freeway (Non-Tourist)	Area	Urban
Highway	STH 59		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	7700		
No. Driveway Entrances	2	Car Wash	Yes
Non-Diesel Fueling (VFP)	18	Diesel Fueling (VFP)	5
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Wednesday, May 4, 2022
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	204	190	394	207	194	401						
7:00 AM	232	233	465	217	218	435						
8:00 AM	173	173	346	173	173	346						
9:00 AM	138	141	279	152	164	316						
10:00 AM	144	144	288	135	133	268				0	0	0
11:00 AM	179	174	353	165	158	323				0	0	0
12:00 PM	204	200	404	179	184	363				0	0	0
1:00 PM	184	194	378	172	171	343				0	0	0
2:00 PM	184	186	370	174	175	349						
3:00 PM	218	217	435	198	194	392	0	0	0			
4:00 PM	230	225	455	206	215	421	0	0	0			
5:00 PM	209	221	430	191	194	385	0	0	0			
6:00 PM							0	0	0			
TOTAL	2299	2298	4597	2169	2173	4342	0	0	0	0	0	0
DISTRIBUTION	50%	50%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.90%	6.44%
7:00 AM	7.54%	7.57%
8:00 AM	5.81%	5.80%
9:00 AM	4.87%	5.12%
10:00 AM	4.68%	4.65%
11:00 AM	5.77%	5.57%
12:00 PM	6.43%	6.44%
1:00 PM	5.98%	6.12%
2:00 PM	6.01%	6.06%
3:00 PM	6.98%	6.89%
4:00 PM	7.32%	7.38%
5:00 PM	6.71%	6.96%

WEEKDAY AVE:	2234	2235.5	4469.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
2234	2236	4470
2979	2981	5959

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	225	226	451						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	219	223	442						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	239	233	472						
DISTRIBUTION	51%	49%							
PEAK HOUR	6:45 AM	-	7:45 AM						
PM PEAK HOUR - GENERATOR	225	219	444						
DISTRIBUTION	51%	49%							
PEAK HOUR	3:30 PM	-	4:30 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	58.6	57.4	61.3	57.7	0.0	0.0
Vehicle Fueling Positions (VFP)	19.6	19.2	20.5	19.3	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

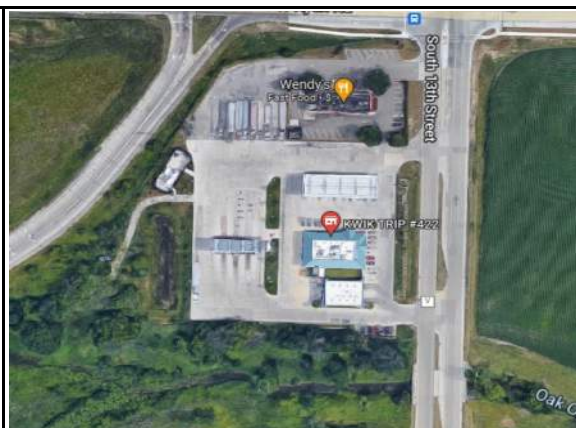
Site Summary

Site Name: **Oak Creek #422 (9535 S 13th St)**

Site Information

Site ID: **SE-121**

Municipality	Oak Creek		
County	Milwaukee	WisDOT Region	SE
Location	Freeway (Non-Tourist)	Area	Urban
Highway	IH 41/94 & STH 100		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	6500		
No. Driveway Entrances	3	Car Wash	Yes
Non-Diesel Fueling (VFP)	26	Diesel Fueling (VFP)	8
No. of Gas Stations within 1/2 mile	2		



Count Information

1st Day of Count	Wednesday, May 4, 2022
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	217	193	410	198	181	379						
7:00 AM	201	214	415	212	219	431						
8:00 AM	179	196	375	214	221	435						
9:00 AM	140	148	288	163	180	343						
10:00 AM	147	143	290	160	161	321				0	0	0
11:00 AM	233	242	475	163	169	332				0	0	0
12:00 PM	182	199	381	188	214	402				0	0	0
1:00 PM	160	158	318	154	162	316				0	0	0
2:00 PM	169	190	359	170	167	337						
3:00 PM	208	199	407	184	192	376	0	0	0			
4:00 PM	186	201	387	181	181	362	0	0	0			
5:00 PM	206	227	433	206	214	420	0	0	0			
6:00 PM							0	0	0			
TOTAL	2228	2310	4538	2193	2261	4454	0	0	0	0	0	0
DISTRIBUTION	49%	51%		49%	51%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	7.04%	6.14%
7:00 AM	7.01%	7.10%
8:00 AM	6.67%	6.84%
9:00 AM	5.14%	5.38%
10:00 AM	5.21%	4.99%
11:00 AM	6.72%	6.74%
12:00 PM	6.28%	6.78%
1:00 PM	5.33%	5.25%
2:00 PM	5.75%	5.86%
3:00 PM	6.65%	6.42%
4:00 PM	6.23%	6.27%
5:00 PM	6.99%	7.24%

WEEKDAY AVE:	2210.5	2285.5	4496
DISTRIBUTION	49%	51%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
2211	2286	4496
2947	3047	5995

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	207	217	424						
DISTRIBUTION	49%	51%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	206	221	427						
DISTRIBUTION	48%	52%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	230	228	458						
DISTRIBUTION	50%	50%							
PEAK HOUR	6:30 AM	-	7:30 AM						
PM PEAK HOUR - GENERATOR	206	221	427						
DISTRIBUTION	48%	52%							
PEAK HOUR	5:00 PM	-	6:00 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street	Any hour between 7:00 AM - 9:00 AM
PM Peak Hour - Adjacent Street	Any hour between 4:00 PM - 6:00 PM
AM Peak Hour - Generator	Any hour in the AM
PM Peak Hour - Generator	Any hour in the PM
Peak Hour Generator	Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	65.2	65.7	70.5	65.7	0.0	0.0
Vehicle Fueling Positions (VFP)	12.5	12.6	13.5	12.6	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Ashwaubenon #125 (940 Waube Ln)

Site Information

Site ID: NE-201

Municipality	Ashwaubenon		
County	Brown	WisDOT Region	NE
Location	Freeway (Non-Tourist)	Area	Urban
Highway	IH 41		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	7400		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Wednesday, September 29, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	137	128	265	132	124	256						
7:00 AM	159	165	324	146	153	299						
8:00 AM	120	114	234	121	117	238						
9:00 AM	82	85	167	98	103	201						
10:00 AM	78	82	160	82	80	162				75	72	147
11:00 AM	114	107	221	126	130	256				72	79	151
12:00 PM	166	173	339	155	150	305				83	69	152
1:00 PM	109	103	212	90	98	188				60	70	130
2:00 PM	90	101	191	105	102	207						
3:00 PM	105	103	208	120	114	234	127	124	251			
4:00 PM	108	113	221	124	129	253	119	120	239			
5:00 PM	121	122	243	113	119	232	105	100	205			
6:00 PM							76	84	160			
TOTAL	1389	1396	2785	1412	1419	2831	427	428	855	290	290	580
<i>DISTRIBUTION</i>	50%	50%		50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	7.20%	6.71%
7:00 AM	8.17%	8.47%
8:00 AM	6.45%	6.15%
9:00 AM	4.82%	5.01%
10:00 AM	4.28%	4.32%
11:00 AM	6.43%	6.31%
12:00 PM	8.60%	8.61%
1:00 PM	5.33%	5.36%
2:00 PM	5.22%	5.41%
3:00 PM	6.02%	5.78%
4:00 PM	6.21%	6.45%
5:00 PM	6.27%	6.42%

WEEKDAY AVE:	1400.5	1407.5	2808
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1401	1408	2808
1867	1877	3744

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	164	154	318						
<i>DISTRIBUTION</i>	52%	48%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	128	124	252						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	164	154	318						
<i>DISTRIBUTION</i>	52%	48%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - GENERATOR	161	162	323						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	12:00 PM	-	1:00 PM						
PEAK HOUR GENERATOR				126	134	260	76	81	157
<i>DISTRIBUTION</i>				48%	52%		48%	52%	
PEAK HOUR				3:15 PM	-	4:15 PM	10:45 AM	-	11:45 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	43.0	34.1	43.0	43.6	35.1	21.2
Vehicle Fueling Positions (VFP)	19.9	15.8	19.9	20.2	16.3	9.8

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: De Pere - Kwik Trip #127 (746 Main Ave)

Site Information

Site ID: NE-202

Municipality	De Pere		
County	Brown	WisDOT Region	NE
Location	Non-Freeway (Non-Tourist)	Area	Urban
Highway	Main Ave		
ITE Land Use Code (10th Ed.)	945		
Store Size (Sq Ft)	4100		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Wednesday, September 29, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	57	60	117	56	64	120						
7:00 AM	67	65	132	79	75	154						
8:00 AM	68	68	136	43	44	87						
9:00 AM	49	51	100	47	44	91						
10:00 AM	47	45	92	47	47	94				75	78	153
11:00 AM	57	54	111	62	61	123				55	58	113
12:00 PM	72	73	145	67	61	128				73	70	143
1:00 PM	50	53	103	51	57	108				49	54	103
2:00 PM	43	42	85	50	50	100						
3:00 PM	52	52	104	59	63	122	72	73	145			
4:00 PM	61	59	120	61	61	122	73	82	155			
5:00 PM	66	68	134	69	69	138	83	83	166			
6:00 PM							63	64	127			
TOTAL	689	690	1379	691	696	1387	291	302	593	252	260	512
<i>DISTRIBUTION</i>	50%	50%		50%	50%		49%	51%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.14%	6.71%
7:00 AM	7.93%	7.58%
8:00 AM	6.03%	6.06%
9:00 AM	5.22%	5.14%
10:00 AM	5.11%	4.98%
11:00 AM	6.47%	6.22%
12:00 PM	7.55%	7.25%
1:00 PM	5.49%	5.95%
2:00 PM	5.05%	4.98%
3:00 PM	6.03%	6.22%
4:00 PM	6.63%	6.49%
5:00 PM	7.34%	7.41%

WEEKDAY AVE:	690	693	1383
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
690	693	1383
920	924	1844

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	73	70	143						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	68	69	137						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	72	72	144						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	6:45 AM	-	7:45 AM						
PM PEAK HOUR - GENERATOR	70	67	137						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	12:00 PM	-	1:00 PM						
PEAK HOUR GENERATOR				85	85	170	75	78	153
<i>DISTRIBUTION</i>				50%	50%		49%	51%	
PEAK HOUR				3:15 PM	-	4:15 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	34.9	33.4	35.1	33.4	41.5	37.3
Vehicle Fueling Positions (VFP)	17.9	17.1	18.0	17.1	21.3	19.1

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Denmark #1015 (111 Bohemia Dr)**

Site Information

Site ID: **NE-203**

Municipality	Denmark		
County	Brown	WisDOT Region	NE
Location	Freeway (Tourist)	Area	Rural
Highway	STH 96 E of IH 43		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	7000		
No. Driveway Entrances	5	Car Wash	Yes
Non-Diesel Fueling (VFP)	14	Diesel Fueling (VFP)	4
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Wednesday, September 29, 2021
Days Counted	Wednesday, Friday, Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	143	162	305	0	0	0						
7:00 AM	182	172	354	0	0	0						
8:00 AM	121	121	242	0	0	0						
9:00 AM	101	105	206	0	0	0						
10:00 AM	84	88	172	0	0	0				147	148	295
11:00 AM	115	112	227	0	0	0				113	109	222
12:00 PM	126	124	250	0	0	0				141	131	272
1:00 PM	138	132	270	0	0	0				123	134	257
2:00 PM	103	112	215	0	0	0						
3:00 PM	140	144	284	0	0	0	171	183	354			
4:00 PM	161	151	312	0	0	0	191	186	377			
5:00 PM	152	157	309	0	0	0	176	178	354			
6:00 PM							128	147	275			
TOTAL	1566	1580	3146	0	0	0	666	694	1360	524	522	1046
<i>DISTRIBUTION</i>	<i>50%</i>	<i>50%</i>					<i>49%</i>	<i>51%</i>		<i>50%</i>	<i>50%</i>	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.85%	7.69%
7:00 AM	8.72%	8.16%
8:00 AM	5.80%	5.74%
9:00 AM	4.84%	4.98%
10:00 AM	4.02%	4.18%
11:00 AM	5.51%	5.32%
12:00 PM	6.03%	5.89%
1:00 PM	6.61%	6.27%
2:00 PM	4.93%	5.32%
3:00 PM	6.70%	6.84%
4:00 PM	7.71%	7.17%
5:00 PM	7.28%	7.45%

WEEKDAY AVE:	783	790	1573
<i>DISTRIBUTION</i>	<i>50%</i>	<i>50%</i>	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1566	1580	3146
2088	2107	4195

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	182	172	354						
<i>DISTRIBUTION</i>	<i>51%</i>	<i>49%</i>							
<i>PEAK HOUR</i>	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	162	168	330						
<i>DISTRIBUTION</i>	<i>49%</i>	<i>51%</i>							
<i>PEAK HOUR</i>	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	182	172	354						
<i>DISTRIBUTION</i>	<i>51%</i>	<i>49%</i>							
<i>PEAK HOUR</i>	7:00 AM	-	8:00 AM						
PM PEAK HOUR - GENERATOR	162	168	330						
<i>DISTRIBUTION</i>	<i>49%</i>	<i>51%</i>							
<i>PEAK HOUR</i>	4:30 PM	-	5:30 PM						
PEAK HOUR GENERATOR				191	186	377	147	148	295
<i>DISTRIBUTION</i>				<i>51%</i>	<i>49%</i>		<i>50%</i>	<i>50%</i>	
<i>PEAK HOUR</i>				4:00 PM	-	5:00 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	50.6	47.1	50.6	47.1	53.9	42.1
Vehicle Fueling Positions (VFP)	19.7	18.3	19.7	18.3	20.9	16.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Appleton #678 (3232 S Oneida St)**

Site Information

Site ID: **NE-204**

Municipality	Appleton		
County	Outagamie	WisDOT Region	NE
Location	Freeway (Non-Tourist)	Area	Urban
Highway	IH 441		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	4300		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Wednesday, September 8, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	70	72	142	72	68	140						
7:00 AM	98	95	193	72	74	146						
8:00 AM	86	79	165	79	72	151						
9:00 AM	72	59	131	69	70	139						
10:00 AM	64	67	131	66	70	136				154	149	303
11:00 AM	62	64	126	77	74	151				119	114	233
12:00 PM	82	77	159	76	74	150				141	135	276
1:00 PM	55	51	106	70	72	142				119	121	240
2:00 PM	67	70	137	74	80	154						
3:00 PM	88	86	174	92	89	181	99	86	185			
4:00 PM	89	88	177	83	79	162	85	86	171			
5:00 PM	90	93	183	98	102	200	91	95	186			
6:00 PM							85	86	171			
TOTAL	923	901	1824	928	924	1852	391	386	777	533	519	1052
<i>DISTRIBUTION</i>	51%	49%		50%	50%		50%	50%		51%	49%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.75%	5.75%
7:00 AM	6.89%	6.95%
8:00 AM	6.69%	6.21%
9:00 AM	5.71%	5.30%
10:00 AM	5.27%	5.63%
11:00 AM	5.63%	5.67%
12:00 PM	6.40%	6.21%
1:00 PM	5.06%	5.05%
2:00 PM	5.71%	6.16%
3:00 PM	7.29%	7.19%
4:00 PM	6.97%	6.86%
5:00 PM	7.62%	8.01%

WEEKDAY AVE:	925.5	912.5	1838
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
926	913	1838
1234	1217	2451

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	88	83	171						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	7:30 AM - 8:30 AM								
PM PEAK HOUR - ADJ. STREET	100	101	201						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	4:45 PM - 5:45 PM								
AM PEAK HOUR - GENERATOR	87	86	173						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	6:45 AM - 7:45 AM								
PM PEAK HOUR - GENERATOR	100	101	201						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	4:45 PM - 5:45 PM								
PEAK HOUR GENERATOR				116	119	235	154	149	303
<i>DISTRIBUTION</i>				49%	51%		51%	49%	
PEAK HOUR				4:00 PM - 5:00 PM			10:00 AM - 11:00 AM		

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	39.8	46.7	40.2	46.7	54.7	70.5
Vehicle Fueling Positions (VFP)	14.3	16.8	14.4	16.8	19.6	25.3

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Larsen #628 (5600 County Rd II)**

Site Information

Site ID: **NE-205**

Municipality	Larsen		
County	Winnebago	WisDOT Region	NE
Location	Freeway (Non-Tourist)	Area	Rural
Highway	IH 45		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5500		
No. Driveway Entrances	1	Car Wash	No
Non-Diesel Fueling (VFP)	10	Diesel Fueling (VFP)	3
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Wednesday, September 8, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	91	88	179	91	90	181						
7:00 AM	106	105	211	97	91	188						
8:00 AM	84	71	155	86	79	165						
9:00 AM	105	94	199	93	85	178						
10:00 AM	103	89	192	81	72	153				129	115	244
11:00 AM	93	82	175	84	75	159				131	118	249
12:00 PM	89	89	178	94	87	181				121	117	238
1:00 PM	79	69	148	81	78	159				108	101	209
2:00 PM	99	93	192	81	74	155						
3:00 PM	98	96	194	106	94	200	143	127	270			
4:00 PM	119	112	231	110	94	204	166	152	318			
5:00 PM	105	98	203	101	94	195	133	133	266			
6:00 PM							89	88	177			
TOTAL	1171	1086	2257	1105	1013	2118	531	500	1031	489	451	940
<i>DISTRIBUTION</i>	52%	48%		52%	48%		52%	48%		52%	48%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.00%	6.36%
7:00 AM	6.69%	7.00%
8:00 AM	5.60%	5.36%
9:00 AM	6.52%	6.40%
10:00 AM	6.06%	5.75%
11:00 AM	5.83%	5.61%
12:00 PM	6.03%	6.29%
1:00 PM	5.27%	5.25%
2:00 PM	5.93%	5.97%
3:00 PM	6.72%	6.79%
4:00 PM	7.55%	7.36%
5:00 PM	6.79%	6.86%

WEEKDAY AVE:	1138	1049.5	2187.5
<i>DISTRIBUTION</i>	52%	48%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1138	1050	2188
1517	1399	2917

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	102	98	200						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	114	106	220						
<i>DISTRIBUTION</i>	52%	48%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	103	99	202						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	6:45 AM	-	7:45 AM						
PM PEAK HOUR - GENERATOR	116	108	224						
<i>DISTRIBUTION</i>	52%	48%							
PEAK HOUR	3:45 PM	-	4:45 PM						
PEAK HOUR GENERATOR				165	156	321	132	117	249
<i>DISTRIBUTION</i>				51%	49%		53%	47%	
PEAK HOUR				4:15 PM	-	5:15 PM	10:45 AM	-	11:45 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	36.4	40.0	36.7	40.7	58.4	45.3
Vehicle Fueling Positions (VFP)	15.4	16.9	15.5	17.2	24.7	19.2

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Speedway, Neenah; IH 41 & CTH II*

Site Information

Site ID: **NE-206**

Municipality	Neenah		
County	Winnebago	WisDOT Region	NE
Location	Freeway (Non-Tourist)	Area	Urban
Highway	IH 41		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5100		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	4
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Wednesday, September 8, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	66	58	124	51	54	105						
7:00 AM	70	61	131	63	60	123						
8:00 AM	44	55	99	55	51	106						
9:00 AM	65	62	127	49	51	100						
10:00 AM	55	47	102	58	61	119				37	29	66
11:00 AM	60	61	121	67	59	126				34	37	71
12:00 PM	77	77	154	58	61	119				49	50	99
1:00 PM	57	66	123	53	60	113				46	46	92
2:00 PM	74	73	147	65	69	134						
3:00 PM	55	65	120	74	68	142	69	75	144			
4:00 PM	56	50	106	73	68	141	61	60	121			
5:00 PM	61	59	120	46	54	100	48	54	102			
6:00 PM							50	49	99			
TOTAL	740	734	1474	712	716	1428	228	238	466	166	162	328
<i>DISTRIBUTION</i>	50%	50%		50%	50%		49%	51%		51%	49%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.04%	5.79%
7:00 AM	6.87%	6.26%
8:00 AM	5.11%	5.48%
9:00 AM	5.89%	5.84%
10:00 AM	5.84%	5.59%
11:00 AM	6.56%	6.21%
12:00 PM	6.97%	7.14%
1:00 PM	5.68%	6.52%
2:00 PM	7.18%	7.34%
3:00 PM	6.66%	6.88%
4:00 PM	6.66%	6.10%
5:00 PM	5.53%	5.84%

WEEKDAY AVE:	726	725	1451
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
726	725	1451
968	967	1935

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	65	64	129						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	65	59	124						
<i>DISTRIBUTION</i>	52%	48%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	66	66	132						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	6:15 AM	-	7:15 AM						
PM PEAK HOUR - GENERATOR	73	72	145						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	2:30 PM	-	3:30 PM						
PEAK HOUR GENERATOR				70	76	146	58	50	108
<i>DISTRIBUTION</i>				48%	52%		54%	46%	
PEAK HOUR				3:15 PM	-	4:15 PM	12:30 PM	-	1:30 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	25.3	24.3	25.9	28.4	28.6	21.2
Vehicle Fueling Positions (VFP)	6.5	6.2	6.6	7.3	7.3	5.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Lomira, Exxon; IH 41 & STH 67

Site Information

Site ID: NE-207

Municipality	Lomira		
County	Dodge	WisDOT Region	NE
Location	Freeway (Non-Tourist)	Area	Rural
Highway	IH 41		
ITE Land Use Code (10th Ed.)	945		
Store Size (Sq Ft)	2900		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	5
No. of Gas Stations within 1/2 mile	2		



Count Information

1st Day of Count	Wednesday, September 29, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	0	0	0						
7:00 AM	41	45	86	28	24	52						
8:00 AM	31	26	57	39	39	78						
9:00 AM	0	0	0	0	0	0						
10:00 AM	0	0	0	0	0	0				0	0	0
11:00 AM	0	0	0	0	0	0				58	61	119
12:00 PM	0	0	0	0	0	0				49	50	99
1:00 PM	0	0	0	0	0	0				0	0	0
2:00 PM	0	0	0	0	0	0						
3:00 PM	0	0	0	0	0	0	0	0	0			
4:00 PM	43	36	79	49	41	90	66	65	131			
5:00 PM	47	44	91	40	47	87	65	54	119			
6:00 PM							0	0	0			
TOTAL	162	151	313	156	151	307	131	119	250	107	111	218
<i>DISTRIBUTION</i>	52%	48%		51%	49%		52%	48%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
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		
5:00 PM		

WEEKDAY AVE:	159	151	310
<i>DISTRIBUTION</i>	51%	49%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	36	35	71						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	48	49	97						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	36	35	71						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - GENERATOR	48	49	97						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	4:30 PM	-	5:30 PM						
PEAK HOUR GENERATOR				66	65	131	58	61	119
<i>DISTRIBUTION</i>				50%	50%		49%	51%	
PEAK HOUR				4:00 PM	-	5:00 PM	11:00 AM	-	12:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	24.5	33.4	24.5	33.4	45.2	41.0
Vehicle Fueling Positions (VFP)	5.5	7.5	5.5	7.5	10.1	9.2

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Manitowoc #611 (2102 Washington St)**

Site Information

Site ID: **NE-208**

Municipality	Manitowoc		
County	Manitowoc	WisDOT Region	NE
Location	Non-Freeway (Non-Tourist)	Area	Urban
Highway	US 151		
ITE Land Use Code (10th Ed.)	945		
Store Size (Sq Ft)	2500		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Wednesday, July 21, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	27	28	55	30	30	60						
7:00 AM	37	32	69	23	25	48						
8:00 AM	27	29	56	35	32	67						
9:00 AM	28	27	55	40	43	83						
10:00 AM	32	32	64	38	38	76				31	27	58
11:00 AM	26	26	52	34	33	67				29	33	62
12:00 PM	35	36	71	40	39	79				36	37	73
1:00 PM	48	46	94	32	29	61				33	35	68
2:00 PM	32	35	67	44	50	94						
3:00 PM	35	38	73	47	46	93	41	39	80			
4:00 PM	39	39	78	45	46	91	45	49	94			
5:00 PM	35	35	70	51	51	102	32	32	64			
6:00 PM							38	41	79			
TOTAL	401	403	804	459	462	921	156	161	317	129	132	261
<i>DISTRIBUTION</i>	50%	50%		50%	50%		49%	51%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.97%	5.03%
7:00 AM	5.23%	4.94%
8:00 AM	5.41%	5.29%
9:00 AM	5.93%	6.07%
10:00 AM	6.10%	6.07%
11:00 AM	5.23%	5.12%
12:00 PM	6.54%	6.50%
1:00 PM	6.98%	6.50%
2:00 PM	6.63%	7.37%
3:00 PM	7.15%	7.28%
4:00 PM	7.33%	7.37%
5:00 PM	7.50%	7.46%

WEEKDAY AVE:	430	432.5	862.5
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
430	433	863
573	577	1150

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	37	32	69						
<i>DISTRIBUTION</i>	54%	46%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	47	47	94						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	37	37	74						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	9:45 AM	-	10:45 AM						
PM PEAK HOUR - GENERATOR	47	47	94						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	4:15 PM	-	5:15 PM						
PEAK HOUR GENERATOR				47	47	94	43	43	86
<i>DISTRIBUTION</i>				50%	50%		50%	50%	
PEAK HOUR				3:30 PM	-	4:30 PM	12:30 PM	-	1:30 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	27.6	37.6	29.6	37.6	37.6	34.4
Vehicle Fueling Positions (VFP)	8.6	11.8	9.3	11.8	11.8	10.8

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Mountain BP (14048 WIS 32-64)

Site Information

Site ID: NE-209

Municipality	Mountain		
County	Oconto	WisDOT Region	NE
Location	Non-Freeway (Tourist)	Area	Rural
Highway	STH 32 & CTH W		
ITE Land Use Code (10th Ed.)	945		
Store Size (Sq Ft)	3600		
No. Driveway Entrances	3	Car Wash	No
Non-Diesel Fueling (VFP)	6	Diesel Fueling (VFP)	2
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Thursday, August 12, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	15	18	33						
7:00 AM	0	0	0	21	23	44						
8:00 AM	0	0	0	11	13	24						
9:00 AM	0	0	0	21	20	41						
10:00 AM	0	0	0	45	38	83				60	67	127
11:00 AM	0	0	0	34	39	73				61	64	125
12:00 PM	0	0	0	30	33	63				48	54	102
1:00 PM	0	0	0	23	27	50				53	52	105
2:00 PM	0	0	0	26	29	55						
3:00 PM	0	0	0	21	18	39	29	28	57			
4:00 PM	0	0	0	21	21	42	42	41	83			
5:00 PM	0	0	0	32	34	66	35	46	81			
6:00 PM	0	0	0				29	26	55			
TOTAL	0	0	0	300	313	613	135	141	276	222	237	459
<i>DISTRIBUTION</i>				49%	51%		49%	51%		48%	52%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.75%	4.31%
7:00 AM	5.25%	5.51%
8:00 AM	2.75%	3.12%
9:00 AM	5.25%	4.79%
10:00 AM	11.25%	9.11%
11:00 AM	8.50%	9.35%
12:00 PM	7.50%	7.91%
1:00 PM	5.75%	6.47%
2:00 PM	6.50%	6.95%
3:00 PM	5.25%	4.31%
4:00 PM	5.25%	5.03%
5:00 PM	8.00%	8.15%

WEEKDAY AVE:	150	156.5	306.5
<i>DISTRIBUTION</i>	49%	51%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
300	313	613
400	417	817

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	21	23	44						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	32	34	66						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	49	49	98						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	10:30 AM	-	11:30 AM						
PM PEAK HOUR - GENERATOR	32	36	68						
<i>DISTRIBUTION</i>	47%	53%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				45	45	90	72	72	144
<i>DISTRIBUTION</i>				50%	50%		50%	50%	
PEAK HOUR				4:30 PM	-	5:30 PM	10:30 AM	-	11:30 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	12.2	18.3	27.2	18.9	25.0	40.0
Vehicle Fueling Positions (VFP)	5.5	8.3	12.3	8.5	11.3	18.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

*Aerial is not up to date

Site Name: **Sturgeon Bay BP (7513 WIS 42)**

Site Information

Site ID: **NE-210**

Municipality	Sturgeon Bay		
County	Door	WisDOT Region	NE
Location	Non-Freeway (Tourist)	Area	Rural
Highway	STH 57		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	2900		
No. Driveway Entrances	1	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	3
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Thursday, August 12, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	41	48	89						
7:00 AM	0	0	0	44	44	88						
8:00 AM	0	0	0	32	34	66						
9:00 AM	0	0	0	46	48	94						
10:00 AM	0	0	0	52	51	103				83	90	173
11:00 AM	0	0	0	46	48	94				80	78	158
12:00 PM	0	0	0	53	52	105				76	69	145
1:00 PM	0	0	0	39	37	76				65	72	137
2:00 PM	0	0	0	66	69	135						
3:00 PM	0	0	0	62	68	130	67	65	132			
4:00 PM	0	0	0	71	60	131	69	74	143			
5:00 PM	0	0	0	40	42	82	57	50	107			
6:00 PM	0	0	0				45	43	88			
TOTAL	0	0	0	592	601	1193	238	232	470	304	309	613
<i>DISTRIBUTION</i>				50%	50%		51%	49%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.19%	5.99%
7:00 AM	5.57%	5.49%
8:00 AM	4.05%	4.24%
9:00 AM	5.83%	5.99%
10:00 AM	6.59%	6.36%
11:00 AM	5.83%	5.99%
12:00 PM	6.71%	6.49%
1:00 PM	4.94%	4.62%
2:00 PM	8.36%	8.61%
3:00 PM	7.85%	8.49%
4:00 PM	8.99%	7.49%
5:00 PM	5.07%	5.24%

WEEKDAY AVE:	296	300.5	596.5
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips	592	601	1193
Adjust to 24-hour trips*	789	801	1591

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	45	44	89						
<i>DISTRIBUTION</i>	51%	49%							
<i>PEAK HOUR</i>	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	71	60	131						
<i>DISTRIBUTION</i>	54%	46%							
<i>PEAK HOUR</i>	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	50	54	104						
<i>DISTRIBUTION</i>	48%	52%							
<i>PEAK HOUR</i>	9:45 AM	-	10:45 AM						
PM PEAK HOUR - GENERATOR	80	70	150						
<i>DISTRIBUTION</i>	53%	47%							
<i>PEAK HOUR</i>	3:30 PM	-	4:30 PM						
PEAK HOUR GENERATOR				74	77	151	93	98	191
<i>DISTRIBUTION</i>				49%	51%		49%	51%	
<i>PEAK HOUR</i>				4:15 PM	-	5:15 PM	10:15 AM	-	11:15 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	30.7	45.2	35.9	51.7	52.1	65.9
Vehicle Fueling Positions (VFP)	8.1	11.9	9.5	13.6	13.7	17.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

*Aerial is not up to date

Site Name: **New Holstein #644(1517 Wisconsin Ave)**

Site Information

Site ID: **NE-211**

Municipality	New Holstein		
County	Calumet	WisDOT Region	NE
Location	Non-Freeway (Non-Tourist)	Area	Rural
Highway	STH 57/32		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5600		
No. Driveway Entrances	5	Car Wash	yes
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	2
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Wednesday, July 21, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	85	100	185	87	103	190						
7:00 AM	77	103	180	68	78	146						
8:00 AM	53	61	114	86	99	185						
9:00 AM	71	72	143	60	75	135						
10:00 AM	69	76	145	60	56	116				82	97	179
11:00 AM	58	71	129	62	71	133				67	74	141
12:00 PM	69	61	130	71	74	145				73	84	157
1:00 PM	87	95	182	85	81	166				76	80	156
2:00 PM	79	85	164	71	76	147						
3:00 PM	82	86	168	79	78	157	84	89	173			
4:00 PM	95	103	198	82	94	176	93	103	196			
5:00 PM	101	92	193	77	85	162	82	93	175			
6:00 PM							62	56	118			
TOTAL	926	1005	1931	888	970	1858	321	341	662	298	335	633
<i>DISTRIBUTION</i>	48%	52%		48%	52%		48%	52%		47%	53%	

Average Weekly Hourly Distributions

Hour	% IN	% OUT
6:00 AM	7.11%	7.71%
7:00 AM	6.00%	6.87%
8:00 AM	5.75%	6.08%
9:00 AM	5.42%	5.58%
10:00 AM	5.33%	5.01%
11:00 AM	4.96%	5.39%
12:00 PM	5.79%	5.13%
1:00 PM	7.11%	6.68%
2:00 PM	6.20%	6.11%
3:00 PM	6.66%	6.23%
4:00 PM	7.32%	7.48%
5:00 PM	7.36%	6.72%

WEEKDAY AVE:	907	987.5	1894.5
<i>DISTRIBUTION</i>	48%	52%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	907	988	1895
Outbound	1209	1317	2526

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	75	92	167						
<i>DISTRIBUTION</i>	45%	55%							
PEAK HOUR	7:30 AM	-	8:30 AM						
PM PEAK HOUR - ADJ. STREET	93	102	195						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	86	102	188						
<i>DISTRIBUTION</i>	46%	54%							
PEAK HOUR	6:00 AM	-	7:00 AM						
PM PEAK HOUR - GENERATOR	93	102	195						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	4:30 PM	-	5:30 PM						
PEAK HOUR GENERATOR				103	94	197	83	100	183
<i>DISTRIBUTION</i>				52%	48%		45%	55%	
PEAK HOUR				3:30 PM	-	4:30 PM	11:45 AM	-	12:45 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	29.8	34.8	33.6	34.8	35.2	32.7
Vehicle Fueling Positions (VFP)	9.3	10.8	10.4	10.8	10.9	10.2

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Sheboygan #139 (7002 Sauk Trail Rd)**

Site Information

Site ID: **NE-212**

Municipality	Winneconne		
County	Winnebago	WisDOT Region	NE
Location	Non-Freeway (Non-Tourist)	Area	Rural
Highway	STH 116		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	4500		
No. Driveway Entrances	3	Car Wash	No
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Wednesday, July 21, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	90	74	164	75	66	141						
7:00 AM	100	68	168	96	83	179						
8:00 AM	71	63	134	101	84	185						
9:00 AM	82	60	142	87	71	158						
10:00 AM	89	83	172	98	93	191				143	101	244
11:00 AM	91	87	178	108	85	193				131	117	248
12:00 PM	94	80	174	97	90	187				125	114	239
1:00 PM	91	91	182	78	79	157				109	103	212
2:00 PM	79	81	160	86	91	177						
3:00 PM	92	84	176	101	91	192	102	91	193			
4:00 PM	101	87	188	109	110	219	97	90	187			
5:00 PM	85	89	174	111	99	210	87	77	164			
6:00 PM							99	90	189			
TOTAL	1065	947	2012	1147	1042	2189	385	348	733	508	435	943
<i>DISTRIBUTION</i>	53%	47%		52%	48%		53%	47%		54%	46%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.59%	5.28%
7:00 AM	6.65%	5.69%
8:00 AM	5.83%	5.54%
9:00 AM	5.73%	4.94%
10:00 AM	6.34%	6.64%
11:00 AM	6.75%	6.49%
12:00 PM	6.48%	6.41%
1:00 PM	5.73%	6.41%
2:00 PM	5.59%	6.49%
3:00 PM	6.54%	6.60%
4:00 PM	7.12%	7.43%
5:00 PM	6.65%	7.09%

WEEKDAY AVE:	1106	994.5	2100.5
<i>DISTRIBUTION</i>	53%	47%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1106	995	2101
1475	1326	2801

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	98	76	174						
<i>DISTRIBUTION</i>	56%	44%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	108	101	209						
<i>DISTRIBUTION</i>	52%	48%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	117	98	215						
<i>DISTRIBUTION</i>	54%	46%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	108	101	209						
<i>DISTRIBUTION</i>	52%	48%							
PEAK HOUR	4:15 PM	-	5:15 PM						
PEAK HOUR GENERATOR				105	95	200	160	125	285
<i>DISTRIBUTION</i>				53%	48%		56%	44%	
PEAK HOUR				3:15 PM	-	4:15 PM	10:30 AM	-	11:30 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	38.7	46.4	47.8	46.4	44.4	63.3
Vehicle Fueling Positions (VFP)	10.9	13.1	13.4	13.1	12.5	17.8

