ENVIRONMENTAL ASSESSMENT WORKSHEET

FORMER MACY'S SITE

City of Edina, Hennepin County, Minnesota

May 30, 2023

Comment period: June 6 – July 6, 2023

Prepared for:
City of Edina
4801 W. 50th Street
Edina, MN 55424

Environmental Assessment Worksheet

This most recent Environmental Assessment Worksheet (EAW) form and guidance documents are available at the Environmental Quality Board's website at**:** https://www.eqb.state.mn.us**/** The EAW form provides information about a project that may have the potential for significant environmental effects. Guidance documents provide additional detail and links to resources for completing the EAW form.

Cumulative potential effects can either be addressed under each applicable EAW Item or can be addressed collectively under EAW Item 21.

Note to reviewers: Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for anEIS.

1. **Project title:** Former Macy's Site

2. **Proposer: Enclave**

   Contact person: Patrick Brama
   Title: Developer
   Address: 1660S Hwy 100, Suite 530
   City, State, ZIP: Saint Louis Park, MN 55416
   Phone: 651-461-9977
   Fax:
   Email: Patrick.Brama@enclavecompanies.com

3. **RGU: City of Edina**

   Contact person: Cary Teague
   Title: Community Development Director
   Address: 4801 W 50th Street
   City, State, ZIP: Edina, MN 55424
   Phone: (952) 826-0460
   Fax: (952) 826-0389
   Email: cteague@EdinaMN.gov

4. **Reason for EAW Preparation:** (check one) **Required:**

   Discretionary:
   ☐ **EIS Scoping**   ☐ **Citizen petition**
   X **Mandatory EAW**   ☐ **RGU discretion**
                                                   ☐ **Proposer initiated**

   If EAW or EIS is mandatory give EQB rule category subpart number(s) and name(s):

   Mixed Residential and Industrial-Commercial Projects: MR 4410.4300, Subp 32

5. **Project Location:**

   a) **County: Hennepin County**
   b) **City/Township: Edina**
   c) **PLS Location (¼, ¼, Section, Township, Range): SW, NW, S: 32, T: 28N, R: 24W**
   d) **Watershed (81 major watershed scale): #20 – Mississippi River**
   e) **GPS Coordinates: 44.87148, -93.32730**
   f) **Tax Parcel Number: 320282423004**

At a minimum attach each of the following to the EAW:

g) County map showing the general location of the project; (see **Figure 1)**
h) U.S. Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries (photocopy acceptable); (see **Figure 2)**
i) Site plans showing all significant project and natural features. Pre-construction land cover plan and post-construction site plan. (see **Figure 3 and 4**)
j) List of data sources, models, and other resources (from the Item-by-Item Guidance: *Climate Adaptation and Resilience* or other) used for information about current Minnesota climate trends and how climate change is anticipated to affect the general location of the project during the life of the project (as detailed below in item 7. Climate Adaptation and Resilience). (see responses to **Items 7 and 18**)

6. **Project Description:**

   a. **Provide the brief project summary to be published in the EQB Monitor, (approximately 50 words).**

      Enclave is proposing the redevelopment of the former Macy's Furniture Store site into 300,000 square feet of office/mixed use space and 460 multi-family residential units. The site is located on approximately eight acres on the east side of France Avenue north of Gallagher Drive in Edina, MN.

   b. **Give a complete description of the proposed project and related new construction, including infrastructure needs. If the project is an expansion include a description of the existing facility. Emphasize: 1) construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes, 2) modifications to existing equipmentor industrial processes, 3) significant demolition, removal or remodeling of existing structures, and 4) timing and duration of construction activities**

      Enclave (the developer) is proposing the redevelopment of the former Macy's Furniture Store (project, site) in Edina, MN (**Figures 1-3).** The project is located the southeast portion of the City of Edina at 7235 France Ave South. The site totals eight acres and is comprised of one parcel (PID# 320282423004).

      The existing 80,000 square foot building will be demolished. The redevelopment will include four buildings with a total of 300,000 square feet of office/mixed use, 460 multi-family residential units, and parking (**Figure 3**):

      - Building A & B: 5-story, 150,000 square foot office building and parking each
      - Building C & D: 6-story, 230 multi-family residential units and parking each

      The development will be constructed in two phases beginning in the spring/early summer of 2024 (Phase I commencement) and spring/early summer of 2025 (Phase II commencement). Site preparation will begin in the spring/early summer of 2024 with the demolition of the existing building. Phase I is anticipated to be completed in the spring/early summer of 2026 while Phase II is anticipated to be completed in the summer/early fall of 2027.

      New utility infrastructure will be included as a part of this project including gas, electric, sanitary sewer, cable/internet, storm sewer, water, stormwater management, sidewalks and trail connections, internal roads and green space.
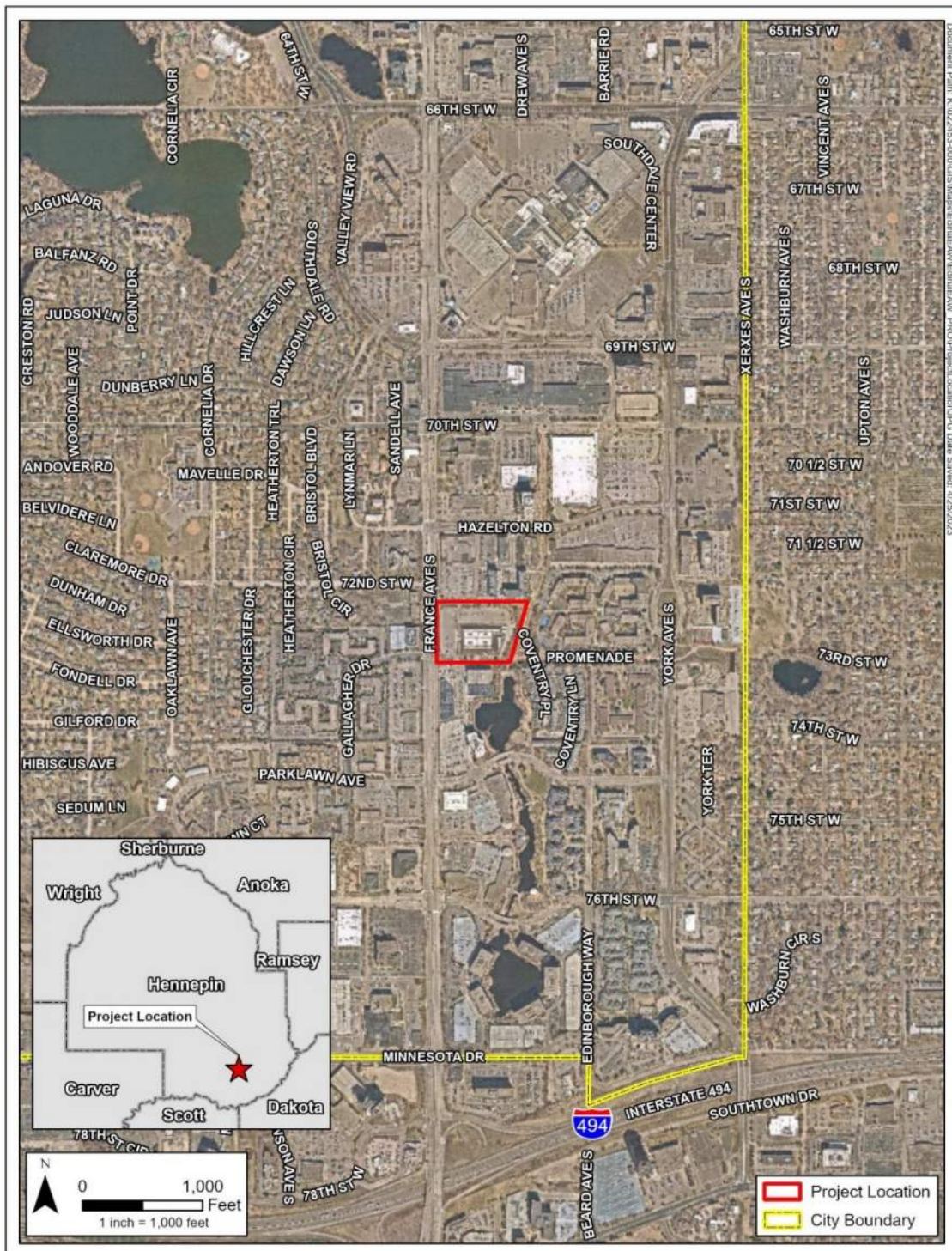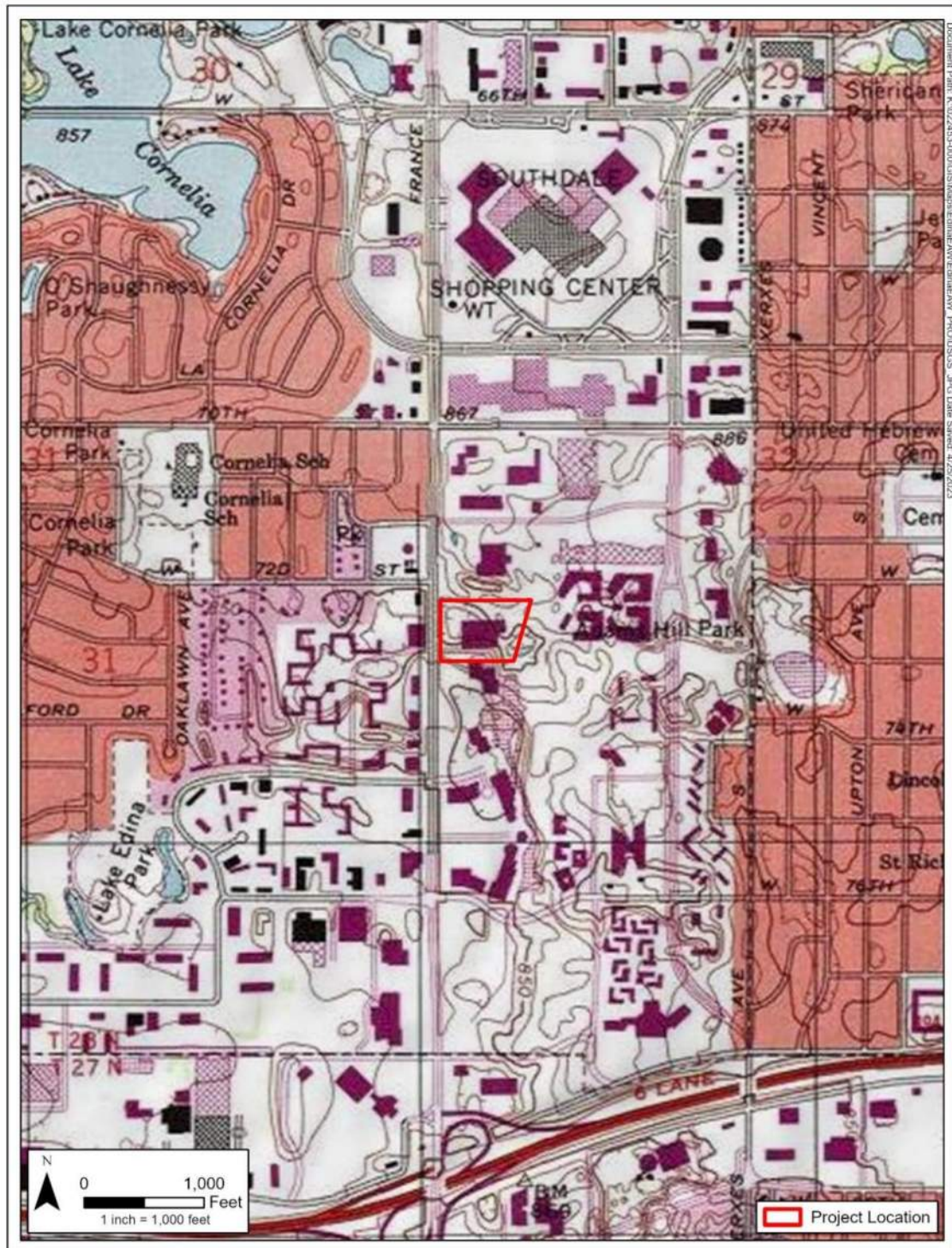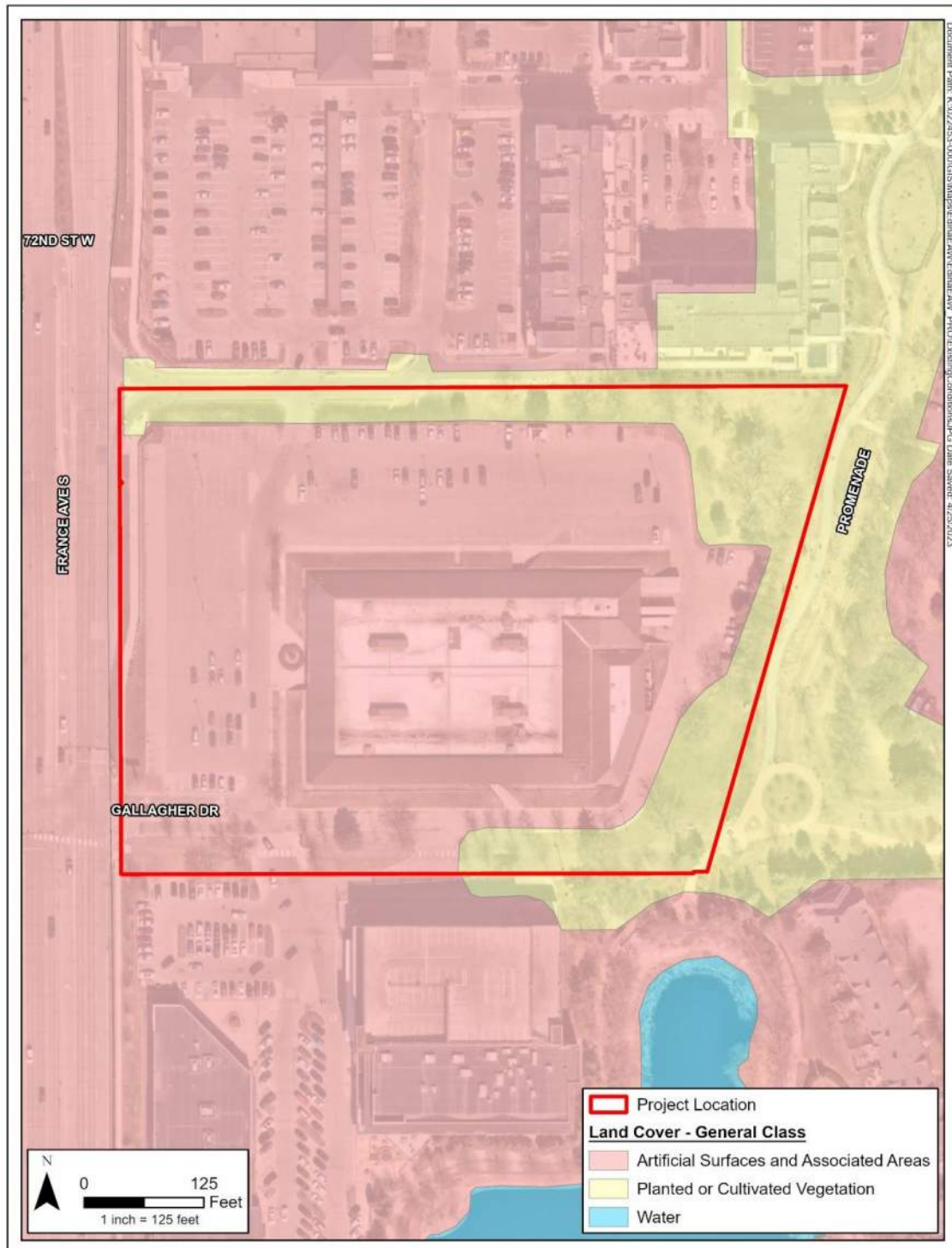
Figure 1: Project Location

Figure 2: USGS Map

Figure 3: Concept Plan

Figure 4: Existing Land Cover

c. **Project magnitude:**

Description	Number
Total Project Acreage	8 acres
Linear project length	NA
Number and type of residential units	430 multi-family
Residential building area (in square feet)	114,867 sf (footprint)
Commercial building area (in square feet)	86,400 sf (footprint)
Industrial building area (in square feet)	NA
Institutional building area (in square feet)	NA
Other uses – specify (in square feet)	
Structure height(s)	82-150 feet

d. **Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.**

The project will be carried out by a private developer. The project will provide market rate and affordable housing as well as areas of employment.

e. **Are future stages of this development including development on any other property planned orlikely to happen? ☐ Yes X No**
If yes, briefly describe future stages, relationship to present project, timeline and plans forenvironmental review.

f. **Is this project a subsequent stage of an earlier project? ☐ Yes X No**
If yes, briefly describe the past development, timeline and any past environmental review.

7. **Climate Adaptation and Resilience:**
   a. **Describe the climate trends in the general location of the project (see guidance: *Climate Adaptation and Resilience*) and how climate change is anticipated to affect that location during the life of the project.**

   According to the MN DNR across the state, "Minnesota's climate already is changing rapidly and will continue to do so for the foreseeable future. Temperatures are increasing -- especially in winter -- and larger, more frequent extreme precipitation events are occurring. Substantial warming during winter and at night, increased precipitation, and heavier downpours already have affected our natural resources, and how we interact with and use them. The decades ahead will bring even warmer winters and nights, and even larger rainfalls, along with the likelihood of increased summer heat and the potential for longer dry spells."[1]

   Projected climate change impacts to this specific site have been analyzed below, utilizing resources from the guidance document supplied by the Environmental Quality Board (EQB).

   Variables in this analysis include precipitation and temperature, storm intensity, floods, and extreme heat.

   Precipitation and Temperature:
   According to the Minnesota Climate Explorer mapping tool for Hennepin County, utilizing the mean model, the following Table demonstrates the changes expected on precipitation and temperature in the County.

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[1] https://www.dnr.state.mn.us/climate/climate_change_info/climate-trends.html

Table 1[2]: Estimated future precipitation and temperature changes

Recent and Projected Future for Hennepin County: January-December, Mean Model	Precipitation: Mean (in)	Average temperature: Mean (˚F)	Maximum Temperature: Mean (˚F)	Minimum Temperature: Mean (˚F)
1980-1999 Modeled Present	31.61	45.28	51.97	38.71
2040-2059 Mid-Century (RCP 4.5)	32.12	48.87	55.82	42.14
2080-2099 Late-Century (RCP 4.5)	32.94	51.27	57.92	44.94
2080-2099 Late- Century (RCP 8.5)	35.7	55.03	61.46	49.13

These models generally predict that the project area will see more precipitation and warmer average, maximum and minimum temperatures. The mid-century (2040-2059) calculation is more relevant to the roadway portions of the project, given the 20-year life of improvement. The late-century (2080-2099) calculation is more relevant to the life of the structures for the project, given the 50-year expected life of the project.

Storm Intensity:
In the Edina area, according to the EPA's CREATE: Storms map[3], the scenarios demonstrate that by 2035, there will likely be an increase in 100-year storm intensity. With the 'not as stormy' scenario, by 2035, there may be a 2.9% increase and by 2060, there will be a 5.6% increase in 100-year storm intensity. In the 'stormy' scenario, by 2035, there may be a 13.7% increase and by 2060, a 26.6% increase in 100-year storm intensity. Generally, there is an expected increase in 100-year storm intensity, per the modelling.