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Sheboygan #139 (7002 Sauk Trail Rd)

Site Information

Site ID: NE-213

Municipality	Sheboygan		
County	Sheboygan	WisDOT Region	NE
Location	Freeway (Non-Tourist)	Area	Rural
Highway	IH 43 & Sauk Trail		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5000		
No. Driveway Entrances	3	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	5
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Wednesday, July 21, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	105	107	212	109	113	222						
7:00 AM	92	93	185	101	92	193						
8:00 AM	82	87	169	111	115	226						
9:00 AM	118	119	237	89	81	170						
10:00 AM	117	110	227	94	96	190				138	135	273
11:00 AM	129	129	258	132	129	261				137	129	266
12:00 PM	132	139	271	105	108	213				119	129	248
1:00 PM	124	113	237	104	108	212				123	113	236
2:00 PM	130	133	263	142	135	277						
3:00 PM	137	146	283	142	144	286	147	150	297			
4:00 PM	137	136	273	121	129	250	162	161	323			
5:00 PM	99	95	194	113	111	224	101	106	207			
6:00 PM							91	87	178			
TOTAL	1402	1407	2809	1363	1361	2724	501	504	1005	517	506	1023
<i>DISTRIBUTION</i>	50%	50%		50%	50%		50%	50%		51%	49%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.80%	5.96%
7:00 AM	5.24%	5.01%
8:00 AM	5.24%	5.47%
9:00 AM	5.61%	5.42%
10:00 AM	5.72%	5.58%
11:00 AM	7.08%	6.99%
12:00 PM	6.43%	6.69%
1:00 PM	6.18%	5.99%
2:00 PM	7.38%	7.26%
3:00 PM	7.57%	7.86%
4:00 PM	7.00%	7.18%
5:00 PM	5.75%	5.58%

WEEKDAY AVE:	1382.5	1384	2766.5
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1383	1384	2767
1843	1845	3689

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	100	101	201						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	129	133	262						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	133	132	265						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	150	144	294						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	3:30 PM	-	4:30 PM						
PEAK HOUR GENERATOR				162	161	323	139	152	291
<i>DISTRIBUTION</i>				50%	50%		48%	52%	
PEAK HOUR				4:00 PM	-	5:00 PM	10:30 AM	-	11:30 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	40.2	52.4	53.0	58.8	64.6	58.2
Vehicle Fueling Positions (VFP)	15.5	20.2	20.4	22.6	24.8	22.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Abrams Shell (4353 Brookside Rd)**

Site Information

Site ID: **NE-214**

Municipality	Abrams		
County	Oconto	WisDOT Region	NE
Location	Freeway (Tourist)	Area	Rural
Highway	US 41		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5500		
No. Driveway Entrances	1	Car Wash	No
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	2
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Thursday, August 12, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	21	20	41						
7:00 AM	0	0	0	26	24	50						
8:00 AM	0	0	0	28	29	57						
9:00 AM	0	0	0	24	22	46						
10:00 AM	0	0	0	34	35	69				63	63	126
11:00 AM	0	0	0	46	42	88				52	58	110
12:00 PM	0	0	0	36	37	73				37	33	70
1:00 PM	0	0	0	43	47	90				46	48	94
2:00 PM	0	0	0	46	45	91						
3:00 PM	0	0	0	51	52	103	46	52	98			
4:00 PM	0	0	0	49	45	94	54	54	108			
5:00 PM	0	0	0	29	37	66	42	38	80			
6:00 PM	0	0	0				43	50	93			
TOTAL	0	0	0	433	435	868	185	194	379	198	202	400
<i>DISTRIBUTION</i>				50%	50%		49%	51%		50%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.64%	3.45%
7:00 AM	4.50%	4.14%
8:00 AM	4.85%	5.00%
9:00 AM	4.16%	3.79%
10:00 AM	5.89%	6.03%
11:00 AM	7.97%	7.24%
12:00 PM	6.24%	6.38%
1:00 PM	7.45%	8.10%
2:00 PM	7.97%	7.76%
3:00 PM	8.83%	8.97%
4:00 PM	8.49%	7.76%
5:00 PM	5.02%	6.38%

WEEKDAY AVE:	216.5	217.5	434
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips	433	435	868
Adjust to 24-hour trips*	577	580	1157

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	29	32	61						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	46	50	96						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	45	44	89						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	11:15 AM	-	12:15 PM						
PM PEAK HOUR - GENERATOR	54	51	105						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	2:30 PM	-	3:30 PM						
PEAK HOUR GENERATOR				58	59	117	63	63	126
<i>DISTRIBUTION</i>				50%	50%		50%	50%	
PEAK HOUR				4:15 PM	-	5:15 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	11.1	17.5	16.2	19.1	21.3	22.9
Vehicle Fueling Positions (VFP)	4.4	6.9	6.4	7.5	8.4	9.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

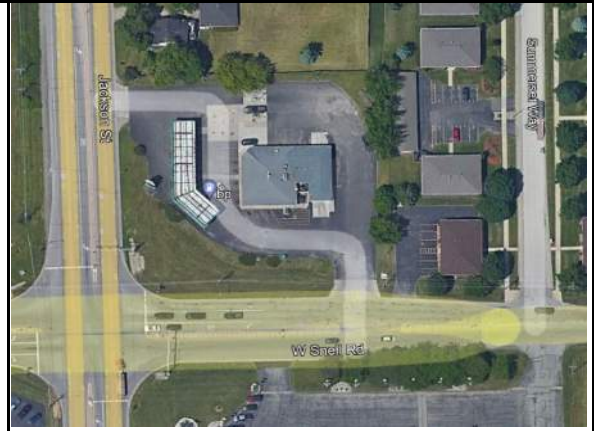
Site Summary

Site Name: Oshkosh BP (3700 Jackson St)

Site Information

Site ID: NE-215

Municipality	Oshkosh	
County	Winnebago	WisDOT Region
Location	Non-Freeway (Non-Tourist)	Area
Highway	Jackson Street	
ITE Land Use Code (10th Ed.)	960	
Store Size (Sq Ft)	5800	
No. Driveway Entrances	2	Car Wash
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)
No. of Gas Stations within 1/2 mile	1	



Count Information

1st Day of Count	Wednesday, August 25, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	45	41	86	43	38	81						
7:00 AM	27	28	55	38	43	81						
8:00 AM	45	42	87	36	32	68						
9:00 AM	38	34	72	35	38	73						
10:00 AM	35	38	73	38	39	77				32	31	63
11:00 AM	49	50	99	51	45	96				44	43	87
12:00 PM	41	38	79	50	54	104				46	43	89
1:00 PM	47	44	91	55	58	113				47	48	95
2:00 PM	59	60	119	52	46	98						
3:00 PM	55	57	112	57	60	117	53	49	102			
4:00 PM	64	58	122	57	58	115	48	50	98			
5:00 PM	43	48	91	48	49	97	46	50	96			
6:00 PM							31	34	65			
TOTAL	548	538	1086	560	560	1120	178	183	361	169	165	334
<i>DISTRIBUTION</i>	50%	50%		50%	50%		49%	51%		51%	49%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.96%	5.40%
7:00 AM	4.40%	4.85%
8:00 AM	5.48%	5.05%
9:00 AM	4.94%	4.92%
10:00 AM	4.94%	5.26%
11:00 AM	6.77%	6.49%
12:00 PM	6.16%	6.28%
1:00 PM	6.90%	6.97%
2:00 PM	7.51%	7.24%
3:00 PM	7.58%	7.99%
4:00 PM	8.19%	7.92%
5:00 PM	6.16%	6.63%

WEEKDAY AVE:	554	549	1103
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
554	549	1103
739	732	1471

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	41	37	78						
<i>DISTRIBUTION</i>	53%	47%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	61	58	119						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	52	52	104						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	11:15 AM	-	12:15 PM						
PM PEAK HOUR - GENERATOR	62	62	124						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	3:30 PM	-	4:30 PM						
PEAK HOUR GENERATOR				57	56	113	52	50	102
<i>DISTRIBUTION</i>				50%	50%		51%	49%	
PEAK HOUR				3:15 PM	-	4:15 PM	12:45 PM	-	1:45 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	13.4	20.5	17.9	21.4	19.5	17.6
Vehicle Fueling Positions (VFP)	7.1	10.8	9.5	11.3	10.3	9.3

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Lena Kwik Trip # 587 (5908 Duame Rd)

Site Information

Site ID: NE-216

Municipality	Lena		
County	Oconto	WisDOT Region	NE
Location	Freeway (Tourist)	Area	Rural
Highway	US 141 & STH 22		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	6500		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	10	Diesel Fueling (VFP)	4
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Thursday, August 12, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	107	101	208						
7:00 AM	0	0	0	101	111	212						
8:00 AM	0	0	0	112	100	212						
9:00 AM	0	0	0	114	117	231						
10:00 AM	0	0	0	129	117	246				175	176	351
11:00 AM	0	0	0	118	129	247				143	144	287
12:00 PM	0	0	0	112	104	216				132	133	265
1:00 PM	0	0	0	107	117	224				117	116	233
2:00 PM	0	0	0	129	135	264						
3:00 PM	0	0	0	118	124	242	139	130	269			
4:00 PM	0	0	0	122	124	246	138	145	283			
5:00 PM	0	0	0	128	130	258	145	133	278			
6:00 PM	0	0	0				100	108	208			
TOTAL	0	0	0	1397	1409	2806	522	516	1038	567	569	1136
<i>DISTRIBUTION</i>				50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.74%	5.38%
7:00 AM	5.42%	5.91%
8:00 AM	6.01%	5.32%
9:00 AM	6.12%	6.23%
10:00 AM	6.93%	6.23%
11:00 AM	6.34%	6.87%
12:00 PM	6.01%	5.54%
1:00 PM	5.74%	6.23%
2:00 PM	6.93%	7.19%
3:00 PM	6.34%	6.60%
4:00 PM	6.55%	6.60%
5:00 PM	6.87%	6.92%

WEEKDAY AVE:	698.5	704.5	1403
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1397	1409	2806
1863	1879	3741

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	101	111	212						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	128	130	258						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	124	133	257						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	10:15 AM	-	11:15 AM						
PM PEAK HOUR - GENERATOR	129	135	264						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	2:00 PM	-	3:00 PM						
PEAK HOUR GENERATOR				146	147	293	175	176	351
<i>DISTRIBUTION</i>				50%	50%		50%	50%	
PEAK HOUR				5:15 PM	-	6:15 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	32.6	39.7	39.5	40.6	45.1	54.0
Vehicle Fueling Positions (VFP)	15.1	18.4	18.4	18.9	20.9	25.1

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Cedar Grove Citgo (905 Sauk Trail Rd)

Site Information

Site ID: NE-217

Municipality	Cedar Grove		
County	Sheboygan	WisDOT Region	NE
Location	Freeway (Non-Tourist)	Area	Rural
Highway	IH 43 & STH 32		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	8000		
No. Driveway Entrances	1	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	2
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Wednesday, July 21, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	47	47	94	64	65	129						
7:00 AM	30	30	60	27	24	51						
8:00 AM	16	15	31	37	36	73						
9:00 AM	19	20	39	34	30	64						
10:00 AM	34	38	72	22	34	56				37	41	78
11:00 AM	42	37	79	39	41	80				51	54	105
12:00 PM	31	33	64	32	33	65				68	66	134
1:00 PM	41	33	74	34	29	63				38	42	80
2:00 PM	33	35	68	27	31	58						
3:00 PM	37	39	76	50	43	93	45	46	91			
4:00 PM	45	46	91	42	43	85	38	37	75			
5:00 PM	40	40	80	39	38	77	26	26	52			
6:00 PM							30	30	60			
TOTAL	415	413	828	447	447	894	139	139	278	194	203	397
DISTRIBUTION	50%	50%		50%	50%		50%	50%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	9.66%	9.77%
7:00 AM	4.96%	4.71%
8:00 AM	4.61%	4.45%
9:00 AM	4.61%	4.36%
10:00 AM	4.87%	6.28%
11:00 AM	7.05%	6.80%
12:00 PM	5.48%	5.76%
1:00 PM	6.53%	5.41%
2:00 PM	5.22%	5.76%
3:00 PM	7.57%	7.15%
4:00 PM	7.57%	7.76%
5:00 PM	6.87%	6.80%

WEEKDAY AVE:	431	430	861
DISTRIBUTION	50%	50%	

Total 12-hour Trips	431	430	861
Adjust to 24-hour trips*	575	573	1148

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	30	28	58						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	44	45	89						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	56	56	112						
DISTRIBUTION	50%	50%							
PEAK HOUR	6:00 AM	-	7:00 AM						
PM PEAK HOUR - GENERATOR	47	49	96						
DISTRIBUTION	49%	51%							
PEAK HOUR	3:30 PM	-	4:30 PM						
PEAK HOUR GENERATOR				45	46	91	68	66	134
DISTRIBUTION				49%	51%		51%	49%	
PEAK HOUR				3:00 PM	-	4:00 PM	12:00 PM	-	1:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	7.3	11.1	14.0	12.0	11.4	16.8
Vehicle Fueling Positions (VFP)	5.8	8.9	11.2	9.6	9.1	13.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **BP - Coloma - STH 21 West of I-39**

Site Information

Site ID: **NC-301**

Municipality	Coloma		
County	Waushara	WisDOT Region	NC
Location	Freeway (Non-Tourist)	Area	Rural
Highway	STH 21 West of IH 39		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5500		
No. Driveway Entrances	1	Car Wash	No
Non-Diesel Fueling (VFP)	10	Diesel Fueling (VFP)	5
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Tuesday, June 29, 2021
Days Counted	Tuesday - Wednesday

Hourly Volume Summary

	Tuesday*			Wednesday*			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	21	26	47	13	24	37						
7:00 AM	24	23	47	35	33	68						
8:00 AM	27	27	54	37	40	77						
9:00 AM	50	44	94	64	63	127						
10:00 AM	48	53	101	38	37	75				0	0	0
11:00 AM	46	47	93	59	64	123				0	0	0
12:00 PM	48	45	93	63	57	120				0	0	0
1:00 PM	50	49	99	50	48	98				0	0	0
2:00 PM	54	59	113	45	47	92						
3:00 PM	43	45	88	37	40	77	0	0	0			
4:00 PM	37	38	75	42	37	79	0	0	0			
5:00 PM	33	33	66	53	51	104	0	0	0			
6:00 PM							0	0	0			
TOTAL	481	489	970	536	541	1077	0	0	0	0	0	0
DISTRIBUTION	50%	50%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	2.51%	3.64%
7:00 AM	4.35%	4.08%
8:00 AM	4.72%	4.88%
9:00 AM	8.41%	7.79%
10:00 AM	6.34%	6.55%
11:00 AM	7.74%	8.08%
12:00 PM	8.19%	7.43%
1:00 PM	7.37%	7.06%
2:00 PM	7.30%	7.72%
3:00 PM	5.90%	6.19%
4:00 PM	5.83%	5.46%
5:00 PM	6.34%	6.12%

WEEKDAY AVE:	508.5	515	1023.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	509	515	1024
Outbound	678	687	1365
Total			

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	35	33	68						
DISTRIBUTION	51%	49%							
PEAK HOUR	7:45 AM - 8:45 AM								
PM PEAK HOUR - ADJ. STREET	45	42	87						
DISTRIBUTION	52%	48%							
PEAK HOUR	4:30 PM - 5:30 PM								
AM PEAK HOUR - GENERATOR	57	54	111						
DISTRIBUTION	51%	49%							
PEAK HOUR	9:00 AM - 10:00 AM								
PM PEAK HOUR - GENERATOR	57	55	112						
DISTRIBUTION	51%	49%							
PEAK HOUR	1:45 PM - 2:45 PM								
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	12.4	15.8	20.2	20.4	0.0	0.0
Vehicle Fueling Positions (VFP)	4.5	5.8	7.4	7.5	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

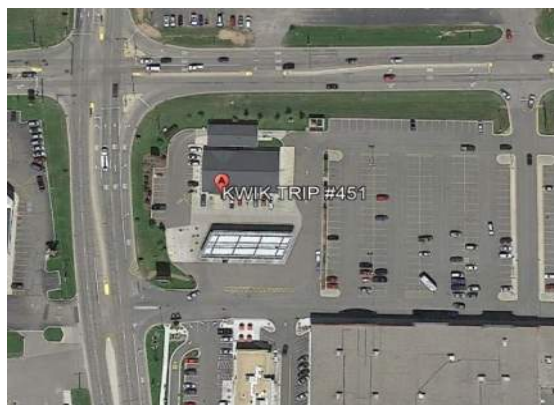
Site Summary

Site Name: Antigo #451 - US 45 at STH 64 (455 St Hwy 64)

Site Information

Site ID: NC-302

Municipality	Antigo	
County	Langlade	WisDOT Region
Location	Non-Freeway (Non-Tourist)	Area
Highway	STH 64	
ITE Land Use Code (10th Ed.)	960	
Store Size (Sq Ft)	6000	
No. Driveway Entrances	2	Car Wash
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)
No. of Gas Stations within 1/2 mile	3	
		Yes
		0



Count Information

1st Day of Count	Wednesday, September 1, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	93	88	181	86	93	179						
7:00 AM	129	121	250	118	123	241						
8:00 AM	94	96	190	125	120	245						
9:00 AM	112	111	223	100	101	201						
10:00 AM	115	116	231	148	140	288				194	209	403
11:00 AM	138	127	265	129	130	259				206	199	405
12:00 PM	137	150	287	142	148	290				174	185	359
1:00 PM	112	107	219	88	104	192				178	188	366
2:00 PM	125	119	244	85	87	172						
3:00 PM	99	104	203	91	85	176	173	162	335			
4:00 PM	128	122	250	143	144	287	188	176	364			
5:00 PM	121	121	242	136	157	293	167	174	341			
6:00 PM							133	142	275			
TOTAL	1403	1382	2785	1391	1432	2823	661	654	1315	752	781	1533
DISTRIBUTION	50%	50%		49%	51%		50%	50%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.80%	4.82%
7:00 AM	6.63%	6.50%
8:00 AM	5.88%	5.76%
9:00 AM	5.69%	5.65%
10:00 AM	7.06%	6.82%
11:00 AM	7.17%	6.85%
12:00 PM	7.49%	7.94%
1:00 PM	5.37%	5.62%
2:00 PM	5.64%	5.49%
3:00 PM	5.10%	5.04%
4:00 PM	7.27%	7.09%
5:00 PM	6.90%	7.41%

WEEKDAY AVE:	1397	1407	2804
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1397	1407	2804
1863	1876	3739

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	125	125	250						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:30 AM	-	8:30 AM						
PM PEAK HOUR - ADJ. STREET	140	137	277						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	142	138	280						
DISTRIBUTION	51%	49%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	140	149	289						
DISTRIBUTION	48%	52%							
PEAK HOUR	12:00 PM	-	1:00 PM						
PEAK HOUR GENERATOR				190	183	373	211	215	426
DISTRIBUTION				51%	49%		50%	50%	
PEAK HOUR				4:15 PM	-	5:15 PM	10:30 AM	-	11:30 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	41.7	46.2	46.7	48.2	62.2	71.0
Vehicle Fueling Positions (VFP)	15.6	17.3	17.5	18.1	23.3	26.6

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: BP - Arbor Vitae - US 51

Site Information

Site ID: NC-303

Municipality	Arbor Vitae			
County	Vilas	WisDOT Region	NC	
Location	Non-Freeway (Tourist)		Area	Urban
Highway	US 51			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	8900			
No. Driveway Entrances	4	Car Wash	Yes	
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	3	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Thursday, August 5, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	18	16	34						
7:00 AM	0	0	0	39	27	66						
8:00 AM	0	0	0	55	42	97						
9:00 AM	0	0	0	54	44	98						
10:00 AM	0	0	0	50	38	88				67	62	129
11:00 AM	0	0	0	60	48	108				85	65	150
12:00 PM	0	0	0	57	49	106				70	49	119
1:00 PM	0	0	0	53	61	114				67	60	127
2:00 PM	0	0	0	50	53	103						
3:00 PM	0	0	0	43	42	85	74	81	155			
4:00 PM	0	0	0	49	40	89	79	66	145			
5:00 PM	0	0	0	57	55	112	75	71	146			
6:00 PM							49	61	110			
TOTAL	0	0	0	585	515	1100	277	279	556	289	236	525
<i>DISTRIBUTION</i>				53%	47%		50%	50%		55%	45%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	2.31%	2.33%
7:00 AM	5.00%	3.93%
8:00 AM	7.05%	6.12%
9:00 AM	6.92%	6.41%
10:00 AM	6.41%	5.53%
11:00 AM	7.69%	6.99%
12:00 PM	7.31%	7.14%
1:00 PM	6.79%	8.88%
2:00 PM	6.41%	7.72%
3:00 PM	5.51%	6.12%
4:00 PM	6.28%	5.83%
5:00 PM	7.31%	8.01%

WEEKDAY AVE:	292.5	257.5	550
<i>DISTRIBUTION</i>	53%	47%	

Total 12-hour Trips	585	515	1100
Adjust to 24-hour trips*	780	687	1467

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	55	42	97						
<i>DISTRIBUTION</i>	57%	43%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	57	55	112						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	60	48	108						
<i>DISTRIBUTION</i>	56%	44%							
PEAK HOUR	11:00 AM	-	12:00 PM						
PM PEAK HOUR - GENERATOR	59	55	114						
<i>DISTRIBUTION</i>	52%	48%							
PEAK HOUR	12:30 PM	-	1:30 PM						
PEAK HOUR GENERATOR				85	90	175	85	68	153
<i>DISTRIBUTION</i>				49%	51%		56%	44%	
PEAK HOUR				3:15 PM	-	4:15 PM	10:30 AM	-	11:30 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	10.9	12.6	12.1	12.8	19.7	17.2
Vehicle Fueling Positions (VFP)	5.1	5.9	5.7	6.0	9.2	8.1

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

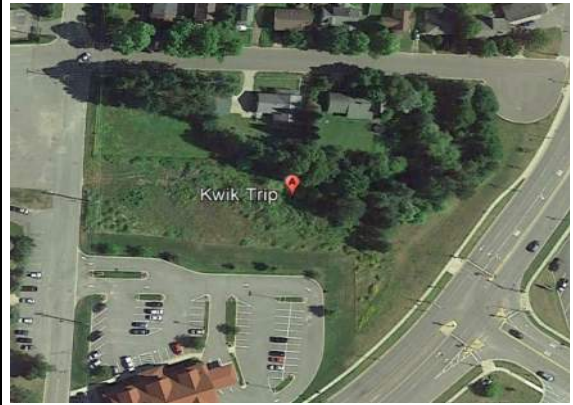
*Aerial is not up to date

Site Name: *Eagle River #131 (201 West Wall St)*

Site Information

Site ID: NC-304

Municipality	Eagle River	
County	Vilas	WisDOT Region
Location	Non-Freeway (Tourist)	Area
Highway	West Wall St	
ITE Land Use Code (10th Ed.)	960	
Store Size (Sq Ft)	7500	
No. Driveway Entrances	3	Car Wash
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)
No. of Gas Stations within 1/2 mile	3	



Count Information

1st Day of Count	Wednesday, July 28, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	119	116	235	145	134	279						
7:00 AM	159	149	308	151	149	300						
8:00 AM	178	172	350	147	134	281						
9:00 AM	194	185	379	158	164	322						
10:00 AM	182	194	376	175	168	343				239	243	482
11:00 AM	167	167	334	189	186	375				175	185	360
12:00 PM	211	204	415	203	202	405				183	181	364
1:00 PM	173	191	364	171	180	351				166	164	330
2:00 PM	143	149	292	139	139	278						
3:00 PM	153	155	308	142	144	286	164	160	324			
4:00 PM	190	186	376	140	146	286	159	159	318			
5:00 PM	119	134	253	138	146	284	138	141	279			
6:00 PM							123	126	249			
TOTAL	1988	2002	3990	1898	1892	3790	584	586	1170	763	773	1536
DISTRIBUTION	50%	50%		50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.10%	4.82%
7:00 AM	5.98%	5.74%
8:00 AM	6.27%	5.89%
9:00 AM	6.79%	6.72%
10:00 AM	6.89%	6.97%
11:00 AM	6.87%	6.80%
12:00 PM	7.99%	7.82%
1:00 PM	6.64%	7.15%
2:00 PM	5.44%	5.55%
3:00 PM	5.69%	5.76%
4:00 PM	6.37%	6.39%
5:00 PM	4.96%	5.39%

WEEKDAY AVE:	1943	1947	3890
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1943	1947	3890
2591	2596	5187

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	163	153	316						
DISTRIBUTION	52%	48%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	168	179	347						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	205	196	401						
DISTRIBUTION	51%	49%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	210	208	418						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				160	170	330	239	243	482
DISTRIBUTION				48%	52%		50%	50%	
PEAK HOUR				3:30 PM	-	4:30 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	42.1	46.3	53.5	55.7	44.0	64.3
Vehicle Fueling Positions (VFP)	19.8	21.7	25.1	26.1	20.6	30.1

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Marathon- Fifiel - STH 70**

Site Information

Site ID: **NC-305**

Municipality	Fifiel		WisDOT Region	NC
County	Price	Area		Rural
Location	Non-Freeway (Non-Tourist)			
Highway	STH 70			
ITE Land Use Code (10th Ed.)	945			
Store Size (Sq Ft)	2600			
No. Driveway Entrances	1	Car Wash	No	
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	2	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Wednesday, July 21, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	8	5	13	8	6	14						
7:00 AM	13	10	23	13	14	27						
8:00 AM	19	13	32	9	11	20						
9:00 AM	23	22	45	19	19	38						
10:00 AM	19	18	37	22	21	43				35	27	62
11:00 AM	26	26	52	12	10	22				24	26	50
12:00 PM	24	20	44	16	18	34				35	33	68
1:00 PM	13	15	28	16	20	36				31	29	60
2:00 PM	12	13	25	11	10	21						
3:00 PM	25	19	44	24	26	50	26	23	49			
4:00 PM	18	19	37	22	20	42	29	25	54			
5:00 PM	15	16	31	18	15	33	17	18	35			
6:00 PM							25	24	49			
TOTAL	215	196	411	190	190	380	97	90	187	125	115	240
<i>DISTRIBUTION</i>	52%	48%		50%	50%		52%	48%		52%	48%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	2.96%	2.14%
7:00 AM	4.81%	4.66%
8:00 AM	5.19%	4.66%
9:00 AM	7.78%	7.97%
10:00 AM	7.59%	7.58%
11:00 AM	7.04%	6.99%
12:00 PM	7.41%	7.38%
1:00 PM	5.37%	6.80%
2:00 PM	4.26%	4.47%
3:00 PM	9.07%	8.74%
4:00 PM	7.41%	7.58%
5:00 PM	6.11%	6.02%

WEEKDAY AVE:	202.5	193	395.5
<i>DISTRIBUTION</i>	51%	49%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
203	193	396
270	257	527

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	15	15	30						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	20	20	40						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	19	24	43						
<i>DISTRIBUTION</i>	44%	56%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	25	26	51						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	3:15 PM	-	4:15 PM						
PEAK HOUR GENERATOR				32	29	61	35	34	69
<i>DISTRIBUTION</i>				52%	48%		51%	49%	
PEAK HOUR				4:15 PM	-	5:15 PM	10:15 AM	-	11:15 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	11.5	15.4	16.5	19.6	23.5	26.5
Vehicle Fueling Positions (VFP)	3.0	4.0	4.3	5.1	6.1	6.9

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Merrill #241 (300 S Pine Ridge Ave)

Site Information

Site ID: NC-306

Municipality	Merrill	WisDOT Region	NC
County	Lincoln	Area	Urban
Location	Freeway (Tourist)		
Highway	IH 51		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5000		
No. Driveway Entrances	3	Car Wash	No
Non-Diesel Fueling (VFP)	20	Diesel Fueling (VFP)	2
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Thursday, July 22, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	100	95	195						
7:00 AM	0	0	0	96	99	195						
8:00 AM	0	0	0	109	105	214						
9:00 AM	0	0	0	111	98	209						
10:00 AM	0	0	0	115	101	216				204	180	384
11:00 AM	0	0	0	136	129	265				198	212	410
12:00 PM	0	0	0	144	129	273				179	191	370
1:00 PM	0	0	0	123	101	224				131	114	245
2:00 PM	0	0	0	131	125	256						
3:00 PM	0	0	0	152	129	281	156	152	308			
4:00 PM	0	0	0	141	147	288	159	166	325			
5:00 PM	0	0	0	109	126	235	168	163	331			
6:00 PM							111	116	227			
TOTAL	0	0	0	1467	1384	2851	594	597	1191	712	697	1409
DISTRIBUTION				51%	49%		50%	50%		51%	49%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.11%	5.15%
7:00 AM	4.91%	5.36%
8:00 AM	5.57%	5.69%
9:00 AM	5.67%	5.31%
10:00 AM	5.88%	5.47%
11:00 AM	6.95%	6.99%
12:00 PM	7.36%	6.99%
1:00 PM	6.29%	5.47%
2:00 PM	6.70%	6.77%
3:00 PM	7.77%	6.99%
4:00 PM	7.21%	7.97%
5:00 PM	5.57%	6.83%

WEEKDAY AVE:	733.5	692	1425.5
DISTRIBUTION	51%	49%	

Total 12-hour Trips	1467	1384	2851
Adjust to 24-hour trips*	1956	1845	3801

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	109	105	214						
DISTRIBUTION	51%	49%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	141	147	288						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	149	128	277						
DISTRIBUTION	54%	46%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	160	148	308						
DISTRIBUTION	52%	48%							
PEAK HOUR	3:45 PM	-	4:45 PM						
PEAK HOUR GENERATOR				167	180	347	204	216	420
DISTRIBUTION				48%	52%		49%	51%	
PEAK HOUR				3:30 PM	-	4:30 PM	10:45 AM	-	11:45 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	42.8	57.6	55.4	61.6	69.4	84.0
Vehicle Fueling Positions (VFP)	9.7	13.1	12.6	14.0	15.8	19.1

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Minocqua - Krist Food Mart/Citgo - US 51

Site Information

Site ID: NC-307

Municipality	Minocqua		WisDOT Region	NC
County	Oneida	Area		Rural
Location	Non-Freeway (Tourist)			
Highway	US 51			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	3800			
No. Driveway Entrances	3	Car Wash	No	
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	2	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Thursday, August 5, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	3	3	6						
7:00 AM	0	0	0	13	12	25						
8:00 AM	0	0	0	14	15	29						
9:00 AM	0	0	0	13	10	23						
10:00 AM	0	0	0	14	14	28				30	29	59
11:00 AM	0	0	0	21	19	40				12	13	25
12:00 PM	0	0	0	25	26	51				14	13	27
1:00 PM	0	0	0	9	10	19				26	27	53
2:00 PM	0	0	0	13	13	26						
3:00 PM	0	0	0	24	25	49	15	15	30			
4:00 PM	0	0	0	23	23	46	15	15	30			
5:00 PM	0	0	0	24	23	47	26	23	49			
6:00 PM							27	29	56			
TOTAL	0	0	0	196	193	389	83	82	165	82	82	164
DISTRIBUTION				50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	1.15%	1.17%
7:00 AM	4.97%	4.66%
8:00 AM	5.36%	5.83%
9:00 AM	4.97%	3.89%
10:00 AM	5.36%	5.44%
11:00 AM	8.04%	7.38%
12:00 PM	9.57%	10.10%
1:00 PM	3.44%	3.89%
2:00 PM	4.97%	5.05%
3:00 PM	9.18%	9.72%
4:00 PM	8.80%	8.94%
5:00 PM	9.18%	8.94%

WEEKDAY AVE:	98	96.5	194.5
DISTRIBUTION	50%	50%	

Inbound	Outbound	Total
196	193	389
261	257	519

Total 12-hour Trips
Adjust to 24-hour trips*

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	16	14	30						
DISTRIBUTION	53%	47%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	25	27	52						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	26	21	47						
DISTRIBUTION	55%	45%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	25	27	52						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:30 PM	-	5:30 PM						
PEAK HOUR GENERATOR				32	32	64	30	29	59
DISTRIBUTION				50%	50%		51%	49%	
PEAK HOUR				5:15 PM	-	6:15 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	7.9	13.7	12.4	13.7	16.8	15.5
Vehicle Fueling Positions (VFP)	2.1	3.7	3.4	3.7	4.6	4.2

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Minocqua #159 - US 51 at STH 70 (8690 Hwy 51 N)

Site Information

Site ID: NC-308

Municipality	Minocqua	
County	Oneida	WisDOT Region
Location	Non-Freeway (Tourist)	Area
Highway	US 51	
ITE Land Use Code (10th Ed.)	960	
Store Size (Sq Ft)	7500	
No. Driveway Entrances	3	Car Wash
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)
No. of Gas Stations within 1/2 mile	0	



Count Information

1st Day of Count	Thursday, July 29, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	112	104	216						
7:00 AM	0	0	0	138	143	281						
8:00 AM	0	0	0	147	138	285						
9:00 AM	0	0	0	157	147	304						
10:00 AM	0	0	0	168	153	321				187	182	369
11:00 AM	0	0	0	186	160	346				167	151	318
12:00 PM	0	0	0	210	199	409				182	160	342
1:00 PM	0	0	0	153	160	313				147	140	287
2:00 PM	0	0	0	153	141	294						
3:00 PM	0	0	0	137	143	280	165	162	327			
4:00 PM	0	0	0	153	143	296	135	125	260			
5:00 PM	0	0	0	161	157	318	168	145	313			
6:00 PM							132	146	278			
TOTAL	0	0	0	1875	1788	3663	600	578	1178	683	633	1316
DISTRIBUTION				51%	49%		51%	49%		52%	48%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.48%	4.36%
7:00 AM	5.52%	6.00%
8:00 AM	5.88%	5.79%
9:00 AM	6.28%	6.17%
10:00 AM	6.72%	6.42%
11:00 AM	7.44%	6.71%
12:00 PM	8.40%	8.35%
1:00 PM	6.12%	6.71%
2:00 PM	6.12%	5.91%
3:00 PM	5.48%	6.00%
4:00 PM	6.12%	6.00%
5:00 PM	6.44%	6.59%

WEEKDAY AVE:	937.5	894	1831.5
DISTRIBUTION	51%	49%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	1875	1788	3663
Outbound	2500	2384	4884
Total			

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	161	150	311						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	161	157	318						
DISTRIBUTION	51%	49%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	209	187	396						
DISTRIBUTION	53%	47%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	210	199	409						
DISTRIBUTION	51%	49%							
PEAK HOUR	12:00 PM	-	1:00 PM						
PEAK HOUR GENERATOR				165	162	327	190	185	375
DISTRIBUTION				50%	50%		51%	49%	
PEAK HOUR				3:00 PM	-	4:00 PM	10:15 AM	-	11:15 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	41.5	42.4	52.8	54.5	43.6	50.0
Vehicle Fueling Positions (VFP)	19.4	19.9	24.8	25.6	20.4	23.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Plainfield BP (N6481 5th Ave)

Site Information

Site ID: NC-309

Municipality	Plainfield	
County	Waushara	WisDOT Region
Location	Freeway (Non-Tourist)	Area
Highway	STH 73 off IH 39	
ITE Land Use Code (10th Ed.)	945	
Store Size (Sq Ft)	1900	
No. Driveway Entrances	2	Car Wash
Non-Diesel Fueling (VFP)	6	Diesel Fueling (VFP)
No. of Gas Stations within 1/2 mile	1	



Count Information

1st Day of Count	Saturday, June 19, 2021
Days Counted	Tuesday - Wednesday

Hourly Volume Summary

	Tuesday*			Wednesday*			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	33	29	62	35	21	56						
7:00 AM	31	34	65	32	37	69						
8:00 AM	33	33	66	18	21	39						
9:00 AM	47	40	87	28	20	48						
10:00 AM	26	27	53	33	41	74				0	0	0
11:00 AM	33	32	65	35	32	67				0	0	0
12:00 PM	39	40	79	48	45	93				0	0	0
1:00 PM	36	36	72	54	53	107				0	0	0
2:00 PM	43	42	85	45	58	103						
3:00 PM	42	35	77	55	51	106	0	0	0			
4:00 PM	54	58	112	64	59	123	0	0	0			
5:00 PM	43	38	81	59	60	119	0	0	0			
6:00 PM							0	0	0			
TOTAL	460	444	904	506	498	1004	0	0	0	0	0	0
DISTRIBUTION	51%	49%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.28%	3.98%
7:00 AM	4.89%	5.65%
8:00 AM	3.96%	4.30%
9:00 AM	5.82%	4.78%
10:00 AM	4.58%	5.41%
11:00 AM	5.28%	5.10%
12:00 PM	6.75%	6.77%
1:00 PM	6.99%	7.09%
2:00 PM	6.83%	7.96%
3:00 PM	7.53%	6.85%
4:00 PM	9.16%	9.32%
5:00 PM	7.92%	7.80%

WEEKDAY AVE:	483	471	954
DISTRIBUTION	51%	49%	

Inbound	Outbound	Total
483	471	954
644	628	1272

Total 12-hour Trips
Adjust to 24-hour trips*

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	32	36	68						
DISTRIBUTION	47%	53%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	59	59	118						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	41	35	76						
DISTRIBUTION	54%	46%							
PEAK HOUR	6:30 AM	-	7:30 AM						
PM PEAK HOUR - GENERATOR	58	62	120						
DISTRIBUTION	48%	52%							
PEAK HOUR	3:45 PM	-	4:45 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	35.8	62.1	40.0	63.2	0.0	0.0
Vehicle Fueling Positions (VFP)	7.6	13.1	8.4	13.3	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Wausau BP (10201 Park Plaza)

Site Information

Site ID: NC-310

Municipality	Wausau		WisDOT Region	NC
County	Marathon		Area	Urban
Location	Freeway (Non-Tourist)		Highway	IH 39
ITE Land Use Code (10th Ed.)	960		Store Size (Sq Ft)	3500
No. Driveway Entrances	3	Car Wash	No	
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Wednesday, October 27, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	31	37	68	36	36	72						
7:00 AM	25	25	50	21	24	45						
8:00 AM	36	32	68	30	30	60						
9:00 AM	26	28	54	28	29	57						
10:00 AM	26	28	54	25	25	50				41	39	80
11:00 AM	44	40	84	42	39	81				39	45	84
12:00 PM	46	53	99	44	48	92				41	36	77
1:00 PM	43	45	88	37	38	75				38	41	79
2:00 PM	29	25	54	51	48	99						
3:00 PM	37	39	76	49	51	100	56	61	117			
4:00 PM	44	43	87	50	48	98	53	51	104			
5:00 PM	33	36	69	54	56	110	48	54	102			
6:00 PM							49	49	98			
TOTAL	420	431	851	467	472	939	206	215	421	159	161	320
<i>DISTRIBUTION</i>	49%	51%		50%	50%		49%	51%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.67%	6.06%
7:00 AM	3.89%	4.07%
8:00 AM	5.58%	5.15%
9:00 AM	4.57%	4.73%
10:00 AM	4.31%	4.40%
11:00 AM	7.27%	6.56%
12:00 PM	7.61%	8.39%
1:00 PM	6.76%	6.89%
2:00 PM	6.76%	6.06%
3:00 PM	7.27%	7.48%
4:00 PM	7.95%	7.56%
5:00 PM	7.36%	7.64%

WEEKDAY AVE:	443.5	451.5	895
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips*	444	452	895
Adjust to 24-hour trips*	591	602	1193

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	33	31	64						
<i>DISTRIBUTION</i>	52%	48%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	55	56	111						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	57	53	110						
<i>DISTRIBUTION</i>	52%	48%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	54	59	113						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				60	62	122	47	47	94
<i>DISTRIBUTION</i>				49%	51%		50%	50%	
PEAK HOUR				4:45 PM	-	5:45 PM	11:45 AM	-	12:45 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street *Any hour between 7:00 AM - 9:00 AM*
PM Peak Hour - Adjacent Street *Any hour between 4:00 PM - 6:00 PM*
AM Peak Hour - Generator *Any hour in the AM*
PM Peak Hour - Generator *Any hour in the PM*
Peak Hour Generator *Any hour in the time period collected (applies to Friday and Saturday only)*

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	18.3	31.7	31.4	32.3	34.9	26.9
Vehicle Fueling Positions (VFP)	5.3	9.3	9.2	9.4	10.2	7.8

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Stratford Cenex (118710 WI-153)*

Site Information

Site ID: **NC-311**

Municipality	Stratford		
County	Marathon	WisDOT Region	NC
Location	Non-Freeway (Non-Tourist)	Area	Rural
Highway	STH 97		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	4500		
No. Driveway Entrances	4	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	2
No. of Gas Stations within 1/2 mile	2		



Count Information

1st Day of Count	Wednesday, September 1, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	53	45	98	47	47	94						
7:00 AM	69	60	129	80	77	157						
8:00 AM	44	47	91	46	47	93						
9:00 AM	54	49	103	48	51	99						
10:00 AM	48	45	93	58	58	116				62	53	115
11:00 AM	67	68	135	62	51	113				56	60	116
12:00 PM	70	67	137	67	66	133				55	55	110
1:00 PM	66	64	130	62	53	115				45	46	91
2:00 PM	53	54	107	61	63	124						
3:00 PM	68	61	129	75	70	145	61	53	114			
4:00 PM	78	83	161	48	54	102	82	78	160			
5:00 PM	54	58	112	62	56	118	67	70	137			
6:00 PM							46	51	97			
TOTAL	724	701	1425	716	693	1409	256	252	508	218	214	432
DISTRIBUTION	51%	49%		51%	49%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.21%	4.95%
7:00 AM	7.76%	7.37%
8:00 AM	4.69%	5.06%
9:00 AM	5.31%	5.38%
10:00 AM	5.52%	5.54%
11:00 AM	6.72%	6.40%
12:00 PM	7.14%	7.16%
1:00 PM	6.67%	6.29%
2:00 PM	5.94%	6.29%
3:00 PM	7.45%	7.05%
4:00 PM	6.56%	7.37%
5:00 PM	6.04%	6.13%

WEEKDAY AVE:	720	697	1417
DISTRIBUTION	51%	49%	

Total 12-hour Trips*	720	697	1417
Adjust to 24-hour trips*	960	929	1889

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	75	69	144						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	66	66	132						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	79	77	156						
DISTRIBUTION	51%	49%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	71	73	144						
DISTRIBUTION	49%	51%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR	90	89	179	63	64	127			
DISTRIBUTION	50%	50%		50%	50%				
PEAK HOUR	4:30 PM	-	5:30 PM	10:45 AM	-	11:45 AM			

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	32.0	29.3	34.7	32.0	39.8	28.2
Vehicle Fueling Positions (VFP)	14.4	13.2	15.6	14.4	17.9	12.7

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Rhinelander Shell (1999 River St)

Site Information

Site ID: NC-312

Municipality	Rhinelander		
County	Oneida	WisDOT Region	NC
Location	Non-Freeway (Non-Tourist)	Area	Urban
Highway	STH 47 at CHT K		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5300		
No. Driveway Entrances	3	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	2
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Wednesday, July 28, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	79	72	151	76	78	154						
7:00 AM	73	74	147	87	88	175						
8:00 AM	90	83	173	81	75	156						
9:00 AM	68	75	143	72	74	146						
10:00 AM	78	78	156	81	72	153				93	94	187
11:00 AM	86	73	159	79	81	160				88	89	177
12:00 PM	91	103	194	79	83	162				85	85	170
1:00 PM	92	87	179	68	69	137				69	70	139
2:00 PM	104	112	216	91	97	188						
3:00 PM	83	74	157	98	92	190	111	105	216			
4:00 PM	106	108	214	93	87	180	94	97	191			
5:00 PM	75	84	159	90	98	188	112	108	220			
6:00 PM							71	79	150			
TOTAL	1025	1023	2048	995	994	1989	388	389	777	335	338	673
DISTRIBUTION	50%	50%		50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.75%	5.58%
7:00 AM	5.94%	6.02%
8:00 AM	6.35%	5.88%
9:00 AM	5.20%	5.54%
10:00 AM	5.90%	5.58%
11:00 AM	6.13%	5.73%
12:00 PM	6.31%	6.92%
1:00 PM	5.94%	5.80%
2:00 PM	7.24%	7.77%
3:00 PM	6.72%	6.17%
4:00 PM	7.39%	7.25%
5:00 PM	6.13%	6.77%

WEEKDAY AVE:	1010	1008.5	2018.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1010	1009	2019
1347	1345	2691

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	86	79	165						
DISTRIBUTION	52%	48%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	100	101	201						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	88	88	176						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	98	105	203						
DISTRIBUTION	48%	52%							
PEAK HOUR	2:00 PM	-	3:00 PM						
PEAK HOUR GENERATOR				112	108	220	92	100	192
DISTRIBUTION				51%	49%		48%	52%	
PEAK HOUR				5:00 PM	-	6:00 PM	11:15 AM	-	12:15 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	31.1	37.9	33.2	38.3	41.5	36.2
Vehicle Fueling Positions (VFP)	16.5	20.1	17.6	20.3	22.0	19.2

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Waupaca KT #888(106 County Rd QQ)**

Site Information

Site ID: **NC-313**

Municipality	Waupaca		WisDOT Region	NC
County	Waupaca		Area	Urban
Location	Freeway (Tourist)		Area	Urban
Highway	STH 54 & CTH QQ			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	7700			
No. Driveway Entrances	2	Car Wash	Yes	
Non-Diesel Fueling (VFP)	20	Diesel Fueling (VFP)	3	
No. of Gas Stations within 1/2 mile	3			



Count Information

1st Day of Count	Thursday, August 12, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	106	104	210						
7:00 AM	0	0	0	139	129	268						
8:00 AM	0	0	0	125	134	259						
9:00 AM	0	0	0	147	132	279						
10:00 AM	0	0	0	126	134	260				238	228	466
11:00 AM	0	0	0	164	162	326				226	238	464
12:00 PM	0	0	0	149	160	309				170	178	348
1:00 PM	0	0	0	150	145	295				181	181	362
2:00 PM	0	0	0	143	139	282						
3:00 PM	0	0	0	168	177	345	172	176	348			
4:00 PM	0	0	0	176	170	346	169	154	323			
5:00 PM	0	0	0	153	163	316	190	197	387			
6:00 PM							142	162	304			
TOTAL	0	0	0	1746	1749	3495	673	689	1362	815	825	1640
DISTRIBUTION				50%	50%		49%	51%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.55%	4.46%
7:00 AM	5.97%	5.53%
8:00 AM	5.37%	5.75%
9:00 AM	6.31%	5.66%
10:00 AM	5.41%	5.75%
11:00 AM	7.04%	6.95%
12:00 PM	6.40%	6.86%
1:00 PM	6.44%	6.22%
2:00 PM	6.14%	5.96%
3:00 PM	7.22%	7.59%
4:00 PM	7.56%	7.29%
5:00 PM	6.57%	6.99%

WEEKDAY AVE:	873	874.5	1747.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips*	1746	1749	3495
Adjust to 24-hour trips*	2328	2332	4660

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	146	138	284						
DISTRIBUTION	51%	49%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	174	183	357						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	167	168	335						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:15 AM	-	12:15 PM						
PM PEAK HOUR - GENERATOR	174	183	357						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:30 PM	-	5:30 PM						
PEAK HOUR GENERATOR				190	197	387	241	233	474
DISTRIBUTION				49%	51%		51%	49%	
PEAK HOUR				5:00 PM	-	6:00 PM	10:45 AM	-	11:45 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	36.9	46.4	43.5	46.4	50.3	61.6
Vehicle Fueling Positions (VFP)	12.3	15.5	14.6	15.5	16.8	20.6

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Aerial Not Up To Date **NE Driveway Closed Thursday**

Site Name: Phillips # 1067 (1424 N Lk Ave)

Site Information

Site ID: NC-314

Municipality	Phillips	
County	Price	WisDOT Region NC
Location	Non-Freeway (Tourist)	Area Rural
Highway	STH 13	
ITE Land Use Code (10th Ed.)	960	
Store Size (Sq Ft)	5800	
No. Driveway Entrances	3	Car Wash Yes
Non-Diesel Fueling (VFP)	20	Diesel Fueling (VFP) 4
No. of Gas Stations within 1/2 mile	0	



Count Information

1st Day of Count	Thursday, July 22, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	75	67	142						
7:00 AM	0	0	0	92	87	179						
8:00 AM	0	0	0	66	71	137						
9:00 AM	0	0	0	96	91	187						
10:00 AM	0	0	0	78	82	160				146	133	279
11:00 AM	0	0	0	116	115	231				142	145	287
12:00 PM	0	0	0	125	120	245				146	146	292
1:00 PM	0	0	0	111	108	219				135	134	269
2:00 PM	0	0	0	107	104	211						
3:00 PM	0	0	0	111	115	226	112	110	222			
4:00 PM	0	0	0	96	105	201	130	129	259			
5:00 PM	0	0	0	75	72	147	112	117	229			
6:00 PM							61	71	132			
TOTAL	0	0	0	1148	1137	2285	415	427	842	569	558	1127
<i>DISTRIBUTION</i>				50%	50%		49%	51%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.90%	4.42%
7:00 AM	6.01%	5.74%
8:00 AM	4.31%	4.68%
9:00 AM	6.27%	6.00%
10:00 AM	5.10%	5.41%
11:00 AM	7.58%	7.59%
12:00 PM	8.17%	7.92%
1:00 PM	7.25%	7.12%
2:00 PM	6.99%	6.86%
3:00 PM	7.25%	7.59%
4:00 PM	6.27%	6.93%
5:00 PM	4.90%	4.75%

WEEKDAY AVE:	574	568.5	1142.5
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips	1148	1137	2285
Adjust to 24-hour trips*	1531	1516	3047

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	92	87	179						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	96	105	201						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	128	131	259						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	125	124	249						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				138	132	270	153	166	319
<i>DISTRIBUTION</i>				51%	49%		48%	52%	
PEAK HOUR				3:45 PM	-	4:45 PM	12:30 PM	-	1:30 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	30.9	34.7	44.7	42.9	46.6	55.0
Vehicle Fueling Positions (VFP)	7.5	8.4	10.8	10.4	11.3	13.3

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Black River Falls #648 (751 State Hwy 54)**

Site Information

Site ID: **NW-401**

Municipality	Black River Falls		
County	Jackson	WisDOT Region	NW
Location	Freeway (Non-Tourist)	Area	Rural
Highway	STH 54		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	9500		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	14	Diesel Fueling (VFP)	5
No. of Gas Stations within 1/2 mile	2		



Count Information

1st Day of Count	Wednesday, September 22, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	126	123	249	115	114	229						
7:00 AM	161	139	300	174	153	327						
8:00 AM	137	144	281	147	141	288						
9:00 AM	155	142	297	151	150	301						
10:00 AM	143	123	266	156	136	292				210	208	418
11:00 AM	185	170	355	195	194	389				220	227	447
12:00 PM	231	230	461	234	213	447				219	223	442
1:00 PM	170	175	345	185	206	391				210	225	435
2:00 PM	160	149	309	153	165	318						
3:00 PM	154	158	312	171	164	335	247	250	497			
4:00 PM	154	142	296	185	175	360	220	201	421			
5:00 PM	140	129	269	168	159	327	209	233	442			
6:00 PM							196	184	380			
TOTAL	1916	1824	3740	2034	1970	4004	872	868	1740	859	883	1742
DISTRIBUTION	51%	49%		51%	49%		50%	50%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.58%	4.69%
7:00 AM	6.36%	5.77%
8:00 AM	5.39%	5.63%
9:00 AM	5.81%	5.77%
10:00 AM	5.68%	5.12%
11:00 AM	7.22%	7.20%
12:00 PM	8.83%	8.76%
1:00 PM	6.74%	7.53%
2:00 PM	5.94%	6.21%
3:00 PM	6.17%	6.37%
4:00 PM	6.44%	6.27%
5:00 PM	5.85%	5.69%

WEEKDAY AVE:	1975	1897	3872
DISTRIBUTION	51%	49%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	1975	1897	3872
Outbound	2633	2529	5163
Total			

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	172	158	330						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	168	164	332						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	232	218	450						
DISTRIBUTION	52%	48%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	233	222	455						
DISTRIBUTION	51%	49%							
PEAK HOUR	12:00 PM	-	1:00 PM						
PEAK HOUR GENERATOR				247	250	497	231	232	463
DISTRIBUTION				50%	50%		50%	50%	
PEAK HOUR				3:00 PM	-	4:00 PM	10:45 AM	-	11:45 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	34.7	34.9	47.4	47.9	52.3	48.7
Vehicle Fueling Positions (VFP)	17.4	17.5	23.7	23.9	26.2	24.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Ashland #110 (1814 Lake Shore Dr W)

Site Information

Site ID: NW-402

Municipality	Ashland		WisDOT Region	NW
County	Ashland		Area	Urban
Location	Non-Freeway (Tourist)		Highway	US 2 & STH 112
ITE Land Use Code (10th Ed.)	960		No. Driveway Entrances	3
Store Size (Sq Ft)	9900		Car Wash	Yes
No. Diesel Fueling (VFP)	20		Diesel Fueling (VFP)	2
No. of Gas Stations within 1/2 mile	2			



Count Information

1st Day of Count	Wednesday, July 28, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	71	62	133	66	66	132						
7:00 AM	119	116	235	107	108	215						
8:00 AM	98	93	191	98	95	193						
9:00 AM	105	109	214	99	97	196						
10:00 AM	89	90	179	126	122	248				161	154	315
11:00 AM	115	110	225	139	137	276				155	153	308
12:00 PM	136	128	264	150	143	293				129	126	255
1:00 PM	119	121	240	120	125	245				124	113	237
2:00 PM	121	129	250	134	139	273						
3:00 PM	125	119	244	132	124	256	157	151	308			
4:00 PM	130	126	256	156	165	321	143	144	287			
5:00 PM	104	116	220	157	162	319	143	153	296			
6:00 PM							99	101	200			
TOTAL	1332	1319	2651	1484	1483	2967	542	549	1091	569	546	1115
<i>DISTRIBUTION</i>	50%	50%		50%	50%		50%	50%		51%	49%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.65%	3.43%
7:00 AM	6.02%	6.00%
8:00 AM	5.22%	5.03%
9:00 AM	5.43%	5.51%
10:00 AM	5.73%	5.67%
11:00 AM	6.76%	6.61%
12:00 PM	7.62%	7.25%
1:00 PM	6.37%	6.58%
2:00 PM	6.79%	7.17%
3:00 PM	6.84%	6.50%
4:00 PM	7.62%	7.79%
5:00 PM	6.95%	7.44%

WEEKDAY AVE:	1408	1401	2809
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips*	1408	1401	2809
Adjust to 24-hour trips*	1877	1868	3745

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	113	116	229						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	145	146	291						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	133	136	269						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	145	146	291						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	4:15 PM	-	5:15 PM						
PEAK HOUR GENERATOR				162	158	320	177	172	349
<i>DISTRIBUTION</i>				51%	49%		51%	49%	
PEAK HOUR				3:30 PM	-	4:30 PM	10:15 AM	-	11:15 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	23.1	29.4	27.2	29.4	32.3	35.3
Vehicle Fueling Positions (VFP)	10.4	13.2	12.2	13.2	14.5	15.9

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Hayward Marathon (15771 US Hwy 63)*

Site Information

Site ID: **NW-403**

Municipality	Hayward	
County	Sawyer	WisDOT Region
Location	Non-Freeway (Tourist)	Area
Highway	US 63	
ITE Land Use Code (10th Ed.)	945	
Store Size (Sq Ft)	3000	
No. Driveway Entrances	3	Car Wash
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)
No. of Gas Stations within 1/2 mile	5	
		Yes
		0



Count Information

1st Day of Count	Wednesday, July 28, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	3	5	8						
7:00 AM	0	0	0	14	13	27						
8:00 AM	0	0	0	18	15	33						
9:00 AM	0	0	0	26	29	55						
10:00 AM	0	0	0	41	38	79				49	46	95
11:00 AM	0	0	0	36	35	71				63	62	125
12:00 PM	0	0	0	41	37	78				47	51	98
1:00 PM	0	0	0	28	30	58				40	41	81
2:00 PM	0	0	0	33	34	67						
3:00 PM	0	0	0	44	40	84	47	46	93			
4:00 PM	0	0	0	46	46	92	28	27	55			
5:00 PM	0	0	0	31	34	65	25	27	52			
6:00 PM							18	21	39			
TOTAL	0	0	0	361	356	717	118	121	239	199	200	399
DISTRIBUTION				50%	50%		49%	51%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	0.62%	1.05%
7:00 AM	2.91%	2.74%
8:00 AM	3.74%	3.16%
9:00 AM	5.40%	6.11%
10:00 AM	8.52%	8.01%
11:00 AM	7.48%	7.37%
12:00 PM	8.52%	7.79%
1:00 PM	5.82%	6.32%
2:00 PM	6.86%	7.16%
3:00 PM	9.14%	8.43%
4:00 PM	9.56%	9.69%
5:00 PM	6.44%	7.16%

WEEKDAY AVE:	180.5	178	358.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
361	356	717
481	475	956

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	16	17	33						
DISTRIBUTION	48%	52%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	46	46	92						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	46	37	83						
DISTRIBUTION	55%	45%							
PEAK HOUR	11:15 AM	-	12:15 PM						
PM PEAK HOUR - GENERATOR	53	56	109						
DISTRIBUTION	49%	51%							
PEAK HOUR	3:30 PM	-	4:30 PM						
PEAK HOUR GENERATOR				47	46	93	63	62	125
DISTRIBUTION				51%	49%		50%	50%	
PEAK HOUR				3:00 PM	-	4:00 PM	11:00 AM	-	12:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	11.0	30.7	27.7	36.3	31.0	41.7
Vehicle Fueling Positions (VFP)	4.1	11.5	10.4	13.6	11.6	15.6

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Bloomer Holiday (2016 17th Ave)*

Site Information

Site ID: *NW-404*

Municipality	Bloomer		
County	Chippewa	WisDOT Region	NW
Location	Freeway (Non-Tourist)	Area	Rural
Highway	STH 40		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	3000		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Thursday, August 19, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	16	18	34						
7:00 AM	0	0	0	21	18	39						
8:00 AM	0	0	0	20	19	39						
9:00 AM	0	0	0	26	26	52						
10:00 AM	0	0	0	33	29	62				50	47	97
11:00 AM	0	0	0	41	45	86				47	39	86
12:00 PM	0	0	0	35	33	68				40	44	84
1:00 PM	0	0	0	36	38	74				46	49	95
2:00 PM	0	0	0	36	34	70						
3:00 PM	0	0	0	35	35	70	43	45	88			
4:00 PM	0	0	0	44	44	88	50	52	102			
5:00 PM	0	0	0	32	35	67	42	39	81			
6:00 PM							45	48	93			
TOTAL	0	0	0	375	374	749	180	184	364	183	179	362
DISTRIBUTION				50%	50%		49%	51%		51%	49%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.20%	3.61%
7:00 AM	4.20%	3.61%
8:00 AM	4.00%	3.81%
9:00 AM	5.20%	5.21%
10:00 AM	6.60%	5.82%
11:00 AM	8.20%	9.02%
12:00 PM	7.00%	6.62%
1:00 PM	7.20%	7.62%
2:00 PM	7.20%	6.82%
3:00 PM	7.00%	7.02%
4:00 PM	8.80%	8.82%
5:00 PM	6.40%	7.02%

WEEKDAY AVE:	187.5	187	374.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
375	374	749
500	499	999

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	20	22	42						
DISTRIBUTION	48%	52%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	44	44	88						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	41	45	86						
DISTRIBUTION	48%	52%							
PEAK HOUR	11:00 AM	-	12:00 PM						
PM PEAK HOUR - GENERATOR	44	44	88						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:00 PM	-	5:00 PM						
PEAK HOUR GENERATOR				50	52	102	50	47	97
DISTRIBUTION				49%	51%		52%	48%	
PEAK HOUR				4:00 PM	-	5:00 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	14.0	29.3	28.7	29.3	34.0	32.3
Vehicle Fueling Positions (VFP)	3.5	7.3	7.2	7.3	8.5	8.1

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Eau Claire Holiday (5511 WI-93 Trunk)*

Site Information

Site ID: *NW-405*

Municipality	<i>Eau Claire</i>			
County	<i>Eau Claire</i>	WisDOT Region	<i>NW</i>	
Location	<i>Freeway (Non-Tourist)</i>		Area	<i>Urban</i>
Highway	<i>STH-93</i>			
ITE Land Use Code (10th Ed.)	<i>960</i>			
Store Size (Sq Ft)	<i>3400</i>			
No. Driveway Entrances	<i>3</i>	Car Wash	<i>No</i>	
Non-Diesel Fueling (VFP)	<i>10</i>	Diesel Fueling (VFP)	<i>0</i>	
No. of Gas Stations within 1/2 mile	<i>1</i>			



Count Information

1st Day of Count	<i>Wednesday, August 18, 2021</i>
Days Counted	<i>Wednesday - Saturday</i>

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	26	26	52	38	33	71						
7:00 AM	45	41	86	44	48	92						
8:00 AM	39	37	76	48	41	89						
9:00 AM	65	60	125	42	41	83						
10:00 AM	33	39	72	62	60	122				46	45	91
11:00 AM	55	52	107	55	61	116				54	59	113
12:00 PM	42	47	89	71	68	139				57	55	112
1:00 PM	58	54	112	71	69	140				61	48	109
2:00 PM	62	58	120	62	68	130						
3:00 PM	69	73	142	62	61	123	73	73	146			
4:00 PM	52	57	109	72	77	149	65	75	140			
5:00 PM	57	58	115	64	63	127	63	68	131			
6:00 PM							35	44	79			
TOTAL	603	602	1205	691	690	1381	236	260	496	218	207	425
DISTRIBUTION	50%	50%		50%	50%		48%	52%		51%	49%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.71%	3.42%
7:00 AM	5.16%	5.17%
8:00 AM	5.04%	4.53%
9:00 AM	6.20%	5.86%
10:00 AM	5.51%	5.75%
11:00 AM	6.38%	6.56%
12:00 PM	6.55%	6.68%
1:00 PM	7.48%	7.14%
2:00 PM	7.19%	7.31%
3:00 PM	7.59%	7.78%
4:00 PM	7.19%	7.78%
5:00 PM	7.01%	7.02%

WEEKDAY AVE:	647	646	1293
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	647	646	1293
Outbound	863	861	1724
Total			

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	45	45	90						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	62	67	129						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	55	57	112						
DISTRIBUTION	49%	51%							
PEAK HOUR	11:00 AM	-	12:00 PM						
PM PEAK HOUR - GENERATOR	72	71	143						
DISTRIBUTION	50%	50%							
PEAK HOUR	2:45 PM	-	3:45 PM						
PEAK HOUR GENERATOR	73	73	146				67	56	123
DISTRIBUTION	50%	50%					54%	46%	
PEAK HOUR	3:00 PM	-	4:00 PM	12:45 PM	-	1:45 PM			

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	26.5	37.9	32.9	42.1	42.9	36.2
Vehicle Fueling Positions (VFP)	9.0	12.9	11.2	14.3	14.6	12.3

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Hayward Kwik Trip (15831 US Hwy 63)**

Site Information

Site ID: **NW-406**

Municipality	Hayward			
County	Sawyer	WisDOT Region	NW	
Location	Non-Freeway (Tourist)		Area	Rural
Highway	US 63 & STH 27			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	4000			
No. Driveway Entrances	4	Car Wash	No	
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	3	
No. of Gas Stations within 1/2 mile	5			



Count Information

1st Day of Count	Thursday, July 29, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	97	72	169						
7:00 AM	0	0	0	124	96	220						
8:00 AM	0	0	0	109	102	211						
9:00 AM	0	0	0	109	90	199						
10:00 AM	0	0	0	147	132	279				178	172	350
11:00 AM	0	0	0	165	144	309				193	190	383
12:00 PM	0	0	0	124	132	256				160	157	317
1:00 PM	0	0	0	147	121	268				154	117	271
2:00 PM	0	0	0	159	124	283						
3:00 PM	0	0	0	114	111	225	148	115	263			
4:00 PM	0	0	0	151	123	274	190	141	331			
5:00 PM	0	0	0	128	119	247	152	157	309			
6:00 PM							118	115	233			
TOTAL	0	0	0	1574	1366	2940	608	528	1136	685	636	1321
DISTRIBUTION				54%	46%		54%	46%		52%	48%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.62%	3.95%
7:00 AM	5.91%	5.27%
8:00 AM	5.19%	5.60%
9:00 AM	5.19%	4.94%
10:00 AM	7.00%	7.25%
11:00 AM	7.86%	7.91%
12:00 PM	5.91%	7.25%
1:00 PM	7.00%	6.64%
2:00 PM	7.58%	6.81%
3:00 PM	5.43%	6.09%
4:00 PM	7.20%	6.75%
5:00 PM	6.10%	6.53%

WEEKDAY AVE:	787	683	1470
DISTRIBUTION	54%	46%	

Total 12-hour Trips	1574	1366	2940
Adjust to 24-hour trips*	2099	1821	3920

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	137	105	242						
DISTRIBUTION	57%	43%							
PEAK HOUR	7:15 AM - 8:15 AM								
PM PEAK HOUR - ADJ. STREET	152	123	275						
DISTRIBUTION	55%	45%							
PEAK HOUR	4:15 PM - 5:15 PM								
AM PEAK HOUR - GENERATOR	171	144	315						
DISTRIBUTION	54%	46%							
PEAK HOUR	11:30 AM - 12:30 PM								
PM PEAK HOUR - GENERATOR	159	149	308						
DISTRIBUTION	52%	48%							
PEAK HOUR	11:45 AM - 12:45 PM								
PEAK HOUR GENERATOR				190	141	331	189	199	388
DISTRIBUTION				57%	43%		49%	51%	
PEAK HOUR				4:00 PM - 5:00 PM			10:30 AM - 11:30 AM		

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	60.5	68.8	78.8	77.0	82.8	97.0
Vehicle Fueling Positions (VFP)	12.7	14.5	16.6	16.2	17.4	20.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Superior #203 (1419 Banks Ave)

Site Information

Site ID: NW-407

Municipality	Superior	
County	Douglas	WisDOT Region
Location	Non-Freeway (Non-Tourist)	Area
Highway	US 2	
ITE Land Use Code (10th Ed.)	960	
Store Size (Sq Ft)	4500	
No. Driveway Entrances	3	Car Wash
Non-Diesel Fueling (VFP)	20	Diesel Fueling (VFP)
No. of Gas Stations within 1/2 mile	1	
		Yes
		2



Count Information

1st Day of Count	Wednesday, July 28, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	82	86	168	100	98	198						
7:00 AM	152	137	289	133	116	249						
8:00 AM	99	109	208	86	99	185						
9:00 AM	87	85	172	77	80	157						
10:00 AM	94	95	189	110	92	202				107	103	210
11:00 AM	114	116	230	126	124	250				93	89	182
12:00 PM	154	160	314	129	120	249				120	105	225
1:00 PM	115	123	238	139	139	278				102	87	189
2:00 PM	105	117	222	126	111	237						
3:00 PM	120	111	231	131	146	277	133	125	258			
4:00 PM	117	113	230	118	116	234	150	152	302			
5:00 PM	111	131	242	137	131	268	147	133	280			
6:00 PM							95	112	207			
TOTAL	1350	1383	2733	1412	1372	2784	525	522	1047	422	384	806
DISTRIBUTION	49%	51%		51%	49%		50%	50%		52%	48%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.94%	5.01%
7:00 AM	7.74%	6.89%
8:00 AM	5.02%	5.66%
9:00 AM	4.45%	4.49%
10:00 AM	5.54%	5.09%
11:00 AM	6.52%	6.53%
12:00 PM	7.68%	7.62%
1:00 PM	6.90%	7.13%
2:00 PM	6.27%	6.21%
3:00 PM	6.82%	7.00%
4:00 PM	6.38%	6.23%
5:00 PM	6.73%	7.13%

WEEKDAY AVE:	1381	1377.5	2758.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips	1381	1378	2759
Adjust to 24-hour trips*	1841	1837	3678

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	141	137	278						
DISTRIBUTION	51%	49%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	135	128	263						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	141	137	278						
DISTRIBUTION	51%	49%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - GENERATOR	142	140	282						
DISTRIBUTION	50%	50%							
PEAK HOUR	12:00 PM	-	1:00 PM						
PEAK HOUR GENERATOR				150	152	302	120	105	225
DISTRIBUTION				50%	50%		53%	47%	
PEAK HOUR				4:00 PM	-	5:00 PM	12:00 PM	-	1:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	61.8	58.4	61.8	62.7	67.1	50.0
Vehicle Fueling Positions (VFP)	12.6	12.0	12.6	12.8	13.7	10.2

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Spoooner # 329 (201 W Maple St)**

Site Information

Site ID: **NW-408**

Municipality	Spoooner		
County	Washburn	WisDOT Region	NW
Location	Non-Freeway (Tourist)	Area	Rural
Highway	STH 70		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5000		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Thursday, July 29, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	58	52	110						
7:00 AM	0	0	0	82	81	163						
8:00 AM	0	0	0	102	88	190						
9:00 AM	0	0	0	111	107	218						
10:00 AM	0	0	0	98	78	176				177	140	317
11:00 AM	0	0	0	122	109	231				136	117	253
12:00 PM	0	0	0	101	100	201				140	128	268
1:00 PM	0	0	0	124	102	226				123	100	223
2:00 PM	0	0	0	106	113	219						
3:00 PM	0	0	0	127	112	239	127	101	228			
4:00 PM	0	0	0	124	101	225	141	123	264			
5:00 PM	0	0	0	106	85	191	124	101	225			
6:00 PM							122	109	231			
TOTAL	0	0	0	1261	1128	2389	514	434	948	576	485	1061
DISTRIBUTION				53%	47%		54%	46%		54%	46%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.45%	3.46%
7:00 AM	4.88%	5.39%
8:00 AM	6.07%	5.85%
9:00 AM	6.60%	7.11%
10:00 AM	5.83%	5.19%
11:00 AM	7.26%	7.25%
12:00 PM	6.01%	6.65%
1:00 PM	7.38%	6.78%
2:00 PM	6.30%	7.51%
3:00 PM	7.55%	7.45%
4:00 PM	7.38%	6.72%
5:00 PM	6.30%	5.65%

WEEKDAY AVE:	630.5	564	1194.5
DISTRIBUTION	53%	47%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1261	1128	2389
1681	1504	3185

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	102	88	190						
DISTRIBUTION	54%	46%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	124	101	225						
DISTRIBUTION	55%	45%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	123	110	233						
DISTRIBUTION	53%	47%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	129	113	242						
DISTRIBUTION	53%	47%							
PEAK HOUR	3:15 PM	-	4:15 PM						
PEAK HOUR GENERATOR				148	123	271	177	140	317
DISTRIBUTION				55%	45%		56%	44%	
PEAK HOUR				3:45 PM	-	4:45 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	38.0	45.0	46.6	48.4	54.2	63.4
Vehicle Fueling Positions (VFP)	11.9	14.1	14.6	15.1	16.9	19.8

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

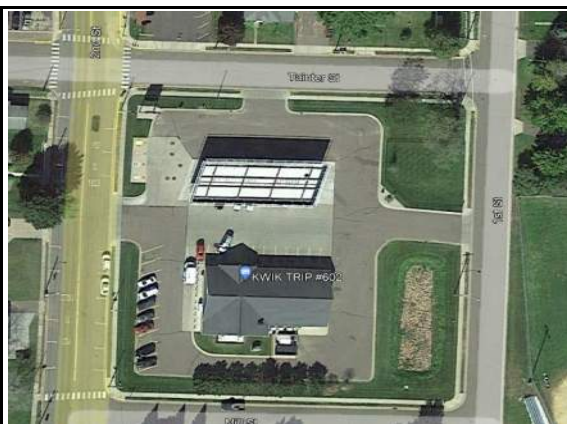
Site Summary

Site Name: Chetek Kwik Trip #602 (324 2nd St)