Floods:
Risk Factor: Flood Factor Tool
According to the Risk Factor: Flood Factor tool from the nonprofit First Street Foundation®, the city of Edina has a Minor Flood Factor risk overall. "There are 1,484 properties in Edina that have greater than a 26% chance of being severely affected by flooding over the next 30 years. This represents 14% of all properties in Edina."[4] Within the categories, residential and social facilities have moderate risk, commercial and road has minor risk, and critical infrastructure has minimal risk.

Metropolitan Council Localized Flood Mapping
Per the tool, "the interactive Localized Flood Map Screening Tool is intended for community use. The data is part of the regional Climate Vulnerability Assessment project for the Twin Cities metro area. Communities may use this tool to screen for potential surface or localized flooding locations. The Localized Flood Map Screening Tool was created using the State of Minnesota's LiDAR elevation data from 2011." **Figure 5** shows the project area with respect to flooding risk associated with climate change. On the northern and western edges of the site, there are areas that have primary flood hazard in dark blue. The western side of the project also includes areas of secondary and tertiary flood hazard in blue and lighter blue. The teal area on the east side of the project indicates a shallow flood hazard.[5]

[2] https://arcgis.dnr.state.mn.us/ewr/climateexplorer/main/historical
[3] https://epa.maps.arcgis.com/apps/MapSeries/index.html?appid=3805293158d54846a29f750d63c6890e
[4] https://riskfactor.com/city/garrison-mn/2723192_fsid/flood#flood_risk_overview
[5] https://metrocouncil.maps.arcgis.com/apps/webappviewer/index.html?id=100fa3012dcc4e288a74cbf4d95027bf

Figure 5: Flood Hazards from Climate Vulnerability Screening (Metropolitan Council Localized Flood Map Screening Tool)

Extreme Heat

EPA CREATE Map

In the Edina area, the EPA's CREATE: Extreme Heat map shows that the number of days over 100°F historically mapped. Where the project area is located, there has been one day in the project area historically over 100°F. By 2035, projections show the project area with three scenarios as follows:

- in the Hot/Dry scenario, three days will be over 100°F;
- in the central scenario, two days will be over 100°F;
- in the warm/wet scenario, two days will be over 100°F.[6]

By 2060, the modeling of the scenarios show the following:
- in the Hot/Dry scenario, eight days will be over 100°F;
- in the central scenario, six days will be over 100°F;
- in the warm/wet scenario, five days will be over 100°F.[7]

This indicates that the project area may see more extreme heat days in the future.

University of Minnesota Heat Exposure Tool

Heat Exposure mapping tools from the University of Minnesota show high composite sensitivity and moderate exposure scores for Hennepin County. These composite scores help to "visualize datasets that contribute to a community's vulnerability, including sensitivity (i.e., demographic, socio-economic, health, and environmental variables) and exposure (i.e., temperature-related variables). Variables can be mapped individually or layered to develop a composite score."[8] High scores indicate high community vulnerability to extreme heat overall. The project area scores indicate community vulnerability to extreme heat.

a. **For each Resource Category in the table below: Describe how the project's proposed activities and how the project's design will interact with those climate trends. Describe proposed adaptations to address the project effects identified.**

Table 2: Proposed Activities and Climate Considerations

Resource Category	Climate Considerations	Project Information	
		Climate change risks and vulnerabilities	Adaptations
Project Design	Aspects of the building architecture/materials choices and site design that may negatively affect urban heat island conditions in the area considering changing climate zones, temperature trends, and potential for extended heat waves	• This site is in an area with risk of the urban heat island effect, increasing temperatures and precipitation, and increase storm intensity. The site is planned to have a buildings and paved parking	• The project is proposing underground stormwater storage . The project may consider green infrastructure solutions, such as rain gardens, green roof, vegetation and vegetative buffer strips, tree trenches, cisterns, and other solutions. • The project will follow all applicable federal, state,

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[6] https://epa.maps.arcgis.com/apps/MapSeries/index.html?appid=3805293158d54846a29f750d63c6890e
[7] https://epa.maps.arcgis.com/apps/MapSeries/index.html?appid=3805293158d54846a29f750d63c6890e
[8] https://maps.umn.edu/climatehealthtool/heat_app/

		surfaces.	and local standards and regulations, as listed throughout this report.
Land Use	Any critical facilities (i.e. facilities necessary for public health and safety, those storing hazardous materials, or those with housing occupants who may be insufficiently mobile) that are proposed in floodplain areas and other areas identified as at risk for localized flooding; describe the risk potential considering changing precipitation and event intensity	• Potential risk of future flooding in the project area due to increasing storm intensity. • The proposed land use is similar to the existing use (commercial) and is proposed to be commercial and residential. • The new land use will include residential and commercial structures that will use energy and create transportation needs.	• The project is proposing underground stormwater storage. The project may consider green infrastructure solutions, such as rain gardens, green roof, vegetation and vegetative buffer strips, tree trenches, cisterns, and other solutions. • As practicable, the project will evaluate additional strategies beyond the BMPs described above to improve climate resiliency. • The project will follow all applicable federal, state, and local standards and regulations, as listed throughout this report. • This mixed-use project will utilize energy efficient appliances and fixtures, lighting, and efficient building practices. The apartment buildings will also consider provision of solar power on rooftops and electric vehicle charging stations. The project will also include a public trail connection on the north side of Subject property, connecting France to Centennial Lakes Promenade for non-vehicle trips.
Water Resources	Addressed in item 12		
Contamination/ Hazardous Materials/Wastes	Addressed in item 13.		
Fish, wildlife, plant communities, and sensitive ecological	Addressed in item 14.		

resources (rare features)	

8. **Cover types: Estimate the acreage of the site with each of the following cover types before and afterdevelopment:**

Cover Types	Before (acres)	After (acres)
Wetlands and shallow lakes (<2 meters deep)	0	0
Deep lakes (>2 meters deep)	0	0
Wooded/forest	0	0
Rivers/streams	0	0
Brush/Grassland	0	0
Cropland	0	0
Livestock rangeland/pastureland	0	0
Lawn/landscaping	1.69	1.1
Green infrastructure TOTAL (from table below*)	0	0.03
Impervious surface	6.28	6.87
Stormwater Pond (wet sedimentation basin)	0	0
Other (describe)	0	0
TOTAL	8	8

Green Infrastructure*	Before (acreage)	After (acreage)
Constructed infiltration systems (infiltration basins/infiltration trenches/ rainwater gardens/bioretention areas without underdrains/swales with impermeable check dams)	0	0
Constructed tree trenches and tree boxes	0	0.03
Constructed wetlands	0	0
Constructed green roofs	0	0
Constructed permeable pavements	0	0
Other (describe)	0	0
TOTAL*	0	0.03

Trees	Percent	Number
Percent tree canopy removed or number of mature trees removed during development	There are approximately 25 existing trees onsite	Approximately 25 existing trees (100%) will be removed
Number of new trees planted		Trees will be planted around the site and within the central area. The number of trees to be planted

		will be determined through the plan review process.

9. Permits and approvals required: List all known local, state and federal permits, approvals, certifications and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure. *All of these final decisions are prohibiteduntil all appropriate environmental review has been completed. See Minnesota Rules, Chapter 4410.3100.*

Unit of Government	Type of Application	Status
Federal		
US Army Corps of Engineers	Section 404 Permit	To be obtained, if needed
State		
Pollution Control Agency	NPDES/SDS Construction Stormwater Permit	To be obtained
Pollution Control Agency	Sanitary Sewer Extension	To be obtained
Pollution Control Agency	Response Action Plan/ Construction Contingency Plan review	To be obtained, if needed
Department of Health	Watermain Extension Plan Review	To be obtained
Department of Natural Resources	Water Appropriation (Construction Dewatering) Permit	To be obtained, if needed
Local		
City of Edina	Site Plan Review	To be obtained
City of Edina	Right of Way Permit	To be obtained
City of Edina	Demolition Permit	To be obtained
City of Edina	Sewer & Water Connection & Repair Permit	To be obtained
City of Edina	Grading Permit	To be obtained
City of Edina	Conditional Use Permit	To be obtained
Met Council	Sanitary Sewer Extension (Regional Review)	To be obtained
Nine Mile Creek Watershed District	Watershed District Permit	To be obtained
Hennepin County	Approval of France Avenue underpass	To be obtained

Cumulative potential effects may be considered and addressed in response to individual EAW Item Nos.10-20, or the RGU can address all cumulative potential effects in response to EAW Item No.22. If addressing cumulative effect under individual items, make sure to include information requested in EAW Item No. 21.

10. Land use:

    a. **Describe:**
        i. **Existing land use of the site as well as areas adjacent to and near the site, including**

parks and open space, cemeteries, trails, prime or unique farmlands.

Existing land use is a commercial lot containing an 80,000 square foot single story building (former Macy's Furniture Store) that is surrounded by parking lot. France Avenue South is adjacent to on the western edge of the project site while grocery, mixed use, and retail areas are adjacent to the north and south of the project site. Open space/parkland include the Edina Promenade which is adjacent to the project site to the east, a portion of Centennial Lakes Park which is adjacent on the southeast corner of the project site and Nine Mile Creek Regional trail that runs east/west on the southern edge of the project site (**Figure 6**).

The open space/parkland (Edina Promenade) offers trails that connect nearby Centennial Lakes Park and Nine Mile Creek Regional Trail to residential, retail, and parks in the surrounding area.

Figure 6: Parks and Trails
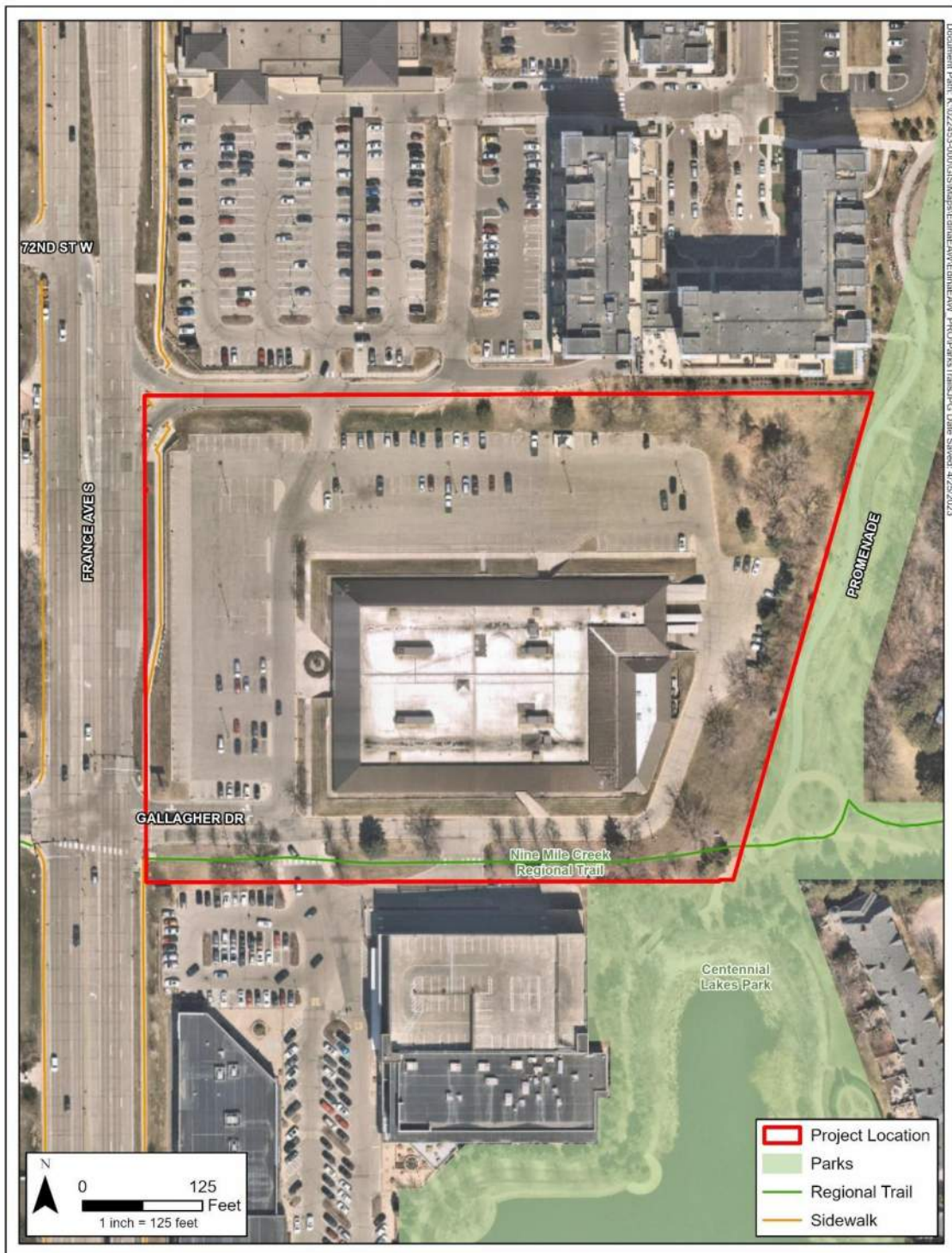
ii. **Plans. Describe planned land use as identified in comprehensive plan (if available) and anyother applicable plan for land use, water, or resources management by a local, regional, state, or federal agency.**

The City of Edina's 2040 Comprehensive plan describes the site and surrounding area as a "potential change area". This means the area has the capacity to support new growth in the form of housing and job-generating uses and has infrastructure to support this is

change. The area the site is within is known as "The Greater Southdale District." The guidelines for development in this area calls for more compact buildings, structured parking, and stronger focus on transit supportive densities. This may include some mixed-use elements compatible with residential development such as small-scale retail, services, and institutional uses.

iii. **Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenicrivers, critical area, agricultural preserves, etc.**

The project site is currently zoned Planned Commercial (PCD-3) and within the building height overlay district HOD-8 that specifies a maximum height of 8 stories or 96 feet, whichever is greater (**Figure 7**). The site is not within a FEMA floodplain or any additional special districts or overlay.

iv. **If any critical facilities (i.e. facilities necessary for public health and safety, those storing hazardous materials, or those with housing occupants who may be insufficiently mobile) are proposed in floodplain areas and other areas identified as at risk for localized flooding,describe the risk potential considering changing precipitation and event intensity.**

Not applicable

Figure 7: Zoning Map
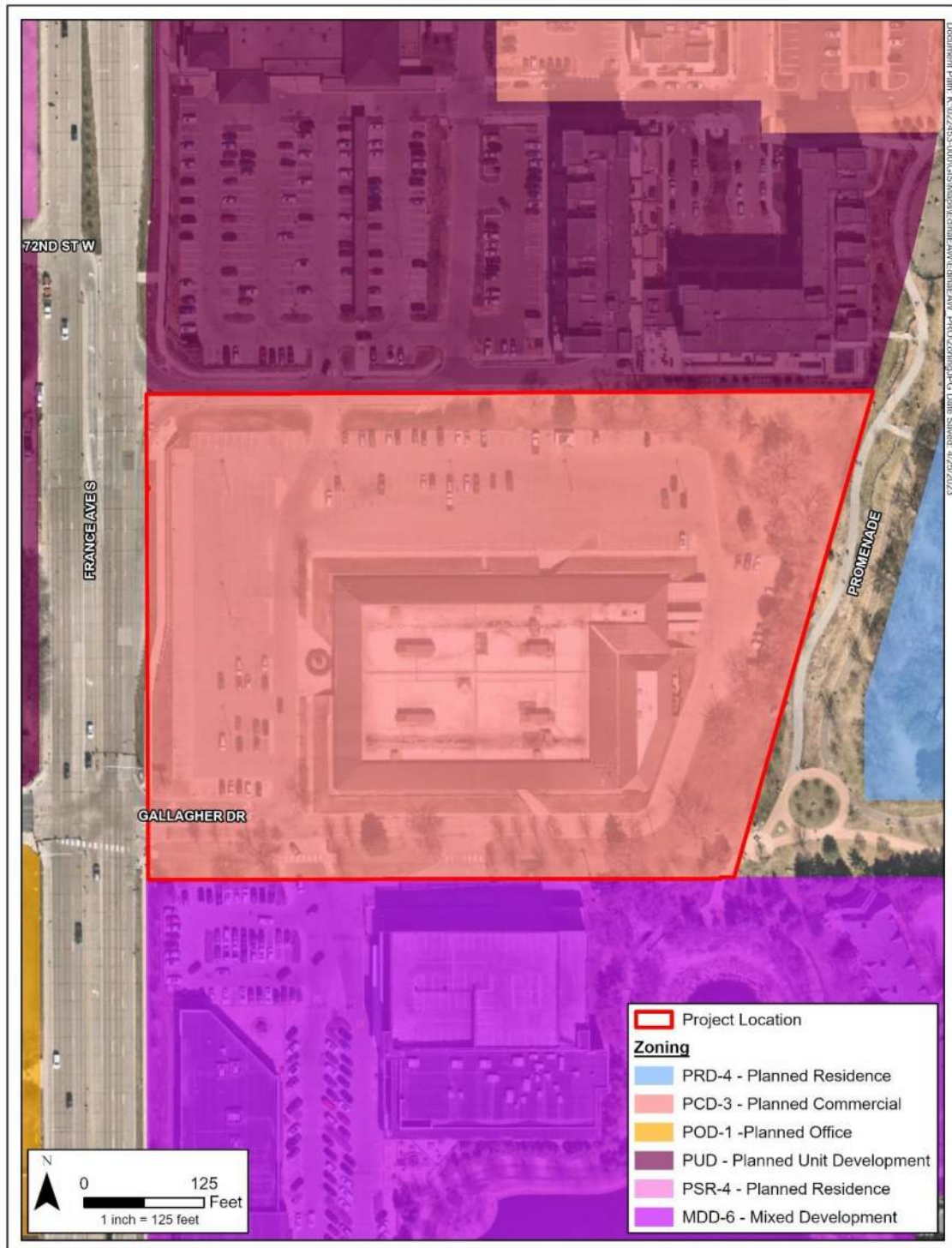
b. **Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 10a above, concentrating on implications for environmental effects.**

The proposed project aligns with the land use plans, goals, and policies that are outlined in the City of Edina's Comprehensive Plan for The Greater Southdale District. The proposed 300,000 square ft of office/mixed use space and 460 multi-family residential units provide compact buildings, structured parking, and a strong focus on transit supportive densities as described in the City's Comprehensive Plan.

The project plan includes incorporating the adjacent Centennial Lakes/Edina Promenade with walk-up units, pathways, and a dedicated portion of land for an extension of the Promenade. In addition, the developer is proposing to connect France Avenue to the Promenade with a new pedestrian/bicycle connection. This area is within close proximity to grocery and shopping areas. These considerations connect the site to key destinations within walkable distances, reducing dependance on cars which is identified as an areawide goal in the City's Comprehensive Plan.

c. **Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 10b above and any risk potential.**

The proposed project is compatible with the zoning and plans described in the City's Comprehensive Planning document. Building heights are anticipated to be between 82 – 150 feet. Building heights that exceed 96 feet will need to obtain a Conditional Use Permit.

11. **Geology, soils and topography/land forms:**

a. **Geology - Describe the geology underlying the project area and identify and map any susceptiblegeologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.**

Bedrock under the project site is consolidated marine sedimentary rock known as the St. Peter Sandstone. There are no susceptible geologic features on site or nearby and no anticipated effects to geologic features expected as a part of this project.

b. **Soils and topography - Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability or other soils limitations, such as steep slopes, highlypermeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed inresponse to Item 12.b.ii.**

The NCRS web soil survey maps Urban land, with 0 to 8 percent slopes as soil units on site. Urban land soils are fill material from surrounding upland, and gravel pits. The topography of the site is relatively flat with an elevation across the site of approximately 857 feet above sea

level.