Site Information

Site ID: NW-409

Municipality	Chetek			
County	Barron	WisDOT Region	NW	
Location	Non-Freeway (Tourist)		Area	Rural
Highway	2nd & Mill St			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	5900			
No. Driveway Entrances	3	Car Wash	No	
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	2			



Count Information

1st Day of Count	Thursday, July 29, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	76	77	153						
7:00 AM	0	0	0	95	88	183						
8:00 AM	0	0	0	118	116	234						
9:00 AM	0	0	0	111	114	225						
10:00 AM	0	0	0	124	121	245				209	199	408
11:00 AM	0	0	0	100	100	200				181	190	371
12:00 PM	0	0	0	132	131	263				179	171	350
1:00 PM	0	0	0	116	128	244				131	151	282
2:00 PM	0	0	0	126	124	250						
3:00 PM	0	0	0	132	133	265	153	151	304			
4:00 PM	0	0	0	128	126	254	132	138	270			
5:00 PM	0	0	0	118	124	242	136	125	261			
6:00 PM							132	142	274			
TOTAL	0	0	0	1376	1382	2758	553	556	1109	700	711	1411
DISTRIBUTION				50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.14%	4.18%
7:00 AM	5.18%	4.78%
8:00 AM	6.43%	6.30%
9:00 AM	6.05%	6.19%
10:00 AM	6.76%	6.57%
11:00 AM	5.45%	5.43%
12:00 PM	7.19%	7.11%
1:00 PM	6.32%	6.95%
2:00 PM	6.87%	6.73%
3:00 PM	7.19%	7.22%
4:00 PM	6.98%	6.84%
5:00 PM	6.43%	6.73%

WEEKDAY AVE:	688	691	1379
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
1376	1382	2758
1835	1843	3677

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	118	116	234						
DISTRIBUTION	50%	50%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	128	126	254						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	124	121	245						
DISTRIBUTION	51%	49%							
PEAK HOUR	10:00 AM	-	11:00 AM						
PM PEAK HOUR - GENERATOR	129	137	266						
DISTRIBUTION	48%	52%							
PEAK HOUR	2:45 PM	-	3:45 PM						
PEAK HOUR GENERATOR				153	151	304	209	199	408
DISTRIBUTION				50%	50%		51%	49%	
PEAK HOUR				3:00 PM	-	4:00 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	39.7	43.1	41.5	45.1	51.5	69.2
Vehicle Fueling Positions (VFP)	14.6	15.9	15.3	16.6	19.0	25.5

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Rice Lake #476 (2851 Decker Dr)

Site Information

Site ID: NW-410

Municipality	Rice Lake	
County	Barron	WisDOT Region
Location	Freeway (Tourist)	Area
Highway	US 53	
ITE Land Use Code (10th Ed.)	960	
Store Size (Sq Ft)	6900	
No. Driveway Entrances	2	Car Wash
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)
No. of Gas Stations within 1/2 mile	0	
		Yes
		3



Count Information

1st Day of Count	Wednesday, August 18, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	76	70	146	84	84	168						
7:00 AM	105	98	203	114	112	226						
8:00 AM	80	97	177	106	103	209						
9:00 AM	126	114	240	114	111	225						
10:00 AM	114	131	245	128	126	254				172	168	340
11:00 AM	101	95	196	143	157	300				156	154	310
12:00 PM	153	143	296	140	133	273				152	167	319
1:00 PM	143	146	289	150	146	296				164	159	323
2:00 PM	127	137	264	139	144	283						
3:00 PM	134	129	263	144	156	300	168	166	334			
4:00 PM	143	145	288	148	139	287	167	164	331			
5:00 PM	106	108	214	128	139	267	141	151	292			
6:00 PM							134	128	262			
TOTAL	1408	1413	2821	1538	1550	3088	610	609	1219	644	648	1292
DISTRIBUTION	50%	50%		50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.07%	3.90%
7:00 AM	5.58%	5.32%
8:00 AM	4.74%	5.06%
9:00 AM	6.11%	5.70%
10:00 AM	6.16%	6.51%
11:00 AM	6.21%	6.38%
12:00 PM	7.46%	6.99%
1:00 PM	7.46%	7.39%
2:00 PM	6.77%	7.11%
3:00 PM	7.08%	7.21%
4:00 PM	7.41%	7.19%
5:00 PM	5.96%	6.25%

WEEKDAY AVE:	1473	1481.5	2954.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	1473	1482	2955
Outbound	1964	1975	3939

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	105	112	217						
DISTRIBUTION	48%	52%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	146	148	294						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	130	130	260						
DISTRIBUTION	50%	50%							
PEAK HOUR	10:30 AM	-	11:30 AM						
PM PEAK HOUR - GENERATOR	147	154	301						
DISTRIBUTION	49%	51%							
PEAK HOUR	1:15 PM	-	2:15 PM						
PEAK HOUR GENERATOR				175	172	347	174	172	346
DISTRIBUTION				50%	50%		50%	50%	
PEAK HOUR				3:30 PM	-	4:30 PM	11:45 AM	-	12:45 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	31.4	42.6	37.7	43.6	50.3	50.1
Vehicle Fueling Positions (VFP)	14.5	19.6	17.3	20.1	23.1	23.1

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

*Aerial is not up to date

Site Name: **Somerset #1074 (726 WI-35)**

Site Information

Site ID: NW-411

Municipality	Somerset			
County	St Croix	WisDOT Region	NW	
Location	Non-Freeway (Non-Tourist)		Area	Rural
Highway	STH 35 & 64			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	5100			
No. Driveway Entrances	3	Car Wash	Yes	
Non-Diesel Fueling (VFP)	20	Diesel Fueling (VFP)	2	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Wednesday, August 18, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	113	111	224	115	106	221						
7:00 AM	122	114	236	129	128	257						
8:00 AM	110	112	222	92	85	177						
9:00 AM	71	77	148	95	95	190						
10:00 AM	83	75	158	88	96	184				113	116	229
11:00 AM	125	128	253	136	121	257				121	118	239
12:00 PM	125	124	249	116	127	243				98	100	198
1:00 PM	93	96	189	96	93	189				109	114	223
2:00 PM	108	110	218	102	102	204						
3:00 PM	123	115	238	120	118	238	129	129	258			
4:00 PM	121	125	246	123	123	246	133	128	261			
5:00 PM	126	135	261	127	133	260	120	125	245			
6:00 PM							99	101	200			
TOTAL	1320	1322	2642	1339	1327	2666	481	483	964	441	448	889
DISTRIBUTION	50%	50%		50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.43%	6.14%
7:00 AM	7.08%	6.85%
8:00 AM	5.70%	5.58%
9:00 AM	4.68%	4.87%
10:00 AM	4.82%	4.84%
11:00 AM	7.36%	7.05%
12:00 PM	6.80%	7.11%
1:00 PM	5.33%	5.35%
2:00 PM	5.92%	6.00%
3:00 PM	6.85%	6.60%
4:00 PM	6.88%	7.02%
5:00 PM	7.14%	7.59%

WEEKDAY AVE:	1329.5	1324.5	2654
DISTRIBUTION	50%	50%	

Total 12-hour Trips	1330	1325	2654
Adjust to 24-hour trips*	1773	1766	3539

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	126	121	247						
DISTRIBUTION	51%	49%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	127	134	261						
DISTRIBUTION	49%	51%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	137	139	276						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	127	134	261						
DISTRIBUTION	49%	51%							
PEAK HOUR	5:00 PM	-	6:00 PM						
PEAK HOUR GENERATOR				136	134	270	124	127	251
DISTRIBUTION				50%	50%		49%	51%	
PEAK HOUR				4:45 PM	-	5:45 PM	11:15 AM	-	12:15 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	48.4	51.2	54.1	51.2	52.9	49.2
Vehicle Fueling Positions (VFP)	11.2	11.9	12.5	11.9	12.3	11.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Hudson Kwik Trip #935 (740 6th St N)

Site Information

Site ID: NW-412

Municipality	Hudson	
County	St Croix	WisDOT Region
Location	Non-Freeway (Tourist)	Area
Highway	STH 35	
ITE Land Use Code (10th Ed.)	960	
Store Size (Sq Ft)	7200	
No. Driveway Entrances	2	Car Wash
Non-Diesel Fueling (VFP)	20	Diesel Fueling (VFP)
No. of Gas Stations within 1/2 mile	1	
		Yes
		0



Count Information

1st Day of Count	Thursday, August 19, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	57	61	118						
7:00 AM	0	0	0	88	82	170						
8:00 AM	0	0	0	69	72	141						
9:00 AM	0	0	0	62	61	123						
10:00 AM	0	0	0	65	62	127				124	135	259
11:00 AM	0	0	0	91	86	177				86	88	174
12:00 PM	0	0	0	98	110	208				112	114	226
1:00 PM	0	0	0	70	74	144				103	103	206
2:00 PM	0	0	0	90	79	169						
3:00 PM	0	0	0	76	84	160	88	95	183			
4:00 PM	0	0	0	108	104	212	101	98	199			
5:00 PM	0	0	0	109	105	214	107	112	219			
6:00 PM	0	0	0				87	91	178			
TOTAL	0	0	0	983	980	1963	383	396	779	425	440	865
DISTRIBUTION				50%	50%		49%	51%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.35%	4.67%
7:00 AM	6.71%	6.28%
8:00 AM	5.26%	5.51%
9:00 AM	4.73%	4.67%
10:00 AM	4.96%	4.74%
11:00 AM	6.94%	6.58%
12:00 PM	7.48%	8.42%
1:00 PM	5.34%	5.66%
2:00 PM	6.87%	6.05%
3:00 PM	5.80%	6.43%
4:00 PM	8.24%	7.96%
5:00 PM	8.32%	8.04%

WEEKDAY AVE:	491.5	490	981.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips	983	980	1963
Adjust to 24-hour trips*	1311	1307	2617

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	88	82	170						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	109	105	214						
DISTRIBUTION	51%	49%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	112	114	226						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	105	113	218						
DISTRIBUTION	48%	52%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				116	107	223	124	135	259
DISTRIBUTION				52%	48%		48%	52%	
PEAK HOUR				4:45 PM	-	5:45 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	23.6	29.7	31.4	30.3	31.0	36.0
Vehicle Fueling Positions (VFP)	8.5	10.7	11.3	10.9	11.2	13.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Baraboo - Amoco at WIS 33 & WIS 136*

Site Information

Site ID: SW-501

Municipality	Baraboo		
County	Sauk	WisDOT Region	SW
Location	Freeway (Tourist)	Area	Urban
Highway	STH 33 & STH 136		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	9300		
No. Driveway Entrances	4	Car Wash	No
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	4
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Thursday, July 15, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	24	26	50						
7:00 AM	0	0	0	32	26	58						
8:00 AM	0	0	0	33	33	66						
9:00 AM	0	0	0	27	31	58						
10:00 AM	0	0	0	38	34	72				35	27	62
11:00 AM	0	0	0	35	39	74				33	34	67
12:00 PM	0	0	0	31	36	67				42	47	89
1:00 PM	0	0	0	31	29	60				30	26	56
2:00 PM	0	0	0	26	29	55						
3:00 PM	0	0	0	48	47	95	56	57	113			
4:00 PM	0	0	0	32	35	67	49	47	96			
5:00 PM	0	0	0	36	38	74	42	39	81			
6:00 PM	0	0	0				42	47	89			
TOTAL	0	0	0	393	403	796	189	190	379	140	134	274
<i>DISTRIBUTION</i>				49%	51%		50%	50%		51%	49%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.58%	4.84%
7:00 AM	6.11%	4.84%
8:00 AM	6.30%	6.14%
9:00 AM	5.15%	5.77%
10:00 AM	7.25%	6.33%
11:00 AM	6.68%	7.26%
12:00 PM	5.92%	6.70%
1:00 PM	5.92%	5.40%
2:00 PM	4.96%	5.40%
3:00 PM	9.16%	8.75%
4:00 PM	6.11%	6.51%
5:00 PM	6.87%	7.07%

WEEKDAY AVE:	196.5	201.5	398
<i>DISTRIBUTION</i>	49%	51%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
393	403	796
524	537	1061

*(75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	35	35	70						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	35	39	74						
<i>DISTRIBUTION</i>	47%	53%							
PEAK HOUR	4:45 PM	-	5:45 PM						
AM PEAK HOUR - GENERATOR	42	41	83						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	10:45 AM	-	11:45 AM						
PM PEAK HOUR - GENERATOR	49	51	100						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	3:15 PM	-	4:15 PM						
PEAK HOUR GENERATOR				56	57	113	42	47	89
<i>DISTRIBUTION</i>				50%	50%		47%	53%	
PEAK HOUR				3:00 PM	-	4:00 PM	12:00 PM	-	1:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	7.5	8.0	8.9	10.8	12.2	9.6
Vehicle Fueling Positions (VFP)	4.4	4.6	5.2	6.3	7.1	5.6

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: *Baraboo - Casey's on CTH W*

Site Information

Site ID: SW-502

Municipality	Baraboo			
County	Sauk	WisDOT Region	SW	
Location	Non-Freeway (Tourist)		Area	Urban
Highway	CTH W			
ITE Land Use Code (10th Ed.)	945			
Store Size (Sq Ft)	2500			
No. Driveway Entrances	2	Car Wash	No	
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Thursday, July 15, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	4	3	7						
7:00 AM	0	0	0	18	15	33						
8:00 AM	0	0	0	18	17	35						
9:00 AM	0	0	0	20	16	36						
10:00 AM	0	0	0	22	19	41				24	28	52
11:00 AM	0	0	0	22	21	43				27	28	55
12:00 PM	0	0	0	27	26	53				30	30	60
1:00 PM	0	0	0	29	22	51				27	27	54
2:00 PM	0	0	0	25	32	57						
3:00 PM	0	0	0	26	26	52	22	23	45			
4:00 PM	0	0	0	21	21	42	32	26	58			
5:00 PM	0	0	0	20	20	40	17	18	35			
6:00 PM	0	0	0				21	23	44			
TOTAL	0	0	0	252	238	490	92	90	182	108	113	221
<i>DISTRIBUTION</i>				51%	49%		51%	49%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	1.19%	0.95%
7:00 AM	5.36%	4.73%
8:00 AM	5.36%	5.36%
9:00 AM	5.95%	5.04%
10:00 AM	6.55%	5.99%
11:00 AM	6.55%	6.62%
12:00 PM	8.04%	8.19%
1:00 PM	8.63%	6.93%
2:00 PM	7.44%	10.08%
3:00 PM	7.74%	8.19%
4:00 PM	6.25%	6.62%
5:00 PM	5.95%	6.30%

WEEKDAY AVE:	126	119	245
<i>DISTRIBUTION</i>	51%	49%	

Total 12-hour Trips	252	238	490
Adjust to 24-hour trips*	336	317	653

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	21	19	40						
<i>DISTRIBUTION</i>	53%	48%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	24	23	47						
<i>DISTRIBUTION</i>	51%	49%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	24	24	48						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	11:15 AM	-	12:15 PM						
PM PEAK HOUR - GENERATOR	34	30	64						
<i>DISTRIBUTION</i>	53%	47%							
PEAK HOUR	1:45 PM	-	2:45 PM						
PEAK HOUR GENERATOR				35	30	65	30	35	65
<i>DISTRIBUTION</i>				54%	46%		46%	54%	
PEAK HOUR				4:15 PM	-	5:15 PM	11:45 AM	-	12:45 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday	Friday	Saturday	
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	16.0	18.8	19.2	25.6	26.0	26.0
Vehicle Fueling Positions (VFP)	5.0	5.9	6.0	8.0	8.1	8.1

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: SW - Fort Atkinson -Caseys

Site Information

Site ID: SW-503

Municipality	Fort Atkinson		
County	Jefferson	WisDOT Region	SW
Location	Non-Freeway (Non-Tourist)	Area	Urban
Highway	USH 12		
ITE Land Use Code (10th Ed.)	945		
Store Size (Sq Ft)	4400		
No. Driveway Entrances	4	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	2		



Count Information

1st Day of Count	Wednesday, June 23, 2021
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	26	27	53	25	25	50						
7:00 AM	26	24	50	28	28	56						
8:00 AM	24	23	47	28	23	51						
9:00 AM	30	25	55	33	38	71						
10:00 AM	43	46	89	25	24	49				0	0	0
11:00 AM	28	32	60	26	30	56				0	0	0
12:00 PM	32	33	65	31	28	59				0	0	0
1:00 PM	23	25	48	26	30	56				0	0	0
2:00 PM	37	34	71	33	30	63						
3:00 PM	26	28	54	36	37	73	0	0	0			
4:00 PM	31	34	65	36	40	76	0	0	0			
5:00 PM	34	32	66	39	41	80	0	0	0			
6:00 PM							0	0	0			
TOTAL	360	363	723	366	374	740	0	0	0	0	0	0
DISTRIBUTION	50%	50%		49%	51%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.27%	5.29%
7:00 AM	5.58%	5.29%
8:00 AM	5.37%	4.68%
9:00 AM	6.51%	6.41%
10:00 AM	7.02%	7.12%
11:00 AM	5.58%	6.31%
12:00 PM	6.51%	6.21%
1:00 PM	5.06%	5.60%
2:00 PM	7.23%	6.51%
3:00 PM	6.40%	6.61%
4:00 PM	6.92%	7.53%
5:00 PM	7.54%	7.43%

WEEKDAY AVE:	363	368.5	731.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips	363	369	732
Adjust to 24-hour trips*	484	491	975

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	28	29	57						
DISTRIBUTION	49%	51%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	37	39	76						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:45 PM	-	5:45 PM						
AM PEAK HOUR - GENERATOR	34	35	69						
DISTRIBUTION	49%	51%							
PEAK HOUR	10:00 AM	-	11:00 AM						
PM PEAK HOUR - GENERATOR	37	39	76						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:45 PM	-	5:45 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	13.0	17.3	15.7	17.3	0.0	0.0
Vehicle Fueling Positions (VFP)	7.1	9.5	8.6	9.5	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **La Crosse #750 (4828 Mormon Coulee Rd)**

Site Information

Site ID: SW-504

Municipality	La Crosse		WisDOT Region	SW
County	La Crosse		Area	Urban
Location	Non-Freeway (Non-Tourist)		Highway	Hwy 14/61
ITE Land Use Code (10th Ed.)	960		Store Size (Sq Ft)	6300
No. Driveway Entrances	2	Car Wash	Yes	
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	3	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Wednesday, September 22, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	86	88	174	69	76	145						
7:00 AM	98	102	200	113	115	228						
8:00 AM	101	106	207	112	119	231						
9:00 AM	100	94	194	113	101	214						
10:00 AM	108	104	212	110	111	221				174	177	351
11:00 AM	128	122	250	126	133	259				156	134	290
12:00 PM	149	155	304	145	141	286				140	152	292
1:00 PM	140	123	263	140	122	262				156	151	307
2:00 PM	140	143	283	143	154	297						
3:00 PM	143	145	288	175	169	344	184	176	360			
4:00 PM	175	177	352	152	151	303	170	166	336			
5:00 PM	145	144	289	154	153	307	141	140	281			
6:00 PM							97	112	209			
TOTAL	1513	1503	3016	1552	1545	3097	592	594	1186	626	614	1240
DISTRIBUTION	50%	50%		50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.79%	4.04%
7:00 AM	5.16%	5.34%
8:00 AM	5.21%	5.54%
9:00 AM	5.21%	4.80%
10:00 AM	5.33%	5.29%
11:00 AM	6.22%	6.27%
12:00 PM	7.19%	7.28%
1:00 PM	6.85%	6.03%
2:00 PM	6.92%	7.31%
3:00 PM	7.78%	7.73%
4:00 PM	8.00%	8.07%
5:00 PM	7.32%	7.31%

WEEKDAY AVE:	1532.5	1524	3056.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips*	1533	1524	3057
Adjust to 24-hour trips*	2043	2032	4075

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	117	121	238						
DISTRIBUTION	49%	51%							
PEAK HOUR	7:30 AM	-	8:30 AM						
PM PEAK HOUR - ADJ. STREET	162	167	329						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:45 PM	-	5:45 PM						
AM PEAK HOUR - GENERATOR	138	139	277						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	162	167	329						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:45 PM	-	5:45 PM						
PEAK HOUR GENERATOR				178	188	366	174	177	351
DISTRIBUTION				49%	51%		50%	50%	
PEAK HOUR				3:15 PM	-	4:15 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	37.8	52.2	44.0	52.2	58.1	55.7
Vehicle Fueling Positions (VFP)	12.5	17.3	14.6	17.3	19.3	18.5

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Brodhead #1021 (2107 1st Center Ave)**

Site Information

Site ID: SW-505

Municipality	Brodhead			
County	Green	WisDOT Region	SW	
Location	Non-Freeway (Non-Tourist)		Area	Rural
Highway	STH 11			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	8000			
No. Driveway Entrances	3	Car Wash	Yes	
Non-Diesel Fueling (VFP)	20	Diesel Fueling (VFP)	3	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Wednesday, October 6, 2021
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	80	85	165	88	83	171						
7:00 AM	128	116	244	126	120	246						
8:00 AM	66	74	140	65	77	142						
9:00 AM	81	82	163	86	82	168						
10:00 AM	81	73	154	85	80	165				0	0	0
11:00 AM	93	100	193	90	90	180				0	0	0
12:00 PM	97	102	199	96	103	199				0	0	0
1:00 PM	94	91	185	71	74	145				0	0	0
2:00 PM	99	100	199	109	106	215						
3:00 PM	102	102	204	114	113	227	0	0	0			
4:00 PM	112	114	226	113	119	232	0	0	0			
5:00 PM	100	105	205	127	129	256	0	0	0			
6:00 PM							0	0	0			
TOTAL	1133	1144	2277	1170	1176	2346	0	0	0	0	0	0
DISTRIBUTION	50%	50%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.47%	5.43%
7:00 AM	8.27%	7.63%
8:00 AM	4.27%	4.88%
9:00 AM	5.44%	5.30%
10:00 AM	5.41%	4.95%
11:00 AM	5.96%	6.14%
12:00 PM	6.29%	6.63%
1:00 PM	5.37%	5.33%
2:00 PM	6.77%	6.66%
3:00 PM	7.03%	6.95%
4:00 PM	7.33%	7.53%
5:00 PM	7.39%	7.56%

WEEKDAY AVE:	1151.5	1160	2311.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	1152	1160	2312
Outbound	1535	1547	3082

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	127	118	245						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	119	121	240						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:45 PM	-	5:45 PM						
AM PEAK HOUR - GENERATOR	127	118	245						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - GENERATOR	119	121	240						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:45 PM	-	5:45 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	30.6	30.0	30.6	30.0	0.0	0.0
Vehicle Fueling Positions (VFP)	10.7	10.4	10.7	10.4	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Cuba City - KwikTrip#339 (212 S Main Street)

Site Information

Site ID: SW-506

Municipality	Cuba City		
County	Grant	WisDOT Region	SW
Location	Non-Freeway (Non-Tourist)	Area	Rural
Highway	Main St		
ITE Land Use Code (10th Ed.)	945		
Store Size (Sq Ft)	4000		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Wednesday, October 6, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	86	88	174	91	89	180						
7:00 AM	116	122	238	109	110	219						
8:00 AM	71	72	143	78	76	154						
9:00 AM	75	72	147	81	84	165						
10:00 AM	68	73	141	68	75	143				97	109	206
11:00 AM	79	75	154	82	76	158				106	105	211
12:00 PM	91	90	181	90	94	184				100	110	210
1:00 PM	46	50	96	56	60	116				89	94	183
2:00 PM	69	70	139	64	72	136						
3:00 PM	102	101	203	104	100	204	113	108	221			
4:00 PM	70	76	146	100	99	199	119	127	246			
5:00 PM	83	94	177	90	89	179	82	87	169			
6:00 PM							58	60	118			
TOTAL	956	983	1939	1013	1024	2037	372	382	754	392	418	810
DISTRIBUTION	49%	51%		50%	50%		49%	51%		48%	52%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.74%	6.61%
7:00 AM	8.57%	8.67%
8:00 AM	5.68%	5.53%
9:00 AM	5.94%	5.83%
10:00 AM	5.18%	5.53%
11:00 AM	6.13%	5.64%
12:00 PM	6.89%	6.88%
1:00 PM	3.89%	4.11%
2:00 PM	5.07%	5.31%
3:00 PM	7.85%	7.51%
4:00 PM	6.48%	6.54%
5:00 PM	6.59%	6.84%

WEEKDAY AVE:	984.5	1003.5	1988
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
985	1004	1988
1313	1338	2651

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	113	116	229						
DISTRIBUTION	49%	51%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	97	100	197						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	113	116	229						
DISTRIBUTION	49%	51%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - GENERATOR	107	101	208						
DISTRIBUTION	51%	49%							
PEAK HOUR	2:45 PM	-	3:45 PM						
PEAK HOUR GENERATOR				125	130	255	111	107	218
DISTRIBUTION				49%	51%		51%	49%	
PEAK HOUR				3:45 PM	-	4:45 PM	10:15 AM	-	11:15 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	57.3	49.3	57.3	52.0	63.8	54.5
Vehicle Fueling Positions (VFP)	28.6	24.6	28.6	26.0	31.9	27.3

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

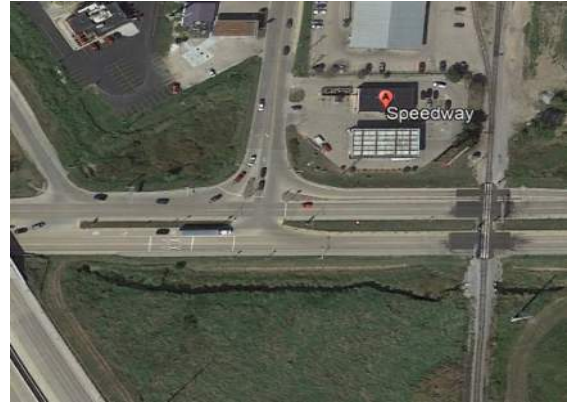
Site Summary

Site Name: Windsor/Deforest Speedway

Site Information

Site ID: SW-507

Municipality	Windsor	WisDOT Region	SW
County	Dane	Area	Urban
Location	Freeway (Non-Tourist)		
Highway	STH 19 E of IH 39/90		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	3300		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	2		



Count Information

1st Day of Count	Wednesday, June 9, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	52	52	104	40	37	77						
7:00 AM	35	35	70	32	30	62						
8:00 AM	27	19	46	45	45	90						
9:00 AM	50	51	101	42	37	79						
10:00 AM	46	44	90	48	49	97				77	70	147
11:00 AM	39	37	76	48	46	94				68	72	140
12:00 PM	47	55	102	67	64	131				61	62	123
1:00 PM	51	52	103	55	59	114				65	65	130
2:00 PM	55	51	106	44	46	90						
3:00 PM	58	64	122	63	62	125	65	73	138			
4:00 PM	56	57	113	56	62	118	56	62	118			
5:00 PM	38	39	77	49	51	100	50	45	95			
6:00 PM							57	56	113			
TOTAL	554	556	1110	589	588	1177	228	236	464	271	269	540
DISTRIBUTION	50%	50%		50%	50%		49%	51%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.04%	5.83%
7:00 AM	4.40%	4.26%
8:00 AM	4.72%	4.20%
9:00 AM	6.04%	5.77%
10:00 AM	6.17%	6.10%
11:00 AM	5.71%	5.44%
12:00 PM	7.48%	7.80%
1:00 PM	6.96%	7.28%
2:00 PM	6.50%	6.36%
3:00 PM	7.94%	8.26%
4:00 PM	7.35%	7.80%
5:00 PM	5.71%	5.90%

WEEKDAY AVE:	571.5	572	1143.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips*	572	572	1144
Adjust to 24-hour trips*	762	763	1525

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	37	34	71						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:30 AM	-	8:30 AM						
PM PEAK HOUR - ADJ. STREET	56	60	116						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	50	52	102						
DISTRIBUTION	49%	51%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	61	63	124						
DISTRIBUTION	49%	51%							
PEAK HOUR	3:00 PM	-	4:00 PM						
PEAK HOUR GENERATOR				65	73	138	76	78	154
DISTRIBUTION				47%	53%		49%	51%	
PEAK HOUR				3:00 PM	-	4:00 PM	10:15 AM	-	11:15 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	21.5	35.2	30.9	37.6	41.8	46.7
Vehicle Fueling Positions (VFP)	5.9	9.7	8.5	10.3	11.5	12.8

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Casey's Belleville, STH 69

Site Information

Site ID: SW-508

Municipality	Belleville		
County	Dane	WisDOT Region	SW
Location	Non-Freeway (Non-Tourist)	Area	Rural
Highway	STH 69		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	4500		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	10	Diesel Fueling (VFP)	3
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Wednesday, October 6, 2021
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	19	19	38	14	13	27						
7:00 AM	64	57	121	65	57	122						
8:00 AM	42	42	84	41	47	88						
9:00 AM	36	38	74	23	20	43						
10:00 AM	43	45	88	33	31	64				0	0	0
11:00 AM	41	40	81	48	47	95				0	0	0
12:00 PM	59	60	119	51	56	107				0	0	0
1:00 PM	32	37	69	34	31	65				0	0	0
2:00 PM	50	46	96	57	65	122						
3:00 PM	44	48	92	41	40	81	0	0	0			
4:00 PM	50	46	96	44	47	91	0	0	0			
5:00 PM	47	46	93	53	53	106	0	0	0			
6:00 PM							0	0	0			
TOTAL	527	524	1051	504	507	1011	0	0	0	0	0	0
<i>DISTRIBUTION</i>	50%	50%		50%	50%							

Average Weekly Hourly Distributions

Hour	% IN	% OUT
6:00 AM	2.40%	2.33%
7:00 AM	9.38%	8.29%
8:00 AM	6.04%	6.47%
9:00 AM	4.29%	4.22%
10:00 AM	5.53%	5.53%
11:00 AM	6.47%	6.33%
12:00 PM	8.00%	8.44%
1:00 PM	4.80%	4.95%
2:00 PM	7.78%	8.07%
3:00 PM	6.18%	6.40%
4:00 PM	6.84%	6.77%
5:00 PM	7.27%	7.20%

WEEKDAY AVE:	515.5	515.5	1031
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	516	516	1031
Outbound	687	687	1375
Total			

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	65	65	130						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	50	50	100						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	65	65	130						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - GENERATOR	55	60	115						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
<i>DISTRIBUTION</i>									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	28.9	22.2	28.9	25.6	0.0	0.0
Vehicle Fueling Positions (VFP)	10.0	7.7	10.0	8.8	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Johnson Creek #487 (465 Village Walk Ln)

Site Information

Site ID: SW-509

Municipality	Johnson Creek		
County	Jefferson	WisDOT Region	SW
Location	Freeway (Non-Tourist)	Area	Rural
Highway	STH 26 S of IH 94		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	6000		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	20	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	2		



Count Information

1st Day of Count	Wednesday, November 3, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	115	113	228	125	127	252						
7:00 AM	157	147	304	150	137	287						
8:00 AM	111	99	210	91	94	185						
9:00 AM	76	83	159	108	107	215						
10:00 AM	106	91	197	108	95	203				148	146	294
11:00 AM	121	132	253	120	126	246				130	131	261
12:00 PM	106	108	214	131	131	262				127	132	259
1:00 PM	71	77	148	94	92	186				129	126	255
2:00 PM	105	94	199	121	125	246						
3:00 PM	109	112	221	114	113	227	140	139	279			
4:00 PM	112	122	234	147	149	296	178	178	356			
5:00 PM	125	130	255	119	127	246	151	151	302			
6:00 PM							126	137	263			
TOTAL	1314	1308	2622	1428	1423	2851	595	605	1200	534	535	1069
DISTRIBUTION	50%	50%		50%	50%		50%	50%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.56%	6.59%
7:00 AM	8.40%	7.80%
8:00 AM	5.53%	5.30%
9:00 AM	5.03%	5.22%
10:00 AM	5.85%	5.11%
11:00 AM	6.59%	7.09%
12:00 PM	6.48%	6.56%
1:00 PM	4.51%	4.64%
2:00 PM	6.18%	6.01%
3:00 PM	6.10%	6.18%
4:00 PM	7.08%	7.44%
5:00 PM	6.67%	7.06%

WEEKDAY AVE:	1371	1365.5	2736.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips*	1371	1366	2737
Adjust to 24-hour trips*	1828	1821	3649

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	154	142	296						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	133	138	271						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	154	142	296						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - GENERATOR	133	138	271						
DISTRIBUTION	49%	51%							
PEAK HOUR	4:30 PM	-	5:30 PM						
PEAK HOUR GENERATOR				173	185	358	148	146	294
DISTRIBUTION				48%	52%		50%	50%	
PEAK HOUR				4:15 PM	-	5:15 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	49.3	45.2	49.3	45.2	59.7	49.0
Vehicle Fueling Positions (VFP)	14.8	13.6	14.8	13.6	17.9	14.7

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Lake Mills - #306 (105 W Tyrana Park Rd)

Site Information

Site ID: SW-510

Municipality	Lake Mills		
County	Jefferson	WisDOT Region	SW
Location	Freeway (Non-Tourist)	Area	Urban
Highway	IH 94		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	5800		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	3
No. of Gas Stations within 1/2 mile	1		



Count Information

1st Day of Count	Wednesday, November 3, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	133	114	247	137	152	289						
7:00 AM	186	184	370	177	149	326						
8:00 AM	140	146	286	122	150	272						
9:00 AM	120	129	249	126	118	244						
10:00 AM	129	126	255	123	124	247				196	201	397
11:00 AM	151	142	293	135	134	269				182	191	373
12:00 PM	145	149	294	148	150	298				165	156	321
1:00 PM	128	124	252	136	141	277				160	172	332
2:00 PM	114	124	238	137	135	272						
3:00 PM	152	152	304	132	137	269	165	172	337			
4:00 PM	134	138	272	136	139	275	168	163	331			
5:00 PM	138	148	286	154	157	311	149	159	308			
6:00 PM							132	124	256			
TOTAL	1670	1676	3346	1663	1686	3349	614	618	1232	703	720	1423
DISTRIBUTION	50%	50%		50%	50%		50%	50%		49%	51%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.08%	5.93%
7:00 AM	8.17%	7.43%
8:00 AM	5.90%	6.60%
9:00 AM	5.54%	5.51%
10:00 AM	5.67%	5.58%
11:00 AM	6.44%	6.16%
12:00 PM	6.59%	6.67%
1:00 PM	5.94%	5.91%
2:00 PM	5.65%	5.78%
3:00 PM	6.39%	6.45%
4:00 PM	6.08%	6.18%
5:00 PM	6.57%	6.80%

WEEKDAY AVE:	1666.5	1681	3347.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	1667	1681	3348
Outbound	2222	2241	4463
Total			

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	180	182	362						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	153	152	305						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:45 PM	-	5:45 PM						
AM PEAK HOUR - GENERATOR	180	182	362						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - GENERATOR	153	152	305						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:45 PM	-	5:45 PM						
PEAK HOUR GENERATOR				173	165	338	196	201	397
DISTRIBUTION				51%	49%		49%	51%	
PEAK HOUR				4:15 PM	-	5:15 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	62.4	52.6	62.4	52.6	58.3	68.4
Vehicle Fueling Positions (VFP)	19.1	16.1	19.1	16.1	17.8	20.9

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Lake Delton - Exxon - Off USH 12

Site Information

Site ID: SW-511

Municipality	Lake Delton			
County	Sauk	WisDOT Region	SW	
Location	Freeway (Tourist)		Area	Rural
Highway	USH 12			
ITE Land Use Code (10th Ed.)	945			
Store Size (Sq Ft)	2500			
No. Driveway Entrances	2	Car Wash	No	
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	3			