Soil borings taken on-site reveal Urban land, or fill material, at a depth of 7-28 feet across the project site underlain with poorly graded sand-silt identified as glacial till. The new foundation will be approximately 10-25 feet below existing grade and will land on native soils or engineered fill following a soil correction. Based on existing soil boring data at the site, the correction depth could extend up to 6 feet below the proposed footings.

The site is currently developed with buildings and impervious surface. Demolition of existing development will disturb soils. Erosion and sediment control BMPs would be implemented during demolition and construction as outlined in the stormwater pollution prevention plan (SWPPP). BMPs may include but are not limited to erosion control blankets, silt fencing, and stormwater inlet control structures.

NOTE: For silica sand projects, the EAW must include a hydrogeologic investigation assessing the potential groundwater and surface water effects and geologic conditions that could create an increased risk of potentially significant effects on groundwater and surface water. Descriptions of water resources and potential effects from the project in EAW Item 12 must be consistent with thegeology, soils and topography/land forms and potential effects described in EAW Item 11.

12. **Water resources:**

   a. **Describe surface water and groundwater features on or near the site in a.i. and a.ii. below.**

      i. **Surface water - lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, shoreland classification and floodway/floodplain, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include the presence of aquatic invasive species and the water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within 1 mile of the project. Include DNR Public Waters Inventory number(s), if any.**

      The DNR National Wetland Inventory (NWI) shows one wetland adjacent to the project area (**Figure 8**). It is classified as a PUBHx, Freshwater Pond that has been excavated. It is a 2.94-acre pond adjacent to the site in the southeast corner of the parcel.

      Both Lake Cornelia (PWI 28P), Lake Edina (PWI 29P), one unnamed public water (PWI1079P) and are located within 1 mile from the project area. Both Lake Cornelia and Lake Edina are impaired for nutrients. According to the DNR, Lake Edina has also been listed as an infested water body because it contains Eurasian watermilfoil.

Figure 8: Surface Waters

ii. **Groundwater – aquifers, springs, seeps. Include: 1) depth to groundwater; 2) if project is within a MDH wellhead protection area; 3) identification of any onsite and/or nearby wells,including unique numbers and well logs if available. If there are no wells known on site or nearby, explain the methodology used to determine this.**

Based on a geotechnical report for the site, groundwater is about 35-40 feet below the surface. Based on the Minnesota Hydrogeology Atlas, the depth to groundwater varies from 10 to 30 feet. Based on the Minnesota Department of Health Source Water Protection Web Map Viewer, the site is located in Low to Moderate Vulnerability portions of the Edina and Bloomington Drinking Water Supply Management Areas (DWSMAs). Based on the Minnesota Well Index, there are no wells on site, and there are two active wells (Unique Well IDs 206182 and 272558) within 150 feet of the site to the northwest across France Avenue.

b. **Describe effects from project activities on water resources and measures to minimize or mitigatethe effects in Item b.i. through Item b.iv. below.**

i. **Wastewater - For each of the following, describe the sources, quantities and composition ofall sanitary, municipal/domestic and industrial wastewater produced or treated at the site.**

1) **If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water andwaste loadings, including any effects on, or required expansion of, municipal wastewater infrastructure.**

Wastewater will discharge to the City of Edina sanitary sewer system for conveyance to the Metropolitan Council Environmental Services (MCES) regional collection and treatment system.

As shown on **Figure 9**, there is an existing trunk sanitary sewer that crosses through the northeast corner of the site that will need to be relocated along the boundary of the site or along internal streets. In the Southeast Edina Sanitary Sewer Preliminary Engineering Report dated April 2017, the projected flows in this trunk sanitary sewer were approaching its capacity. The number of SAC units assumed in that study should be verified for agreement with this EAW, and the existing pipe slopes should be verified to ensure that the proposed realignment can maintain minimum slope and adequate capacity.

Wastewater will flow via city sanitary sewers to MCES Meter 129 and Interceptor 1-RF-491 and then through the MCES regional collection system to the Metropolitan Wastewater Treatment Plant (Metro WWTP). The Metro WWTP has a capacity of 314 million gallons per day (MGD) and receives 177 MGD as of March 2023. No pretreatment is necessary for the proposed development.

The projected wastewater flow from the proposed development is detailed below.

Table 3: Projected Wastewater Flows

Land Use	SAC Units	Unit Flow (gpd/unit)	Average Flow (gpd)	Peak Factor	Peak Hourly Flow (gpd)

Office/Mixed Use	113*	180	20,340		
Multi-Family Residential	460	180	82,800		
Total			**103,140**	**4.0**	**412,560**

*Office SAC units based on 300,000 SF and 2,650 SF/SAC.

2) **If the wastewater discharge is to a subsurface sewage treatment systems (SSTS), describe the system used, the design flow, and suitability of site conditions for sucha system. If septic systems are part of the project, describe the availability of septage disposal options within the region to handle the ongoing amounts generated as a result of the project. Consider the effects of current Minnesota climate trends and anticipated changes in rainfall frequency, intensity and amount with this discussion.**

Not applicable.

3) **If the wastewater discharge is to surface water, identify the wastewater treatment methods and identify discharge points and proposed effluent limitations to mitigateimpacts. Discuss any effects to surface or groundwater from wastewater discharges,taking into consideration how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects.**

Not applicable.

Figure 9 : Existing Sanitary Sewer and Water Utilities
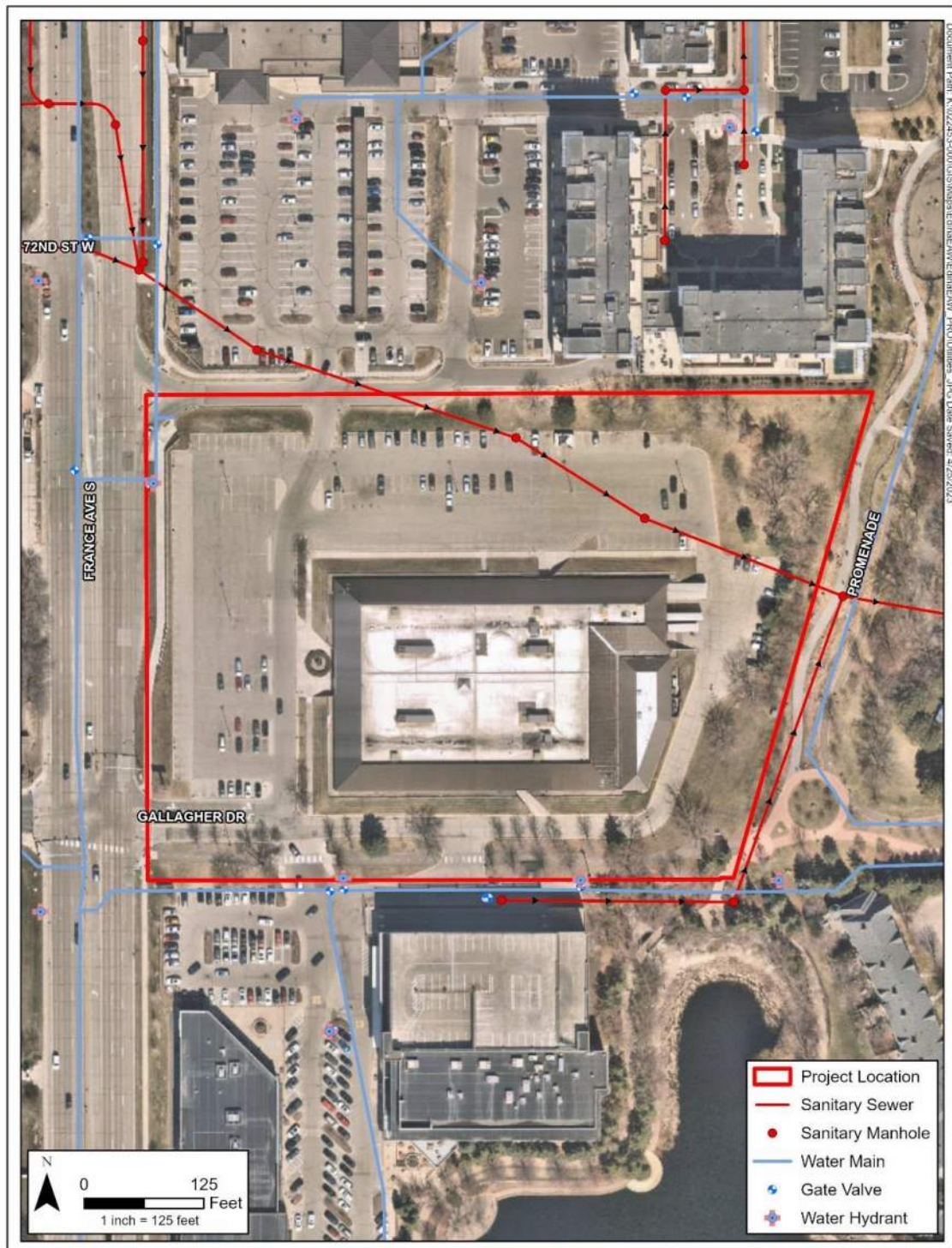
ii. **Stormwater - Describe changes in surface hydrology resulting from change of land cover. Describe the routes and receiving water bodies for runoff from the project site (major downstream water bodies as well as the immediate receiving waters). Discuss environmental effects from stormwater discharges on receiving waters post construction including how the project will affect runoff volume, discharge rate and change in pollutants. Consider the effects of current Minnesota climate trends and anticipated changes in rainfall frequency, intensity and amount with this discussion. For projects requiring NPDES/SDS Construction Stormwater permit coverage, state the total number of acres that will be disturbed by the project and describe the stormwater pollution prevention plan (SWPPP), including specific best management practices to address soil erosion and sedimentation during and after project construction. Discuss permanent stormwater management plans, including methods of achieving volume reduction to restore or maintain the natural hydrology of the site using green infrastructure practices or other stormwater management practices. Identify any receiving waters that have construction-related water impairments or are classified as special as defined in the Construction Stormwater permit. Describe additional requirements for special and/or impaired waters.**

Existing Conditions
Existing land use is a commercial lot containing an 80,000 square foot single story building (former Macy's Furniture Store) that is surrounded by parking lot. France Avenue South is adjacent to on the western edge of the project site while grocery, mixed use, and retail areas are adjacent to the north and south of the project site. Open space/parkland (Edina Promenade) is adjacent to the project site to the east and a portion of Centennial Lakes Park is adjacent on the southeast corner of the project site.

Under existing conditions, the property's storm water is piped to the east and ultimately drains to the wetland complex and Centennial Lake. The site is primarily impervious surface without any stormwater treatment.

Proposed Conditions
It is estimated that the development will need approximately 93,000 cubic feet of stormwater storage to meet City and Nine Mile Creek Watershed District requirements. This is proposed to be accomplished through an underground stormwater treatment system.

The site is within the Nine Mile Creek Watershed District (NMWD). NMWD rules will require the site to meet volume management control via infiltration, water quality, and rate control. The initial Geotech borings show layers of silty sand, clay and fill down to underlying poorly graded soil sands. Based on these soil types, volume management will be met through infiltration which will also allow for water quality to be met. Rate control will be met through the existing impervious coverage and lack of any on site stormwater management devices existing on site. The site does not drain to an impaired water within one mile of the site.

As discussed in Item 7 of the EAW, the Edina area will likely see an increase in 100-year storm intensity associated with changing climate trends. This has the potential to increase temporary flooding in open spaces and ponding areas in the vicinity of the site.

iii. **Water appropriation - Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use and purpose of the water use and if a DNR water appropriation permit is required. Describe**

anywell abandonment. If connecting to an existing municipal water supply, identify the wells tobe used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Discuss how the proposed water use is resilient in the event of changes in total precipitation, large precipitation events, drought, increased temperatures, variable surface water flows and elevations, and longer growing seasons. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation. Describe contingency plans should theappropriation volume increase beyond infrastructure capacity or water supply for the project diminish in quantity or quality, such as reuse of water, connections with another water source, or emergency connections.

Geotechnical information for the site indicates that groundwater appears to be approximately 35-40 feet below the surface. If the construction of utilities and building foundations require dewatering, a temporary water appropriation permit for construction dewatering would be required under DNR General Permit 1997-0005.

The site will connect to and receive its water supply from the City of Edina water supply system via existing 8-inch, 10-inch and 12-inch diameter watermains on the western, southern, and eastern boundaries of the site. Based on the City's Water Supply Plan dated January 2020, the average day demand from 2012 to 2017 was 6.5 million gallons per day (MGD), and the max day demand was 14 MGD. The system's total well capacity is 25 MGD, treatment capacity is 16 MGD, and storage capacity is 7 MG. The existing well and treatment capacity can accommodate the additional max day demand detailed below, and the existing storage capacity can accommodate the additional average day demand detailed below.

Table 4: Projected water use

Land Use	Units	Unit Demand (gpd/unit)	Average Day Demand (gpd)	Peak Factor	Max Day Demand (gpd)
Office/Mixed Use	113	225	25,425		
Multi-Family Residential	460	225	103,500		
Total			**128,925**	**2.25**	**290,081**

iv. **Surface Waters**

   a) **Wetlands - Describe any anticipated physical effects or alterations to wetland features such as draining, filling, permanent inundation, dredging and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed, taking into consideration how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigationfor unavoidable wetland impacts will occur in the same minor or major watershed and identify those probable locations.**

   No wetlands are present at the site and one wetland is located on the adjacent site to the southeast of the project in Centennial Lakes Park. Direct impacts to wetlands are not expected to occur as a part of this project. Erosion and sediment control

BMPs would be implemented during demolition and construction as required in the stormwater pollution prevention plan (SWPPP) to prevent indirect impacts to wetlands adjacent to the site. BMPs may include but are not limited to erosion control blankets, silt fencing, and stormwater inlet control structures.

b) **Other surface waters- Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicialditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features, taking into consideration how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering thewater features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.**

No surface water features are located within the project area or adjacent to the project site. Impacts to surface waters from this project are not anticipated.

13. **Contamination/Hazardous Materials/Wastes:**

a. **Pre-project site conditions - Describe existing contamination or potential environmental hazards on or in close proximity to the project site such as soil or ground water contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.**

A Draft Phase I Environmental Site Assessment (ESA) was prepared for the site. The Draft Phase I ESA was dated February 22, 2023 and prepared by Braun Intertec Corporation. Based on the results of the Draft Phase I ESA, two sites on or adjacent to the site were identified as recognized environmental conditions (RECs) (**Figure 10**).

The following recognized environmental conditions (RECs) were identified for the site:

1) The site was historically used as a gravel mine from approximately 1947 to 1966. The former mining activities appeared to mainly occur along the northern and southern edges of the site. Based on a review of previous environmental reports related to the adjoining property located north of the site, fill soil was present up to 30 feet and included concrete, wood, and other debris. Therefore, there is a potential for soil, groundwater, and/or soil vapor impacts at the site related to the import of fill soil from unknown sources.

2) From approximately 1947 to 1966, a gravel pit operation was located at the adjoining property located north of the site. The adjoining property has documented soil contamination and has since been redeveloped under the oversight of the MPCA's Brownfields Program. However, it does not appear that

groundwater samples were collected at the adjoining property during redevelopment. Although the adjoining property to the north has been remediated and redeveloped, there remains a potential that contamination may have caused impacts to the soil, groundwater, and/or soil vapor at the site.

Based on the review of the RECs on or adjacent to the site, there is potential to encounter contaminated soil, groundwater, and/or soil vapor at the proposed project. A Phase II ESA will be completed and a Response Action Plan (RAP) and/or Construction Contingency Plan (CCP) may need to be developed for the proper management of contamination and/or regulated materials encountered during reconstruction.

Figure 10: Potential Contamination Areas

b. **Project related generation/storage of solid wastes - Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of solidwaste including source reduction and recycling.**

Prior to site redevelopment, the removal/demolition of site structures will occur. State and Federal law requires a pre-demolition inspection consisting of but not limited to, an asbestos survey, lead paint sampling, and a regulated materials inventory. Regulated materials will be handled appropriately and remaining general demolition debris will need to be hauled to a licensed demolition landfill. Beneficial reuse and recycling of materials should be considered to minimize demolition waste. If asbestos is encountered in the pre-demolition inspection, asbestos abatement procedures and clearance levels will follow up-to-date MPCA, MDH, and EPA guidelines.

Project activities will generate wastes and debris typical of construction operations. All waste and unused materials will be properly contained and disposed of off-site in conformance with state and local standards. After construction, garbage/recycling for residential and commercial tenants will be provided through garbage services offered by the City.

c. **Project related use/storage of hazardous materials - Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location and size of any new above or below ground tanks to store petroleum or other materials. Indicate the number, location, size and age of existing tanks on the property that the project will use. Discuss potential environmental effects from accidental spill or release of hazardous materials. Identify measures to avoid, minimize or mitigate adverseeffects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.**

Products, materials, or wastes typical of construction sites will be present during the construction of this project (e.g., gasoline, diesel fuel, oil, hydraulic fluid, portable toilets, etc.). To ensure compliance with the NPDES/SDS Construction Stormwater permit, products that have the potential to leach pollutants will be stored under cover; hazardous materials will be stored in sealed containers and will have secondary containment to prevent spills, solid wastes will be collected and disposed of properly, and vehicle and equipment washing will not be allowed on site.

d. **Project related generation/storage of hazardous wastes - Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, anddisposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of hazardous waste including source reduction and recycling**

The proposed project is not expected to generate any hazardous wastes during construction or operation. If hazardous wastes are generated by the contractor, it will be the responsibility of the contractor to recycle and/or dispose of the waste in accordance with local, State, and Federal regulations.

14. **Fish, wildlife, plant communities, and sensitive ecological resources (rare features):**

    a. **Describe fish and wildlife resources as well as habitats and vegetation on or in near the site.**

       Existing landcover within the project area is mostly comprised of existing structure and impervious surfaces (parking lot). A small number of trees are located on the east side of the parcel. These trees may serve as habitat for passerine birds and small mammals such as squirrels and raccoons but provide limited habitat in a fully developed area. Of the areas not covered in impervious surfaces are turfgrass. Centennial Lake and a park are located within 200 feet of the southern corner of this parcel. The lake was surveyed by the DNR most recently in 2011. A total of seven species were captured (black bullhead, green sunfish, hybrid sunfish, bluegill sunfish, black crappie, northern pike and pumpkinseed). This lake is stocked annually through the Fishing in the Neighborhood (FiN) Program and is managed as a "put and take" fishery to promote urban angling.

    b. **Describe rare features such as state-listed (endangered, threatened or special concern) species, native plant communities, Minnesota Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number (LA-____) and/or correspondence number (MCE 2023-00246) from which the data were obtained and attach the Natural Heritage Review letter from the DNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe the results.**

       The DNR has provided a Natural Heritage Review and the letter in included in **Appendix A.** This review indicates that Blanding's turtles have been reported in the vicinity of the area. However, given the current land use in the project area, impacts to turtles are not anticipated. A review of the US Fish and Wildlife's Information for Planning and Consultation (IPaC) indicated this parcel could potentially observe one federally endangered mammal (Northern Long-Eared Bat), one proposed endangered mammal (Tricolored Bat), one endangered insect (Rusty Patched Bumble Bee), and one candidate insect (Monarch butterfly). No critical habitats are located on this parcel. There were no Minnesota Biological Survey (MBS) Sites of Biological Significance found in this project area. No DNR Native Plant Communities were found on this site. Furthermore, this project area does not include any DNR Old Growth Stands, Minnesota Prairie Conservation Plans, or Important Bird Areas.