Count Information

1st Day of Count	Thursday, July 8, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	0	0	0	0	0	0						
7:00 AM	0	0	0	15	15	30						
8:00 AM	0	0	0	15	15	30						
9:00 AM	0	0	0	0	0	0						
10:00 AM	0	0	0	0	0	0				0	0	0
11:00 AM	0	0	0	0	0	0				16	16	32
12:00 PM	0	0	0	0	0	0				32	36	68
1:00 PM	0	0	0	0	0	0				0	0	0
2:00 PM	0	0	0	0	0	0						
3:00 PM	0	0	0	0	0	0	0	0	0			
4:00 PM	0	0	0	18	19	37	26	26	52			
5:00 PM	0	0	0	21	21	42	19	20	39			
6:00 PM	0	0	0				0	0	0			
TOTAL	0	0	0	69	70	139	45	46	91	48	52	100
DISTRIBUTION				50%	50%		49%	51%		48%	52%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
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		
5:00 PM		

WEEKDAY AVE:	34.5	35	69.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	16	15	31						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	21	21	42						
DISTRIBUTION	50%	50%							
PEAK HOUR	5:00 PM	-	6:00 PM						
AM PEAK HOUR - GENERATOR	16	15	31						
DISTRIBUTION	52%	48%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - GENERATOR	21	21	42						
DISTRIBUTION	50%	50%							
PEAK HOUR	5:00 PM	-	6:00 PM						
PEAK HOUR GENERATOR				26	26	52	32	36	68
DISTRIBUTION				50%	50%		47%	53%	
PEAK HOUR				4:00 PM	-	5:00 PM	12:00 PM	-	1:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	12.4	16.8	12.4	16.8	20.8	27.2
Vehicle Fueling Positions (VFP)	3.9	5.3	3.9	5.3	6.5	8.5

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Lake Delton #583 (532 W Munroe Ave)

Site Information

Site ID: SW-512

Municipality	Lake Delton			
County	Sauk	WisDOT Region	SW	
Location	Freeway (Tourist)		Area	Rural
Highway	IH 90			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	4200			
No. Driveway Entrances	2	Car Wash	No	
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	3	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Thursday, July 8, 2021
Days Counted	Thursday - Saturday

Hourly Volume Summary

	Tuesday*			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	110	112	222	0	0	0						
7:00 AM	127	120	247	0	0	0						
8:00 AM	155	164	319	0	0	0						
9:00 AM	122	131	253	0	0	0						
10:00 AM	126	132	258	0	0	0				275	248	523
11:00 AM	145	148	293	0	0	0				219	223	442
12:00 PM	139	156	295	0	0	0				272	255	527
1:00 PM	151	139	290	0	0	0				230	248	478
2:00 PM	142	154	296	0	0	0						
3:00 PM	168	166	334	0	0	0	249	240	489			
4:00 PM	164	167	331	0	0	0	239	249	488			
5:00 PM	130	151	281	0	0	0	218	220	438			
6:00 PM							212	206	418			
TOTAL	1679	1740	3419	0	0	0	918	915	1833	996	974	1970
DISTRIBUTION	49%	51%					50%	50%		51%	49%	

Average Weekly Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.91%	4.83%
7:00 AM	5.67%	5.17%
8:00 AM	6.92%	7.07%
9:00 AM	5.45%	5.65%
10:00 AM	5.63%	5.69%
11:00 AM	6.48%	6.38%
12:00 PM	6.21%	6.72%
1:00 PM	6.75%	5.99%
2:00 PM	6.34%	6.64%
3:00 PM	7.50%	7.16%
4:00 PM	7.33%	7.20%
5:00 PM	5.81%	6.51%

WEEKDAY AVE:	839.5	870	1709.5
DISTRIBUTION	49%	51%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	1679	1740	3419
Outbound	2239	2320	4559
Total			

*75% of daily traffic assumed in 12-hour period

*West Driveway only on Tuesday (11-9-21) adjusted for tourist season; East Driveway only on Thursday (7-8-21); sum of driveways shown on Tuesday above

Peak Hour Summary

	Weekday (Average)*			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	155	164	319						
DISTRIBUTION	49%	51%							
PEAK HOUR	8:00 AM	-	9:00 AM						
PM PEAK HOUR - ADJ. STREET	165	182	347						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	161	164	325						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	165	182	347						
DISTRIBUTION	48%	52%							
PEAK HOUR	4:30 PM	-	5:30 PM						
PEAK HOUR GENERATOR				264	251	515	264	271	535
DISTRIBUTION				51%	49%		49%	51%	
PEAK HOUR				3:15 PM	-	4:15 PM	10:15 AM	-	11:15 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	76.0	82.6	77.4	82.6	122.6	127.4
Vehicle Fueling Positions (VFP)	29.0	31.5	29.5	31.5	46.8	48.6

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Portage BP (W10620 WI-33)

Site Information

Site ID: SW-513

Municipality	Portage		
County	Columbia	WisDOT Region	SW
Location	Freeway (Non-Tourist)	Area	Rural
Highway	STH 33 W of IH 90/94		
ITE Land Use Code (10th Ed.)	945		
Store Size (Sq Ft)	1700		
No. Driveway Entrances	2	Car Wash	No
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Tuesday, June 29, 2021
Days Counted	Tuesday - Wednesday

Hourly Volume Summary

	Tuesday*			Wednesday*			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	13	10	23	14	11	25						
7:00 AM	28	27	55	23	20	43						
8:00 AM	24	20	44	23	23	46						
9:00 AM	25	25	50	29	29	58						
10:00 AM	36	37	73	36	34	70				0	0	0
11:00 AM	30	26	56	40	34	74				0	0	0
12:00 PM	32	34	66	31	34	65				0	0	0
1:00 PM	45	43	88	33	35	68				0	0	0
2:00 PM	42	44	86	41	47	88						
3:00 PM	48	47	95	33	38	71	0	0	0			
4:00 PM	38	42	80	30	53	83	0	0	0			
5:00 PM	28	39	67	35	44	79	0	0	0			
6:00 PM							0	0	0			
TOTAL	389	394	783	368	402	770	0	0	0	0	0	0
<i>DISTRIBUTION</i>	50%	50%		48%	52%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	2.68%	1.98%
7:00 AM	5.05%	4.43%
8:00 AM	4.66%	4.05%
9:00 AM	5.35%	5.09%
10:00 AM	7.13%	6.69%
11:00 AM	6.94%	5.65%
12:00 PM	6.24%	6.41%
1:00 PM	7.73%	7.35%
2:00 PM	8.22%	8.57%
3:00 PM	8.03%	8.01%
4:00 PM	6.74%	8.95%
5:00 PM	6.24%	7.82%

WEEKDAY AVE:	378.5	398	776.5
<i>DISTRIBUTION</i>	49%	51%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
379	398	777
505	531	1035

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	28	24	52						
<i>DISTRIBUTION</i>	54%	46%							
PEAK HOUR	7:30 AM	-	8:30 AM						
PM PEAK HOUR - ADJ. STREET	36	49	85						
<i>DISTRIBUTION</i>	42%	58%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	36	36	72						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	10:00 AM	-	11:00 AM						
PM PEAK HOUR - GENERATOR	42	50	92						
<i>DISTRIBUTION</i>	46%	54%							
PEAK HOUR	3:30 PM	-	4:30 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
<i>DISTRIBUTION</i>									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- | | |
|--------------------------------|---|
| AM Peak Hour - Adjacent Street | Any hour between 7:00 AM - 9:00 AM |
| PM Peak Hour - Adjacent Street | Any hour between 4:00 PM - 6:00 PM |
| AM Peak Hour - Generator | Any hour in the AM |
| PM Peak Hour - Generator | Any hour in the PM |
| Peak Hour Generator | Any hour in the time period collected (applies to Friday and Saturday only) |

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	30.6	50.0	42.4	54.1	0.0	0.0
Vehicle Fueling Positions (VFP)	6.5	10.6	9.0	11.5	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

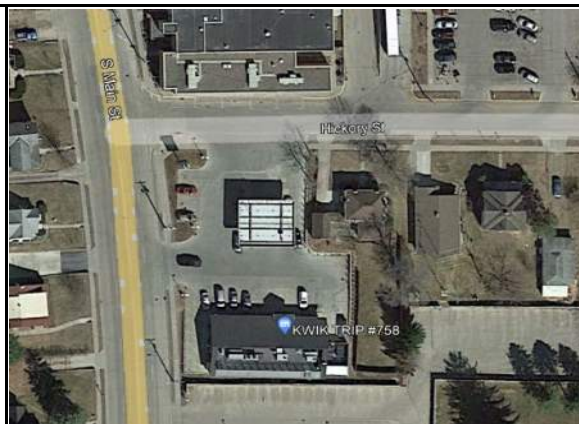
Site Summary

Site Name: Viroqua KT #758(603 S Main St)

Site Information

Site ID: SW-514

Municipality	Viroqua		WisDOT Region	SW
County	Vernon		Area	Rural
Location	Non-Freeway (Non-Tourist)			
Highway	USH 14			
ITE Land Use Code (10th Ed.)	945			
Store Size (Sq Ft)	2300			
No. Driveway Entrances	2	Car Wash	No	
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Sunday, August 1, 2021
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	51	53	104	54	49	103						
7:00 AM	79	82	161	77	75	152						
8:00 AM	75	73	148	85	80	165						
9:00 AM	68	67	135	84	85	169						
10:00 AM	84	87	171	84	85	169				0	0	0
11:00 AM	94	96	190	87	91	178				0	0	0
12:00 PM	85	84	169	80	76	156				0	0	0
1:00 PM	71	66	137	72	77	149				0	0	0
2:00 PM	106	109	215	78	80	158						
3:00 PM	80	83	163	99	102	201	0	0	0			
4:00 PM	98	94	192	105	99	204	0	0	0			
5:00 PM	102	105	207	111	112	223	0	0	0			
6:00 PM							0	0	0			
TOTAL	993	999	1992	1016	1011	2027	0	0	0	0	0	0
DISTRIBUTION	50%	50%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.92%	3.81%
7:00 AM	5.82%	5.86%
8:00 AM	5.97%	5.71%
9:00 AM	5.67%	5.67%
10:00 AM	6.27%	6.42%
11:00 AM	6.76%	6.98%
12:00 PM	6.16%	5.97%
1:00 PM	5.34%	5.34%
2:00 PM	6.87%	7.05%
3:00 PM	6.68%	6.90%
4:00 PM	7.58%	7.20%
5:00 PM	7.95%	8.10%

WEEKDAY AVE:	1004.5	1005	2009.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	1005	1005	2010
Outbound	1339	1340	2679

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	81	85	166						
DISTRIBUTION	49%	51%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	109	109	218						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	91	94	185						
DISTRIBUTION	49%	51%							
PEAK HOUR	11:00 AM	-	12:00 PM						
PM PEAK HOUR - GENERATOR	109	109	218						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:15 PM	-	5:15 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	72.2	94.8	80.4	94.8	0.0	0.0
Vehicle Fueling Positions (VFP)	20.8	27.3	23.1	27.3	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Horicon KT #782(716 E Lake St)

Site Information

Site ID: SW-515

Municipality	Horicon		WisDOT Region	SW
County	Dodge		Area	Rural
Location	Non-Freeway (Non-Tourist)		Highway	STH 33
ITE Land Use Code (10th Ed.)	945		Store Size (Sq Ft)	2600
No. Driveway Entrances	3	Car Wash	No	
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Wednesday, November 3, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	55	54	109	42	40	82						
7:00 AM	48	46	94	58	52	110						
8:00 AM	37	38	75	28	29	57						
9:00 AM	34	29	63	28	32	60						
10:00 AM	49	45	94	34	34	68				65	58	123
11:00 AM	35	34	69	32	29	61				59	50	109
12:00 PM	58	56	114	48	50	98				47	41	88
1:00 PM	53	56	109	35	36	71				54	54	108
2:00 PM	51	38	89	50	45	95						
3:00 PM	47	51	98	65	72	137	66	62	128			
4:00 PM	63	65	128	67	60	127	54	45	99			
5:00 PM	66	64	130	49	55	104	48	43	91			
6:00 PM							50	42	92			
TOTAL	596	576	1172	536	534	1070	218	192	410	225	203	428
<i>DISTRIBUTION</i>	51%	49%		50%	50%		53%	47%		53%	47%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.43%	6.35%
7:00 AM	7.02%	6.62%
8:00 AM	4.31%	4.53%
9:00 AM	4.11%	4.12%
10:00 AM	5.50%	5.34%
11:00 AM	4.44%	4.26%
12:00 PM	7.02%	7.16%
1:00 PM	5.83%	6.22%
2:00 PM	6.69%	5.61%
3:00 PM	7.42%	8.31%
4:00 PM	8.61%	8.45%
5:00 PM	7.62%	8.04%

WEEKDAY AVE:	566	555	1121
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips*	566	555	1121
Adjust to 24-hour trips*	755	740	1495

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	55	54	109						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	70	73	143						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	55	54	109						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - GENERATOR	70	73	143						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	4:30 PM	-	5:30 PM						
PEAK HOUR GENERATOR				66	62	128	65	58	123
<i>DISTRIBUTION</i>				52%	48%		53%	47%	
PEAK HOUR				3:00 PM	-	4:00 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	41.9	55.0	41.9	55.0	49.2	47.3
Vehicle Fueling Positions (VFP)	13.6	17.9	13.6	17.9	16.0	15.4

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Tomah Mobil (24432 Gopher Ave)

Site Information

Site ID: SW-516

Municipality	Tomah		WisDOT Region	SW
County	Monroe		Area	Urban
Location	Freeway (Non-Tourist)			
Highway	IH 90 & STH 131			
ITE Land Use Code (10th Ed.)	945			
Store Size (Sq Ft)	2800			
No. Driveway Entrances	2	Car Wash	No	
Non-Diesel Fueling (VFP)	8	Diesel Fueling (VFP)	2	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Wednesday, October 27, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	11	10	21	9	7	16						
7:00 AM	12	14	26	13	15	28						
8:00 AM	12	12	24	13	12	25						
9:00 AM	15	14	29	15	14	29						
10:00 AM	14	13	27	12	12	24				16	17	33
11:00 AM	8	8	16	18	18	36				22	21	43
12:00 PM	16	15	31	19	20	39				25	27	52
1:00 PM	20	22	42	16	15	31				16	14	30
2:00 PM	22	21	43	15	13	28						
3:00 PM	29	24	53	25	23	48	23	22	45			
4:00 PM	21	27	48	13	17	30	29	32	61			
5:00 PM	14	15	29	19	18	37	19	19	38			
6:00 PM							20	22	42			
TOTAL	194	195	389	187	184	371	91	95	186	79	79	158
<i>DISTRIBUTION</i>	50%	50%		50%	50%		49%	51%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.94%	3.36%
7:00 AM	4.92%	5.74%
8:00 AM	4.92%	4.75%
9:00 AM	5.91%	5.54%
10:00 AM	5.12%	4.95%
11:00 AM	5.12%	5.15%
12:00 PM	6.89%	6.93%
1:00 PM	7.09%	7.32%
2:00 PM	7.28%	6.73%
3:00 PM	10.63%	9.30%
4:00 PM	6.69%	8.71%
5:00 PM	6.50%	6.53%

WEEKDAY AVE:	190.5	189.5	380
<i>DISTRIBUTION</i>	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
191	190	380
254	253	507

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	15	16	31						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	7:30 AM	-	8:30 AM						
PM PEAK HOUR - ADJ. STREET	17	22	39						
<i>DISTRIBUTION</i>	44%	56%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	15	16	31						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	7:30 AM	-	8:30 AM						
PM PEAK HOUR - GENERATOR	27	24	51						
<i>DISTRIBUTION</i>	53%	47%							
PEAK HOUR	3:00 PM	-	4:00 PM						
PEAK HOUR GENERATOR				29	32	61	25	27	52
<i>DISTRIBUTION</i>				48%	52%		48%	52%	
PEAK HOUR				4:00 PM	-	5:00 PM	12:00 PM	-	1:00 PM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	11.1	13.9	11.1	18.2	21.8	18.6
Vehicle Fueling Positions (VFP)	3.1	3.9	3.1	5.1	6.1	5.2

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

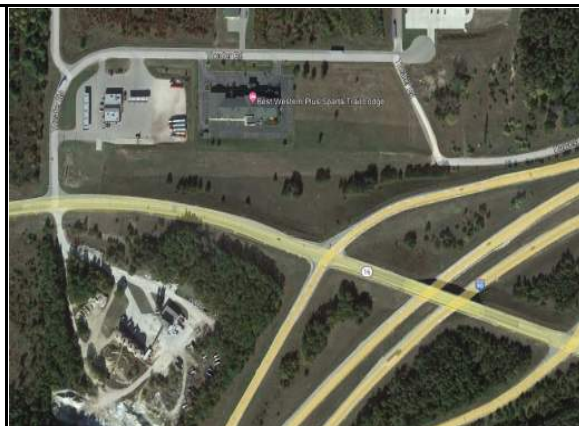
Site Summary

Site Name: Sparta BP (4105 Theater Rd)

Site Information

Site ID: SW-517

Municipality	Sparta		WisDOT Region	SW
County	Monroe	Location		Freeway (Non-Tourist)
Area	Urban		Highway	IH 90 & STH 16
ITE Land Use Code (10th Ed.)	960		Store Size (Sq Ft)	5900
No. Driveway Entrances	3	Car Wash	No	
Non-Diesel Fueling (VFP)	10	Diesel Fueling (VFP)	5	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Wednesday, October 27, 2021
Days Counted	Wednesday - Saturday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	12	12	24	21	25	46						
7:00 AM	20	21	41	17	19	36						
8:00 AM	20	23	43	21	17	38						
9:00 AM	29	26	55	20	25	45						
10:00 AM	18	20	38	19	19	38				30	32	62
11:00 AM	34	32	66	23	15	38				31	27	58
12:00 PM	35	30	65	32	30	62				25	24	49
1:00 PM	26	23	49	15	23	38				22	23	45
2:00 PM	31	31	62	30	27	57						
3:00 PM	38	52	90	37	36	73	24	24	48			
4:00 PM	28	28	56	39	29	68	42	34	76			
5:00 PM	35	31	66	27	28	55	27	30	57			
6:00 PM							34	26	60			
TOTAL	326	329	655	301	293	594	127	114	241	108	106	214
DISTRIBUTION	50%	50%		51%	49%		53%	47%		50%	50%	

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.95%	4.46%
7:00 AM	4.43%	4.82%
8:00 AM	4.90%	4.82%
9:00 AM	5.86%	6.15%
10:00 AM	4.43%	4.70%
11:00 AM	6.82%	5.67%
12:00 PM	8.01%	7.23%
1:00 PM	4.90%	5.55%
2:00 PM	7.30%	6.99%
3:00 PM	8.97%	10.61%
4:00 PM	8.01%	6.87%
5:00 PM	7.42%	7.11%

WEEKDAY AVE:	313.5	311	624.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
314	311	625
418	415	833

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	19	23	42						
DISTRIBUTION	45%	55%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	36	35	71						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	35	30	65						
DISTRIBUTION	54%	46%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	38	44	82						
DISTRIBUTION	46%	54%							
PEAK HOUR	3:00 PM	-	4:00 PM						
PEAK HOUR GENERATOR				42	34	76	30	32	62
DISTRIBUTION				55%	45%		48%	52%	
PEAK HOUR				4:00 PM	-	5:00 PM	10:00 AM	-	11:00 AM

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	7.1	12.0	11.0	13.9	12.9	10.5
Vehicle Fueling Positions (VFP)	2.8	4.7	4.3	5.5	5.1	4.1

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Viroqua KT # 757(1301 N Main St)

Site Information

Site ID: SW-518

Municipality	Viroqua		WisDOT Region	SW
County	Vernon		Area	Rural
Location	Non-Freeway (Non-Tourist)		Highway	USH 14
ITE Land Use Code (10th Ed.)	960		Store Size (Sq Ft)	6400
No. Driveway Entrances	2	Car Wash	Yes	
Non-Diesel Fueling (VFP)	10	Diesel Fueling (VFP)	2	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Wednesday, August 18, 2021
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	92	92	184	94	87	181						
7:00 AM	145	132	277	110	104	214						
8:00 AM	123	129	252	126	131	257						
9:00 AM	144	136	280	139	132	271						
10:00 AM	149	157	306	165	156	321				0	0	0
11:00 AM	168	154	322	184	178	362				0	0	0
12:00 PM	168	174	342	170	190	360				0	0	0
1:00 PM	137	150	287	151	146	297				0	0	0
2:00 PM	135	150	285	134	135	269						
3:00 PM	168	159	327	147	153	300	0	0	0			
4:00 PM	144	146	290	172	171	343	0	0	0			
5:00 PM	163	168	331	151	156	307	0	0	0			
6:00 PM							0	0	0			
TOTAL	1736	1747	3483	1743	1739	3482	0	0	0	0	0	0
DISTRIBUTION	50%	50%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.01%	3.85%
7:00 AM	5.50%	5.08%
8:00 AM	5.37%	5.59%
9:00 AM	6.10%	5.77%
10:00 AM	6.77%	6.73%
11:00 AM	7.59%	7.14%
12:00 PM	7.29%	7.83%
1:00 PM	6.21%	6.37%
2:00 PM	5.80%	6.13%
3:00 PM	6.79%	6.71%
4:00 PM	6.81%	6.82%
5:00 PM	6.77%	6.97%

WEEKDAY AVE:	1739.5	1743	3482.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips*	1740	1743	3483
Adjust to 24-hour trips*	2319	2324	4643

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	133	132	265						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	162	165	327						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:45 PM	-	5:45 PM						
AM PEAK HOUR - GENERATOR	188	183	371						
DISTRIBUTION	51%	49%							
PEAK HOUR	11:15 AM	-	12:15 PM						
PM PEAK HOUR - GENERATOR	181	181	362						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	41.4	51.1	58.0	56.6	0.0	0.0
Vehicle Fueling Positions (VFP)	22.1	27.3	30.9	30.2	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

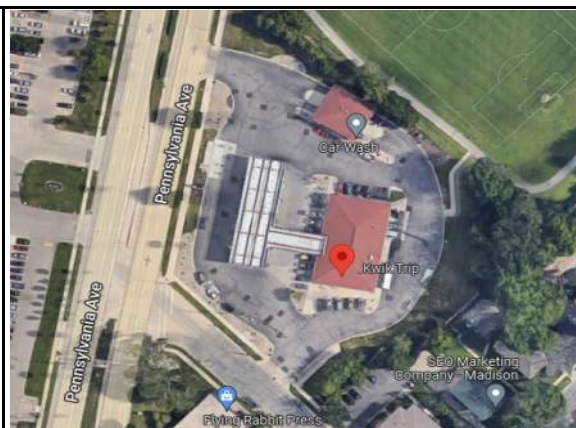
Site Summary

Site Name: **Madison #960 (401 N Third St)**

Site Information

Site ID: **SW-519**

Municipality	Madison	
County	Dane	WisDOT Region SW
Location	Non-Freeway (Non-Tourist)	Area Urban
Highway	STH 113	
ITE Land Use Code (10th Ed.)	960	
Store Size (Sq Ft)	7600	
No. Driveway Entrances	2	Car Wash Yes
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP) 4
No. of Gas Stations within 1/2 mile	1	



Count Information

1st Day of Count	Wednesday, April 6, 2022
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	115	108	223	110	116	226						
7:00 AM	145	141	286	151	140	291						
8:00 AM	133	131	264	174	176	350						
9:00 AM	136	145	281	144	150	294						
10:00 AM	141	128	269	141	131	272				0	0	0
11:00 AM	176	175	351	151	158	309				0	0	0
12:00 PM	148	148	296	161	157	318				0	0	0
1:00 PM	141	139	280	117	116	233				0	0	0
2:00 PM	161	161	322	136	129	265						
3:00 PM	183	188	371	162	160	322	0	0	0			
4:00 PM	157	157	314	155	163	318	0	0	0			
5:00 PM	127	129	256	156	156	312	0	0	0			
6:00 PM							0	0	0			
TOTAL	1763	1750	3513	1758	1752	3510	0	0	0	0	0	0
DISTRIBUTION	50%	50%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.79%	4.80%
7:00 AM	6.31%	6.02%
8:00 AM	6.54%	6.57%
9:00 AM	5.96%	6.32%
10:00 AM	6.01%	5.55%
11:00 AM	6.97%	7.13%
12:00 PM	6.58%	6.53%
1:00 PM	5.50%	5.46%
2:00 PM	6.33%	6.21%
3:00 PM	7.35%	7.45%
4:00 PM	6.65%	6.85%
5:00 PM	6.03%	6.10%

WEEKDAY AVE:	1760.5	1751	3511.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips	1761	1751	3512
Adjust to 24-hour trips*	2347	2335	4682

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	163	159	322						
DISTRIBUTION	51%	49%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	159	159	318						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	168	172	340						
DISTRIBUTION	49%	51%							
PEAK HOUR	11:15 AM	-	12:15 PM						
PM PEAK HOUR - GENERATOR	176	179	355						
DISTRIBUTION	50%	50%							
PEAK HOUR	3:15 PM	-	4:15 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	42.4	41.8	44.7	46.7	0.0	0.0
Vehicle Fueling Positions (VFP)	16.1	15.9	17.0	17.8	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Madison #961 (3528 E Washington Ave)**

Site Information

Site ID: **SW-520**

Municipality	Madison		WisDOT Region	SW
County	Dane	Area		Urban
Location	Non-Freeway (Non-Tourist)			
Highway	USH 151			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	5700			
No. Driveway Entrances	2	Car Wash	Yes	
Non-Diesel Fueling (VFP)	16	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Wednesday, April 6, 2022
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	81	76	157	62	52	114						
7:00 AM	109	111	220	89	104	193						
8:00 AM	93	90	183	93	91	184						
9:00 AM	64	72	136	66	58	124						
10:00 AM	82	78	160	73	82	155				0	0	0
11:00 AM	85	82	167	87	77	164				0	0	0
12:00 PM	103	111	214	98	105	203				0	0	0
1:00 PM	81	82	163	88	92	180				0	0	0
2:00 PM	88	88	176	83	87	170						
3:00 PM	67	75	142	90	87	177	0	0	0			
4:00 PM	84	81	165	88	90	178	0	0	0			
5:00 PM	87	86	173	94	97	191	0	0	0			
6:00 PM							0	0	0			
TOTAL	1024	1032	2056	1011	1022	2033	0	0	0	0	0	0
DISTRIBUTION	50%	50%		50%	50%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	5.27%	4.67%
7:00 AM	7.30%	7.85%
8:00 AM	6.86%	6.61%
9:00 AM	4.79%	4.75%
10:00 AM	5.71%	5.84%
11:00 AM	6.34%	5.81%
12:00 PM	7.41%	7.89%
1:00 PM	6.23%	6.35%
2:00 PM	6.30%	6.39%
3:00 PM	5.79%	5.92%
4:00 PM	6.34%	6.24%
5:00 PM	6.67%	6.68%

WEEKDAY AVE:	1017.5	1027	2044.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips	1018	1027	2045
Adjust to 24-hour trips*	1357	1369	2726

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	99	108	207						
DISTRIBUTION	48%	52%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	94	92	186						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:15 PM	-	5:15 PM						
AM PEAK HOUR - GENERATOR	99	108	207						
DISTRIBUTION	48%	52%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - GENERATOR	105	106	211						
DISTRIBUTION	50%	50%							
PEAK HOUR	11:45 AM	-	12:45 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

- AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
- PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
- AM Peak Hour - Generator Any hour in the AM
- PM Peak Hour - Generator Any hour in the PM
- Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	36.3	32.6	36.3	37.0	0.0	0.0
Vehicle Fueling Positions (VFP)	12.9	11.6	12.9	13.2	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

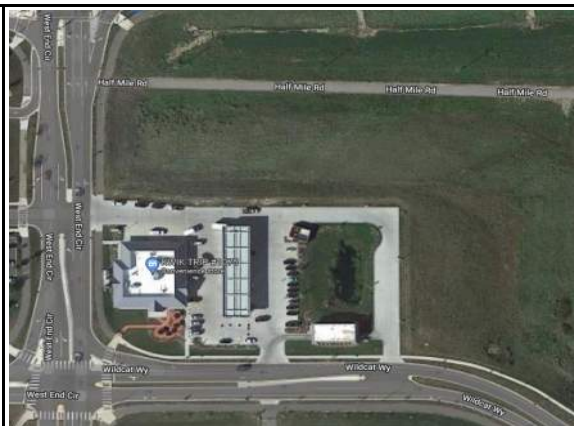
Site Summary

Site Name: Verona #1075 (233 Wildcat Way)

Site Information

Site ID: SW-521

Municipality	Verona		WisDOT Region	SW
County	Dane		Area	Urban
Location	Freeway (Non-Tourist)			
Highway	Wildcat Way			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	10800			
No. Driveway Entrances	3	Car Wash	Yes	
Non-Diesel Fueling (VFP)	24	Diesel Fueling (VFP)	0	
No. of Gas Stations within 1/2 mile	0			



Count Information

1st Day of Count	Wednesday, May 11, 2022
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	108	101	209	111	93	204						
7:00 AM	130	122	252	134	130	264						
8:00 AM	108	113	221	129	133	262						
9:00 AM	70	70	140	83	83	166						
10:00 AM	69	72	141	81	69	150				0	0	0
11:00 AM	85	74	159	131	128	259				0	0	0
12:00 PM	112	116	228	110	122	232				0	0	0
1:00 PM	87	86	173	82	74	156				0	0	0
2:00 PM	95	99	194	93	91	184						
3:00 PM	158	144	302	135	136	271	0	0	0			
4:00 PM	144	150	294	146	144	290	0	0	0			
5:00 PM	129	127	256	143	146	289	0	0	0			
6:00 PM							0	0	0			
TOTAL	1295	1274	2569	1378	1349	2727	0	0	0	0	0	0
DISTRIBUTION	50%	50%		51%	49%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	6.14%	5.55%
7:00 AM	7.41%	7.21%
8:00 AM	6.65%	7.03%
9:00 AM	4.29%	4.37%
10:00 AM	4.21%	4.03%
11:00 AM	6.06%	5.78%
12:00 PM	6.23%	6.81%
1:00 PM	4.74%	4.57%
2:00 PM	5.27%	5.43%
3:00 PM	8.22%	8.01%
4:00 PM	8.14%	8.41%
5:00 PM	7.63%	7.81%

WEEKDAY AVE:	1336.5	1311.5	2648
DISTRIBUTION	50%	50%	

Total 12-hour Trips	1337	1312	2648
Adjust to 24-hour trips*	1782	1749	3531

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	139	131	270						
DISTRIBUTION	51%	49%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - ADJ. STREET	145	147	292						
DISTRIBUTION	50%	50%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	139	131	270						
DISTRIBUTION	51%	49%							
PEAK HOUR	7:15 AM	-	8:15 AM						
PM PEAK HOUR - GENERATOR	155	157	312						
DISTRIBUTION	50%	50%							
PEAK HOUR	3:30 PM	-	4:30 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street	Any hour between 7:00 AM - 9:00 AM
PM Peak Hour - Adjacent Street	Any hour between 4:00 PM - 6:00 PM
AM Peak Hour - Generator	Any hour in the AM
PM Peak Hour - Generator	Any hour in the PM
Peak Hour Generator	Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	25.0	27.0	25.0	28.9	0.0	0.0
Vehicle Fueling Positions (VFP)	11.3	12.2	11.3	13.0	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Monona Speedway (2500 Royal Ave)

Site Information

Site ID: SW-522

Municipality	Monona		WisDOT Region	SW
County	Dane		Area	Urban
Location	Freeway (Non-Tourist)		Highway	USH 12/18
ITE Land Use Code (10th Ed.)	960		No. Driveway Entrances	3
Store Size (Sq Ft)	4500		Car Wash	No
Non-Diesel Fueling (VFP)	10		Diesel Fueling (VFP)	3
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Wednesday, April 6, 2022
Days Counted	Wednesday - Thursday

Hourly Volume Summary

	Wednesday			Thursday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	32	30	62	35	37	72						
7:00 AM	54	56	110	47	53	100						
8:00 AM	37	46	83	48	51	99						
9:00 AM	38	44	82	39	47	86						
10:00 AM	46	49	95	39	41	80				0	0	0
11:00 AM	59	64	123	45	49	94				0	0	0
12:00 PM	50	63	113	41	51	92				0	0	0
1:00 PM	44	59	103	50	55	105				0	0	0
2:00 PM	48	49	97	69	65	134						
3:00 PM	63	58	121	66	73	139	0	0	0			
4:00 PM	61	65	126	61	69	130	0	0	0			
5:00 PM	52	59	111	53	55	108	0	0	0			
6:00 PM							0	0	0			
TOTAL	584	642	1226	593	646	1239	0	0	0	0	0	0
<i>DISTRIBUTION</i>	48%	52%		48%	52%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	4.27%	3.90%
7:00 AM	6.44%	6.35%
8:00 AM	5.42%	5.65%
9:00 AM	4.91%	5.30%
10:00 AM	5.42%	5.24%
11:00 AM	6.63%	6.58%
12:00 PM	5.80%	6.64%
1:00 PM	5.99%	6.64%
2:00 PM	7.46%	6.64%
3:00 PM	8.22%	7.63%
4:00 PM	7.77%	7.80%
5:00 PM	6.69%	6.64%

WEEKDAY AVE:	588.5	644	1232.5
<i>DISTRIBUTION</i>	48%	52%	

Total 12-hour Trips
Adjust to 24-hour trips*

Inbound	Outbound	Total
589	644	1233
785	859	1643

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	51	55	106						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	7:00 AM	-	8:00 AM						
PM PEAK HOUR - ADJ. STREET	61	67	128						
<i>DISTRIBUTION</i>	48%	52%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	51	61	112						
<i>DISTRIBUTION</i>	46%	54%							
PEAK HOUR	11:15 AM	-	12:15 PM						
PM PEAK HOUR - GENERATOR	68	72	140						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	3:15 PM	-	4:15 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
<i>DISTRIBUTION</i>									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	23.6	28.4	24.9	31.1	0.0	0.0
Vehicle Fueling Positions (VFP)	8.2	9.8	8.6	10.8	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: **Middleton Mobil (8613 University Green)**

Site Information

Site ID: **SW-523**

Municipality	Middleton		WisDOT Region	SW
County	Dane		Area	Urban
Location	Non-Freeway (Non-Tourist)			
Highway	USH 14			
ITE Land Use Code (10th Ed.)	960			
Store Size (Sq Ft)	4400			
No. Driveway Entrances	2	Car Wash	Yes	
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	3	
No. of Gas Stations within 1/2 mile	1			



Count Information

1st Day of Count	Tuesday, April 19, 2022
Days Counted	Tuesday - Wednesday

Hourly Volume Summary

	Tuesday			Wednesday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	25	22	47	28	27	55						
7:00 AM	42	43	85	46	46	92						
8:00 AM	45	51	96	51	53	104						
9:00 AM	45	48	93	52	53	105						
10:00 AM	50	52	102	58	59	117				0	0	0
11:00 AM	45	55	100	53	47	100				0	0	0
12:00 PM	55	64	119	60	67	127				0	0	0
1:00 PM	60	61	121	56	55	111				0	0	0
2:00 PM	60	62	122	45	47	92						
3:00 PM	82	88	170	45	51	96	0	0	0			
4:00 PM	74	80	154	75	70	145	0	0	0			
5:00 PM	76	86	162	67	74	141	0	0	0			
6:00 PM							0	0	0			
TOTAL	659	712	1371	636	649	1285	0	0	0	0	0	0
<i>DISTRIBUTION</i>	48%	52%		49%	51%							

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.07%	2.70%
7:00 AM	5.10%	4.90%
8:00 AM	5.56%	5.73%
9:00 AM	5.62%	5.57%
10:00 AM	6.25%	6.12%
11:00 AM	5.68%	5.62%
12:00 PM	6.66%	7.22%
1:00 PM	6.72%	6.39%
2:00 PM	6.08%	6.01%
3:00 PM	7.36%	7.66%
4:00 PM	8.63%	8.27%
5:00 PM	8.28%	8.82%

WEEKDAY AVE:	647.5	680.5	1328
<i>DISTRIBUTION</i>	49%	51%	

Total 12-hour Trips*	648	681	1328
Adjust to 24-hour trips*	863	907	1771

**(75% of daily traffic assumed in 12-hour period)*

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	56	58	114						
<i>DISTRIBUTION</i>	49%	51%							
PEAK HOUR	7:45 AM	-	8:45 AM						
PM PEAK HOUR - ADJ. STREET	82	82	164						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	4:30 PM	-	5:30 PM						
AM PEAK HOUR - GENERATOR	55	62	117						
<i>DISTRIBUTION</i>	47%	53%							
PEAK HOUR	10:30 AM	-	11:30 AM						
PM PEAK HOUR - GENERATOR	82	82	164						
<i>DISTRIBUTION</i>	50%	50%							
PEAK HOUR	4:30 PM	-	5:30 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
<i>DISTRIBUTION</i>									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	25.9	37.3	26.6	37.3	0.0	0.0
Vehicle Fueling Positions (VFP)	7.6	10.9	7.8	10.9	0.0	0.0

Convenience Store/Gas Station Trip Generation Study

WisDOT Bureau of Traffic Operations

Site Summary

Site Name: Kellys Market (33 Junction Ct)

Site Information

Site ID: SW-524

Municipality	Madison		
County	Dane	WisDOT Region	SW
Location	Freeway (Non-Tourist)	Area	Urban
Highway	USH 12/14		
ITE Land Use Code (10th Ed.)	960		
Store Size (Sq Ft)	4500		
No. Driveway Entrances	2	Car Wash	Yes
Non-Diesel Fueling (VFP)	12	Diesel Fueling (VFP)	0
No. of Gas Stations within 1/2 mile	0		



Count Information

1st Day of Count	Tuesday, April 19, 2022
Days Counted	Tuesday - Wednesday

Hourly Volume Summary

	Tuesday			Wednesday			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
6:00 AM	33	33	66	0	0	0						
7:00 AM	53	49	102	0	0	0						
8:00 AM	45	50	95	0	0	0						
9:00 AM	36	38	74	0	0	0						
10:00 AM	36	35	71	0	0	0				0	0	0
11:00 AM	56	55	111	0	0	0				0	0	0
12:00 PM	63	60	123	0	0	0				0	0	0
1:00 PM	57	59	116	0	0	0				0	0	0
2:00 PM	63	68	131	0	0	0						
3:00 PM	82	80	162	0	0	0	0	0	0			
4:00 PM	80	78	158	0	0	0	0	0	0			
5:00 PM	63	67	130	0	0	0	0	0	0			
6:00 PM							0	0	0			
TOTAL	667	672	1339	0	0	0	0	0	0	0	0	0
DISTRIBUTION	50%	50%										

Average Weekday Hourly Distributions

Hour	% IN	% OUT
6:00 AM	3.71%	3.68%
7:00 AM	5.96%	5.47%
8:00 AM	5.06%	5.58%
9:00 AM	4.05%	4.24%
10:00 AM	4.05%	3.91%
11:00 AM	6.30%	6.14%
12:00 PM	7.08%	6.70%
1:00 PM	6.41%	6.58%
2:00 PM	7.08%	7.59%
3:00 PM	9.22%	8.93%
4:00 PM	9.00%	8.71%
5:00 PM	7.08%	7.48%

WEEKDAY AVE:	333.5	336	669.5
DISTRIBUTION	50%	50%	

Total 12-hour Trips	667	672	1339
Adjust to 24-hour trips*	889	896	1785

* (75% of daily traffic assumed in 12-hour period)

Peak Hour Summary

	Weekday (Average)			Friday			Saturday		
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
AM PEAK HOUR - ADJ. STREET	30	30	60						
DISTRIBUTION	50%	50%							
PEAK HOUR	7:30 AM	-	8:30 AM						
PM PEAK HOUR - ADJ. STREET	40	39	79						
DISTRIBUTION	51%	49%							
PEAK HOUR	4:00 PM	-	5:00 PM						
AM PEAK HOUR - GENERATOR	31	33	64						
DISTRIBUTION	48%	52%							
PEAK HOUR	11:30 AM	-	12:30 PM						
PM PEAK HOUR - GENERATOR	41	42	83						
DISTRIBUTION	49%	51%							
PEAK HOUR	3:15 PM	-	4:15 PM						
PEAK HOUR GENERATOR				0	0	0	0	0	0
DISTRIBUTION									
PEAK HOUR									

Note: Peak Hour is calculated from the four consecutive 15-minute time segments with the highest measured volume of traffic and may not align with the top of the hour (e.g., 8:15 instead of 8:00) as shown in the hourly volume summary.

AM Peak Hour - Adjacent Street Any hour between 7:00 AM - 9:00 AM
 PM Peak Hour - Adjacent Street Any hour between 4:00 PM - 6:00 PM
 AM Peak Hour - Generator Any hour in the AM
 PM Peak Hour - Generator Any hour in the PM
 Peak Hour Generator Any hour in the time period collected (applies to Friday and Saturday only)

Trip Rates

Independent Variable	PEAK ADJ. TRAFFIC		PEAK HOUR GENERATOR			
	Weekday		Weekday		Friday	Saturday
	AM Rate	PM Rate	AM Rate	PM Rate	Rate	Rate
Gross Floor Area (GFA)	13.3	17.6	14.2	18.4	0.0	0.0
Vehicle Fueling Positions (VFP)	5.0	6.6	5.3	6.9	0.0	0.0

Appendix B
Initial Regression Summaries

AM Regression Models

Variable: VFP

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6802
R Square	0.4626
Adjusted R Square	0.4562
Standard Error	81.4544
Observations	86

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	479761.564	479761.564	72.310	5.9E-13
Residual	84	557324.390	6634.814		
Total	85	1037085.953			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-29.963	26.099	-1.148	0.254	-81.864	21.937	-81.864	21.937
VFP	14.052	1.653	8.504	0.000	10.766	17.338	10.766	17.338

Variables: VFP + GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.7035
R Square	0.4949
Adjusted R Square	0.4827
Standard Error	79.4471
Observations	86

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	513202.503	256601.252	40.654	4.91957E-13
Residual	83	523883.450	6311.849		
Total	85	1037085.953			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-49.207	26.794	-1.837	0.070	-102.499	4.084	-102.499	4.084
VFP	10.802	2.143	5.041	0.000	6.539	15.064	6.539	15.064
GFA per 1000sf	13.039	5.665	2.302	0.024	1.772	24.306	1.772	24.306

AM Regression Models

Variables: VFP + GFA + Carwash

SUMMARY OUTPUT

<i>Regression Statistics</i>								
Multiple R	0.7035							
R Square	0.4949							
Adjusted R Square	0.4765							
Standard Error	79.9229							
Observations	86							

ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	513296.439	171098.813	26.786	3.56675E-12			
Residual	82	523789.514	6387.677					
Total	85	1037085.953						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-47.873	29.115	-1.644	0.104	-105.791	10.046	-105.791	10.046
VFP	10.703	2.303	4.647	0.000	6.121	15.285	6.121	15.285
GFA per 1000sf	12.869	5.868	2.193	0.031	1.195	24.543	1.195	24.543
Carwash	2.711	22.360	0.121	0.904	-41.769	47.192	-41.769	47.192

Variables: VFP + Carwash

SUMMARY OUTPUT

<i>Regression Statistics</i>								
Multiple R	0.6821							
R Square	0.4653							
Adjusted R Square	0.4524							
Standard Error	81.7362							
Observations	86							

ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	2	482578.565	241289.282	36.117	5.19807E-12			
Residual	83	554507.389	6680.812					
Total	85	1037085.953						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-24.199	27.653	-0.875	0.384	-79.199	30.801	-79.199	30.801
VFP	13.304	2.019	6.588	0.000	9.287	17.320	9.287	17.320
Carwash	14.419	22.206	0.649	0.518	-29.747	58.585	-29.747	58.585

AM Regression Models

Variable: GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.5833
R Square	0.3402
Adjusted R Square	0.3324
Standard Error	90.2543
Observations	86

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	352835.042	352835.042	43.315	3.78573E-09
Residual	84	684250.911	8145.844		
Total	85	1037085.953			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	13.900	26.911	0.517	0.607	-39.616	67.415	-39.616	67.415
GFA per 1000sf	31.855	4.840	6.581	0.000	22.230	41.481	22.230	41.481

Variables: GFA + Carwash

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6016
R Square	0.3619
Adjusted R Square	0.3466
Standard Error	89.2892
Observations	86

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	375363.285	187681.642	23.541	7.97521E-09
Residual	83	661722.669	7972.562		
Total	85	1037085.953			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	24.916	27.418	0.909	0.366	-29.617	79.449	-29.617	79.449
GFA per 1000sf	26.909	5.620	4.788	0.000	15.730	38.087	15.730	38.087
Carwash	39.301	23.380	1.681	0.097	-7.200	85.803	-7.200	85.803

Variables: VFP + GFA Classifications

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.7518
R Square	0.5652
Adjusted R Square	0.5547
Standard Error	73.7068
Observations	86

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	586171.887	293085.944	53.948	9.74047E-16
Residual	83	450914.066	5432.700		
Total	85	1037085.953			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-69.240	25.229	-2.744	0.007	-119.419	-19.061	-119.419	-19.061
VFP	8.568	1.942	4.412	0.000	4.705	12.430	4.705	12.430
GFA Categories	59.386	13.418	4.426	0.000	32.698	86.075	32.698	86.075

PM Regression Models

Variable: VFP

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6448
R Square	0.4157
Adjusted R Square	0.4088
Standard Error	80.8144
Observations	86

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	390343.151	390343.151	59.768	2.09015E-11
Residual	84	548601.082	6530.965		
Total	85	938944.233			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	12.283	25.894	0.474	0.636	-39.210	63.776	-39.210	63.776
VFP	12.675	1.640	7.731	0.000	9.415	15.936	9.415	15.936

Variables: VFP + GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6753
R Square	0.4561
Adjusted R Square	0.4430
Standard Error	78.4434
Observations	86

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	428214.891	214107.446	34.795	1.06015E-11
Residual	83	510729.341	6153.366		
Total	85	938944.233			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-8.196	26.455	-0.310	0.757	-60.814	44.422	-60.814	44.422
VFP	9.216	2.116	4.356	0.000	5.008	13.424	5.008	13.424
GFA per 1000sf	13.876	5.593	2.481	0.015	2.751	25.000	2.751	25.000

PM Regression Models

Variables: VFP + GFA + Carwash

SUMMARY OUTPUT

<i>Regression Statistics</i>								
Multiple R		0.6773						
R Square		0.4587						
Adjusted R Square		0.4389						
Standard Error		78.7254						
Observations		86						

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	430733.904	143577.968	23.166	5.87626E-11
Residual	82	508210.328	6197.687		
Total	85	938944.233			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-1.285	28.678	-0.045	0.964	-58.335	55.766	-58.335	55.766
VFP	8.707	2.269	3.838	0.000	4.193	13.220	4.193	13.220
GFA per 1000sf	12.996	5.780	2.248	0.027	1.497	24.495	1.497	24.495
Carwash	14.041	22.025	0.638	0.526	-29.773	57.855	-29.773	57.855

Variables: VFP + Carwash

SUMMARY OUTPUT

<i>Regression Statistics</i>								
Multiple R		0.6522						
R Square		0.4254						
Adjusted R Square		0.4115						
Standard Error		80.6254						
Observations		86						

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	399407.045	199703.523	30.722	1.03356E-10
Residual	83	539537.187	6500.448		
Total	85	938944.233			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	22.623	27.277	0.829	0.409	-31.630	76.875	-31.630	76.875
VFP	11.333	1.992	5.689	0.000	7.371	15.295	7.371	15.295
Carwash	25.865	21.904	1.181	0.241	-17.701	69.430	-17.701	69.430

PM Regression Models

Variable: GFA

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.5760
R Square	0.3317
Adjusted R Square	0.3238
Standard Error	86.4285
Observations	86

ANOVA

	df	SS	MS	F	Significance F
Regression	1	311474.433	311474.433	41.697	6.55382E-09
Residual	84	627469.800	7469.879		
Total	85	938944.233			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	45.647	25.770	1.771	0.080	-5.600	96.894	-5.600	96.894
GFA per 1000sf	29.930	4.635	6.457	0.000	20.713	39.147	20.713	39.147

Variables: GFA + Carwash

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.6013
R Square	0.3615
Adjusted R Square	0.3462
Standard Error	84.9863
Observations	86

ANOVA

	df	SS	MS	F	Significance F
Regression	2	339462.374	169731.187	23.500	8.18756E-09
Residual	83	599481.859	7222.673		
Total	85	938944.233			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	57.926	26.097	2.220	0.029	6.021	109.831	6.021	109.831
GFA per 1000sf	24.417	5.349	4.564	0.000	13.777	35.057	13.777	35.057
Carwash	43.806	22.253	1.969	0.052	-0.455	88.066	-0.455	88.066

Variables: VFP + GFA Classifications

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.7315
R Square	0.5350
Adjusted R Square	0.5238
Standard Error	72.5254
Observations	86

ANOVA

	df	SS	MS	F	Significance F
Regression	2	502369.368	251184.684	47.754	1.5772E-14
Residual	83	436574.864	5259.938		
Total	85	938944.233			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-28.017	24.825	-1.129	0.262	-77.392	21.358	-77.392	21.358
VFP	7.048	1.911	3.688	0.000	3.247	10.849	3.247	10.849
GFA Classifications	60.933	13.203	4.615	0.000	34.672	87.194	34.672	87.194

Friday Regression Models

Variable: VFP

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6021
R Square	0.3625
Adjusted R Square	0.3526
Standard Error	97.3348
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	344848.043	344848.043	36.399	8.89132E-08
Residual	64	606340.397	9474.069		
Total	65	951188.439			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	17.034	37.717	0.452	0.653	-58.315	92.383	-58.315	92.383
VFP	14.681	2.433	6.033	0.000	9.820	19.543	9.820	19.543

Variables: VFP + GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6353
R Square	0.4036
Adjusted R Square	0.3847
Standard Error	94.8892
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	383938.377	191969.189	21.321	8.48207E-08
Residual	63	567250.062	9003.969		
Total	65	951188.439			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-8.832	38.809	-0.228	0.821	-86.385	68.721	-86.385	68.721
VFP	10.712	3.042	3.521	0.001	4.632	16.792	4.632	16.792
GFA per 1000sf	16.312	7.829	2.084	0.041	0.668	31.957	0.668	31.957

Friday Regression Models

Variables: VFP + GFA + Carwash

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6354
R Square	0.4037
Adjusted R Square	0.3748
Standard Error	95.6488
Observations	66

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	383969.974	127989.991	13.990	4.52951E-07
Residual	62	567218.466	9148.685		
Total	65	951188.439			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-9.809	42.507	-0.231	0.818	-94.780	75.162	-94.780	75.162
VFP	10.777	3.263	3.303	0.002	4.254	17.300	4.254	17.300
GFA per 1000sf	16.432	8.150	2.016	0.048	0.140	32.723	0.140	32.723
Carwash	-1.810	30.792	-0.059	0.953	-63.362	59.743	-63.362	59.743

Variables: VFP + Carwash

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6038
R Square	0.3646
Adjusted R Square	0.3444
Standard Error	97.9479
Observations	66

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	346779.972	173389.986	18.073	6.25915E-07
Residual	63	604408.467	9593.785		
Total	65	951188.439			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	22.997	40.214	0.572	0.569	-57.364	103.358	-57.364	103.358
VFP	13.965	2.923	4.777	0.000	8.123	19.806	8.123	19.806
Carwash	13.701	30.532	0.449	0.655	-47.312	74.715	-47.312	74.715

Friday Regression Models

Variable: GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.5351
R Square	0.2863
Adjusted R Square	0.2752
Standard Error	102.9913
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	272327.165	272327.165	25.674	3.682E-06
Residual	64	678861.274	10607.207		
Total	65	951188.439			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	59.514	36.474	1.632	0.108	-13.351	132.379	-13.351	132.379
GFA per 1000sf	33.571	6.625	5.067	0.000	20.335	46.807	20.335	46.807

Variables: GFA + Carwash

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.5466
R Square	0.2988
Adjusted R Square	0.2765
Standard Error	102.8957
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	284174.518	142087.259	13.420	1.39589E-05
Residual	63	667013.922	10587.523		
Total	65	951188.439			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	69.693	37.689	1.849	0.069	-5.622	145.009	-5.622	145.009
GFA per 1000sf	29.472	7.670	3.843	0.000	14.145	44.799	14.145	44.799
Carwash	32.932	31.132	1.058	0.294	-29.280	95.145	-29.280	95.145

Variables: VFP + GFA Classifications

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.7096
R Square	0.5035
Adjusted R Square	0.4877
Standard Error	86.5816
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	478916.851	239458.425	31.943	2.64025E-10
Residual	63	472271.588	7496.374		
Total	65	951188.439			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-29.056	35.276	-0.824	0.413	-99.550	41.438	-99.550	41.438
VFP	7.711	2.721	2.834	0.006	2.274	13.148	2.274	13.148
GFA Classifications	73.709	17.429	4.229	0.000	38.879	108.539	38.879	108.539

Saturday Regression Models

Variable: VFP

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.5341
R Square	0.2853
Adjusted R Square	0.2741
Standard Error	110.7503
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	313377.732	313377.732	25.549	3.85551E-06
Residual	64	785000.086	12265.626		
Total	65	1098377.818			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	28.493	42.916	0.664	0.509	-57.241	114.228	-57.241	114.228
VFP	13.995	2.769	5.055	0.000	8.464	19.527	8.464	19.527

Variables: VFP + GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.5765
R Square	0.3324
Adjusted R Square	0.3112
Standard Error	107.8895
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	365049.229	182524.614	15.681	2.97321E-06
Residual	63	733328.589	11640.136		
Total	65	1098377.818			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-1.245	44.126	-0.028	0.978	-89.423	86.933	-89.423	86.933
VFP	9.432	3.459	2.726	0.008	2.519	16.345	2.519	16.345
GFA per 1000sf	18.755	8.901	2.107	0.039	0.966	36.543	0.966	36.543

Saturday Regression Models

Variables: VFP + GFA + Carwash

SUMMARY OUTPUT

Regression Statistics

Multiple R	0.5767
R Square	0.3326
Adjusted R Square	0.3003
Standard Error	108.7346
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	365338.912	121779.637	10.300	1.35824E-05
Residual	62	733038.906	11823.208		
Total	65	1098377.818			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.715	48.323	0.035	0.972	-94.881	98.311	-94.881	98.311
VFP	9.233	3.710	2.489	0.016	1.818	16.649	1.818	16.649
GFA per 1000sf	18.392	9.265	1.985	0.052	-0.128	36.913	-0.128	36.913
Carwash	5.479	35.005	0.157	0.876	-64.494	75.453	-64.494	75.453

Variables: VFP + Carwash

SUMMARY OUTPUT

Regression Statistics

Multiple R	0.5387
R Square	0.2902
Adjusted R Square	0.2677
Standard Error	111.2434
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	318746.5718	159373.2859	12.8785	2.04565E-05
Residual	63	779631.2464	12375.0991		
Total	65	1098377.8182			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	38.434	45.673	0.842	0.403	-52.835	129.703	-52.835	129.703
VFP	12.801	3.320	3.856	0.000	6.166	19.436	6.166	19.436
Carwash	22.840	34.677	0.659	0.513	-46.455	92.136	-46.455	92.136

Saturday Regression Models

Variable: GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.5036
R Square	0.2536
Adjusted R Square	0.2419
Standard Error	113.1824
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	278521.3981	278521.3981	21.7421	1.63317E-05
Residual	64	819856.4201	12810.2566		
Total	65	1098377.8182			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	58.933	40.083	1.470	0.146	-21.142	139.009	-21.142	139.009
GFA per 1000sf	33.950	7.281	4.663	0.000	19.405	48.496	19.405	48.496

Variables: GFA + Carwash

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.5157
R Square	0.2659
Adjusted R Square	0.2426
Standard Error	113.1292
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	292090.1569	146045.0784	11.4114	5.89868E-05
Residual	63	806287.6613	12798.2168		
Total	65	1098377.8182			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	69.827	41.438	1.685	0.097	-12.980	152.633	-12.980	152.633
GFA per 1000sf	29.564	8.433	3.506	0.001	12.713	46.416	12.713	46.416
Carwash	35.244	34.228	1.030	0.307	-33.156	103.644	-33.156	103.644

Variables: VFP + GFA Classifications

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6455
R Square	0.4167
Adjusted R Square	0.3982
Standard Error	100.8423
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	457719.947	228859.974	22.505	4.21739E-08
Residual	63	640657.871	10169.173		
Total	65	1098377.818			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-19.330	41.086	-0.470	0.640	-101.434	62.775	-101.434	62.775
VFP	6.763	3.169	2.134	0.037	0.430	13.095	0.430	13.095
GFA Classifications	76.481	20.300	3.768	0.000	35.915	117.048	35.915	117.048

Appendix C
Initial Regression Model Trip Generation Comparison

AM Trips

Equation/Rate:		14.05*VFP-29.96		10.80*VFP+13.03*GFA-49.21		8.57*VFP+59.39*GFA _{class} -69.24	
Site	Actual Trips	VFP	% Diff	VFP + GFA	% Diff	VFP + GFA _{class}	% Diff
NC-301	68	180.79	166%	184.46	171%	178.09	162%
NC-302	250	194.84	-22%	201.77	-19%	246.05	-2%
NC-303	97	236.99	144%	271.96	180%	271.76	180%
NC-304	316	194.84	-38%	221.32	-30%	246.05	-22%
NC-305	30	110.54	268%	92.67	209%	75.85	153%
NC-306	214	279.14	-30%	253.54	18%	238.08	11%
NC-307	30	166.74	456%	151.50	405%	110.13	267%
NC-308	311	194.84	-37%	221.32	-29%	246.05	-21%
NC-309	68	96.49	42%	72.75	7%	67.28	-1%
NC-310	64	138.64	117%	126.00	97%	92.99	45%
NC-311	144	110.54	-23%	117.43	-18%	135.24	-6%
NC-312	165	110.54	-33%	127.85	-23%	135.24	-18%
NC-313	284	293.19	3%	299.52	5%	306.04	8%
NC-314	179	307.24	72%	285.56	60%	255.22	43%
NE-201	318	194.84	-39%	220.01	-31%	246.05	-23%
NE-202	143	82.44	-42%	90.61	-37%	118.1	-17%
NE-203	354	222.94	-37%	236.40	-33%	263.19	-26%
NE-204	171	138.64	-19%	136.42	-20%	152.38	-11%
NE-205	200	152.69	-24%	162.86	-19%	160.95	-20%
NE-206	129	251.04	95%	233.24	81%	220.94	71%
NE-207	71	152.69	115%	128.98	82%	101.56	43%
NE-208	69	82.44	19%	69.77	1%	58.71	-15%
NE-209	44	82.44	87%	84.10	91%	58.71	33%
NE-210	89	124.59	40%	107.38	21%	84.42	-5%
NE-211	167	222.94	33%	218.16	31%	203.8	22%
NE-212	174	194.84	12%	182.23	5%	186.66	7%
NE-213	201	152.69	-24%	156.34	-22%	160.95	-20%
NE-214	61	166.74	173%	173.66	185%	169.52	178%
NE-215	78	124.59	60%	145.16	86%	143.81	84%
NE-216	212	166.74	-21%	186.69	-12%	228.91	8%
NE-217	58	110.54	91%	163.03	181%	194.63	236%
NW-401	330	236.99	-28%	279.78	-15%	271.76	-18%
NW-402	229	279.14	22%	317.39	39%	297.47	30%
NW-403	33	82.44	150%	76.28	131%	58.71	78%
NW-404	42	138.64	230%	119.48	184%	92.99	121%
NW-405	90	110.54	23%	103.09	15%	75.85	-16%
NW-406	242	236.99	-2%	208.11	-14%	212.37	-12%
NW-407	278	279.14	0%	247.03	-11%	238.08	-14%
NW-408	190	194.84	3%	188.74	-1%	186.66	-2%
NW-409	234	194.84	-17%	200.47	-14%	186.66	-20%
NW-410	217	180.79	-17%	202.70	-7%	237.48	9%
NW-411	247	279.14	13%	254.84	3%	238.08	-4%
NW-412	170	251.04	48%	260.61	53%	280.33	65%
SE-101	63	152.69	142%	154.19	145%	160.95	155%
SE-102	263	251.04	-5%	271.03	3%	280.33	7%
SE-103	163	138.64	-15%	124.69	-24%	92.99	-43%
SE-104	153	110.54	-28%	112.21	-27%	135.24	-12%
SE-105	317	138.64	-56%	165.09	-48%	211.77	-33%
SE-107	138	110.54	-20%	105.70	-23%	75.85	-45%
SE-108	331	194.84	-41%	188.74	-43%	186.66	-44%
SE-109	152	138.64	-9%	118.18	-22%	92.99	-39%
SE-110	79	138.64	75%	109.06	38%	92.99	18%
SE-111	45	138.64	208%	117.53	161%	92.99	107%
SE-112	181	138.64	-23%	118.18	-35%	92.99	-49%
SE-113	188	110.54	-41%	113.52	-40%	135.24	-28%
SE-114	149	194.84	31%	180.92	21%	186.66	25%
SE-115	343	251.04	-27%	239.76	-30%	220.94	-36%
SE-116	475	377.49	-21%	360.41	-24%	357.46	-25%
SE-117	280	307.24	10%	295.99	6%	314.61	12%
SE-119	308	194.84	-37%	227.83	-26%	246.05	-20%
SE-120	451	293.19	-35%	299.52	-34%	306.04	-32%
SE-121	424	447.74	6%	402.69	-5%	400.31	-6%
SW-501	70	194.84	178%	244.77	250%	246.05	252%
SW-502	40	82.44	106%	69.77	74%	58.71	47%
SW-503	57	82.44	45%	94.52	66%	118.1	107%
SW-504	238	236.99	0%	238.08	0%	271.76	14%
SW-505	245	293.19	20%	303.43	24%	306.04	25%
SW-506	229	82.44	-64%	89.31	-61%	118.1	-48%
SW-507	71	138.64	95%	123.39	74%	92.99	31%
SW-508	130	152.69	17%	149.83	15%	160.95	24%
SW-509	296	251.04	-15%	244.97	-17%	280.33	-5%
SW-510	362	236.99	-35%	231.56	-36%	212.37	-41%
SW-511	31	82.44	166%	69.77	125%	58.71	89%
SW-512	319	124.59	-61%	124.32	-61%	143.81	-55%
SW-513	52	82.44	59%	59.34	14%	58.71	13%
SW-514	166	82.44	-50%	67.16	-60%	58.71	-65%
SW-515	109	82.44	-24%	71.07	-35%	58.71	-46%
SW-516	31	110.54	257%	95.27	207%	75.85	145%
SW-517	42	180.79	330%	189.67	352%	178.09	324%
SW-518	265	138.64	-48%	163.78	-38%	211.77	-20%
SW-519	322	251.04	-22%	265.82	-17%	280.33	-13%
SW-520	207	194.84	-6%	197.86	-4%	186.66	-10%
SW-521	270	307.24	14%	350.71	30%	314.61	17%
SW-522	106	152.69	44%	149.83	41%	160.95	52%
SW-523	114	180.79	59%	170.12	49%	178.09	56%
SW-524	60	138.64	131%	139.03	132%	152.38	154%

PM Trips

Equation/Rate:		12.68*VFP+12.28		9.22*VFP+13.88*GFA-8.20		7.05*VFP+60.93*GFA _{class} -28.02	
Site	Actual Trips	VFP	% Diff	VFP + GFA	% Diff	VFP + GFA _{class}	% Diff
NC-301	87	202.48	133%	206.44	137%	199.59	129%
NC-302	277	215.16	-22%	222.60	-20%	267.57	-3%
NC-303	112	253.20	126%	290.51	159%	288.72	158%
NC-304	347	215.16	-38%	243.42	-30%	267.57	-23%
NC-305	40	139.08	248%	120.09	200%	103.41	159%
NC-306	288	291.24	1%	264.04	-8%	248.94	-14%
NC-307	52	189.80	265%	173.62	234%	131.61	153%
NC-308	318	215.16	-32%	243.42	-23%	267.57	-16%
NC-309	118	126.40	7%	101.15	-14%	96.36	-18%
NC-310	111	164.44	48%	151.02	36%	117.51	6%
NC-311	132	139.08	5%	146.46	11%	164.34	25%
NC-312	201	139.08	-31%	157.56	-22%	164.34	-18%
NC-313	357	303.92	-15%	310.74	-13%	316.92	-11%
NC-314	201	316.60	58%	293.58	46%	263.04	31%
NE-201	252	215.16	-15%	242.03	-4%	267.57	6%
NE-202	137	113.72	-17%	122.47	-11%	150.24	10%
NE-203	330	240.52	-27%	254.92	-23%	281.67	-15%
NE-204	201	164.44	-18%	162.12	-19%	178.44	-11%
NE-205	220	177.12	-19%	188.00	-15%	185.49	-16%
NE-206	124	265.88	114%	246.99	99%	234.84	89%
NE-207	97	177.12	83%	151.91	57%	124.56	28%
NE-208	94	113.72	21%	100.26	7%	89.31	-5%
NE-209	66	113.72	72%	115.53	75%	89.31	35%
NE-210	131	151.76	16%	133.47	2%	110.46	-16%
NE-211	195	240.52	23%	235.49	21%	220.74	13%
NE-212	209	215.16	3%	201.78	-3%	206.64	-1%
NE-213	262	177.12	-32%	181.06	-31%	185.49	-29%
NE-214	96	189.80	98%	197.22	105%	192.54	101%
NE-215	119	151.76	28%	173.72	46%	171.39	44%
NE-216	258	189.80	-26%	211.10	-18%	253.47	-2%
NE-217	89	139.08	56%	195.04	119%	225.27	153%
NW-401	332	253.20	-24%	298.84	-10%	288.72	-13%
NW-402	291	291.24	0%	332.05	14%	309.87	6%
NW-403	92	113.72	24%	107.20	17%	89.31	-3%
NW-404	88	164.44	87%	144.08	64%	117.51	34%
NW-405	129	139.08	8%	131.19	2%	103.41	-20%
NW-406	275	253.20	-8%	222.50	-19%	227.79	-17%
NW-407	263	291.24	11%	257.10	-2%	248.94	-5%
NW-408	225	215.16	-4%	208.72	-7%	206.64	-8%
NW-409	254	215.16	-15%	221.21	-13%	206.64	-19%
NW-410	294	202.48	-31%	225.87	-23%	260.52	-11%
NW-411	261	291.24	12%	265.43	2%	248.94	-5%
NW-412	214	265.88	24%	276.14	29%	295.77	38%
SE-101	88	177.12	101%	178.77	103%	185.49	111%
SE-102	261	265.88	2%	287.24	10%	295.77	13%
SE-103	179	164.44	-8%	149.63	-16%	117.51	-34%
SE-104	200	139.08	-30%	140.91	-30%	164.34	-18%
SE-105	322	164.44	-49%	192.66	-40%	239.37	-26%
SE-107	171	139.08	-19%	133.97	-22%	103.41	-40%
SE-108	299	215.16	-28%	208.72	-30%	206.64	-31%
SE-109	150	164.44	10%	142.69	-5%	117.51	-22%
SE-110	84	164.44	96%	132.98	58%	117.51	40%
SE-111	81	164.44	103%	142.00	75%	117.51	45%
SE-112	218	164.44	-25%	142.69	-35%	117.51	-46%
SE-113	296	139.08	-53%	142.30	-52%	164.34	-44%
SE-114	134	215.16	61%	200.39	50%	206.64	54%
SE-115	381	265.88	-30%	253.93	-33%	234.84	-38%
SE-116	363	380.00	5%	361.89	0%	359.22	-1%
SE-117	350	316.60	-10%	304.69	-13%	323.97	-7%
SE-119	389	215.16	-45%	250.36	-36%	267.57	-31%
SE-120	442	303.92	-31%	310.74	-30%	316.92	-28%
SE-121	427	443.40	4%	395.50	-7%	394.47	-8%
SW-501	74	215.16	191%	268.40	263%	267.57	262%
SW-502	47	113.72	142%	100.26	113%	89.31	90%
SW-503	76	113.72	50%	126.63	67%	150.24	98%
SW-504	329	253.20	-23%	254.42	-23%	288.72	-12%
SW-505	240	303.92	27%	314.90	31%	316.92	32%
SW-506	197	113.72	-42%	121.08	-39%	150.24	-24%
SW-507	116	164.44	42%	148.24	28%	117.51	1%
SW-508	100	177.12	77%	174.12	74%	185.49	85%
SW-509	271	265.88	-2%	259.48	-4%	295.77	9%
SW-510	305	253.20	-17%	247.48	-19%	227.79	-25%
SW-511	42	113.72	171%	100.26	139%	89.31	113%
SW-512	347	151.76	-56%	151.52	-56%	171.39	-51%
SW-513	85	113.72	34%	89.16	5%	89.31	5%
SW-514	218	113.72	-48%	97.48	-55%	89.31	-59%
SW-515	143	113.72	-20%	101.65	-29%	89.31	-38%
SW-516	39	139.08	257%	122.86	215%	103.41	165%
SW-517	71	202.48	185%	211.99	199%	199.59	181%
SW-518	327	164.44	-50%	191.27	-42%	239.37	-27%
SW-519	318	265.88	-16%	281.69	-11%	295.77	-7%
SW-520	186	215.16	16%	218.44	17%	206.64	11%
SW-521	292	316.60	8%	362.98	24%	323.97	11%
SW-522	128	177.12	38%	174.12	36%	185.49	45%
SW-523	164	202.48	23%	191.17	17%	199.59	22%
SW-524	79	164.44	108%	164.90	109%	178.44	126%