       Rusty Patched Bumblebees have also been sighted within one mile of this parcel. However, existing vegetation provides little or no forage that is preferred by this insect.

    c. **Discuss how the identified fish, wildlife, plant communities, rare features and ecosystems may be affected by the project including how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.**

       This site currently contains minimal to no suitable habitat for wildlife or threatened/endangered species. The development of the site may have the potential for bird strikes with vertical walls and glass panels on the buildings. This would be more problematic during periods of migration. Removal of trees could reduce habitat for bats species. However, there is generally not suitable habitat within the site for bats.

       All construction machinery should be cleaned of soil and vegetation from previous job sites and should be cleaned thoroughly upon completion of work on this parcel to prevent seeds from being transported onto this site or away from it. As Minnesota climate changes, habitat that resembles southerly latitudes may make nearby habitat suitable to different species than what exist currently.

d. **Identify measures that will be taken to avoid, minimize, or mitigate the adverse effects to fish, wildlife, plant communities, ecosystems, and sensitive ecological resources.**

Wildlife
The NHIS review revealed the records of Blanding's turtles near the site. However, there is no suitable habitat within the site. If Blanding's turtles are found on site, they will be left undisturbed unless they are in imminent danger, at which point they will be moved to safety. Construction silt fence will be used to keep turtles and other reptiles and amphibians out of construction areas. Trenches used for utility installation will be inspected prior to backfilling to avoid animal entrapment.

Fisheries:
A sediment fence will need to be installed to prevent erosion of site soils into stormwater drainage. This should minimize impacts to the nearby Centennial Lake.

Invasive species
Project phasing of soil disturbance will be used to prevent the spread of invasive species if they exist on site. The US Department of Agriculture's National Invasive Species Information Center, Minnesota Department of Agriculture (MDA), and the DNR provide information regarding BMPs to prevent the spread of noxious weeds and invasive species. Appropriate actions such as cleaning equipment, destroying existing invasive species, and limiting soil disturbance in areas of known invasive species will limit the spread and contamination of other areas of the project site. If necessary, spraying invasive species with an herbicide may be necessary for control, especially in locations of soil grading and stockpiling between project phases.

15. **Historic properties:**

   Describe any historic structures, archeological sites, and/or traditional cultural properties on or inclose proximity to the site. Include: 1) historic designations, 2) known artifact areas, and 3) architectural features. Attach letter received from the State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

   The State Historic Preservation Office (SHPO) did not list any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site (**Appendix A**). Additionally, review of the City of Edina's Historic Property site map did not show any significant sites on or near the project site.

16. **Visual:**

   Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects fromthe project. Identify any measures to avoid, minimize, or mitigate visual effects.

   The project site adjoins the Centennial Lakes Park and Edina Promenade, an open space/parkland that offers access to other nearby parks, residential, and retail in the surrounding area. However, this open space/parkland is currently obscured from view by France Avenue users by the existing commercial structure on site.

17. **Air:**

a. **Stationary source emissions - Describe the type, sources, quantities and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants. Discuss effects to air quality including any sensitive receptors, human health or applicable regulatory criteria. Include a discussion of any methods used assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effectsfrom stationary source emissions.**

The project will not have any stationary source emissions.

b. **Vehicle emissions - Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g. traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.**

The EPA has identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS). In addition, the EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers. These are acrolein, benzene, 1, 3-butadiene, diesel particulate matter, plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While Federal Highway Administration (FHWA) considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules. EPA rule requires controls that will dramatically decrease Mobile Source Air Toxin (MSAT) emissions through cleaner fuels and cleaner engines.

For this EAW, the amount of MSAT emitted would be proportional to the average daily traffic (ADT). The ADT estimated for the proposed site development is higher than that for the no build condition because the project involves new development that produces additional trips. This increase in ADT means MSAT under the build scenarios would probably be higher than the no build condition in the project area. There could also be localized differences in MSAT from indirect effects of the project such as associated access traffic, emissions of evaporative MSAT (e.g., benzene) from parked cars, and emissions of diesel particulate matter from delivery trucks. Travel to other destinations would be reduced with subsequent decreases in emissions at those locations.

For the proposed site development, emissions are virtually certain to be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by 72 percent from 1999 to 2050, as shown in the following graph. The magnitude of the EPA-projected reductions is so great (even after accounting for ADT growth) that MSAT emissions in the project area are likely to be lower in the future than they are today.

NATIONAL MSAT EMISSION TRENDS 1999 - 2050
FOR VEHICLES OPERATING ON ROADWAYS
USING EPA's MOBILE6.2 MODEL
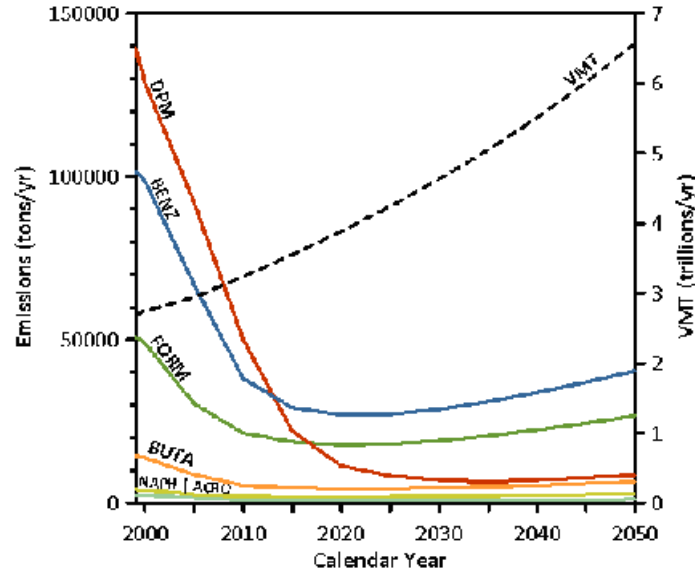
Note:
(1) Annual emissions of polycyclic organic matter are projected to be 561 tons/yr for 1999, decreasing to 373 tons/yr for 2050.
(2) Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors
Source: U.S. Environmental Protection Agency. MOBILE6.2 Model run 20 August 2009.

In summary, it is expected there will be slightly higher MSAT emissions in the project area with the project relative to the no build condition due to increased ADT. There also could be increases in MSAT levels in a few localized areas where ADT increases. However, the EPA's vehicle and fuel regulations will bring about lower MSAT levels in the future when compared to today.

c. **Dust and odors - Describe sources, characteristics, duration, quantities, and intensity of dust andodors generated during project construction and operation. (Fugitive dust may be discussed under item 17a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize ormitigate the effects of dust and odors.**

During construction, particulate emissions will temporarily increase due to generation of fugitive dust. Construction dust control is required to be in conformance with City ordinances and the NPDES Construction Stormwater permit. The construction and operation of the proposed site development is not anticipated to involve processes that would generate odors.

18. **Greenhouse Gas (GHG) Emissions/Carbon Footprint**

a. **GHG Quantification: For all proposed projects, provide quantification and discussion of project GHG emissions. Include additional rows in the tables as necessary to provide project-specific emission sources. Describe the methods used to quantify emissions. If calculation methods are not readily available to quantify GHG emissions for a source, describe the process used to come to that conclusion and any GHG emission sources not included in the total calculation**

This GHG analysis took into account the existing use and the proposed uses. Data sources included the EPA Simplified GHG Emission Calculator, US EPA Energy Star Portfolio Manager Target Finder, and other sources as noted. The analysis included energy use for the buildings, waste generation, and traffic and vehicles anticipated with the project. Per the tables in **Appendix B**, the project's predicted net GHG emissions are estimated at 5,572 CO2e (metric tons per year). For purposes of this analysis, the expected improvement for the development is expected at 50 years, which gives a total 50-year CO2 (metric tons per year) of 278,600 over the life of the development. The building will likely last much longer than 50 years. More detailed analysis can be found in **Appendix B.**

b. **GHG Assessment**

    i. **Describe any mitigation considered to reduce the project's GHG emissions.**

At this phase in project development the plans are in the concept level so exploration of potential mitigation practices is dependent on further development planning and design.

In initial designs, the project developers plan to include solar power on rooftops and electric vehicle charging stations. The project will also increase housing density, with shops, restaurants and amenities onsite and nearby to allow for walking, biking or public transit, especially with the connection and expansion of the Centennial Lakes Promenade. It will also include live-work units to encourage multiple uses onsite for residents to reduce commuting vehicle miles travelled.

The project is proposing stormwater storage with an Arch Chamber System and Storm Trap. The project may consider green infrastructure solutions, such as rain gardens, green roof, vegetation and vegetative buffer strips, tree trenches, cisterns, and other solutions.

The project will follow all applicable federal, state, and local standards and regulations as required, as listed throughout this report.

    ii. **Describe and quantify reductions from selected mitigation, if proposed to reduce the project's GHG emissions. Explain why the selected mitigation was preferred.**

This information is not known at this phase in the project development, due to the very preliminary designs. Generally, this development will provide a mix of uses, and it is generally understood that "Mixed-use zones, which allow retail and commercial establishments near housing, allow people to drive less and thus emit fewer greenhouse gases."[9] In addition, there will be mitigation of GHG emissions from the rooftop solar.

The project may consider additional mitigation strategies as it continues to move through the design process.

    iii. **Quantify the proposed projects predicted net lifetime GHG emissions (total tons/#of years) and how those predicted emissions may affect achievement of the Minnesota Next Generation Energy Act goals and/or other more stringent state or local GHG reduction goals.**

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[9] https://www.huduser.gov/portal/periodicals/em/Summer22/highlight2.html

Minnesota's Next Generation Energy Act requires the state to reduce greenhouse gas emissions in the state by 80% between 2005 and 2050, while supporting clean energy, energy efficiency, and supplementing other renewable energy standards in Minnesota. Edina's greenhouse gas emission goals in the City's Climate Action Plan target "a reduction in City operations and community-wide emissions by 45 percent below 2019 levels and achieve net zero emissions by 2050, in line with the 2015 global Paris Agreement."

Per the tables in **Appendix B**, the project's predicted net GHG emissions are estimated at 5,572 CO2e (metric tons per year).

The project will increase housing density and provide a mix of uses onsite and connect to many modes of transportation besides single occupancy vehicle travel. In the Edina Climate Action Plan, this type of mixed-use development and solar energy will contribute to the Transportation & Land Use and Buildings & Energy strategies and related goals.

This project will work to implement any applicable state or local GHG goals as required.

19. Noise

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area, 2) nearby sensitive receptors, 3) conformance to state noise standards, and 4) quality of life. Identify measures that will be taken to minimize or mitigatethe effects of noise.

Existing sources of noise are surrounding roadways including France Avenue. The area is fully developed and there are no nearby sensitive receptors.

During construction, noise levels will temporarily increase and vary in intensity based on the types of construction equipment being used. To minimize the effects of this noise, construction will be limited to daytime hours consistent with the City's construction and noise ordinances. In addition, construction equipment will be fitted with mufflers that would be maintained throughout the construction process.

Table 5: Typical Roadway Construction Equipment Noise Levels at 50 Feet

Equipment Type	Manufacturers Sampled	Total Number of Models in Sample	Peak Noise Level	
			Range	Average
Backhoe	5	6	74-92	83
Front Loader	5	30	75-96	85
Dozer	8	41	65-95	85
Grader	3	15	72-92	84
Scraper	2	27	76-98	87
Pile Driver	N/A	N/A	95-105	101

Source: United States Environmental Protection Agency and Federal Highway Administration

Following construction, noise in the area will be typical of a mixed-use development. Additional traffic added to surrounding roadways is not expected to generate noise to a degree with would exceed noise standards or diminish quality of life for people living or working nearby.

20. Transportation

a. **Describe traffic-related aspects of project construction and operation. Include: 1) existing and proposed additional parking spaces, 2) estimated total average daily traffic generated, 3) estimated maximum peak hour traffic generated and time of occurrence, 4) indicate source of trip generation rates used in the estimates, and 5) availability of transit and/or other alternativetransportation modes.**

The proposed site is located on the east side of France Avenue (County State Aid Highway [CSAH] 17) between 72nd Street and Gallagher Drive.

The existing site consists of the former Macy's Furniture Store including associated parking. The existing 80,000 square foot building and parking spaces will be demolished. The redevelopment of the site will include a total of 300,000 square feet of office/mixed use, 460 multi-family residential units, and 1,814 parking spaces. Access to the site will be provided on France Avenue at two existing locations on France Avenue at Gallagher Drive and the existing Business Access.

Development of the concept plan is anticipated to generate 5,340 daily, 626 AM peak hour and 611 PM peak hour trips. The trip generation used to estimate the proposed site traffic is based on rates for other similar land uses as documented in the Institute of Transportation Engineers *Trip Generation Manual, 11*th Edition. The table shows the Daily, AM peak and PM peak hour trip generation for the proposed site.

Table 6 - Estimated Site Trip Generation

Planned Use	Size	ADT	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Office	300,000sf	3.252	456	401	55	432	73	359
Multi-Family	460 units	2.088	170	39	131	179	109	70
Total New Trips		5,340	626	440	186	611	183	429

Source: Institute of Transportation Engineers Trip Generation Manual, 11th Edition

Metro Transit Route 6 provides service adjacent to the redeveloped site on France Avenue. The route provides local bus service from the U of M through downtown Minneapolis to the Southdale Transit Center down France Avenue serving the areas on the northside of I-494 in Bloomington.

b. **Discuss the effect on traffic congestion on affected roads and describe any traffic improvementsnecessary. The analysis must discuss the project's impact on the regional transportation system.***If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW.* **Use the format and procedures described in the Minnesota Department of Transportation's Access Management Manual, Chapter 5** *(available at: http://www.dot.state.mn.us/accessmanagement/resources.html)* **or a similar local guidance,**

A traffic study was conducted for the project and is in **Appendix C**. The results of the existing conditions based on the current lane geometry, traffic control and existing 2023 traffic volumes, show that all intersections are operating at overall LOS B or better during both the AM and PM peak hours with all movements operating at LOS C. The background traffic in this study includes recently approved developments that have not yet been constructed.

The results of the 2025 no-build conditions analysis based on the current lane geometry, traffic control and projected 2025 no-build traffic volumes, show that all intersections will continue to operate at overall LOS B or better during both the AM and PM peak hours with all movements operating at LOS C or better except:

- France Avenue at Hazelton Road - NB left turn – PM peak hour – LOS D.

The results of the 2025 build conditions analysis based on the current lane geometry, traffic control and projected 2025 build traffic volumes, show that all intersections will continue to operate at overall LOS B or better during both the AM and PM peak hours with all movements operating at LOS C or better except:

- France Avenue at Hazelton Road – NB left turn – PM peak hour – LOS D
- France Avenue at Gallagher Drive – NB and SB left turn – PM peak hour – LOS D

The results of the 2030 build conditions analysis based on the current lane geometry, traffic control and projected 2030 build traffic volumes, show that all intersections will continue to operate at overall LOS B or better during both the AM and PM peak hours with all movements operating at LOS C or better, except:

- France Avenue at Hazelton Road – NB and SB left turn – PM peak hour – LOS D
- France Avenue at Gallagher Drive – NB and SB left turn – PM peak hour – LOS D
- France Avenue at Parklawn Avenue – NB and SB left turn – PM peak hour – LOS D

c. **Identify measures that will be taken to minimize or mitigate project related transportationeffects**.

To mitigate the transportation impacts, the following measures are proposed:

1. The pedestrian improvements identified in the concept site plan should be completed with the proposed project.

2. Based on the city's requirements some potential TDM strategies for the site that could be implemented by the developer include:
   - Providing bicycle parking spaces exceeding City requirements
   - Providing maps that show the area bus routes, light rail and bus schedules, and bicycle and pedestrian facilities.
   - Directional signage/information for adjacent pedestrian, bicycle and transit facilities
   - Restricting freight deliveries to off peak hours to avoid traffic conflicts on adjacent roadways.

21. **Cumulative potential effects: (Preparers can leave this item blank if cumulative potential effects areaddressed under the applicable EAW Items)**

   a. **Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.**

Project work is limited to the approximately eight acre parcel. The development will be constructed in two phases beginning in the spring/early summer of 2024 (Phase I commencement) and spring/early summer of 2025 (Phase II commencement). Site preparation will begin in the spring/early summer of

2024 with the demolition of the existing building. Phase I is anticipated to be completed in the spring/early summer of 2026 while Phase II is anticipated to be completed in the summer/early fall of 2027.

b. **Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.**

As a separate future project, the City of Edina may undertake a pedestrian underpass under France Avenue to connect the proposed pedestrian plaza from the development to the 7200/7250 France Avenue parcel to the west. This would improve pedestrian access and mobility in the area as shown in **Figure 11.** This project would provide a multi-modal connection across France Avenue while continuing to allow traffic flow along France Avenue.

Figure 11: Potential Underpass at France Avenue

Additionally, the City of Edina's Comprehensive Plan has anticipated and planned for redevelopment in the general area. Several sites have redeveloped or have received approval for redevelopment along France Avenue. This has involved redeveloping a fully developed area from commercial to commercial, multi-family residential, and office. Other projects in the area that have been approved and/or built include:

- 7001 & 7025 France Avenue South: This project has been constructed and is north of the Macy's project area in the southeast quadrant of France Avenue and 70th Street. It includes commercial, retail, offices, and apartments. The buildings are between one-story to 24 story and also include a parking ramp.

- 7200 & 7250 France Avenue South: This project has been approved and is located across France Avenue to the west of the Macy's site project area. It includes office, retail, apartments, and a hotel.

- 4040 70th Street West; 4600 & 4320 77th Street West; 4660 77th Street West: Two of these projects are under construction and one has been approved. They are located north and west of the Macy's site. They include attached senior affordable housing and apartments.

   c. **Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmentaleffects due to these cumulative effects.**

   The City's Comprehensive plan, environmental review, and existing infrastructure studies have provided information to the City about potential impacts. The project site and surrounding area are fully developed. Redevelopment is providing opportunity to create stormwater management systems, pedestrian connectivity, more energy efficient buildings, and some green space into this currently developed area. Traffic flow and timing may shift from the current retail and commercial uses to include residential uses. However, there are not anticipated to be overall cumulative impacts that cannot be addressed through the review and permitting processes.

22. **Other potential environmental effects: If the project may cause any additional environmental effects not addressed by items 1 to 19, describe the effects here, discuss the how the environmentwill be affected, and identify measures that will be taken to minimize and mitigate these effects.**

   The project will not cause any additional environmental effects that have not been addressed in this document.

RGU CERTIFICATION. *(The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.)*

I hereby certify that:

a) The information contained in this document is accurate and complete to the best of my knowledge.

b) The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9c and 60, respectively.

c) Copies of this EAW are being sent to the entire EQB distribution list.

Signature _____   Date _____5·30-23_____

Title _____City Planner_____

APPENDIX A : SHPO and DNR NHIS Correspondence

mn DEPARTMENT OF NATURAL RESOURCES

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

May 17, 2023
Correspondence # MCE 2023-00246

Roxy Robertson
WSB & Associates

RE: Natural Heritage Review of the proposed Macy's on France,
T28N R24W Section 32; Hennepin County

Dear Roxy Robertson,

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

State-listed Species

- Blanding's turtles *(Emydoidea blandingii)*, a state-listed threatened species, have been reported from the vicinity of the proposed project. Given the land use in the immediate vicinity of the project area, impacts to this rare turtle are not anticipated. In the unlikely event that a Blanding's turtle is found on site, please remember that the destruction of threatened or endangered species is prohibited by state law and rules, except under certain prescribed conditions. If turtles are in imminent danger they must be moved by hand out of harm's way, otherwise they are to be left undisturbed.

- Please visit the DNR Rare Species Guide for more information on the habitat use of these species and recommended measures to avoid or minimize impacts. For further assistance with these species, please contact the appropriate DNR Regional Nongame Specialist or Regional Ecologist.

Federally Protected Species

- The area of interest overlaps with a Rusty Patched Bumble Bee *High Potential Zone*. The rusty patched bumble bee *(Bombus affinis)* is federally listed as endangered and is likely to be present in suitable habitat within *High Potential Zones*. From April through October this species uses

underground nests in upland grasslands, shrublands, and forest edges, and forages where nectar and pollen are available. From October through April the species overwinters under tree litter in upland forests and woodlands. The rusty patched bumble bee may be impacted by a variety of land management activities including, but not limited to, prescribed fire, tree-removal, haying, grazing, herbicide use, pesticide use, land-clearing, soil disturbance or compaction, or use of non-native bees. The USFWS rusty patched bumble bee guidance provides guidance on avoiding impacts to rusty patched bumble bee and a key for determining if actions are likely to affect the species; the determination key can be found in the appendix. If applicable, the DNR also recommends reseeding disturbed soils with native species of grasses and forbs using BWSR Seed Mixes or MnDOT Seed Mixes. Please visit the USFWS Rusty Patched Bumble Bee Map for the most current locations of *High Potential Zones*.

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Environmental Review and Permitting

- The Environmental Assessment Worksheet should address whether the proposed project has the potential to adversely affect the above rare features and, if so, it should identify specific measures that will be taken to avoid or minimize disturbance. Sufficient information should be provided so the DNR can determine whether a takings permit will be needed for any of the above protected species.

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.
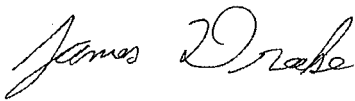
The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit the Natural Heritage Review website for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, you may contact your DNR Regional Environmental Assessment Ecologist.

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

James Drake
Natural Heritage Review Specialist
James.F.Drake@state.mn.us

Cc: Melissa Collins

From:	MN_MNIT_Data Request SHPO <DataRequestSHPO@state.mn.us>
Sent:	Friday, March 24, 2023 5:12 PM
To:	Mary Newman
Subject:	RE: Data Request: Edina EAW - Former Macy's Site
Attachments:	History.xls

EXTERNAL EMAIL

Hello Mary,

Please see attached. Our database has no archaeological records for the given project area.

Jim

m DEPARTMENT OF
ADMINISTRATION
STATE HISTORIC PRESERVATION OFFICE

SHPO Data Requests
Minnesota State Historic Preservation Office
50 Sherburne Avenue, Suite 203
Saint Paul, MN 55155
(651) 201-3299
datarequestshpo@state.mn.us

Notice: This email message simply reports the results of the cultural resources database search you requested. The database search is only for previously known archaeological sites and historic properties. **IN NO CASE DOES THIS DATABASE SEARCH OR EMAIL MESSAGE CONSTITUTE A PROJECT REVIEW UNDER STATE OR FEDERAL PRESERVATION LAWS** – please see our website at https://mn.gov/admin/shpo/protection/ for further information regarding our Environmental Review Process.

Because the majority of archaeological sites in the state and many historic/architectural properties have not been recorded, important sites or properties may exist within the search area and may be affected by development projects within that area. Additional research, including field surveys, may be necessary to adequately assess the area's potential to contain historic properties or archaeological sites.

Properties that are listed in the National Register of Historic Places (NRHP) or have been determined eligible for listing in the NRHP are indicated on the reports you have received, if any. The following codes may be on those reports:

NR – National Register listed. The properties may be individually listed or may be within the boundaries of a National Register District.

CEF – Considered Eligible Findings are made when a federal agency has recommended that a property is eligible for listing in the National Register and MN SHPO has accepted the recommendation for the purposes of the Environmental Review Process. These properties need to be further assessed before they are officially listed in the National Register.

SEF – Staff eligible Findings are those properties the MN SHPO staff considers eligible for listing in the National Register, in circumstances other than the Environmental Review Process.

DOE – Determination of Eligibility is made by the National Park Service and are those properties that are eligible for listing in the National Register, but have not been officially listed.

CNEF – Considered Not Eligible Findings are made during the course of the Environmental Review Process. For the purposes of the review a property is considered not eligible for listing in the National Register. These properties may need to be reassessed for eligibility under additional or alternate contexts.

Properties without NR, CEF, SEF, DOE, or CNEF designations in the reports may not have been evaluated and therefore no assumption to their eligibility can be made. Integrity and contexts change over time, therefore any eligibility determination made ten (10) or more years from the date of the current survey are considered out of date and the property will need to be reassessed.

If you require a comprehensive assessment of a project's potential to impact archaeological sites or historic/architectural properties, you may need to hire a qualified archaeologist and/or historian. If you need assistance with a project review, please contact Kelly Gragg-Johnson, Environmental Review Specialist @ 651-201-3285 or by email at kelly.graggjohnson@state.mn.us. The Minnesota SHPO Archaeology and Historic/Architectural Survey Manuals can be found at https://mn.gov/admin/shpo/identification-evaluation/.

Please subscribe to receive SHPO notices for the most current updates regarding office hours, accessing research files, or changes in submitting materials to the SHPO.

To access historic resource information please visit our webpage on Using SHPO's Files.

From: Mary Newman <mnewman@wsbeng.com>
Sent: Thursday, March 23, 2023 4:24 PM
To: MN_MNIT_Data Request SHPO <DataRequestSHPO@state.mn.us>
Subject: Data Request: Edina EAW - Former Macy's Site

This message may be from an external email source.
Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Good afternoon,

I am requesting historic and archeological resources for a site that is proposed to be developed into mixed use/residential housing. We are completing an EAW for this site.

The site is located in Edina MN at 7235 France Ave S. The approximate center of project area is at lat/long: 44.87148, -93.32730 and encompasses parcel #: 320282423004.

Please let me know if you need additional information to complete this request.

Thank you,

Mary Newman

Mary Newman
Senior Environmental Scientist
763.762.2858 (o) | 612.418.5187 (m)
WSB | wsbeng.com

wsb

For a list of WSB employee licenses and certifications visit here.

APPENDIX B : Detailed GHG Assessment

Greenhouse Gas Emissions, Edina EAW

Project Components

Use	Size (sq ft)	Units
New uses:		
NW block:		
Office building	150,000	
Restaurant	12,500	
Commercial	12,500	
SW block:		
Office building	150,000	
Restaurant	12,500	
Commercial	12,500	
Residential (without parking):		230
Building C	258,527	
Building D	260,102	
Average sq. ft. per unit	2,255	
Residential (including parking):		230
Building C	357,500	
Building D	375,400	
Uses to be removed:		
Macy's furniture store	80,000	

Greenhouse Gas Emissions, Edina EAW

Detailed Summary

Updated: 5/10/2023

Emission Source	Scope*	Data Source Notes**	Amount	Units	Site Energy Use Index (kBtu/sq. ft.) [3]	Emission Factors	GHG (tonnes)	GHG (kg/sq. ft.)	Percent of Total GHG
New uses and project average daily vehicle miles traveled (ADVMT):									
Construction:	1								
Mobile equipment		4	Unknown						
Land use conversion		4	Unknown						
Carbon sink		4	Unknown						
Operational emissions, mobile equipment, after project is operational	1	2	2,832	ADVMT		0.44	457	0.42	7%
Combustion, stationary equipment, natural gas (therms/sq. ft./yr.):	1			therms					
Restaurant		3	25,000	sq. ft.	138.4	1.38	183	7.34	
Commercial		3	25,000	sq. ft.	20.3	0.20	27	1.08	
Offices		3	300,000	sq. ft.	18.5	0.18	294	0.98	
Dwelling units (460 units)		3	732,900	sq. ft.	49.2	0.49	1,911	2.61	
Subtotal			**1,082,900**	**sq. ft.**			**2,415**	**2.23**	38%
Combustion area (diesel, back-up generators, GHG kg/gal.)	1	1 & 2	**455**	gallons		10.74	**5**		0.1%
Off-site electricity, Xcel 2021 (GHG kg/sq. ft.)	2			kWh					
Roadway lighting and signage		4	Unknown						
Restaurant		3	25,000	sq. ft.	153.0	44.84	321	12.85	
Commercial		3	25,000	sq. ft.	35.3	10.35	74	2.96	
Offices		3	300,000	sq. ft.	34.6	10.15	872	2.91	
Dwelling units (460 units)		3	732,900	sq. ft.	26.0	7.63	1,601	2.18	
Subtotal			**1,082,900**	sq. ft.			**2,868**	**2.65**	46%
Off-site waste management	3	2	**1,783**	tons of waste			**559**	**0.64**	9%
Total emissions (tonnes)							**6,304**	**5.8**	100%
Uses to be removed and current ADVMT:									
Current operational emissions, mobile equipment	1	2	2,377	ADVMT		0.44	383	4.79	52%
Combustion, stationary equipment, natural gas (therms/sq. ft./yr.):	1			therms					
Macy's furniture store		3	80,000	sq. ft.	20.3	0.20	86	1.08	12%
Off-site electricity, Xcel 2021 (kWh/sq. ft./yr.):	2			kWh					
Roadway lighting and signage		4	Unknown						
Macy's furniture store		3	80,000	sq. ft.	35.3	10.35	237	2.96	
Subtotal			**80,000**	sq. ft.			**237**	**2.96**	32%
Off-site waste management	3	2	81	tons of waste			**25**		3%

Total emissions, uses to be removed (GHG tonnes)			732	9.1	100%
Net project totals	1,002,900	sq. ft.	5,572	5.6

*Scope:

For an explanation of Emissions scopes, please reference the following:

•Scope 1: "Scope 1 emissions are direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles)." (EPA, http://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance)

•Scope 2: "Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling." (EPA, http://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance)

•Scope 3: "Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly impacts in its value chain. Scope 3 emissions include all sources not within an organization's scope 1 and 2 boundary. The scope 3 emissions for one organization are the scope 1 and 2 emissions of another organization. Scope 3 emissions, also referred to as value chain emissions, often represent the majority of an organization's total GHG emissions." (EPA: https://www.epa.gov/climateleadership/scope-3-inventory-guidance)

** Data Source Notes:

1   EPA Simplified GHG Emissions Calculator ("the Calculator"), https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

2   Refer to the sheet "Mobile Equipment." ADVMT = Average Daily Vehicle Miles Travelled.

3   Source (Zip Code: 55343): US EPA Energy Star Portfolio Manager Target Finder. Refer to Energy Finder sheet.
https://www.energystar.gov/buildings/resources_audience/service_product_providers/commercial_new_construction/target_finder

4   Unknown at this point in the development process.

Greenhouse Gas Emissions, Edina EAW

Waste Generation

Solid Waste Generation	Data Source	Amount	Units	Emission Factor (tonnes/ton)	Waste Amounts	Waste (kg per sq. ft.)
New uses:						
Restaurant (kg @ 40.8 tonnes/yr./restaurant)	1	25,000	sq. ft.		81,600	3.3
Commercial (kg @ 0.921 kg/sq. ft./yr.)	2	25,000	sq. ft.		23,025	0.9
Offices (kg @ 0.848 kg/sq. ft./yr.)	2	300,000	sq. ft.		254,400	0.8
Dwelling units (kg @ 228 kg/unit/month)	3	518,629	sq. ft.		1,258,560	2.4
Subtotals		**868,629**			**1,617,585**	**1.9**
Waste (tons)					**1,783**	
Landfilled waste, 33% (tons) and emission factor	4, 5, & 6	588		0.54	318	
Waste to energy, 26% (tons) and emission factor	4, 5, & 6	464		0.52	241	
Subtotal emissions (tonnes)					**559**	
Uses to be removed:						
Macy's furniture store (kg @ 0.921 kg/sq. ft./yr.)	2	80,000	sq. ft.		73,680	0.9
Waste (tons)					81	
Landfilled waste, 33% (tons) and emission factor	4, 5, & 6	27		0.54	14	
Waste to energy, 26% (tons) and emission factor	4, 5, & 6	21		0.52	11	
Total emissions (tonnes)					**25**	

Notes:

1 US EPA "2018 Wasted Food Report" states average tons of wasted food per facility per year is 40.91 tons (37.1 tonnes). Rate is increased by 10% to account for non-food/non-recycled waste (40.8 tonnes/yr.). Source: https://www.epa.gov/sites/default/files/2020-11/documents/2018_wasted_food_report-11-9-20_final_.pdf

2 Source: Table 21, "Targeted Statewide Waste Characterization Study: Waste Disposal and Diversion Findings for Selected Industry Groups , 2006. https://www2.calrecycle.ca.gov/Publications/Details/1184

3 Apartments: Assumes 1.5 cu. yd. of mixed trash per unit per month. Source: https://www.wastecare.com/usefulinfo/Waste_Generated_by_Industry_Cubic_Yards.htm. At 335 lbs. per cubic yard and 2.2 pounds per kg, the average is about 228 kg per month. Source: https://www.solidwaste.com/doc/bolton-on-landfill-management-converting-cubi-0001

4 Waste amounts for Hennepin County (average of 2020 and 2021): "Recycling Progress Report: Adjusting to a New Normal and Building Zero Waste Habits," June 2022, Hennepin County, https://www.hennepin.us/-/media/hennepinus/your-government/projects-initiatives/documents/recycling-progress-report.pdf

5 Source for emission factor for landfilled waste: "Documentation for Greenhouse Gas Emission and Energy Factors Used in the Waste Reduction Model (WARM), Organic Materials Chapters," Exhibit 1-10, U.S. Environmental Protection Agency Office of Resource Conservation and Recovery, February 2016. https://www.epa.gov/warm/documentation-chapters-greenhouse-gas-emission-energy-and-economic-factors-used-waste

6 Source for emissions from the Hennepin Energy Recovery Center: https://www.pca.state.mn.us/air/permitted-facility-air-emissions-data. Source for tons processed by the HERC: https://www.pca.state.mn.us/waste/report-2019-score-programs

Greenhouse Gas Emissions, Edina EAW

Backup Generator Fuel Consumption

Building	Size	Generator Size (kW) [1]	Diesel Consumption (gal.) [2]	GHG (kg)
NW block office building (sq. ft.)	150,000	800	98	1,050
SW block office building (sq. ft.)	150,000	800	98	1,050
NE block residential building (units)	230	1,000	130	1,391
SE block residential building (units)	230	1,000	130	1,391
Total			**455**	**4,883**

Notes:

[1] Backup generator: Assume 50 kW + 5 W per sq. ft. (source: https://woodstockpower.com/blog/how-to-size-a-generator-for-commercial-building/).

[2] Diesel consumption per hour from chart below. Monthly testing for 30 minutes (source: https://www.health.state.mn.us/facilities/regulation/engineering/docs/lscgensets.pdf)

Generator Size	1/4 Load (gal/hr)	1/2 Load (gal/hr)	3/4 Load (gal/hr)	Full Load (gal/hr)
20	0.6	0.9	1.3	1.6
30	1.3	1.8	2.4	2.9
40	1.6	2.3	3.2	4.0
60	1.8	2.9	3.8	4.8
75	2.4	3.4	4.6	6.1
100	2.6	4.1	5.8	7.4
125	3.1	5.0	7.1	9.1
135	3.3	5.4	7.6	9.8
150	3.6	5.9	8.4	10.9
175	4.1	6.8	9.7	21.7
200	4.7	7.7	11.0	14.4
230	5.3	8.8	12.5	16.6
250	5.7	9.5	13.6	18.0
300	6.8	11.3	16.1	21.5
350	7.9	13.1	18.7	25.1
400	8.9	14.9	21.3	28.6
500	11.0	18.5	26.4	35.7
600	13.2	22.0	31.5	42.8
750	16.3	27.4	39.3	53.4
1000	21.6	36.4	52.1	71.1
1250	26.9	45.3	65.0	88.8
1500	32.2	54.3	77.8	106.5
1750	37.5	63.2	90.7	124.2
2000	42.8	72.2	103.5	141.9
2250	48.1	81.1	116.4	159.6

Source: https://www.uspeglobal.com/pages/resources

Greenhouse Gas Emissions, Edina EAW

Average daily vehicle miles traveled (ADVMT) in the vicinity of the site

Category	ADVMT [1]	GHG (kg)
Current ADVMT	2,377	383,258
Estimated additional ADVMT attributable to the project	455	73,362
Notes:		

    1   Source; Refer to the sources in the EAW Item 20. Transportation.

Greenhouse Gas Emissions, Edina EAW

Emission Factors and Conversions

Emission Sources and Conversion Factors	Data Source	Unit	kBtu	CO$_2$ (kg)	CH$_4$ (kg)	N$_2$O (kg)	GHG (kg)
Global Warming Potential (100-year data)	A, Table 11			1	25	298	
Emission Sources and Conversion Factors							
Xcel Energy, electricity:							
2018	B & A, Table 6 [1]	kWh	3.413	0.366	4.7E-05	6.8E-06	0.369
2020			3.413	0.271	4.7E-05	6.8E-06	0.272
2021			3.413	0.285	4.9E-05	6.8E-06	0.286
Natural gas	A	Therms	100.0				5.302
Gasoline	A	US gallon	125.0	8.78	0.01	0.02	8.81
E-10 gasoline [2]	Calculated	US gallon	120.9				8.51
E-85 gasoline	Calculated	US gallon	118.9				8.35
Diesel (distillate fuel oil #4)	A	US gallon	146.0	10.96	11.00	26.82	11.00
B-5 diesel [2]	Calculated	US gallon	142.9				10.74
Ethanol	A	US gallon	84.0	5.75	2.25	2.98	5.76
Aviation fuel	A	US gallon	135.0	10.15	10.25	23.84	10.18
Business travel and employee commute, passenger cars	D	Mile					0.44
Conversion Factors	**Data Source**	**Number**					
Therms/kBtu	C	0.010					
kWh/kBtu	C	0.293					

Date Sources		Link
A	"Emission Factors for Greenhouse Gas Inventories," USEPA, April 2022.	https://www.epa.gov/system/files/documents/2022-04/ghg_emission_factors_hub.pdf
B	Xcel emission factors for CO2 are for Xcel's wholly owned generating company, NSP. Report for 2022 is not yet available.	https://www.xcelenergy.com/staticfiles/xe-responsive/Environment/Carbon/Carbon-Emission-Intensities-Info-Sheet.pdf
C	Greenhouse Gases Equivalencies Calculator - Calculations and References, USEPA	https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references
D	GHG emissions equal 0.441 kg per vehicle mile travelled for passenger cars and other light-duty vehicles, which will be the dominant vehicle used. Source: Minnesota Infrastructure Carbon Estimator, Version 1.2,	https://www.dot.state.mn.us/sustainability/ghg-analysis.html

Notes:

[1] Xcel provides CO$_2$ in tonnes/MWh. CH$_4$ and N$_2$O are from eGRID/MROW in lbs./kWh. CO$_2$e (aka GHG) is in kg/kWh. There are 0.4536 kg/lb. Source: https://www.epa.gov/egrid

[2] Since 2003, the State of Minnesota requires gasoline and diesel fuels sold in the state be oxygenated by 10% and 5% ethanol respectively.

APPENDIX C : Traffic Study

EAW TRAFFIC STUDY

MACY'S SITE REDEVELOPMENT

City of Edina, Hennepin County, Minnesota

May 16, 2023

Prepared for:
City of Edina
4801 W. 50th Street
Edina, MN 55424

WSB PROJECT NO. R-22453-000

wsb

CERTIFICATION

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly registered professional engineer under the laws of the State of Minnesota.