Friday Trips

Equation/Rate:		14.68*VFP+17.03		10.71*VFP+16.31*GFA-8.83		7.71*VFP+73.71*GFA _{class} -29.06	
Site	Actual Trips	VFP	% Diff	VFP + GFA	% Diff	VFP + GFA _{class}	% Diff
NC-302	373	251.91	-32%	260.39	-30%	315.43	-15%
NC-303	175	295.95	69%	339.82	94%	338.56	93%
NC-304	330	251.91	-24%	284.86	-14%	315.43	-4%
NC-305	61	163.83	169%	140.68	131%	121.75	100%
NC-306	347	339.99	-2%	308.34	-11%	287.98	-17%
NC-307	64	222.55	248%	203.09	217%	152.59	138%
NC-308	327	251.91	-23%	284.86	-13%	315.43	-4%
NC-310	122	193.19	58%	176.78	45%	137.17	12%
NC-311	179	163.83	-8%	171.67	-4%	195.46	9%
NC-312	220	163.83	-26%	184.71	-16%	195.46	-11%
NC-313	387	354.67	-8%	363.09	-6%	369.4	-5%
NC-314	270	369.35	37%	342.81	27%	303.4	12%
NE-201	260	251.91	-3%	283.22	9%	315.43	21%
NE-202	170	134.47	-21%	143.72	-15%	180.04	6%
NE-203	377	281.27	-25%	298.12	-21%	330.85	-12%
NE-204	235	193.19	-18%	189.82	-19%	210.88	-10%
NE-205	321	207.87	-35%	220.11	-31%	218.59	-32%
NE-206	146	310.63	113%	288.55	98%	272.56	87%
NE-207	131	207.87	59%	177.70	36%	144.88	11%
NE-208	94	134.47	43%	117.63	25%	106.33	13%
NE-209	90	134.47	49%	135.57	51%	106.33	18%
NE-210	151	178.51	18%	156.28	3%	129.46	-14%
NE-211	197	281.27	43%	275.29	40%	257.14	31%
NE-212	200	251.91	26%	235.93	18%	241.72	21%
NE-213	323	207.87	-36%	211.95	-34%	218.59	-32%
NE-214	117	222.55	90%	230.82	97%	226.3	93%
NE-215	113	178.51	58%	203.58	80%	203.17	80%
NE-216	293	222.55	-24%	247.13	-16%	300.01	2%
NE-217	91	163.83	80%	228.75	151%	269.17	196%
NW-401	497	295.95	-40%	349.61	-30%	338.56	-32%
NW-402	320	339.99	6%	388.26	21%	361.69	13%
NW-403	93	134.47	45%	125.78	35%	106.33	14%
NW-404	102	193.19	89%	168.62	65%	137.17	34%
NW-405	146	163.83	12%	153.72	5%	121.75	-17%
NW-406	331	295.95	-11%	259.90	-21%	264.85	-20%
NW-407	302	339.99	13%	300.19	-1%	287.98	-5%
NW-408	271	251.91	-7%	244.08	-10%	241.72	-11%
NW-409	304	251.91	-17%	258.76	-15%	241.72	-20%
NW-410	347	237.23	-32%	264.36	-24%	307.72	-11%
NW-411	270	339.99	26%	309.97	15%	287.98	7%
NW-412	223	310.63	39%	322.80	45%	346.27	55%
SE-101	101	207.87	106%	209.26	107%	218.59	116%
SE-102	311	310.63	0%	335.85	8%	346.27	11%
SE-104	244	163.83	-33%	165.14	-32%	195.46	-20%
SE-105	363	193.19	-47%	225.71	-38%	284.59	-22%
SE-107	163	163.83	1%	156.99	-4%	121.75	-25%
SE-108	335	251.91	-25%	244.08	-27%	241.72	-28%
SE-110	119	193.19	62%	155.57	31%	137.17	15%
SE-111	84	193.19	130%	166.17	98%	137.17	63%
SE-112	227	193.19	-15%	166.99	-26%	137.17	-40%
SE-113	337	163.83	-51%	166.77	-51%	195.46	-42%
SE-115	393	310.63	-21%	296.71	-25%	272.56	-31%
SE-116	478	442.75	-7%	422.45	-12%	415.66	-13%
SE-117	375	369.35	-2%	355.86	-5%	377.11	1%
SW-501	113	251.91	123%	314.21	178%	315.43	179%
SW-502	65	134.47	107%	117.63	81%	106.33	64%
SW-504	366	295.95	-19%	297.41	-19%	338.56	-7%
SW-506	255	134.47	-47%	142.09	-44%	180.04	-29%
SW-507	138	193.19	40%	173.51	26%	137.17	-1%
SW-509	358	310.63	-13%	303.23	-15%	346.27	-3%
SW-510	338	295.95	-12%	289.26	-14%	264.85	-22%
SW-511	52	134.47	159%	117.63	126%	106.33	104%
SW-512	515	178.51	-65%	177.48	-66%	203.17	-61%
SW-515	128	134.47	5%	119.26	-7%	106.33	-17%
SW-516	61	163.83	169%	143.94	136%	121.75	100%
SW-517	76	237.23	212%	248.05	226%	234.01	208%

Saturday Trips

Equation/Rate:		14.00*VFP+28.49		9.43*VFP+18.76* GFA-1.25		6.76*VFP+76.48* GFA _{class} -19.33	
Site	Actual Trips	VFP	% Diff	VFP + GFA	% Diff	VFP + GFA _{class}	% Diff
NC-302	426	252.49	-41%	262.19	-38%	318.27	-25%
NC-303	153	294.49	92%	344.88	125%	338.55	121%
NC-304	482	252.49	-48%	290.33	-40%	318.27	-34%
NC-305	69	168.49	144%	141.83	106%	124.75	81%
NC-306	420	336.49	-20%	300.01	-29%	282.35	-33%
NC-307	59	224.49	280%	202.06	242%	151.79	157%
NC-308	375	252.49	-33%	290.33	-23%	318.27	-15%
NC-310	94	196.49	109%	177.57	89%	138.27	47%
NC-311	127	168.49	33%	177.47	40%	201.23	58%
NC-312	192	168.49	-12%	192.48	0%	201.23	5%
NC-313	474	350.49	-26%	360.09	-24%	365.59	-23%
NC-314	319	364.49	14%	333.88	5%	295.87	-7%
NE-201	157	252.49	61%	288.45	84%	318.27	103%
NE-202	153	140.49	-8%	151.11	-1%	187.71	23%
NE-203	295	280.49	-5%	299.81	2%	331.79	12%
NE-204	303	196.49	-35%	192.58	-36%	214.75	-29%
NE-205	249	210.49	-15%	224.52	-10%	221.51	-11%
NE-206	108	308.49	186%	283.03	162%	268.83	149%
NE-207	119	210.49	77%	175.74	48%	145.03	22%
NE-208	86	140.49	63%	121.09	41%	111.23	29%
NE-209	144	140.49	-2%	141.73	-2%	111.23	-23%
NE-210	191	182.49	-4%	156.88	-18%	131.51	-31%
NE-211	183	280.49	53%	273.55	49%	255.31	40%
NE-212	285	252.49	-11%	234.05	-18%	241.79	-15%
NE-213	291	210.49	-28%	215.14	-26%	221.51	-24%
NE-214	126	224.49	78%	233.95	86%	228.27	81%
NE-215	102	182.49	79%	211.29	107%	207.99	104%
NE-216	351	224.49	-36%	252.71	-28%	304.75	-13%
NE-217	134	168.49	26%	243.13	81%	277.71	107%
NW-401	463	294.49	-36%	356.14	-23%	338.55	-27%
NW-402	349	336.49	-4%	391.93	12%	358.83	3%
NW-403	125	140.49	12%	130.47	4%	111.23	-11%
NW-404	97	196.49	103%	168.19	73%	138.27	43%
NW-405	123	168.49	37%	156.83	28%	124.75	1%
NW-406	388	294.49	-24%	252.96	-35%	262.07	-32%
NW-407	225	336.49	50%	290.63	29%	282.35	25%
NW-408	317	252.49	-20%	243.43	-23%	241.79	-24%
NW-409	408	252.49	-38%	260.31	-36%	241.79	-41%
NW-410	346	238.49	-31%	269.64	-22%	311.51	-10%
NW-411	251	336.49	34%	301.89	20%	282.35	12%
NW-412	259	308.49	19%	322.42	24%	345.31	33%
SE-101	93	210.49	126%	212.04	128%	221.51	138%
SE-102	335	308.49	-8%	337.43	1%	345.31	3%
SE-104	246	168.49	-32%	169.97	-31%	201.23	-18%
SE-105	367	196.49	-46%	233.85	-36%	291.23	-21%
SE-107	141	168.49	19%	160.59	14%	124.75	-12%
SE-108	333	252.49	-24%	243.43	-27%	241.79	-27%
SE-110	83	196.49	137%	153.18	85%	138.27	67%
SE-111	77	196.49	155%	165.38	115%	138.27	80%
SE-112	221	196.49	-11%	166.31	-25%	138.27	-37%
SE-113	286	168.49	-41%	171.84	-40%	201.23	-30%
SE-115	418	308.49	-26%	292.41	-30%	268.83	-36%
SE-116	308	434.49	41%	411.04	33%	406.15	32%
SE-117	322	364.49	13%	348.89	8%	372.35	16%
SW-501	89	252.49	184%	324.10	264%	318.27	258%
SW-502	65	140.49	116%	121.09	86%	111.23	71%
SW-504	351	294.49	-16%	296.11	-16%	338.55	-4%
SW-506	218	140.49	-36%	149.23	-32%	187.71	-14%
SW-507	154	196.49	28%	173.82	13%	138.27	-10%
SW-509	294	308.49	5%	299.91	2%	345.31	17%
SW-510	397	294.49	-26%	286.73	-28%	262.07	-34%
SW-511	68	140.49	107%	121.09	78%	111.23	64%
SW-512	535	182.49	-66%	181.27	-66%	207.99	-61%
SW-515	123	140.49	14%	122.97	0%	111.23	-10%
SW-516	52	168.49	224%	145.58	180%	124.75	140%
SW-517	62	238.49	285%	250.88	305%	235.03	279%

Appendix D
Regression Summaries, Diesel versus Non-Diesel

Build Model - AM Regression Model

Trial 1

Variable: Diesel-VFP

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6184
R Square	0.3825
Adjusted R Square	0.3681
Standard Error	13.4469
Observations	45

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	4815.565714	4815.565714	26.6319082	5.97235E-06
Residual	43	7775.234286	180.819402		
Total	44	12590.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-6.954	5.306	-1.311	0.197	-17.655	3.747	-17.655	3.747
DieselFueling Positions	7.869	1.525	5.161	0.000	4.794	10.943	4.794	10.943

Trial 2

Variables: Diesel-VFP + GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6477
R Square	0.4195
Adjusted R Square	0.3919
Standard Error	13.1916
Observations	45

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	5282.071191	2641.035596	15.1768519	1.09537E-05
Residual	42	7308.728809	174.0173526		
Total	44	12590.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-14.590	6.989	-2.088	0.043	-28.694	-0.486	-28.694	-0.486
DieselFueling Positions	7.133	1.562	4.567	0.000	3.981	10.285	3.981	10.285
GFA per 1000sf	1.773	1.083	1.637	0.109	-0.412	3.959	-0.412	3.959

Build Model - AM Regression Model

Trial 3

Variables: Diesel-VFP + Metro Area Populations

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6316
R Square	0.3989
Adjusted R Square	0.3703
Standard Error	13.4235
Observations	45

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	5022.754421	2511.377211	13.9372632	2.27792E-05
Residual	42	7568.045579	180.1915614		
Total	44	12590.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-6.695	5.303	-1.263	0.214	-17.396	4.006	-17.396	4.006
DieselFueling Positions	6.977	1.734	4.023	0.000	3.477	10.477	3.477	10.477
Metro Area Population	1.384	1.291	1.072	0.290	-1.221	3.989	-1.221	3.989

Trial 4

Variable: GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.3623
R Square	0.1312
Adjusted R Square	0.1110
Standard Error	15.9493
Observations	45

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	1652.467982	1652.467982	6.49606568	0.014463315
Residual	43	10938.33202	254.3798144		
Total	44	12590.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.364	7.465	0.049	0.961	-14.692	15.419	-14.692	15.419
GFA per 1000sf	3.196	1.254	2.549	0.014	0.667	5.725	0.667	5.725

Build Model - AM Regression Model

Trial 5

Variables: GFA + Metro Area Populations

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.5174
R Square	0.2677
Adjusted R Square	0.2328
Standard Error	14.8168
Observations	45

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	3370.160467	1685.080234	7.67553807	0.001441658
Residual	42	9220.639533	219.5390365		
Total	44	12590.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-4.128	7.119	-0.580	0.565	-18.494	10.238	-18.494	10.238
GFA per 1000sf	2.814	1.173	2.399	0.021	0.446	5.181	0.446	5.181
Metro Area Population	3.521	1.259	2.797	0.008	0.981	6.062	0.981	6.062

Build Model - PM Regression Model

Trial 1

Variable: Diesel-VFP

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6589
R Square	0.4341
Adjusted R Square	0.4192
Standard Error	6.9841
Observations	40

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	1422.066506	1422.066506	29.1543301	3.7902E-06
Residual	38	1853.533494	48.7771972		
Total	39	3275.6			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-4.598	2.938	-1.565	0.126	-10.545	1.349	-10.545	1.349
DieselFueling Positions	4.420	0.819	5.399	0.000	2.763	6.078	2.763	6.078

Trial 2

Variables: Diesel-VFP + GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6760
R Square	0.4570
Adjusted R Square	0.4276
Standard Error	6.9336
Observations	40

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	1496.815941	748.4079707	15.5674292	1.24279E-05
Residual	37	1778.784059	48.07524483		
Total	39	3275.6			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-8.365	4.199	-1.992	0.054	-16.872	0.143	-16.872	0.143
DieselFueling Positions	4.201	0.832	5.051	0.000	2.516	5.886	2.516	5.886
GFA per 1000sf	0.762	0.611	1.247	0.220	-0.476	2.001	-0.476	2.001

Build Model - PM Regression Model

Trial 3

Variables: Diesel-VFP + Metro Area Populations

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6603
R Square	0.4359
Adjusted R Square	0.4055
Standard Error	7.0665
Observations	40

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	1427.983509	713.9917547	14.2982567	2.50864E-05
Residual	37	1847.616491	49.93558083		
Total	39	3275.6			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-4.521	2.981	-1.517	0.138	-10.560	1.519	-10.560	1.519
DieselFueling Positions	4.252	0.962	4.419	0.000	2.302	6.202	2.302	6.202
Metro Area Population	0.258	0.748	0.344	0.733	-1.258	1.773	-1.258	1.773

Trial 4

Variable: GFA

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.2873
R Square	0.0825
Adjusted R Square	0.0584
Standard Error	8.8930
Observations	40

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	270.3619437	270.3619437	3.41861565	0.072256274
Residual	38	3005.238056	79.08521201		
Total	39	3275.6			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.741	4.735	0.368	0.715	-7.844	11.326	-7.844	11.326
GFA per 1000sf	1.417	0.766	1.849	0.072	-0.134	2.968	-0.134	2.968

Build Model - PM Regression Model

Trial 5

Variables: GFA + Metro Area Populations

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.4458
R Square	0.1987
Adjusted R Square	0.1554
Standard Error	8.4225
Observations	40

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	650.8839287	325.4419643	4.58767819	0.016601302
Residual	37	2624.716071	70.9382722		
Total	39	3275.6			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-0.458	4.584	-0.100	0.921	-9.745	8.830	-9.745	8.830
GFA per 1000sf	1.220	0.731	1.670	0.103	-0.260	2.701	-0.260	2.701
Metro Area Population	1.790	0.773	2.316	0.026	0.224	3.356	0.224	3.356

Appendix E
Final Regression Summaries

AM Regression Models with Metro Variables

VFP + GFA Classifications (See Appendix B)

GFA Class. + Metro 100,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.7051
R Square	0.4972
Adjusted R Square	0.4851
Standard Error	79.2647
Observations	86

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	515605.691	257802.845	41.032	4.06499E-13
Residual	83	521480.263	6282.895		
Total	85	1037085.953			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-30.526	24.684	-1.237	0.220	-79.621	18.569	-79.621	18.569
GFA Class.	96.252	11.117	8.658	0.000	74.141	118.364	74.141	118.364
Metro Area +/- 100k	43.595	18.428	2.366	0.020	6.942	80.248	6.942	80.248

GFA Class. + Metro 300,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.7052
R Square	0.4974
Adjusted R Square	0.4852
Standard Error	79.2497
Observations	86

88.2
8 11.025
5.92
0.536961451

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	515803.4	257901.7	41.064	4.00151E-13
Residual	83	521282.5	6280.5		
Total	85	1037086.0			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-25.385	24.331	-1.043	0.300	-73.777	23.008	-73.777	23.008
GFA Class.	95.680	11.126	8.600	0.000	73.551	117.810	73.551	117.810
Metro Area +/- 300k	52.189	21.995	2.373	0.020	8.442	95.936	8.442	95.936

AM Regression Models with Metro Variables

VFP + GFA Class. + Metro 300,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.7585
R Square	0.5753
Adjusted R Square	0.5598
Standard Error	73.2878
Observations	86

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	596655.2	198885.1	37.029	3.14116E-15
Residual	82	440430.8	5371.1		
Total	85	1037086.0			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-68.471	25.092	-2.729	0.008	-118.386	-18.556	-118.386	-18.556
GFA Class.	61.959	13.469	4.600	0.000	35.166	88.753	35.166	88.753
Metro Area +/- 300k	29.562	21.160	1.397	0.166	-12.532	71.655	-12.532	71.655
VFP	7.794	2.009	3.880	0.000	3.798	11.790	3.798	11.790

VFP + GFA Class. (< Metro 300,000)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.7016
R Square	0.4922
Adjusted R Square	0.4770
Standard Error	72.2870
Observations	70

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	339323.7	169661.9	32.469	1.38417E-10
Residual	67	350102.0	5225.4		
Total	69	689425.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-44.79	28.511	-1.571	0.121	-101.694	12.121	-101.694	12.121
GFA Class.	63.51	14.250	4.456	0.000	35.062	91.950	35.062	91.950
VFP	5.91	2.273	2.601	0.011	1.375	10.449	1.375	10.449

AM Regression Models with Metro Variables

VFP + GFA Class. (≥ Metro 300,000)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.8670
R Square	0.7516
Adjusted R Square	0.7134
Standard Error	75.2431
Observations	16

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	222727.9	111363.9	19.670	0.000116998
Residual	13	73599.9	5661.5		
Total	15	296327.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-108.66	57.515	-1.889	0.081	-232.913	15.592	-232.913	15.592
GFA Class.	54.28	38.244	1.419	0.179	-28.338	136.905	-28.338	136.905
VFP	12.68	4.614	2.747	0.017	2.708	22.646	2.708	22.646

PM Regression Models with Metro Variables

VFP + GFA Classifications (See Appendix B)

GFA Class. + Metro 100,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6931
R Square	0.4804
Adjusted R Square	0.4678
Standard Error	76.6718
Observations	86

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	451023.1	225511.5	38.362	1.59206E-12
Residual	83	487921.2	5878.6		
Total	85	938944.2			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-28.445	32.564	-0.874	0.385	-93.214	36.324	-93.214	36.324
GFA Class.	91.318	10.754	8.492	0.000	69.930	112.707	69.930	112.707
Metro Area +/- 100k	33.041	17.825	1.854	0.067	-2.413	68.495	-2.413	68.495

GFA Class. + Metro 300,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6872
R Square	0.4723
Adjusted R Square	0.4596
Standard Error	77.2653
Observations	86

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	443440.4	221720.2	37.140	3.01925E-12
Residual	83	495503.8	5969.9		
Total	85	938944.2			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-21.604	33.773	-0.640	0.524	-88.777	45.570	-88.777	45.570
GFA Class.	91.122	10.847	8.400	0.000	69.547	112.697	69.547	112.697
Metro Area +/- 300k	31.172	21.444	1.454	0.150	-11.479	73.824	-11.479	73.824

PM Regression Models with Metro Variables

VFP + GFA Class. + Metro 300,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.7326
R Square	0.5368
Adjusted R Square	0.5198
Standard Error	72.8315
Observations	86

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	503981.4	167993.8	31.670	1.07245E-13
Residual	82	434962.9	5304.4		
Total	85	938944.2			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-27.715	24.935	-1.111	0.270	-77.320	21.889	-77.320	21.889
GFA Class.	61.942	13.385	4.628	0.000	35.316	88.569	35.316	88.569
Metro Area +/- 300k	11.592	21.028	0.551	0.583	-30.239	53.423	-30.239	53.423
VFP	6.744	1.996	3.378	0.001	2.773	10.716	2.773	10.716

VFP + GFA Class. (< Metro 300,000)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6804
R Square	0.4630
Adjusted R Square	0.4469
Standard Error	73.9351
Observations	70

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	315731.9	157866	28.879	9.01872E-10
Residual	67	366249.2	5466		
Total	69	681981.1			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-12.15	29.161	-0.417	0.678	-70.353	46.056	-70.353	46.056
GFA Class.	60.09	14.575	4.123	0.000	31.002	89.187	31.002	89.187
VFP	5.91	2.325	2.543	0.013	1.272	10.553	1.272	10.553

PM Regression Models with Metro Variables

VFP + GFA Class. (≥ Metro 300,000)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.8572
R Square	0.7348
Adjusted R Square	0.6940
Standard Error	69.2134
Observations	16

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	172515.4	86257.7	18.006	0.000179334
Residual	13	62276.4	4790.5		
Total	15	234791.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-65.54	52.906	-1.239	0.237	-179.835	48.756	-179.835	48.756
GFA Class.	75.75	35.179	2.153	0.051	-0.250	151.751	-0.250	151.751
VFP	7.88	4.245	1.857	0.086	-1.286	17.053	-1.286	17.053

Friday Regression Models with Metro Variables

VFP + GFA Classifications (See Appendix B)

GFA Class. + Metro 100,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6720
R Square	0.4515
Adjusted R Square	0.4341
Standard Error	90.9986
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	429501.3	214750.7	25.934	6.06767E-09
Residual	63	521687.1	8280.7		
Total	65	951188.4			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-15.493	46.714	-0.332	0.741	-108.843	77.857	-108.843	77.857
GFA Class.	104.597	14.599	7.165	0.000	75.424	133.770	75.424	133.770
Metro Area +/- 100,000	30.569	26.773	1.142	0.258	-22.933	84.071	-22.933	84.071

GFA Class. + Metro 300,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6765
R Square	0.4576
Adjusted R Square	0.4404
Standard Error	90.4920
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	435294.5	217647.2	26.579	4.26833E-09
Residual	63	515894.0	8188.8		
Total	65	951188.4			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-50.436	60.905	-0.828	0.411	-172.145	71.274	-172.145	71.274
GFA Class.	105.450	14.549	7.248	0.000	76.376	134.524	76.376	134.524
Metro Area +/- 300,000	66.699	46.863	1.423	0.160	-26.949	160.348	-26.949	160.348

Friday Regression Models with Metro Variables

VFP + GFA Class. + Metro 300,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.7136
R Square	0.5092
Adjusted R Square	0.4854
Standard Error	86.7749
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	484335.3	161445.1	21.441	1.20643E-09
Residual	62	466853.2	7529.9		
Total	65	951188.4			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-68.968	58.853	-1.172	0.246	-186.614	48.678	-186.614	48.678
GFA Class.	76.928	17.876	4.303	0.000	41.195	112.662	41.195	112.662
Metro Area +/- 300,000	39.201	46.212	0.848	0.400	-53.175	131.577	-53.175	131.577
VFP	7.156	2.804	2.552	0.013	1.551	12.761	1.551	12.761

VFP + GFA Class. (< Metro 300,000)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6828
R Square	0.4662
Adjusted R Square	0.4481
Standard Error	88.1221
Observations	62

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	400208.7	200104	25.768	9.05079E-09
Residual	59	458164.5	7766		
Total	61	858373.2			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-20.65	38.112	-0.542	0.590	-96.909	55.614	-96.909	55.614
GFA Buckets	74.93	18.257	4.104	0.000	38.399	111.463	38.399	111.463
VFP	6.81	2.949	2.309	0.024	0.907	12.708	0.907	12.708

Friday Regression Models with Metro Variables

VFP + GFA Class. (≥ Metro 300,000)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9990
R Square	0.9979
Adjusted R Square	0.9938
Standard Error	13.4350
Observations	4

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	87508.5	43754	242.406	0.045369714
Residual	1	180.5	181		
Total	3	87689.0			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-21.56	19.059	-1.131	0.461	-263.717	220.606	-263.717	220.606
GFA Buckets	234.72	29.461	7.967	0.079	-139.617	609.062	-139.617	609.062
VFP	-7.06	3.501	-2.015	0.293	-51.538	37.427	-51.538	37.427

Saturday Regression Models with Metro Variables

VFP + GFA Classifications (See Appendix B)

GFA Class. + Metro 100,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6142
R Square	0.3772
Adjusted R Square	0.3574
Standard Error	104.2041
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	414293.1	207146.5	19.077	3.32875E-07
Residual	63	684084.7	10858.5		
Total	65	1098377.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	47.578	53.493	0.889	0.377	-59.319	154.474	-59.319	154.474
GFA Class.	102.230	16.717	6.115	0.000	68.823	135.636	68.823	135.636
Metro Area +/- 100,000	-15.811	30.659	-0.516	0.608	-77.077	45.455	-77.077	45.455

GFA Class. + Metro 300,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6125
R Square	0.3752
Adjusted R Square	0.3553
Standard Error	104.3724
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	412081.7	206040.9	18.914	3.68496E-07
Residual	63	686296.1	10893.6		
Total	65	1098377.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	12.145	70.247	0.173	0.863	-128.233	152.524	-128.233	152.524
GFA Class.	103.094	16.781	6.144	0.000	69.560	136.628	69.560	136.628
Metro Area +/- 300,000	13.470	54.051	0.249	0.804	-94.543	121.483	-94.543	121.483

Saturday Regression Models with Metro Variables

VFP + GFA Class. + Metro 300,000

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6460
R Square	0.4173
Adjusted R Square	0.3891
Standard Error	101.6033
Observations	66

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	458337.7	152779.2	14.800	2.24832E-07
Residual	62	640040.1	10323.2		
Total	65	1098377.8			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-5.853	68.910	-0.085	0.933	-143.603	131.897	-143.603	131.897
GFA Class.	75.394	20.931	3.602	0.001	33.555	117.234	33.555	117.234
Metro Area +/- 300,000	-13.236	54.109	-0.245	0.808	-121.398	94.925	-121.398	94.925
VFP	6.950	3.283	2.117	0.038	0.387	13.513	0.387	13.513

VFP + GFA Class. (< Metro 300,000)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6429
R Square	0.4134
Adjusted R Square	0.3935
Standard Error	102.3617
Observations	62

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	435625.7	217813	20.788	1.46758E-07
Residual	59	618197.2	10478		
Total	61	1053823.0			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-29.55	44.270	-0.667	0.507	-118.130	59.039	-118.130	59.039
GFA Class.	74.05	21.207	3.492	0.001	31.618	116.487	31.618	116.487
VFP	7.86	3.425	2.294	0.025	1.003	14.711	1.003	14.711

Saturday Regression Models with Metro Variables

VFP + GFA Class. (≥ Metro 300,000)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9707
R Square	0.9422
Adjusted R Square	0.8267
Standard Error	50.2046
Observations	4

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	41116.5	20558.3	8.156	0.240334384
Residual	1	2520.5	2520.5		
Total	3	43637.0			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	116.89	71.219	1.641	0.348	-788.032	1021.810	-788.032	1021.810
GFA Class.	320.94	110.092	2.915	0.210	-1077.903	1719.792	-1077.903	1719.792
VFP	-26.61	13.082	-2.034	0.291	-192.837	139.615	-192.837	139.615

Appendix F
Final Regression Model Trip Generation Comparison

AM Trips

Equation/Rate:		22.05	12.47	GFA (2-4k sf) Midwest: 14.30 GFA (4.5-5k sf) Midwest: 22.83 GFA (5.5-10k sf) All Sites: 31.60		8.57*VFP + 59.39* GFA Class - 69.24		96.25*GFA Class - 43.60*Metro ₁₀₀ - 30.53		95.68*GFA Class + 52.19*Metro ₃₀₀ - 25.39		7.79*VFP + 62.96*GFA Class + 29.56*Metro ₃₀₀ - 68.47		5.91*VFP + 63.51*GFA Class - 44.79 12.68*VFP + 54.28*GFA Class - 108.66		< 300k	≥ 300k
Site	Actual Trips	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	% Diff	VFP + GFA Class.	% Diff	GFA Class. + Metro 100,000	% Diff	GFA Class. + Metro 300,000	% Diff	VFP + GFA Class. + Metro 300,000	% Diff	VFP + GFA Class. ≥ < Metro 300,000	% Diff		
NC-301	68	330.75	187.05	342.45	404%	178.09	162%	161.97	138%	165.97	144%	172.30	153%	170.88	151%		
NC-302	250	352.80	199.52	505.60	102%	246.05	-2%	258.22	-3%	261.65	5%	242.05	-3%	240.30	-4%		
NC-303	97	418.95	236.93	600.40	519%	271.76	180%	258.22	166%	261.65	170%	265.42	174%	258.03	166%		
NC-304	316	352.80	199.52	505.60	60%	246.05	-22%	258.22	-18%	261.65	-17%	242.05	-23%	240.30	-24%		
NC-305	30	220.50	124.70	143.00	377%	75.85	153%	65.72	119%	70.29	134%	71.39	138%	77.82	159%		
NC-306	214	485.10	274.34	502.26	135%	238.08	11%	161.97	-24%	165.97	-22%	226.83	6%	212.25	-1%		
NC-307	30	308.70	174.58	200.20	567%	110.13	267%	65.72	119%	70.29	134%	102.55	242%	101.46	238%		
NC-308	311	352.80	199.52	505.60	63%	246.05	-21%	258.22	-17%	261.65	-16%	242.05	-22%	240.30	-23%		
NC-309	68	198.45	112.23	128.70	89%	67.28	-1%	65.72	-3%	70.29	3%	63.60	-6%	71.91	6%		
NC-310	64	264.60	149.64	171.60	168%	92.99	45%	65.72	3%	70.29	10%	86.97	36%	89.64	40%		
NC-311	144	220.50	124.70	228.30	59%	135.24	-6%	161.97	12%	165.97	15%	133.35	-7%	141.33	-2%		
NC-312	165	220.50	124.70	228.30	38%	135.24	-18%	161.97	-2%	165.97	1%	133.35	-19%	141.33	-14%		
NC-313	284	507.15	286.81	726.80	156%	306.04	8%	258.22	-9%	261.65	-8%	296.58	4%	281.67	-1%		
NC-314	179	529.20	299.28	758.40	324%	255.22	43%	161.97	-10%	165.97	-7%	242.41	35%	224.07	25%		
NE-201	318	352.80	199.52	505.60	59%	246.05	-23%	301.82	-5%	261.65	-18%	242.05	-24%	240.30	-24%		
NE-202	143	176.40	99.76	182.64	28%	118.10	-17%	205.57	44%	165.97	16%	117.77	-18%	129.51	-9%		
NE-203	354	396.90	224.46	568.80	61%	263.19	-26%	258.22	-27%	261.65	-26%	257.63	-27%	252.12	-29%		
NE-204	171	264.60	149.64	273.96	60%	152.38	-11%	205.57	20%	165.97	-3%	148.93	-13%	153.15	-10%		
NE-205	200	286.65	162.11	296.79	48%	160.95	-20%	161.97	-19%	165.97	-17%	156.72	-22%	159.06	-20%		
NE-206	129	441.00	249.40	456.60	254%	220.94	71%	205.57	59%	165.97	29%	211.25	64%	200.43	55%		
NE-207	71	286.65	162.11	185.90	162%	101.56	43%	65.72	-7%	70.29	-1%	94.76	33%	95.55	35%		
NE-208	69	176.40	99.76	114.40	66%	58.71	-15%	65.72	-5%	70.29	2%	55.81	-19%	66.00	-4%		
NE-209	44	176.40	99.76	114.40	160%	58.71	33%	65.72	49%	70.29	60%	55.81	27%	66.00	50%		
NE-210	89	242.55	137.17	157.30	77%	84.42	-5%	65.72	-26%	70.29	-21%	79.18	-11%	83.73	-6%		
NE-211	167	396.90	224.46	568.80	241%	203.80	22%	161.97	-3%	165.97	-1%	195.67	17%	188.61	13%		
NE-212	174	352.80	199.52	365.28	110%	186.66	7%	161.97	-7%	165.97	-5%	180.09	4%	176.79	2%		
NE-213	201	286.65	162.11	296.79	48%	160.95	-20%	161.97	-19%	165.97	-17%	156.72	-22%	159.06	-21%		
NE-214	61	308.70	174.58	319.62	424%	169.52	178%	161.97	166%	165.97	172%	164.51	170%	164.97	170%		
NE-215	78	242.55	137.17	347.60	346%	143.81	84%	161.97	108%	165.97	113%	141.14	81%	147.24	89%		
NE-216	212	308.70	174.58	442.40	109%	228.91	8%	258.22	22%	261.65	23%	226.47	7%	228.48	8%		
NE-217	58	220.50	124.70	316.00	445%	194.63	236%	258.22	345%	261.65	351%	195.31	237%	204.84	253%		
NW-401	330	418.95	236.93	600.40	82%	271.76	-18%	258.22	-22%	261.65	-21%	265.42	-20%	258.03	-22%		
NW-402	229	485.10	274.34	695.20	204%	297.47	30%	258.22	13%	261.65	14%	288.79	26%	275.76	20%		
NW-403	33	176.40	99.76	114.40	247%	58.71	78%	65.72	99%	70.29	113%	55.81	69%	66.00	100%		
NW-404	42	264.60	149.64	171.60	309%	92.99	121%	65.72	56%	70.29	67%	86.97	107%	89.64	113%		
NW-405	90	220.50	124.70	143.00	59%	75.85	-16%	109.32	21%	70.29	-22%	71.39	-21%	77.82	-14%		
NW-406	242	418.95	236.93	271.70	12%	212.37	-12%	161.97	-33%	165.97	-31%	203.46	-16%	194.52	-20%		
NW-407	278	485.10	274.34	502.26	81%	238.08	-14%	205.57	-26%	165.97	-40%	226.83	-18%	212.25	-24%		
NW-408	190	352.80	199.52	365.28	92%	186.66	-2%	161.97	-15%	165.97	-13%	180.09	-5%	176.79	-7%		
NW-409	234	352.80	199.52	505.60	116%	186.66	-20%	161.97	-31%	165.97	-29%	180.09	-23%	176.79	-24%		
NW-410	217	330.75	187.05	474.00	118%	237.48	9%	258.22	19%	261.65	21%	234.26	8%	234.39	8%		
NW-411	247	485.10	274.34	502.26	103%	238.08	-4%	161.97	-34%	165.97	-33%	226.83	-8%	212.25	-14%		
NW-412	170	441.00	249.40	632.00	272%	280.33	65%	258.22	52%	261.65	54%	273.21	61%	263.94	55%		
SE-101	63	286.65	162.11	296.79	371%	160.95	155%	161.97	157%	165.97	163%	156.72	149%	159.06	152%		
SE-102	263	441.00	249.40	632.00	140%	280.33	7%	258.22	-2%	261.65	-1%	273.21	4%	263.94	0%		
SE-103	163	264.60	149.64	171.60	5%	92.99	-43%	109.32	-33%	122.48	-25%	116.53	-29%	97.78	-40%		
SE-104	153	220.50	124.70	228.30	49%	135.24	-12%	161.97	6%	165.97	8%	133.35	-13%	141.33	-8%		
SE-105	317	264.60	149.64	379.20	20%	211.77	-33%	258.22	-19%	261.65	-17%	210.89	-33%	216.66	-32%		
SE-107	138	220.50	124.70	143.00	4%	75.85	-45%	65.72	-52%	70.29	-49%	71.39	-48%	77.82	-44%		
SE-108	331	352.80	199.52	365.28	10%	186.66	-44%	205.57	-38%	218.16	-34%	209.65	-37%	202.78	-39%		
SE-109	152	264.60	149.64	171.60	13%	92.99	-39%	109.32	-28%	122.48	-19%	116.53	-23%	97.78	-36%		
SE-110	79	264.60	149.64	171.60	117%	92.99	18%	109.32	38%	122.48	55%	116.53	48%	97.78	24%		
SE-111	45	264.60	149.64	171.60	281%	92.99	107%	109.32	143%	70.29	56%	86.97	93%	89.64	99%		
SE-112	181	264.60	149.64	171.60	-5%	92.99	-49%	109.32	-40%	70.29	-61%	86.97	-52%	89.64	-50%		
SE-113	188	220.50	124.70	228.30	21%	135.24	-28%	205.57	9%	165.97	-12%	133.35	-29%	141.33	-25%		
SE-114	149	352.80	199.52	365.28	145%	186.66	25%	205.57	38%	218.16	46%	209.65	41%	202.78	36%		
SE-115	343	441.00	249.40	632.00	84%	220.94	-36%	161.97	-53%	165.97	-52%	211.25	-38%	204.43	-42%		
SE-116	475	639.45	361.63	916.40	93%	357.46	-25%	301.82	-36%	313.84	-34%	372.88	-21%	421.90	-11%		
SE-117	280	529.20	299.28	758.40	171%	314.61	12%	301.82	8%	261.65	-7%	304.37	9%	287.58	3%		
SE-119	308	352.80	199.52	505.60	64%	246.05	-20%	301.82	-2%	313.84	2%	271.61	-12%	257.06	-17%		
SE-120	451	507.15	286.81	726.80	61%	306.04	-32%	301.82	-33%	313.84	-30%	326.14	-28%	345.82	-23%		
SE-121	424	749.70	423.98	1074.40	153%	400.31	-6%	301.82	-29%	313.84	-26%	411.83	-3%	485.30	14%		
SW-501	70	352.80	199.52	505.60	622%	246.05	252%	258.22	269%	261.65	274%	242.05	246%	240.30	243%		
SW-502	40	176.40	99.76	114.40	186%	58.71	47%	65.72	64%	70.29	76%	55.81	40%	66.00	65%		
SW-503	57	176.40	99.76	182.64	220%	118.10	107%	161.97	184%	165.97	191%	117.77	107%	129.51	127%		
SW-504	238	418.95	236.93	600.40	152%	271.76	14%	301.82	27%	261.65	10%	265.42	12%	258.03	8%		
SW-505	245	507.15	286.81	726.80	197%	306.04	25%	258.22	5%	261.65	7%	296.58	21%	281.67	15%		
SW-506	229	176.40	99.76	114.40	-50%	118.10	-48%	161.97	-29%	165.97	-28%	117.77	-49%	129.51	-43%		
SW-507	71	264.60	149.64	171.60	142%	92.99	31%	109.32	54%	122.48	73%	116.53	64%	97.78	38%		
SW-508	130	286.65	162.11	296.79	128%	160.95	24%	161.97	25%	165.97	28%	156.72	21%	159.06	22%		
SW-509	296	441.00	249.40	632.00	114%	280.33	-5%	258.22	-13%	261.65	-12%	273.21	-8%	263.94	-11%		
SW-510	362	418.95	236.93	600.40	66%	212.37	-41%	161.97	-55%	165.97	-54%	203.46	-44%	194.52	-46%		
SW-511	31	176.40	99.76	114.40	269%	58.71	89%	65.72	112%	70.29	127%	55.81	80%	66.00	113%		