Charles T. Rickart

Charles T. Rickart, P.E.

Date: May 16, 2023   Reg. No. 26082

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Appendices

Background / Introduction

The purpose of this study is to determine the potential transportation impacts the proposed redevelopment of the former Macy's Furniture Store site has on the area traffic operations, site traffic circulation, pedestrian safety, and circulation and parking demand.

The site is located on the east side of France Avenue (County State Aid Highway (CSAH 17)) between 72nd Street and Gallagher Drive. The project location is shown in *Figure 1*.

The existing 80,000 square foot building will be demolished. The redevelopment of the site will include four buildings with a total of 300,000 square feet of office/mixed use, 460 multi-family residential units, and parking. Access to the site will be from France Avenue at two existing locations, one at Gallagher Drive and the other from the existing business access.

The traffic impacts of the existing and anticipated site redevelopment were evaluated at each site driveway as well as the primary impacted intersections on France Avenue (CSAH 17). The parking demand was determined based on the City Code and Institute of Transportation Engineers (ITE) guidelines.

The following sections of this report document the traffic and parking analysis and the anticipated impacts the proposed site redevelopment has on the adjacent transportation system.

Figure 1 - Project Location

Figure 1 - Project Location
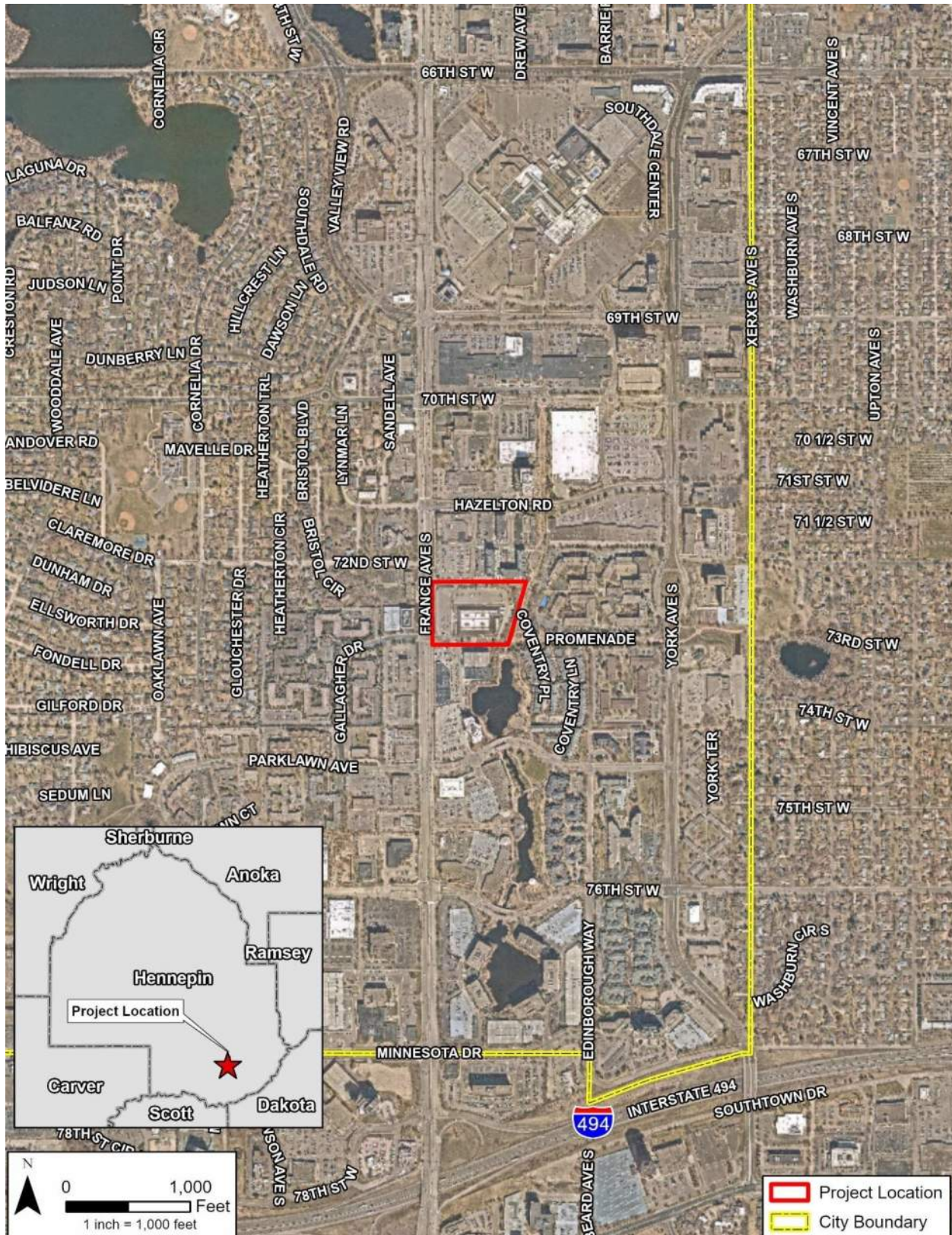
Existing Conditions

The existing conditions for the proposed site redevelopment were evaluated at the following intersections:
- France Avenue (CSAH 17) at Hazelton Road
- France Avenue (CSAH 17) at 72nd Street
- France Avenue (CSAH 17) at Business Access
- France Avenue (CSAH 17) at Gallagher Drive
- France Avenue (CSAH 17) at Parklawn Avenue

A. Roadway Characteristics

US 169 is a north/south US Highway connecting the Minnesota River valley with the Twin Cities and the Iron Range. US 169 is a Minnesota Principal Arterial. In the City of Garrison adjacent to the proposed development, US 169 is a rural 2-lane roadway with 8 feet paved shoulders. The posted speed limit on the section CSAH 69 (Old Brick Yard Road) adjacent to the site is 55 mph. The lane configurations at each of the study area intersection are as follows:

France Ave (CSAH 17) at Hazelton Rd – Traffic Signal Control
- SB France Ave – one right/thru, two thru, one left
- EB Hazelton Rd – one right, one thru, one left
- NB France Ave – one right, three thru, one left
- WB Hazelton Rd – one right/thru, one left

France Ave (CSAH 17) at 72nd Street – Side Street Stop Control
- SB France Ave – one right/thru, two thru
- EB 72nd St – one right
- NB France Ave – three thru, one left

France Ave (CSAH 17) at 72nd Street – Side Street Stop Control
- SB France Ave – three thru
- WB 72nd St – one right
- NB France Ave – one right, three thru

France Ave (CSAH 17) at Gallagher Dr – Traffic Signal Control
- SB France Ave – one right/thru, two thru, one left
- EB Gallagher Dr – one right/thru, one left
- NB France Ave – one right/thru, two thru, one left
- WB Gallagher Dr – one right/thru, one left

France Ave (CSAH 17) at Parklawn Ave – Traffic Signal Control
- SB France Ave – one right/thru, two thru, one left
- EB Gallagher Dr – one right, one thru, one left
- NB France Ave – one right, three thru, one left
- WB Gallagher Dr – one right, one thru, one left

B. Traffic Volumes

Peak hour turning movement counts and daily counts were conducted during the week of April 10, 2023. These counts were used as the existing baseline conditions for the area. The data identified the weekday AM peak hour from 8:00 to 9:00 am and PM peak hour from 4:30 to 5:30 pm.

Figure 2 shows the existing intersections that were analyzed as part of the study, with the existing adjusted 2023 Average Daily Traffic (ADT) and weekday AM and PM peak hours. The raw traffic count data is included in *Appendix A*.

C. Crash History

The crash data presented is for a 5-year period from 2018-2022. Existing crash data included with this study was obtained using the Minnesota Crash Mapping Analysis Tool (MnCMAT) developed by MnDOT. The database includes crashes reported to MnDOT by local law enforcement agencies. Crashes that resulted in damages under $1000 may not be included in the database results. A summary of the existing crash data is shown in *Table 1.*

Table 1 - Crash Data Summary

Location	Crashes										Total Crashes
	2018		2019		2020		2021		2022		
	PD	PI	PD	PI	PD	PI	PD	PI	PD	PI	
France Ave at Hazelton Rd	3	1	2	0	1	0	1	0	2	2	12
France Ave at Gallagher Dr	3	0	1	0	2	2	4	4	3	0	19
France Ave at Parklawn Ave	3	4	1	1	1	3	2	0	4	2	21

The data shows that the intersections have calculated crash rates and severity rate that are below MnDOT Metro and Statewide average rates. A Crash Rate Summary is shown in *Table 2*.

Table 2 - Crash Rate Summary

Location	Crashes	Daily Vehicles	Crash Rate*			Severity Rate	
			Calc	Ave**	Crit***	Calc	Ave**
France Ave at Hazelton Rd	12	31,894	0.21	0.59	0.86	0.29	0.97
France Ave at Gallagher Dr	19	30,264	0.34	0.59	0.87	0.47	0.97
France Ave at Parklawn Ave	21	34,964	0.33	0.59	0.85	0.53	0.97

* – Intersection crash rates are expressed in crashes per million entering vehicles
** Average for specific traffic control using MnDOT 2022 green sheets
*** Critical crash rates are expressed in crashes per million entering vehicles with 0.995 confidence level

Figure 2 - Existing Traffic Conditions
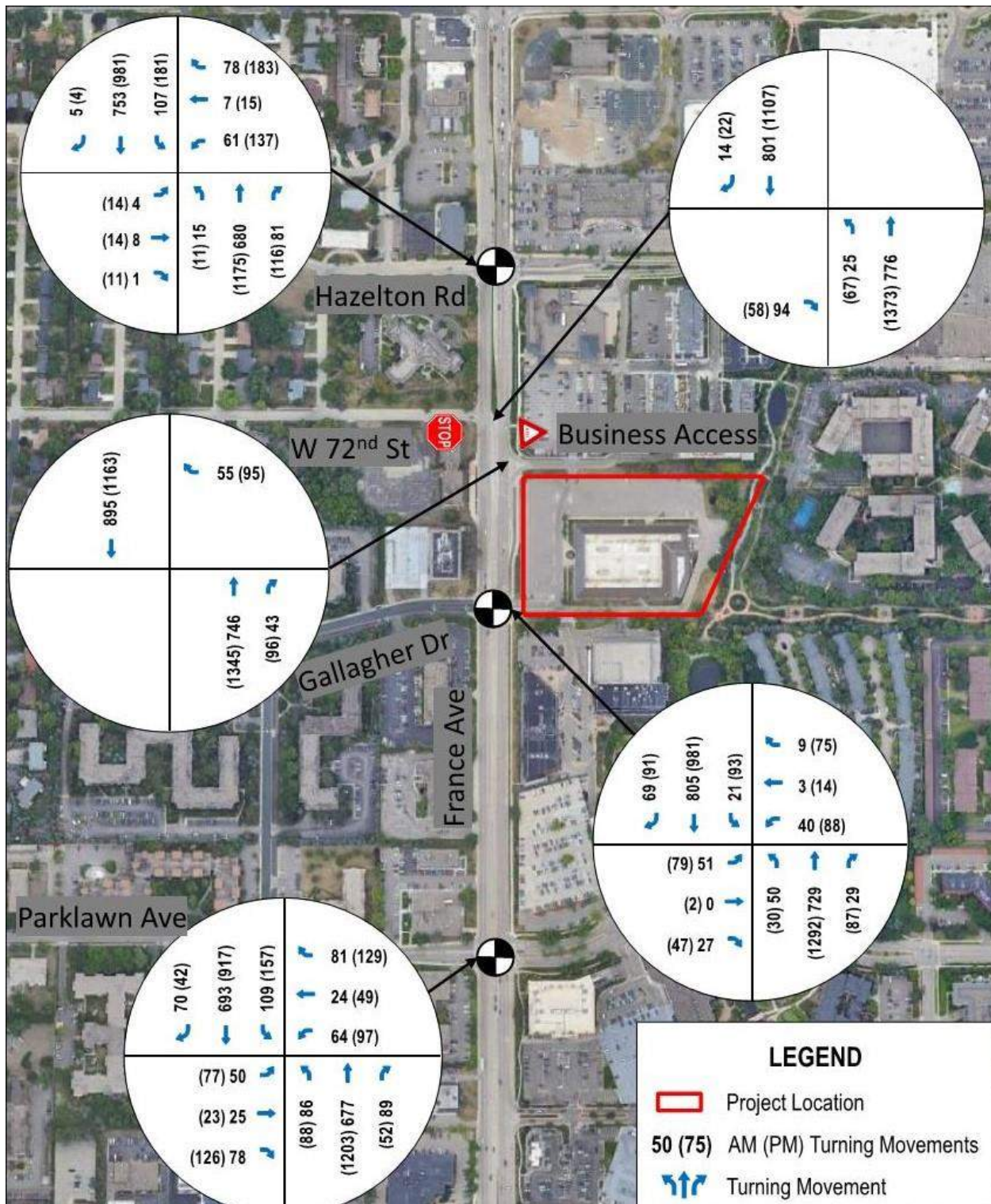
Figure 3 - Development Site Plan
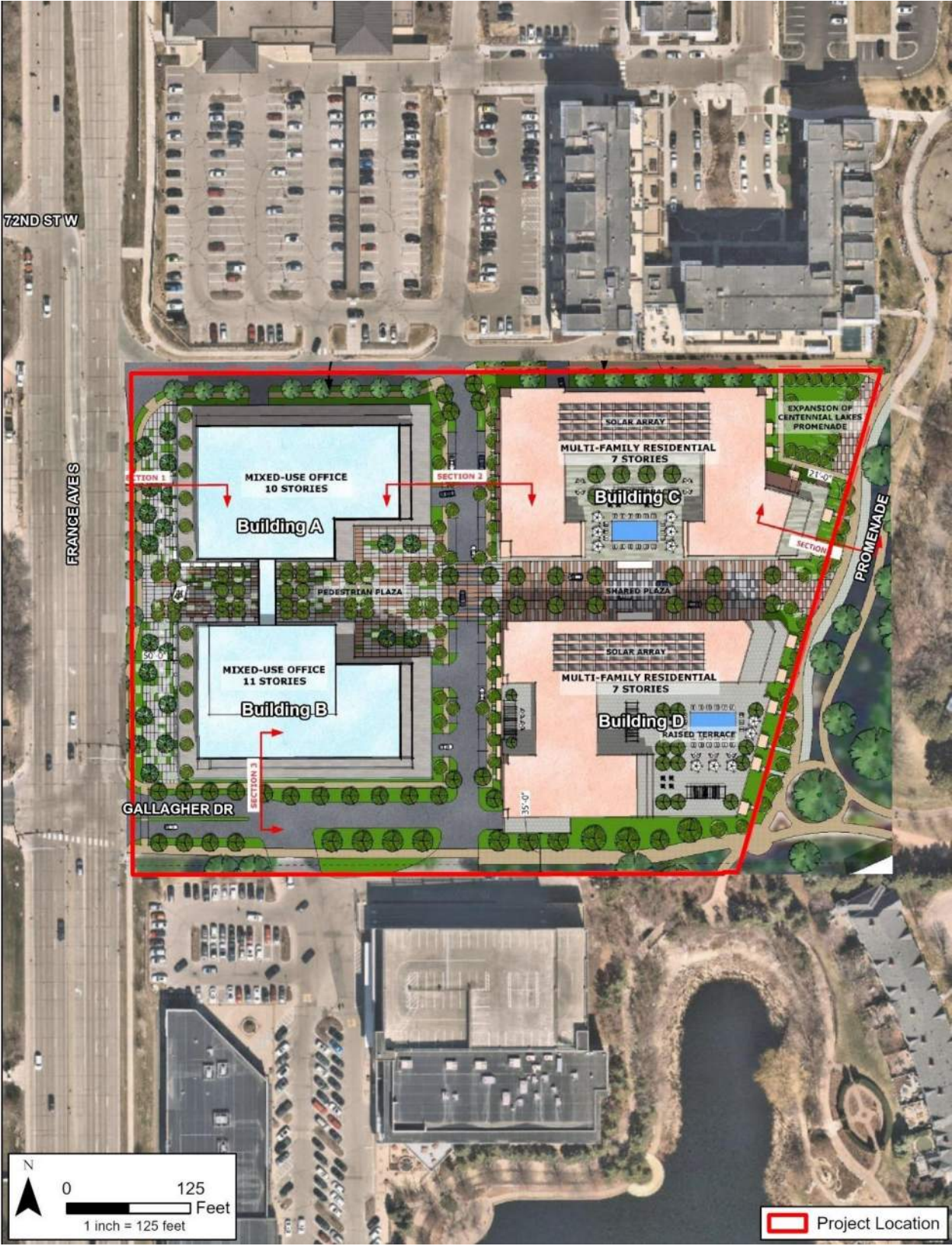
Traffic Projections

In order to analyze the lane configuration and traffic control needs projected traffic volumes were determined for the area. Projected 2025 and 2030 traffic volumes were determined based on proposed anticipated future development land use in the area. The following sections outline the projected background traffic growth, traffic generation from the study area, as well as the traffic distribution and projected traffic volumes.

A. Background (Non-Site) Traffic Growth

Traffic growth in the vicinity of a proposed site will occur between existing conditions (2023) and any given future year due to other development within the region. This background growth must be accounted for and included in future year traffic forecasts.

To account for some background traffic growth, several factors were considered including the current City and County Transportation Plans, future traffic projections compared to the existing traffic volumes and historic traffic volumes and surrounding development that was already approved, but not yet constructed at the time of this study. Based on this review, a factor of 0.8 percent/year was used to project traffic from 2023 to the 2025 and 2030 analysis years.

B. Traffic Generation

The estimated trip generation from the proposed area development is shown below in **Table 3**. The trip generation used to estimate the proposed site traffic is based on rates for other similar land uses as documented in the Institute of Transportation Engineers *Trip Generation Manual, 11*th Edition. The table shows the Daily, AM peak and PM peak hour trip generation for the proposed site.

Table 3 - Estimated Site Trip Generation

Planned Use	Size	ADT	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Office	300,000sf	3.252	456	401	55	432	73	359
Multi-Family	460 units	2.088	170	39	131	179	109	70
Total New Trips		5,340	626	440	186	611	183	429

Source: Institute of Transportation Engineers Trip Generation Manual, 11th Edition

C. Traffic Distribution

Proposed site generated trips were distributed to the adjacent roadway system based on the anticipated origins and destinations for the planned land use, existing travel patterns and engineering judgement. Based on these parameters the following general traffic distribution was used to distribute the projected site traffic volumes to the area roadway network:

- 37 percent to / from the north on France Avenue
- 7 percent to / from the east on Hazelton Road
- 2 percent to / from the west on 72nd Street
- 37 percent to / from the south on France Avenue
- 9 percent to / from the east on Parklawn Avenue
- 8 percent to / from the west on Parklawn Avenue

D. Projected Traffic Volumes

Traffic forecasts were prepared for the future conditions by adding the projected annual background traffic growth to the existing traffic volumes to determine the no-build conditions.The 2025 and 2030 build conditions were then developed by adding the anticipated proposed site redevelopment traffic generation to the no-build volumes.

Figure 4 - Figure 6 shows the projected 2025 No-Build, 2025 Build and 2030 Build traffic volumes.

Figure 4 - 2025 No-Build Traffic Conditions
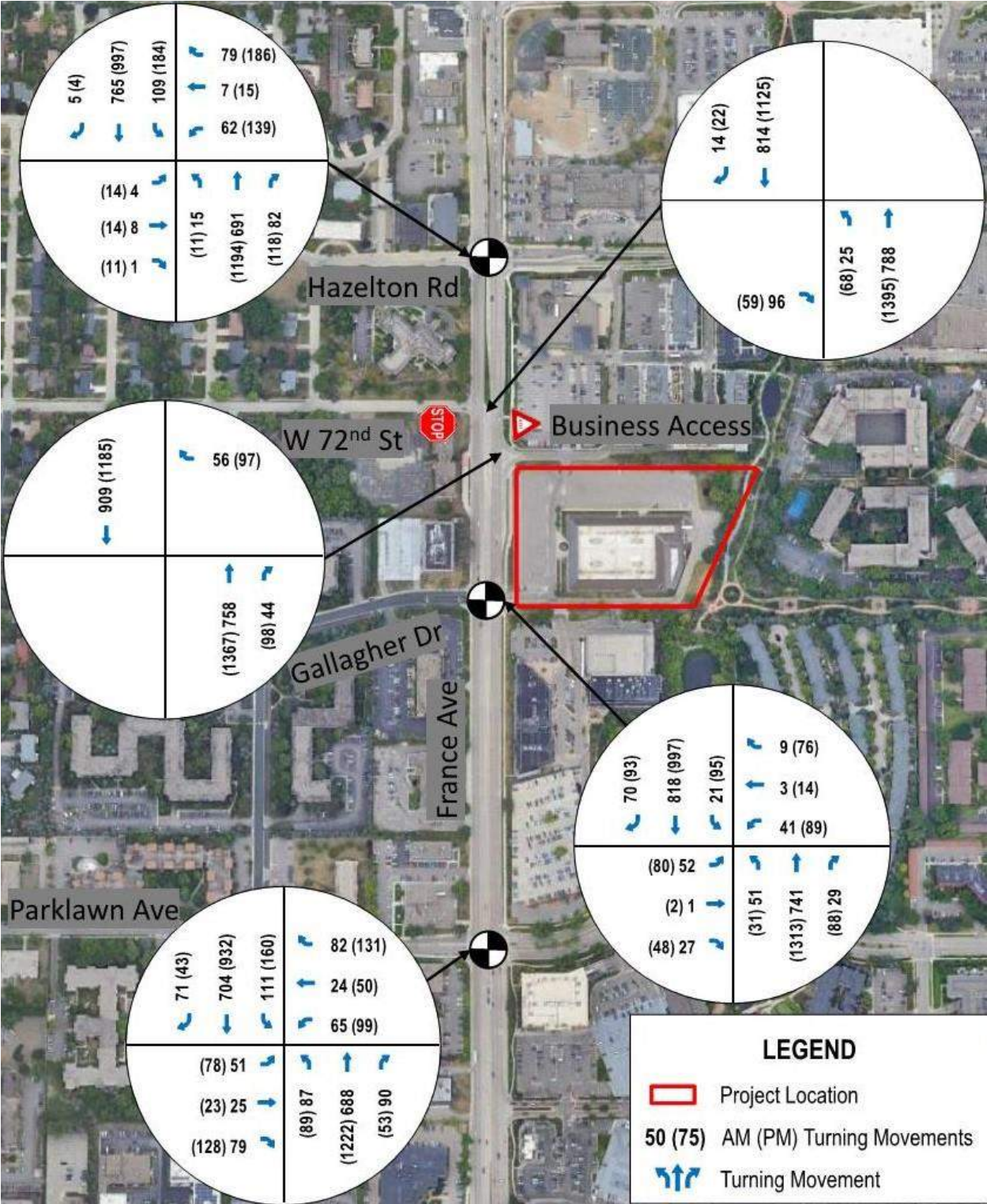
Figure 5 - 2025 Build Traffic Conditions
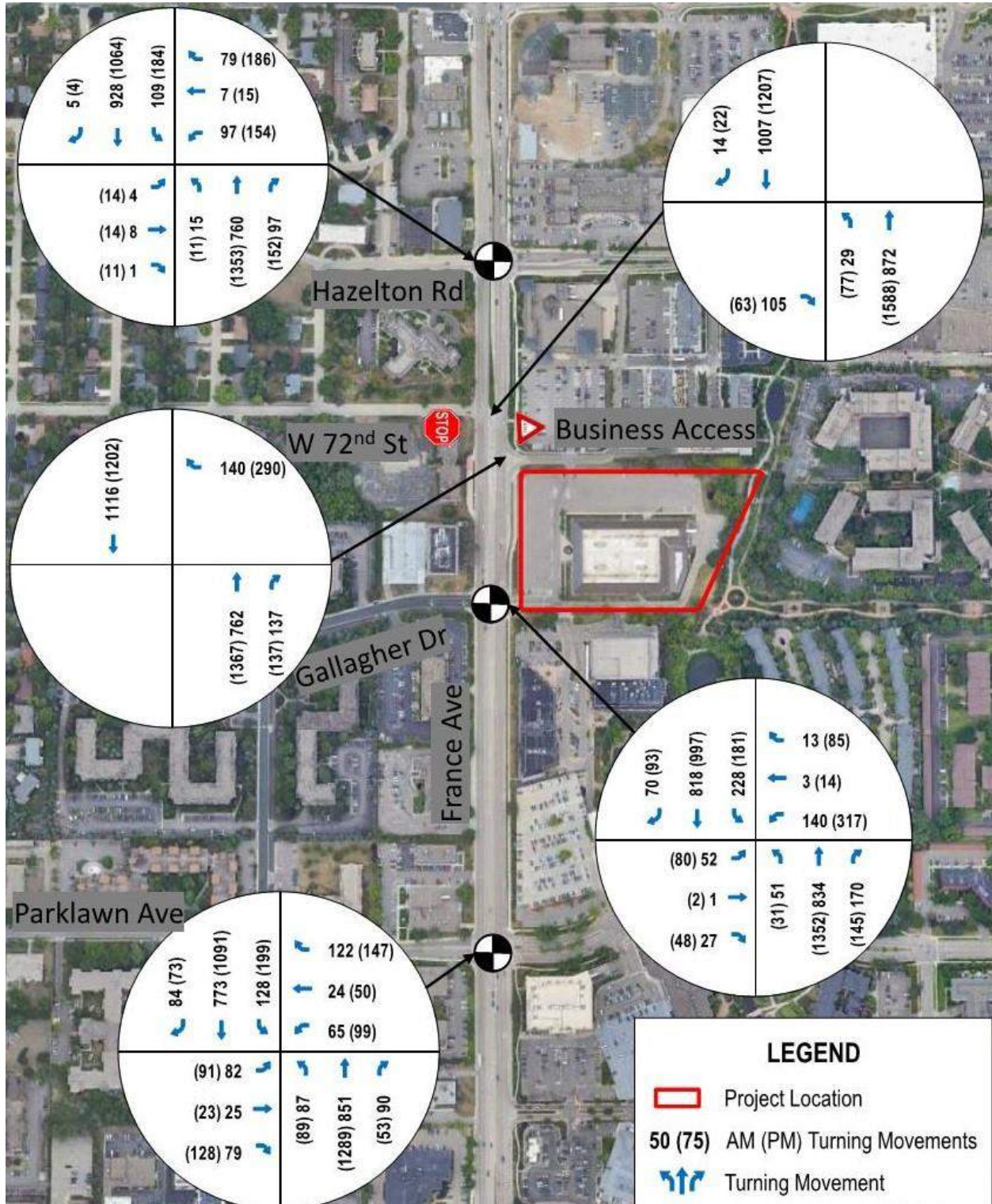
Figure 6 - 2030 Build Traffic Conditions
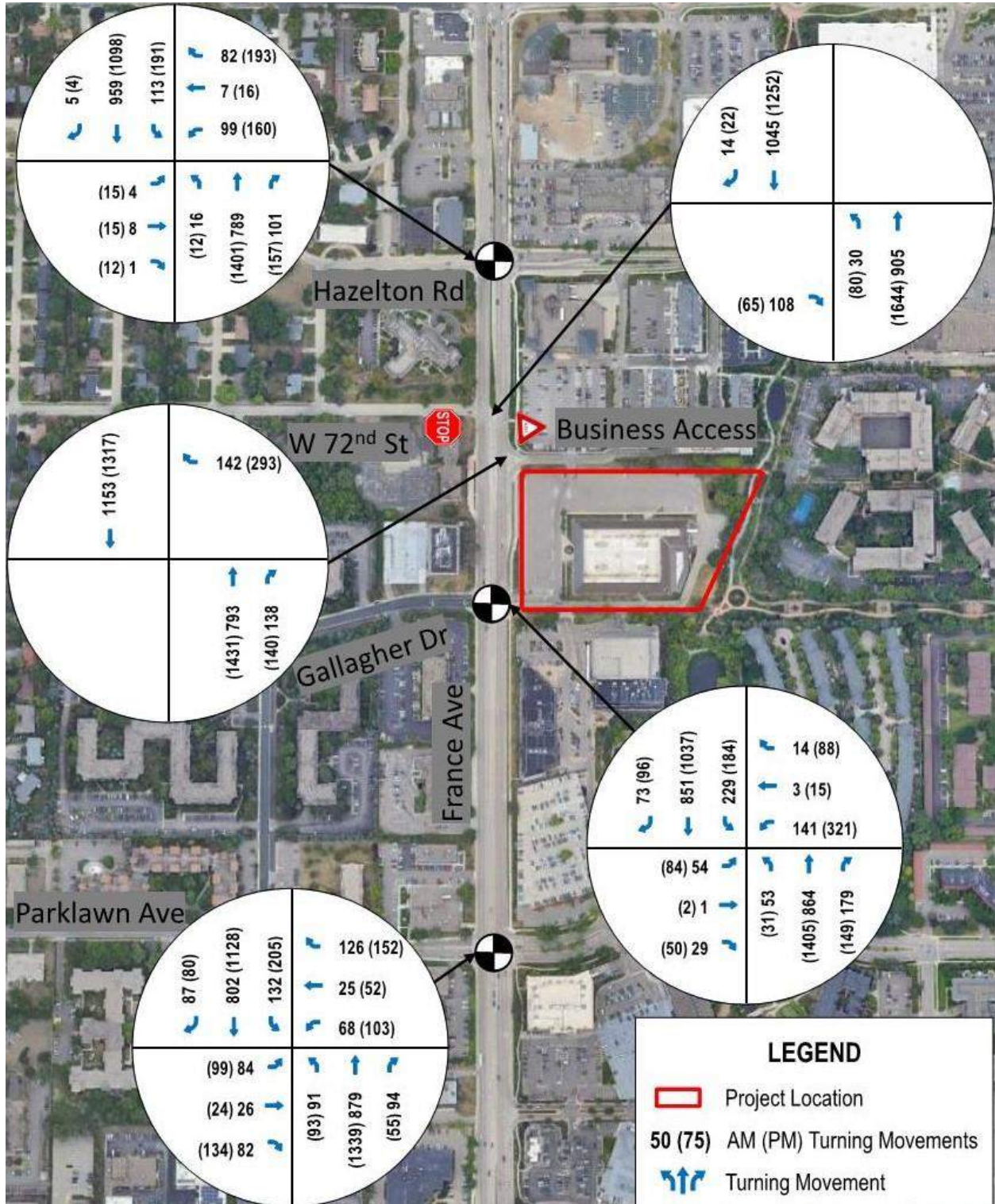
Traffic Impact Analysis

Existing and forecasted traffic operations were evaluated for the intersections and access in the Study Area. The analysis was conducted for the following scenarios.

1. Existing 2023
2. Projected 2025 No-Build
3. Projected 2025 Build
4. Projected 2030 Build

This section describes the methodology used to assess the operations and provides a summary of traffic operations for each scenario. The traffic operation worksheets are included in *Appendix B*.

A. Methodology

The intersections in the corridor were evaluated during the weekday and weekend peak hours using Synchro/SimTraffic micro simulation software. The results are derived from established methodologies documented in the Highway Capacity Manual (HCM) 2010. The software was used to evaluate the characteristics of the roadway network including lane geometrics, turning movement volumes, traffic control, and signal timing. In addition, the signal timing parameters for future year conditions were optimized using Synchro. This information was then transferred to SimTraffic, the traffic simulation model, to estimate average peak hour vehicle delays and queues.

One of the primary measures of effectiveness used to evaluate intersection traffic operations, as defined in the HCM, is Level of Service (LOS) – a qualitative letter grade, A – F, based on seconds of vehicle delay due to a traffic control device at an intersection. By definition, LOS A conditions represent high quality operations (i.e., motorists experience very little delay or interference) and LOS F conditions represent very poor operations (i.e., extreme delay or severe congestion).

Figure 7 depicts a graphical interpretation of delay times that define level of service. The delay thresholds are lower for un-signalized intersections than signalized intersections due to the public's perception of acceptable delays for different traffic controls as indicated in the HCM. In accordance with the Minnesota Department of Transportation (MnDOT) guidelines, this analysis used the LOS D/E boundary as an indicator of acceptable traffic operations.

Figure 7 - Level of Service Ranges for Signalized and Un-Signalized Intersections
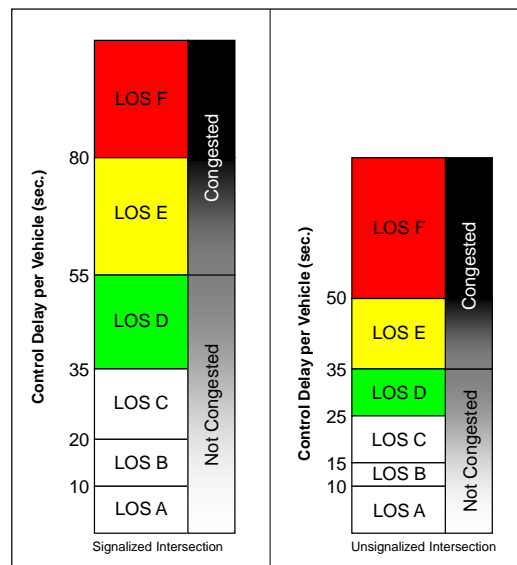
SOURCE: Level of Service thresholds from the Highway Capacity Manual, 2000.

B. Existing Conditions Analysis

Table 4 - 2023 Existing Conditions shown below summarizes the existing LOS at the primary intersections in the study area based on the current lane geometry, traffic control and 2023 traffic volumes. The analysis results show that all intersections are operating at overall LOS B or better during both the AM and PM peak hours. All movements during the AM and PM peak hours are operating at LOS C.

Table 4 - 2023 Existing Conditions Summary

Control	Intersection	AM Peak Hour		PM Peak Hour	
		LOS	Delay[1] (sec/veh)	LOS	Delay[1] (sec/veh)
Signal	France Ave at Hazelton Rd	A (C)	7	B (C)	13
Thru-Stop	France Ave at 72nd St	A (A)	4	A (A)	6
Thru-Stop	France Ave at Business Access	A (A)	2	A (A)	4
Signal	France Ave at Gallagher Dr	A (C)	7	B (C)	10
Signal	France Ave at Parklawn Ave	B (C)	12	B (C)	15

C = Overall LOS, (D) = Worst movement LOS , (1) = Overall Delay (worst movement for thru-stop intersections)

C. Forecasted Conditions Analysis

2025 No-Build Traffic Operations

Table 5 – 2025 No Build Condition Summary, shown below, summarizes the LOS and delays at the primary intersections in the study area based on the current lane geometry, traffic control and projected 2025 traffic volumes, without the proposed area development.

The results show that all intersections will continue to operate at overall LOS B or better in 2025 during both the AM and PM peak hours with only the background traffic growth, with all movements operating at LOS C or better, except the France Avenue northbound left turn at Hazelton Road which would operate at LOS D in the PM peak hour. Delays would only increase slightly from the existing conditions.

Table 5 - 2025 No Build Condition Summary

Control	Intersection	AM Peak Hour		PM Peak Hour	
		LOS	Delay[1] (sec/veh)	LOS	Delay[1] (sec/veh)
Signal	France Ave at Hazelton Rd	A (C)	7	B (D)	13
Thru-Stop	France Ave at 72nd St	A (A)	5	A (A)	7
Thru-Stop	France Ave at Business Access	A (A)	2	A (A)	4
Signal	France Ave at Gallagher Dr	A (C)	7	B (C)	11
Signal	France Ave at Parklawn Ave	B (C)	12	B (C)	16

C = Overall LOS, (D) = Worst movement LOS , (1) = Overall Delay (worst movement for thru-stop intersections)

2025 Build Traffic Operations

Table 6 – 2025 Build Conditions, shown below, summarizes the LOS and delays at the primary intersections in the study area assuming the existing lane configuration, traffic control and projected 2025 traffic volumes with the proposed site redevelopment.

The results show that all intersections would operate at overall LOS B in 2025 during both the AM and PM peak hours with the proposed redevelopment traffic growth. All movements would also be operating at LOS C or better during the AM and PM peak hours except the France Avenue northbound left turn at Hazelton Road during the PM peak hour and the northbound and southbound France Avenue left turns at Gallagher Drive during the PM peak hour.

Table 6 - 2025 Build Conditions

Control	Intersection	AM Peak Hour		PM Peak Hour	
		LOS	Delay[1] (sec/veh)	LOS	Delay[1] (sec/veh)
Signal	France Ave at Hazelton Rd	A (C)	9	B (D)	14
Thru-Stop	France Ave at 72nd St	A (A)	6	A (A)	7
Thru-Stop	France Ave at Business Access	A (A)	3	A (A)	7
Signal	France Ave at Gallagher Dr	B (C)	14	B (D)	19
Signal	France Ave at Parklawn Ave	B (C)	13	B (C)	17

C = Overall LOS, (D) = Worst movement LOS , (1) = Overall Delay (worst movement for thru-stop intersections)

2030 Build Traffic Operations

Table 7 – 2030 Build Conditions, shown below, summarizes the LOS and delays at the primary intersections in the study area assuming the existing lane configuration, traffic control and projected 2030 traffic volumes with the proposed area redevelopment.

The results show that all intersections would operate at overall LOS B in 2030 during both the AM and PM peak hours with the proposed redevelopment traffic growth. All movements would also be operating at LOS C or better during the AM and PM peak hours except the following:

- France Avenue at Hazelton Road – NB left turn – PM peak hour.
- France Avenue at Hazelton Road – SB left turn – PM peak hour.
- France Avenue at Gallagher Drive – NB left turn – PM peak hour.
- France Avenue at Gallagher Drive – SB left turn – PM peak hour.
- France Avenue at Parklawn Avenue – NB left turn – PM peak hour.
- France Avenue at Parklawn Avenue – SB left turn – PM peak hour.

Table 7 - 2030 Build Condition Summary

Control	Intersection	AM Peak Hour		PM Peak Hour	
		LOS	Delay[1] (sec/veh)	LOS	Delay[1] (sec/veh)
Signal	France Ave at Hazelton Rd	A (C)	9	B (D)	15
Thru-Stop	France Ave at 72nd St	A (A)	7	A (A)	7

Thru-Stop	France Ave at Business Access	A (A)	3	A (A)	7
Signal	France Ave at Gallagher Dr	B (C)	14	B (D)	19
Signal	France Ave at Parklawn Ave	B (C)	14	B (D)	18

C = Overall LOS, (D) = Worst movement LOS , (1) = Overall Delay (worst movement for thru-stop intersections)

D. Vehicle Queuing Analysis

A queuing analysis for the 2025 and 2030 future build conditions was conducted, evaluating the anticipated vehicle queues with the proposed traffic conditions. The analysis was conducted using the SimTraffic simulation software.

The results found that during both the AM and PM peak hours in 2025 and 2030 with the proposed site redevelopment, the maximum queues will not exceed the available turn lanes storage.