PM Trips

Equation/Rate:		17.56	13.99	GFA (2-4k sf) Midwest: 15.38 GFA (4.5-5k sf) Midwest: 17.87 GFA (5.5-10k sf) All Sites: 26.90		7.05*VFP + 60.93* GFA Class - 28.02		91.32*GFA Class + 33.04*Metro ₁₀₀ - 28.45		91.12*GFA Class + 31.17*Metro ₃₀₀ - 21.60		6.74*VFP + 61.94*GFA Class - 11.59*Metro ₃₀₀ - 27.72		5.91*VFP + 60.09*GFA Class - 12.15 7.88*VFP + 75.75*GFA Class - 65.54		< 300k ≥ 300k
Site	Actual Trips	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	% Diff	VFP + GFA Class	% Diff	GFA Class + Metro 100,000	% Diff	GFA Class + Metro 300,000	% Diff	VFP + GFA Class + Metro 300,000	% Diff	VFP + GFA Class ≥ < Metro 300,000	% Diff	
NC-301	87	263.40	209.85	268.05	208%	199.59	129%	154.19	77%	160.64	85%	197.26	127%	196.68	126%	
NC-302	277	280.96	223.84	430.40	55%	267.57	-3%	245.51	-11%	251.76	-9%	265.94	-4%	262.68	-5%	
NC-303	112	333.64	265.81	511.10	356%	288.72	158%	245.51	119%	251.76	125%	286.16	156%	280.41	150%	
NC-304	347	280.96	223.84	430.40	24%	267.57	-23%	245.51	-29%	251.76	-27%	265.94	-23%	262.68	-24%	
NC-305	40	175.60	139.90	153.80	285%	103.41	159%	62.87	57%	69.52	74%	101.62	154%	107.04	168%	
NC-306	288	386.32	307.78	393.14	37%	248.94	-14%	154.19	-46%	160.64	-44%	244.44	-15%	238.05	-17%	
NC-307	52	245.84	195.86	215.32	314%	131.61	153%	62.87	21%	69.52	34%	128.58	147%	130.68	151%	
NC-308	318	280.96	223.84	430.40	35%	267.57	-16%	245.51	-23%	251.76	-21%	265.94	-16%	262.68	-17%	
NC-309	118	158.04	125.91	138.42	17%	96.36	-18%	62.87	-47%	69.52	-41%	94.88	-20%	101.13	-14%	
NC-310	111	210.72	167.88	184.56	66%	117.51	6%	62.87	-43%	69.52	-37%	115.10	4%	118.86	7%	
NC-311	132	175.60	139.90	178.70	35%	164.34	25%	154.19	17%	160.64	22%	163.56	24%	167.13	27%	
NC-312	201	175.60	139.90	178.70	-11%	164.34	-18%	154.19	-23%	160.64	-20%	163.56	-19%	167.13	-17%	
NC-313	357	403.88	321.77	618.70	73%	316.92	-11%	245.51	-31%	251.76	-29%	313.12	-12%	304.05	-15%	
NC-314	201	421.44	335.76	645.60	221%	263.04	31%	154.19	-23%	160.64	-20%	257.92	28%	249.87	24%	
NE-201	252	280.96	223.84	430.40	71%	267.57	6%	278.55	11%	251.76	0%	265.94	6%	262.68	4%	
NE-202	137	140.48	111.92	142.96	4%	150.24	10%	187.23	37%	160.64	17%	150.08	10%	155.31	13%	
NE-203	330	316.08	251.82	484.20	47%	281.67	-15%	245.51	-26%	251.76	-24%	279.42	-15%	274.50	-17%	
NE-204	201	210.72	167.88	214.44	7%	178.44	-11%	187.23	-7%	160.64	-20%	177.04	-12%	178.95	-11%	
NE-205	220	228.28	181.87	232.31	6%	185.49	-16%	154.19	-30%	160.64	-27%	183.78	-16%	184.86	-16%	
NE-206	124	351.20	279.80	357.40	188%	234.84	89%	187.23	51%	160.64	30%	230.96	86%	226.23	82%	
NE-207	97	228.28	181.87	199.94	106%	124.56	28%	62.87	-35%	69.52	-28%	121.84	26%	124.77	29%	
NE-208	94	140.48	111.92	123.04	31%	89.31	-5%	62.87	-33%	69.52	-26%	88.14	-6%	95.22	1%	
NE-209	66	140.48	111.92	123.04	86%	89.31	35%	62.87	-5%	69.52	5%	88.14	34%	95.22	44%	
NE-210	131	193.16	153.89	169.18	29%	110.46	-16%	62.87	-52%	69.52	-47%	108.36	-17%	112.95	-14%	
NE-211	195	316.08	251.82	484.20	148%	220.74	13%	154.19	-21%	160.64	-18%	217.48	12%	214.41	10%	
NE-212	209	280.96	223.84	285.92	37%	206.64	-1%	154.19	-26%	160.64	-23%	204.00	-2%	202.59	-3%	
NE-213	262	228.28	181.87	232.31	-11%	185.49	-29%	154.19	-41%	160.64	-39%	183.78	-30%	184.86	-29%	
NE-214	96	245.84	195.86	250.18	161%	192.54	101%	154.19	61%	160.64	67%	190.52	98%	190.77	99%	
NE-215	119	193.16	153.89	295.90	149%	171.39	44%	154.19	30%	160.64	35%	170.30	43%	173.04	45%	
NE-216	258	245.84	195.86	376.60	46%	253.47	-2%	245.51	-5%	251.76	-2%	252.46	-2%	250.86	-3%	
NE-217	89	175.60	139.90	269.00	202%	225.27	153%	245.51	176%	251.76	183%	225.50	153%	227.22	155%	
NW-401	332	333.64	265.81	511.10	54%	288.72	-13%	245.51	-26%	251.76	-24%	286.16	-14%	280.41	-16%	
NW-402	291	386.32	307.78	591.80	103%	309.87	6%	245.51	-16%	251.76	-13%	306.38	5%	298.14	2%	
NW-403	92	140.48	111.92	123.04	34%	89.31	-3%	62.87	-32%	69.52	-24%	88.14	-4%	95.22	4%	
NW-404	88	210.72	167.88	184.56	110%	117.51	34%	62.87	-29%	69.52	-21%	115.10	31%	118.86	35%	
NW-405	129	175.60	139.90	153.80	19%	103.41	-20%	95.91	-26%	69.52	-46%	101.62	-21%	107.04	-17%	
NW-406	275	333.64	265.81	292.22	6%	227.79	-17%	154.19	-44%	160.64	-42%	224.22	-18%	220.32	-20%	
NW-407	263	386.32	307.78	393.14	49%	248.94	-5%	187.23	-29%	160.64	-39%	244.44	-7%	238.05	-9%	
NW-408	225	280.96	223.84	285.92	27%	206.64	-8%	154.19	-31%	160.64	-29%	204.00	-9%	202.59	-10%	
NW-409	254	280.96	223.84	430.40	69%	206.64	-19%	154.19	-39%	160.64	-37%	204.00	-20%	202.59	-20%	
NW-410	294	263.40	209.85	403.50	37%	260.52	-11%	245.51	-16%	251.76	-14%	259.20	-12%	256.77	-13%	
NW-411	261	386.32	307.78	393.14	51%	248.94	-5%	154.19	-41%	160.64	-38%	244.44	-6%	238.05	-9%	
NW-412	214	351.20	279.80	538.00	151%	295.77	38%	245.51	15%	251.76	18%	292.90	37%	286.32	34%	
SE-101	88	228.28	181.87	232.31	164%	185.49	111%	154.19	75%	160.64	83%	183.78	109%	184.86	110%	
SE-102	261	351.20	279.80	538.00	106%	295.77	13%	245.51	-6%	251.76	-4%	292.90	12%	286.32	10%	
SE-103	179	210.72	167.88	184.56	3%	117.51	-34%	95.91	-46%	100.69	-44%	126.69	-29%	104.77	-41%	
SE-104	200	175.60	139.90	178.70	-11%	164.34	-18%	154.19	-23%	160.64	-20%	163.56	-18%	167.13	-16%	
SE-105	322	210.72	167.88	322.80	0%	239.37	-26%	245.51	-24%	251.76	-22%	238.98	-26%	239.04	-26%	
SE-107	171	175.60	139.90	153.80	-10%	103.41	-40%	62.87	-63%	69.52	-59%	101.62	-41%	107.04	-37%	
SE-108	299	280.96	223.84	285.92	-4%	206.64	-31%	187.23	-37%	191.81	-36%	215.59	-28%	212.04	-29%	
SE-109	150	210.72	167.88	184.56	23%	117.51	-22%	95.91	-36%	100.69	-33%	126.69	-16%	104.77	-30%	
SE-110	84	210.72	167.88	184.56	120%	117.51	40%	95.91	14%	100.69	20%	126.69	51%	104.77	25%	
SE-111	81	210.72	167.88	184.56	128%	117.51	45%	95.91	18%	69.52	-14%	115.10	42%	118.86	47%	
SE-112	218	210.72	167.88	184.56	-15%	117.51	-46%	95.91	-56%	69.52	-68%	115.10	-47%	118.86	-45%	
SE-113	296	175.60	139.90	178.70	-40%	164.34	-44%	187.23	-37%	160.64	-46%	163.56	-45%	167.13	-44%	
SE-114	134	280.96	223.84	285.92	113%	206.64	54%	187.23	40%	191.81	43%	215.59	61%	212.04	58%	
SE-115	381	351.20	279.80	538.00	41%	234.84	-38%	154.19	-60%	160.64	-58%	230.96	-39%	226.23	-41%	
SE-116	363	509.24	405.71	780.10	115%	359.22	-1%	278.55	-23%	282.93	-22%	365.15	1%	390.23	8%	
SE-117	350	421.44	335.76	645.60	84%	323.97	-7%	278.55	-20%	251.76	-28%	319.86	-9%	309.96	-11%	
SE-119	389	280.96	223.84	430.40	11%	267.57	-31%	278.55	-28%	282.93	-27%	277.53	-29%	287.79	-26%	
SE-120	442	403.88	321.77	618.70	40%	316.92	-28%	278.55	-37%	282.93	-36%	324.71	-27%	342.95	-22%	
SE-121	427	597.04	475.66	914.60	114%	394.47	-8%	278.55	-35%	282.93	-34%	398.85	-7%	429.63	1%	
SW-501	74	280.96	223.84	430.40	482%	267.57	262%	245.51	232%	251.76	240%	265.94	259%	262.68	255%	
SW-502	47	140.48	111.92	123.04	162%	89.31	90%	62.87	34%	69.52	48%	88.14	88%	95.22	103%	
SW-503	76	140.48	111.92	142.96	88%	150.24	98%	154.19	103%	160.64	111%	150.08	97%	155.31	104%	
SW-504	329	333.64	265.81	511.10	55%	288.72	-12%	278.55	-15%	251.76	-23%	286.16	-13%	280.41	-15%	
SW-505	240	403.88	321.77	618.70	158%	316.92	32%	245.51	2%	251.76	5%	313.12	30%	304.05	27%	
SW-506	197	140.48	111.92	123.04	-38%	150.24	-24%	154.19	-22%	160.64	-18%	150.08	-24%	155.31	-21%	
SW-507	116	210.72	167.88	184.56	59%	117.51	1%	95.91	-17%	100.69	-13%	126.69	9%	104.77	-10%	
SW-508	100	228.28	181.87	232.31	132%	185.49	85%	154.19	54%	160.64	61%	183.78	84%	184.86	85%	
SW-509	271	351.20	279.80	538.00	99%	295.77	9%	245.51	-9%	251.76	-7%	292.90	8%	286.32	6%	
SW-510	305	333.64	265.81	511.10	68%	227.79	-25%	154.19	-49%	160.64	-47%	224.22	-26%	220.32	-28%	
SW-511	42	140.48	111.92	123.04	193%	89.31	113%	62.87	50%	69.52	66%	88.14	110%	95.22	127%	
SW-512	347	193.16	153.89	196.57	-43%	171.39	-51%	154.19	-56%	160.64	-54%	170.30	-51%	173.04	-50%	
SW-513	85	140.48	111.92	123.04	45%	89.31	5%	62.87	-26%	69.52	-18%	88.14	4%	95.22		

Friday Trips

Equation/Rate:		21.36	15.87	GFA (2-4k sf), Midwest: 15.95 GFA (4-5.5k sf) Midwest: 19.10 GFA (5.5-10k sf) All Sites: 28.03		7.71*VFP+73.71* GFA _{Class} -29.06		104.60*GFA _{Class} + 30.57*Metro ₁₀₀ - 15.49		105.45*GFA _{Class} + 66.70*Metro ₃₀₀ - 50.44		7.16*VFP + 76.93*GFA _{Class} + 39.20*Metro ₃₀₀ - 68.97		6.87*VFP + 74.93*GFA _{Class} - 20.65		7.06*VFP + 234.72*GFA _{Class} - 21.56	
Site	Actual Trips	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	% Diff	VFP + GFA Class.	% Diff	GFA Class. + Metro 100,000	% Diff	GFA Class. + Metro 300,000	% Diff	VFP + GFA Class. + Metro 300,000	% Diff	VFP + GFA Class. ≥ < Metro 300,000	% Diff		
NC-302	373	341.76	253.92	448.48	20%	315.43	-15%	298.31	-20%	265.91	-29%	276.38	-26%	313.10	-16%		
NC-303	175	405.84	301.53	532.57	204%	338.56	93%	298.31	70%	265.91	52%	297.86	70%	333.53	91%		
NC-304	330	341.76	253.92	448.48	36%	315.43	-4%	298.31	-10%	265.91	-19%	276.38	-16%	313.10	-5%		
NC-305	61	213.60	158.70	280.30	360%	121.75	100%	89.11	46%	55.01	-10%	79.56	30%	122.38	101%		
NC-306	347	469.92	349.14	616.66	78%	287.98	-17%	193.71	-44%	160.46	-54%	242.41	-30%	279.03	-20%		
NC-307	64	299.04	222.18	392.42	513%	152.59	138%	89.11	39%	55.01	-14%	108.2	69%	149.62	134%		
NC-308	327	341.76	253.92	448.48	37%	315.43	-4%	298.31	-9%	265.91	-19%	276.38	-15%	313.10	-4%		
NC-310	122	256.32	190.44	336.36	176%	137.17	12%	89.11	-27%	55.01	-55%	93.88	-23%	136.00	11%		
NC-311	179	213.60	158.70	280.30	57%	195.46	9%	193.71	8%	160.46	-10%	156.49	-13%	197.31	10%		
NC-312	220	213.60	158.70	280.30	27%	195.46	-11%	193.71	-12%	160.46	-27%	156.49	-29%	197.31	-10%		
NC-313	387	491.28	365.01	644.69	67%	369.4	-5%	298.31	-23%	265.91	-31%	326.5	-16%	360.77	-7%		
NC-314	270	512.64	380.88	672.72	149%	303.4	12%	193.71	-28%	160.46	-41%	256.73	-5%	292.65	8%		
NE-201	260	341.76	253.92	448.48	72%	315.43	21%	328.88	26%	265.91	2%	276.38	6%	313.10	20%		
NE-202	170	170.88	126.96	224.24	32%	180.04	6%	224.28	32%	160.46	-6%	142.17	-16%	183.69	8%		
NE-203	377	384.48	285.66	504.54	34%	330.85	-12%	298.31	-21%	265.91	-29%	290.7	-23%	326.72	-13%		
NE-204	235	256.32	190.44	336.36	43%	210.88	-10%	224.28	-5%	160.46	-32%	170.81	-27%	210.93	-10%		
NE-205	321	277.68	206.31	364.39	14%	218.59	-32%	193.71	-40%	160.46	-50%	177.97	-45%	217.74	-32%		
NE-210	146	427.20	317.40	560.60	284%	272.56	87%	224.28	54%	160.46	10%	228.09	56%	265.41	82%		
NE-207	131	277.68	206.31	364.39	178%	144.88	11%	89.11	-32%	55.01	-58%	101.04	-23%	142.81	9%		
NE-208	94	170.88	126.96	224.24	139%	106.33	13%	89.11	-5%	55.01	-41%	65.24	-31%	108.76	16%		
NE-209	90	170.88	126.96	224.24	149%	106.33	18%	89.11	-1%	55.01	-39%	65.24	-28%	108.76	21%		
NE-210	151	234.96	174.57	308.33	104%	129.46	-14%	89.11	-41%	55.01	-64%	86.72	-43%	129.19	-14%		
NE-211	197	384.48	285.66	504.54	156%	257.14	31%	193.71	-2%	160.46	-19%	213.77	9%	251.79	28%		
NE-212	200	341.76	253.92	448.48	124%	241.72	21%	193.71	-3%	160.46	-20%	199.45	0%	238.17	19%		
NE-213	323	277.68	206.31	364.39	13%	218.59	-32%	193.71	-40%	160.46	-50%	177.97	-45%	217.74	-33%		
NE-214	117	299.04	222.18	392.42	235%	226.3	93%	193.71	66%	160.46	37%	188.13	58%	224.55	92%		
NE-215	113	234.96	174.57	308.33	173%	203.17	80%	193.71	71%	160.46	42%	163.65	45%	204.12	81%		
NE-216	293	299.04	222.18	392.42	34%	300.01	2%	298.31	2%	265.91	-9%	262.06	-11%	299.48	2%		
NE-217	91	213.60	158.70	280.30	208%	269.17	196%	298.31	228%	265.91	192%	233.42	157%	272.24	199%		
NW-401	497	405.84	301.53	532.57	7%	338.56	-32%	298.31	-40%	265.91	-46%	297.86	-40%	333.53	-33%		
NW-402	320	469.92	349.14	616.66	93%	361.69	13%	298.31	-7%	265.91	-17%	319.34	0%	353.96	11%		
NW-403	93	170.88	126.96	224.24	141%	106.33	14%	89.11	-4%	55.01	-41%	65.24	-30%	108.76	17%		
NW-404	102	256.32	190.44	336.36	230%	137.17	34%	89.11	-13%	55.01	-46%	93.88	-8%	136.00	33%		
NW-405	146	213.60	158.70	280.30	92%	121.75	-17%	119.68	-18%	55.01	-62%	79.56	-46%	122.38	-16%		
NW-406	331	405.84	301.53	532.57	61%	264.85	-20%	193.71	-41%	160.46	-52%	220.93	-33%	258.60	-22%		
NW-407	302	469.92	349.14	616.66	104%	287.98	-5%	224.28	-26%	160.46	-47%	242.41	-20%	279.03	-8%		
NW-408	271	341.76	253.92	448.48	65%	241.72	-11%	193.71	-29%	160.46	-41%	199.45	-26%	238.17	-12%		
NW-409	304	341.76	253.92	448.48	48%	241.72	-20%	193.71	-36%	160.46	-47%	199.45	-34%	238.17	-22%		
NW-410	347	320.40	238.05	420.45	21%	307.72	-11%	298.31	-14%	265.91	-23%	269.22	-22%	306.29	-12%		
NW-411	270	469.92	349.14	616.66	128%	287.98	7%	193.71	-28%	160.46	-41%	242.41	-10%	279.03	3%		
NW-412	223	427.20	317.40	560.60	151%	346.27	55%	298.31	34%	265.91	19%	305.02	37%	340.34	53%		
SE-101	101	277.68	206.31	364.39	261%	218.59	116%	193.71	92%	160.46	59%	177.97	76%	217.74	116%		
SE-102	311	427.20	317.40	560.60	80%	346.27	11%	298.31	-4%	265.91	-14%	305.02	-2%	340.34	9%		
SE-104	244	213.60	158.70	280.30	15%	195.46	-20%	193.71	-21%	160.46	-34%	156.49	-36%	197.31	-19%		
SE-105	363	256.32	190.44	336.36	-7%	284.59	-22%	298.31	-18%	265.91	-27%	247.74	-32%	285.86	-21%		
SE-107	163	213.60	158.70	280.30	72%	121.75	-25%	89.11	-45%	55.01	-66%	79.56	-51%	122.38	-25%		
SE-108	335	341.76	253.92	448.48	34%	241.72	-28%	224.28	-33%	227.16	-32%	238.65	-29%	334.92	0%		
SE-110	119	256.32	190.44	336.36	183%	137.17	15%	119.68	1%	121.71	2%	133.08	12%	128.44	8%		
SE-111	84	256.32	190.44	336.36	300%	137.17	63%	119.68	42%	55.01	-35%	93.88	12%	136.00	62%		
SE-112	227	256.32	190.44	336.36	48%	137.17	-40%	119.68	-47%	55.01	-76%	93.88	-59%	136.00	-40%		
SE-113	337	213.60	158.70	280.30	-17%	195.46	-42%	224.28	-33%	160.46	-52%	156.49	-54%	197.31	-41%		
SE-115	393	427.20	317.40	560.60	43%	272.56	-31%	193.71	-51%	160.46	-59%	228.09	-42%	265.41	-32%		
SE-116	478	619.44	460.23	812.87	70%	415.66	-13%	328.88	-31%	332.61	-30%	408.66	-15%	477.86	0%		
SE-117	375	512.64	380.88	672.72	79%	377.11	1%	328.88	-12%	265.91	-29%	333.66	-11%	367.58	-2%		
SW-501	113	341.76	253.92	448.48	297%	315.43	179%	298.31	164%	265.91	135%	276.38	145%	313.10	177%		
SW-502	65	170.88	126.96	224.24	245%	106.33	64%	89.11	37%	55.01	-15%	65.24	0%	108.76	67%		
SW-504	366	405.84	301.53	532.57	46%	338.56	-7%	328.88	-10%	265.91	-27%	297.86	-19%	333.53	-9%		
SW-506	255	170.88	126.96	224.24	-12%	180.04	-29%	193.71	-24%	160.46	-37%	142.17	-44%	183.69	-28%		
SW-507	138	256.32	190.44	336.36	144%	137.17	-1%	119.68	-13%	121.71	-12%	133.08	-4%	128.44	-7%		
SW-509	358	427.20	317.40	560.60	57%	346.27	-3%	298.31	-17%	265.91	-26%	305.02	-15%	340.34	-5%		
SW-510	338	405.84	301.53	532.57	58%	264.85	-22%	193.71	-43%	160.46	-53%	220.93	-35%	258.60	-23%		
SW-511	52	170.88	126.96	224.24	331%	106.33	104%	89.11	71%	55.01	6%	65.24	25%	108.76	109%		
SW-512	515	234.96	174.57	308.33	-40%	203.17	-61%	193.71	-62%	160.46	-69%	163.65	-68%	204.12	-60%		
SW-515	128	170.88	126.96	224.24	75%	106.33	-17%	89.11	-30%	55.01	-57%	65.24	-49%	108.76	-15%		
SW-516	61	213.60	158.70	280.30	360%	121.75	100%	89.11	46%	55.01	-10%	79.56	30%	122.38	101%		
SW-517	76	320.40	238.05	420.45	453%	234.01	208%	193.71	155%	160.46	111%	192.29	153%	231.36	204%		

Overestimate by 100	31	9	52	8	4	2	4	8
Underestimate by 100	3	9	1	6	13	23	13	6
Miscalculated by > 100 (+/-)	34	18	53	14	17	25	17	14

Saturday Trips

Equation/Rate:		17.11	19.28	GFA (2-4k sf) Midwest: 15.59 GFA (4.5-5k sf) Midwest: 18.03 GFA (5.5-10k sf) All Sites: 29.77		6.76*VFP + 76.48* GFA Class -19.33		102.23*GFA Class - 15.81*Metro ₁₀₀ + 47.58		103.09*GFA Class + 13.47*Metro ₃₀₀ + 12.15		6.95*VFP + 75.39*GFA Class - 13.24*Metro ₃₀₀ - 5.85		7.86*VFP + 74.05*GFA Class -29.55 -26.61*VFP + 320.94*GFA Class + 116.89	
Site	Actual Trips	TGM 10 LUC 960	TGM 10 LUC 945	TGM 11 LUC 945	% Diff	VFP + GFA Class.	% Diff	GFA Class. + Metro 100,000	% Diff	GFA Class. + Metro 300,000	% Diff	VFP + GFA Class. + Metro 300,000	% Diff	VFP + GFA Class. + Metro 300,000	% Diff
NC-302	426	273.76	308.48	476.32	12%	318.27	-25%	354.27	-17%	321.42	-25%	331.52	-22%	318.36	-25%
NC-303	153	325.09	366.32	565.63	270%	338.55	121%	354.27	132%	321.42	110%	352.37	130%	341.94	123%
NC-304	482	273.76	308.48	476.32	-1%	318.27	-34%	354.27	-27%	321.42	-33%	331.52	-31%	318.36	-34%
NC-305	69	171.10	192.80	155.90	126%	124.75	81%	149.81	117%	115.24	67%	139.04	102%	123.1	78%
NC-306	420	376.42	424.16	396.66	-6%	282.35	-33%	252.04	-40%	218.33	-48%	297.83	-29%	291.47	-31%
NC-307	59	239.54	269.92	218.26	270%	151.79	157%	149.81	154%	115.24	95%	166.84	183%	154.54	162%
NC-308	375	273.76	308.48	476.32	27%	318.27	-15%	354.27	-6%	321.42	-14%	331.52	-12%	318.36	-15%
NC-310	94	205.32	231.36	187.08	99%	138.27	47%	149.81	59%	115.24	23%	152.94	63%	138.82	48%
NC-311	127	171.10	192.80	180.30	42%	201.23	58%	252.04	98%	218.33	72%	214.43	69%	197.15	55%
NC-312	192	171.10	192.80	180.30	-6%	201.23	5%	252.04	31%	218.33	14%	214.43	12%	197.15	3%
NC-313	474	393.53	443.44	684.71	44%	365.59	-23%	354.27	-25%	321.42	-32%	380.17	-20%	373.38	-21%
NC-314	319	410.64	462.72	714.48	124%	295.87	-7%	252.04	-21%	218.33	-32%	311.73	-2%	307.19	-4%
NE-201	157	273.76	308.48	476.32	203%	318.27	103%	338.46	116%	321.42	105%	331.52	111%	318.36	103%
NE-202	153	136.88	154.24	144.24	-6%	187.71	23%	236.23	54%	218.33	43%	200.53	31%	181.43	19%
NE-203	295	307.98	347.04	535.86	82%	331.79	12%	354.27	20%	321.42	9%	345.42	17%	334.08	13%
NE-204	303	205.32	231.36	216.36	-29%	214.75	-29%	236.23	-22%	218.33	-28%	228.33	-25%	212.87	-30%
NE-205	249	222.43	250.64	234.39	-6%	221.51	-11%	252.04	1%	218.33	-12%	235.28	-6%	220.73	-11%
NE-206	108	342.20	385.60	360.60	234%	268.83	149%	236.23	119%	218.33	102%	283.93	163%	275.75	155%
NE-207	119	222.43	250.64	202.67	70%	145.03	22%	149.81	26%	115.24	-3%	159.89	34%	146.68	23%
NE-208	86	136.88	154.24	124.72	45%	111.23	29%	149.81	74%	115.24	34%	125.14	46%	107.38	25%
NE-209	144	136.88	154.24	124.72	-13%	111.23	-23%	149.81	4%	115.24	-20%	125.14	-13%	107.38	-25%
NE-210	191	188.21	212.08	171.49	-10%	131.51	-31%	149.81	-22%	115.24	-40%	145.99	-24%	130.96	-31%
NE-211	183	307.98	347.04	535.86	193%	255.31	40%	252.04	38%	218.33	19%	270.03	48%	260.03	42%
NE-212	285	273.76	308.48	288.48	1%	241.79	-15%	252.04	-12%	218.33	-23%	256.13	-10%	244.31	-14%
NE-213	291	222.43	250.64	234.39	-19%	221.51	-24%	252.04	-13%	218.33	-25%	235.28	-19%	220.73	-24%
NE-214	126	239.54	269.92	252.42	100%	228.27	81%	252.04	100%	218.33	73%	242.23	92%	228.59	81%
NE-215	102	188.21	212.08	327.47	221%	207.99	104%	252.04	147%	218.33	114%	221.38	117%	205.01	101%
NE-216	351	239.54	269.92	416.78	19%	304.75	-13%	354.27	1%	321.42	-8%	317.62	-10%	302.64	-14%
NE-217	134	171.10	192.80	297.70	122%	277.71	107%	354.27	164%	321.42	140%	289.82	116%	271.2	102%
NW-401	463	325.09	366.32	565.63	22%	338.55	-27%	354.27	-23%	321.42	-31%	352.37	-24%	341.94	-26%
NW-402	349	376.42	424.16	654.94	88%	358.83	3%	354.27	2%	321.42	-8%	373.22	7%	365.52	5%
NW-403	125	136.88	154.24	124.72	0%	111.23	-11%	149.81	20%	115.24	-8%	125.14	0%	107.38	-14%
NW-404	97	205.32	231.36	187.08	93%	138.27	43%	149.81	54%	115.24	19%	152.94	58%	138.82	43%
NW-405	123	171.10	192.80	155.90	27%	124.75	1%	134	9%	115.24	-6%	139.04	13%	123.1	0%
NW-406	388	325.09	366.32	296.21	-24%	262.07	-32%	252.04	-35%	218.33	-44%	276.98	-29%	267.89	-31%
NW-407	225	376.42	424.16	396.66	76%	282.35	25%	236.23	5%	218.33	-3%	297.83	32%	291.47	30%
NW-408	317	273.76	308.48	288.48	-9%	241.79	-24%	252.04	-20%	218.33	-31%	256.13	-19%	244.31	-23%
NW-409	408	273.76	308.48	476.32	17%	241.79	-41%	252.04	-38%	218.33	-46%	256.13	-37%	244.31	-40%
NW-410	346	256.65	289.20	446.55	29%	311.51	-10%	354.27	2%	321.42	-7%	324.57	-6%	310.5	-10%
NW-411	251	376.42	424.16	396.66	58%	282.35	12%	252.04	0%	218.33	-13%	297.83	19%	291.47	16%
NW-412	259	342.20	385.60	595.40	130%	345.31	33%	354.27	37%	321.42	24%	359.32	39%	349.8	35%
SE-101	93	222.43	250.64	234.39	152%	221.51	138%	252.04	171%	218.33	135%	235.28	153%	220.73	137%
SE-102	335	342.20	385.60	595.40	78%	345.31	3%	354.27	6%	321.42	-4%	359.32	7%	349.8	4%
SE-104	246	171.10	192.80	180.30	-27%	201.23	-18%	252.04	2%	218.33	-11%	214.43	-13%	197.15	-20%
SE-105	367	205.32	231.36	357.24	-3%	291.23	-21%	354.27	-3%	321.42	-12%	303.72	-17%	286.92	-22%
SE-107	141	171.10	192.80	155.90	11%	124.75	-12%	149.81	6%	115.24	-18%	139.04	-1%	123.1	-13%
SE-108	333	273.76	308.48	288.48	-13%	241.79	-27%	236.23	-29%	231.8	-30%	242.89	-27%	333.01	0%
SE-110	83	205.32	231.36	187.08	125%	138.27	67%	134	61%	128.71	55%	139.7	68%	118.51	43%
SE-111	77	205.32	231.36	187.08	143%	138.27	80%	134	74%	115.24	50%	152.94	99%	138.82	80%
SE-112	221	205.32	231.36	187.08	-15%	138.27	-37%	134	-39%	115.24	-48%	152.94	-31%	138.82	-37%
SE-113	286	171.10	192.80	180.30	-37%	201.23	-30%	236.23	-17%	218.33	-24%	214.43	-25%	197.15	-31%
SE-115	418	342.20	385.60	595.40	42%	268.83	-36%	252.04	-40%	218.33	-48%	283.93	-32%	275.75	-34%
SE-116	308	496.19	559.12	863.33	180%	406.15	32%	338.46	10%	334.89	9%	408.63	33%	308.02	0%
SE-117	322	410.64	462.72	714.48	122%	372.35	16%	338.46	5%	321.42	0%	387.12	20%	381.24	18%
SW-501	89	273.76	308.48	476.32	435%	318.27	258%	354.27	298%	321.42	261%	331.52	272%	318.36	258%
SW-502	65	136.88	154.24	124.72	92%	111.23	71%	149.81	130%	115.24	77%	125.14	93%	107.38	65%
SW-504	351	325.09	366.32	565.63	61%	338.55	-4%	338.46	-4%	321.42	-8%	352.37	0%	341.94	-3%
SW-506	218	136.88	154.24	124.72	-43%	187.71	-14%	252.04	16%	218.33	0%	200.53	-8%	181.43	-17%
SW-507	154	205.32	231.36	187.08	21%	138.27	-10%	134	-13%	128.71	-16%	139.7	-9%	118.51	-23%
SW-509	294	342.20	385.60	595.40	103%	345.31	17%	354.27	21%	321.42	9%	359.32	22%	349.8	19%
SW-510	397	325.09	366.32	565.63	42%	262.07	-34%	252.04	-37%	218.33	-45%	276.98	-30%	267.89	-33%
SW-511	68	136.88	154.24	124.72	83%	111.23	64%	149.81	120%	115.24	69%	125.14	84%	107.38	58%
SW-512	535	188.21	212.08	198.33	-63%	207.99	-61%	252.04	-53%	218.33	-59%	221.38	-59%	205.01	-62%
SW-515	123	136.88	154.24	124.72	1%	111.23	-10%	149.81	22%	115.24	-6%	125.14	2%	107.38	-13%
SW-516	52	171.10	192.80	155.90	200%	124.75	140%	149.81	188%	115.24	122%	139.04	167%	123.1	137%
SW-517	62	256.65	289.20	446.55	620%	235.03	279%	252.04	307%	218.33	252%	249.18	302%	236.45	281%

< 300K
≥ 300K

Overestimate by 100	19	23	31	9	10	8	12	9
Underestimate by 100	9	4	2	10	9	13	8	10
Miscalculated by > 100 (+/-)	28	27	33	19	19	21	20	19

Appendix G
Weekday Final Regression Summaries

Weekday Daily Regression Models with Metro Variables

VFP + GFA Class. (< Metro 300,000)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.6843
R Square	0.4683
Adjusted R Square	0.4520
Standard Error	1050.0698
Observations	68

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	63132662.112	31566331.056	28.628	1.21186E-09
Residual	65	71672023.947	1102646.522		
Total	67	134804686.059			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-354.831	426.243	-0.832	0.408	-1206.097	496.435	-1206.097	496.435
VFP	80.610	33.226	2.426	0.018	14.252	146.967	14.252	146.967
GFA Class.	898.299	211.141	4.254	0.000	476.621	1319.977	476.621	1319.977

VFP + GFA Class. (≥ Metro 300,000)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.8703
R Square	0.7575
Adjusted R Square	0.7202
Standard Error	938.5882
Observations	16

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	35768138.769	17884069.385	20.301	0.000100222
Residual	13	11452321.231	880947.787		
Total	15	47220460.000			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-1035.888	717.441	-1.444	0.172	-2585.825	514.049	-2585.825	514.049
VFP	144.001	57.560	2.502	0.027	19.651	268.351	19.651	268.351
GFA Class.	834.764	477.059	1.750	0.104	-195.860	1865.387	-195.860	1865.387