Multi Modal Review / Analysis

A. Pedestrian/Bike System

The City's current 2040 Comprehensive Plan addresses locations of existing and proposed sidewalk and bicycle facilities within the City. The proposed Sidewalk and Bicycle Facilities are shown in *Figure 8* and *Figure 9.* The City of Edina is committed to providing a comprehensive and coordinated pedestrian network that provides transportation as well as recreational value.

Currently there are several pedestrian and bike facilities that could be accessed from the proposed redevelopment site including:

- Pedestrian / Bike Trail on east side of France Avenue.
- Pedestrian / Bike Trail on west side of France Avenue.
- Nine Mile Creek Regional Trail on south side of Gallagher Drive.
- Pedestrian / Bike Trail in the Centennial Lakes Promenade east of the site.

The City's Comprehensive Plan does not identify any new pedestrian or bike facilities in the area of the site redevelopment. The proposed redevelopment site plan does however include a new east / west pedestrian plaza, expansion of the Centennial Lakes Promenade and new sidewalk connections from the site to the existing pedestrian / bike facilities.

B. Transit System

Metro Transit Route 6 provides service adjacent to the redeveloped site on France Avenue. The route provides local bus service from the U of M through downtown Minneapolis to the Southdale Transit Center down France Avenue, serving the areas on the northside of I-494 in Bloomington.

The route operates during the weekdays, weekends, and holidays with 30 to 60 minute headways. Bus stops are currently provided on France Avenue at Hazelton Road, 72nd Street, Gallagher Drive and Parklawn Avenue.

The nearest Park & Ride facility is at the Southdale Transit Center. The Transit Center is located southwest of the York Avenue and 66th Street intersection, on the east side of Southdale Center. The site currently includes approximately 70 surface Park & Ride parking spaces, with overflow

parking for additional vehicles east of the Southdale Center ring road. Transit service is provided to the center from seven primary routes. The Transit Center is currently planned to be relocated to the north side of the Southdale Center.

No changes in the existing transit service is planned with the proposed site redevelopment.

Figure 8 - Proposed Sidewalk Facilities

Edina Comprehensive Plan

Edina, Minnesota

Figure 5.15. Proposed Sidewalk Facilities

January 2019
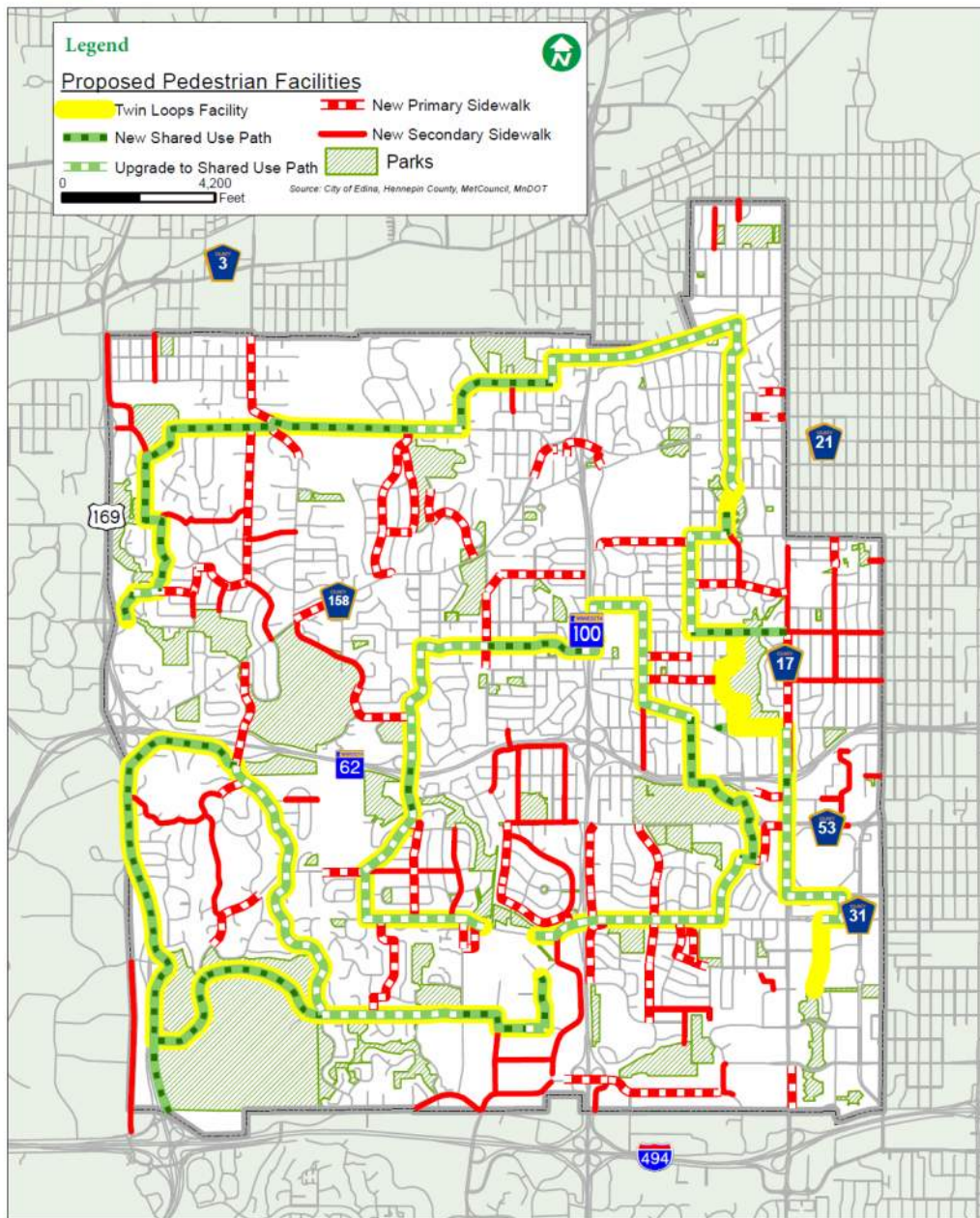
Figure 9 - Proposed Bike Facilities
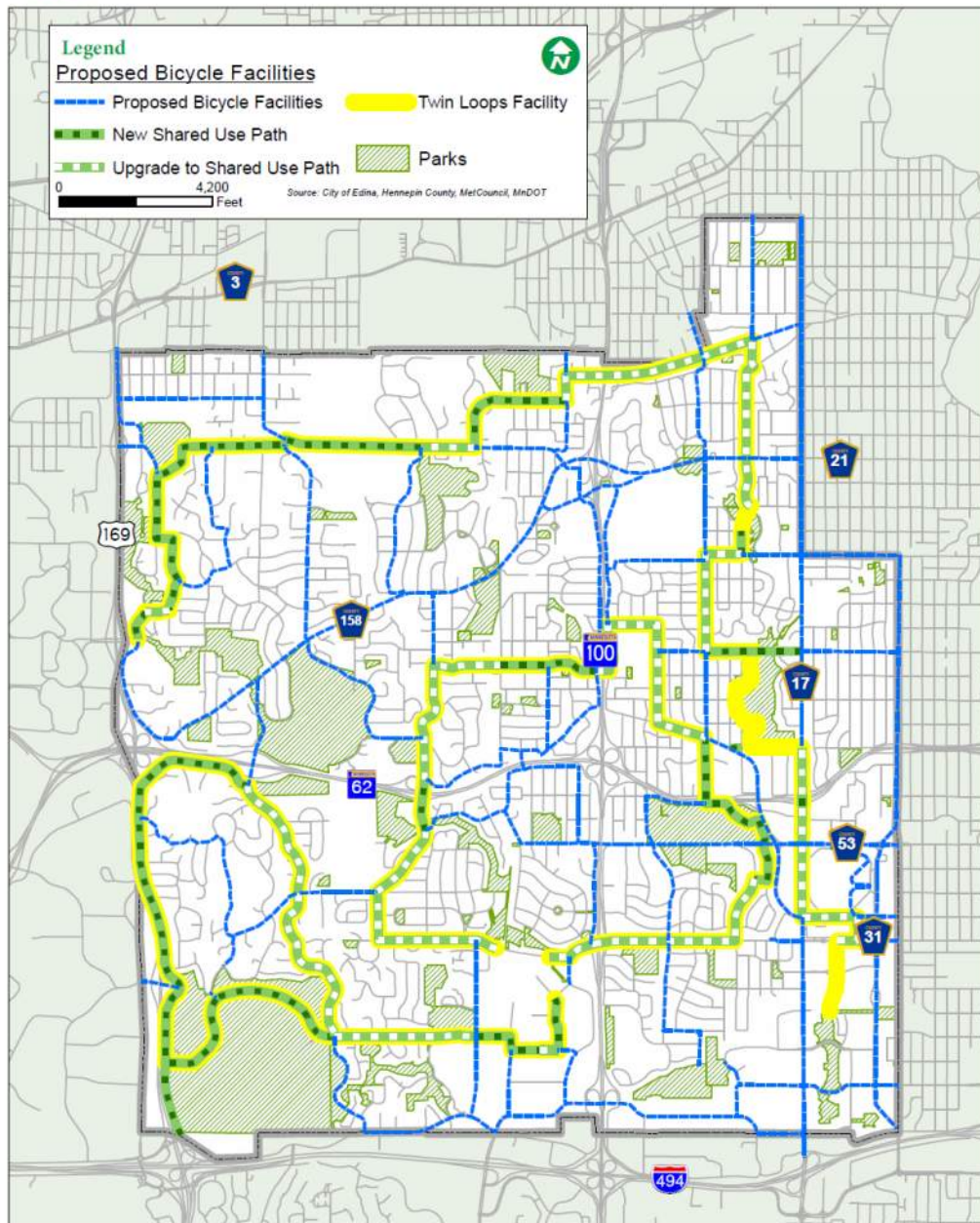
Parking Impact Analysis

The parking demand for the proposed site redevelopment was analyzed based on the anticipated uses on the site. Based on the current City Code the proposed site redevelopment would require a total of 1,575 parking spaces. The current concept site plan includes 1,814 spaces. **Table 8** shows a breakdown of the parking required per City Code.

Table 8 - Parking Required per City Code

Use	Size	Rate	Parking Required	Parking Provided
Office	300,000sf	1/300sf	1,000	1,240
Multi-Family	460 units	1.25/unit	575	574

Source: City of Edina

The parking demand was also analyzed based on industry standards. The parking generation rates used to estimate the parking demand was based on surveys of the parking generation for other similar land uses as documented in the Institute of Transportation Engineers *Parking Generation Manual, 5th* Edition.

Table 9 below shows the estimated parking generation rate and the anticipated peak parking demand on a typical weekday (Monday – Thursday)

Table 9 - Site Parking Demand per ITE

Use	Size	Rate	Parking Required
Office	300,000sf	3.45 / 1000sf	1,035
Multi-Family	460 units	1.2 / unit	552

Source: Institute of Transportation Engineers Parking Generation Manual, 5th Edition

Based on the results of the parking demand analysis, the parking stalls included in the proposed concept site plan would meet City Code requirements. It would also meet the guidelines based on industry standards.

Travel Demand Management

The City of Edina has adopted a Travel Demand Management (TDM) policy that emphasis the reduction of vehicular trips on congested roadways during peak travel times. For the proposed 6016 Vernon Avenue site redevelopment, a Tier 2 Plan is required based on requirement "c" 20 or more parking stalls.

Tier 2 TDM plan is required when any of the following are met:
  a. Over 5,000 square feet of gross floor area;
  b. 10 or more residential units;
  c. 20 or more automobile parking stalls required by City Code; or
  d. Other development/redevelopment as required by Council condition.

A Tier 2 Plan requires developers to demonstrate that proposed project is designed in ways that support TDM. This requires identifying strategies aimed at reducing employee and visitor traffic volumes, during peak travel hours. Based on the policy, the following shall be included in a Tier 2 TDM Plan:

Tier 2 TDM Plan shall include:
    a. Strategies, implementation measures and timeline. A minimum of three (3) unique strategies must be identified for implementation.
    b. Proposed total expenditures to implement the TDM strategies.

Based on these requirements *Table 10* outlines some recommended TDM strategies for the site that could be implemented by the developer:

Table 10 - TDM Strategies

Strategy	Implementation Measures	Timeline	Cost
Providing bicycle parking spaces exceeding City requirements.	• Include on site plan	• With site plan approval • Construct with site improvements	• TBD
Providing maps that show the area bus routes, light rail and bus schedules, and bicycle and pedestrian facilities.	• Create map or use available maps • Have available on Website	• With occupancy	• TBD
Directional signage/information for adjacent pedestrian, bicycle and transit facilities.	• Include on site plan	• With site plan approval • Construct with site improvements	• TBD
Restricting freight deliveries to off peak hours to avoid traffic conflicts on adjacent roadways.	• Coordination with vendors	• Verification with occupancy • On-going	• TBD

Conclusions / Recommendations

Based on the analysis documented in this report, WSB offers the following conclusions and recommendations:

- The existing Macy's Furniture store located on the east side of France Avenue (CSAH 17) Between 72nd Street and Gallagher Drive is proposed to be removed.

- The proposed site redevelopment is proposed to include 300,000 sf of office and 460 multi-family residential units and expected to generate 5,340 daily, 626 AM peak hour and 611 PM peak hour trips. Access to the site will be maintained at the existing access locations on France Avenue at the Business Access driveway and Gallagher Drive. The current concept plan provides 1,814 parking spaces for the site.

- The crash data shows that based on the past 5 years, the intersections on France Avenue have calculated crash rates and severity rates that are below the MnDOT Statewide average rates.

- The traffic operations analysis evaluated impacts for existing conditions and the horizon years of 2023 and 2030 for the local roadway network, specifically, the following intersections in the vicinity of the proposed site redevelopment:
    o France Avenue (CSAH 17) at Hazelton Road
    o France Avenue (CSAH 17) at 72nd Street
    o France Avenue (CSAH 17) at Business Access
    o France Avenue (CSAH 17) at Gallagher Drive
    o France Avenue (CSAH 17) at Parklawn Avenue

- With the existing conditions based on the current lane geometry, traffic control and existing 2023 traffic volumes, the analysis results show that all intersections are operating at overall LOS B or better during both the AM and PM peak hours with all movements operating at LOS C.

- With the 2025 no-build conditions based on the current lane geometry, traffic control and projected 2025 no-build traffic volumes, the analysis results show that all intersections will continue to operate at overall LOS B or better during both the AM and PM peak hours with all movements operating at LOS C or better, except the France Avenue northbound left turn at Hazelton Road which would operate at LOS D in the PM peak hour.

- With the 2025 build conditions based on the current lane geometry, traffic control and projected 2025 build traffic volumes, the analysis results show that all intersections will continue to operate at overall LOS B or better during both the AM and PM peak hours with all movements operating at LOS C or better, except the France Avenue northbound left turn at Hazelton Road during the PM peak hour and the northbound and southbound France Avenue left turns at Gallagher Drive during the PM peak hour.

- With the 2030 build conditions based on the current lane geometry, traffic control and projected 2030 build traffic volumes, the analysis results show that all intersections will continue to operate at overall LOS B or better during both the AM and PM peak hours with all movements operating at LOS C or better, except France Avenue at Hazelton Road northbound and southbound left turn, France Avenue at Gallagher Drive northbound and southbound left turn and the France Avenue at Parklawn Avenue northbound and southbound left turn during the PM peak hour.

- The queuing analysis found that during both the AM and PM peak hours in 2025 and 2030 with the proposed site redevelopment, the maximum queues will not exceed the available turn lanes storage.

  Based on the above conclusions no roadway improvements are recommended at this time.

- The City's Comprehensive Plan does not identify any pedestrian or bicycle facilities in the area adjacent to the site.

  The pedestrian improvements identified in the concept site plan should be completed with the proposed project.

- There is currently transit bus service provided directly adjacent to the site along France Avenue. In addition, the Southdale Transit Center is located north of the site.

  No additional Transit improvements would be required.

- Based on the results of the parking demand analysis, the parking included with the proposed site plan would meet City Code and industry standard requirements.

  No parking improvements or parking variance would be required.

- The City of Edina has adopted a Travel Demand Management (TDM) Policy that requires developers to demonstrate that the proposed project is designed in ways that support TDM. This requires identifying strategies aimed at reducing employee and visitor traffic volumes, during peak travel hours. The proposed redevelopment site proposal would require a Tier 2 TDM Plan.

  Based on the requirements, some potential TDM strategies for the site that could be implemented by the developer include:
  - ***Providing bicycle parking spaces exceeding City requirements.***
  - ***Providing maps that show the area bus routes, light rail and bus schedules, and bicycle and pedestrian facilities.***
  - ***Directional signage/information for adjacent pedestrian, bicycle and transit facilities.***
  - ***Restricting freight deliveries to off peak hours to avoid traffic conflicts on adjacent roadways.***

APPENDIX A
Existing Traffic Counts

wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

France Ave & Hazelton Rd
6-9am & 3-6pm
vehicles & peds

Groups Printed- vehicles & peds

Start Time	France Ave From North					Hazelton Rd From East					France Ave From South					Hazelton Rd From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	2	26	2	0	30	1	0	4	1	6	6	37	2	0	45	1	0	2	0	3	84
06:15 AM	0	67	7	0	74	4	0	3	0	7	8	38	3	0	49	1	2	0	0	3	133
06:30 AM	0	36	4	0	40	3	0	3	0	6	2	77	0	0	79	3	0	1	0	4	129
06:45 AM	0	74	12	0	86	10	1	5	1	17	9	104	0	0	113	1	3	0	0	4	220
Total	2	203	25	0	230	18	1	15	2	36	25	256	5	0	286	6	5	3	0	14	566
07:00 AM	0	72	17	1	90	7	1	5	1	14	13	91	2	2	108	0	1	5	1	7	219
07:15 AM	0	122	17	0	139	19	4	16	0	39	17	108	1	2	128	1	2	4	1	8	314
07:30 AM	0	153	15	0	168	23	1	19	0	43	14	143	1	0	158	0	0	2	0	2	371
07:45 AM	3	185	24	0	212	22	1	19	0	41	20	137	1	0	158	0	2	3	0	5	416
Total	3	532	73	1	609	71	6	59	1	137	64	479	5	4	552	1	5	14	2	22	1320
08:00 AM	1	195	29	0	225	13	4	13	0	30	22	163	0	0	185	0	2	2	0	4	444
08:15 AM	1	177	19	0	197	17	1	16	1	35	20	168	1	1	190	1	3	1	0	5	427
08:30 AM	1	183	32	1	217	27	2	22	0	51	15	162	3	2	182	0	1	1	0	2	452
08:45 AM	2	196	27	0	225	21	0	10	0	31	24	183	11	0	218	0	2	0	0	2	476
Total	5	751	107	1	864	78	7	61	1	147	81	676	15	3	775	1	8	4	0	13	1799
03:00 PM	2	237	52	3	294	49	4	36	3	92	49	238	4	1	292	5	6	7	1	19	697
03:15 PM	2	255	39	1	297	36	4	37	0	77	42	266	2	2	312	3	4	4	0	11	697
03:30 PM	1	249	39	1	290	36	4	32	0	72	40	242	1	3	286	0	3	2	2	7	655
03:45 PM	4	196	58	0	258	51	5	28	1	85	52	240	2	3	297	3	2	3	0	8	648
Total	9	937	188	5	1139	172	17	133	4	326	183	986	9	9	1187	11	15	16	3	45	2697
04:00 PM	1	248	54	0	303	45	9	38	0	92	38	303	4	0	345	3	3	2	0	8	748
04:15 PM	3	219	34	1	257	41	4	41	1	87	31	259	3	1	294	2	2	0	2	6	644
04:30 PM	0	250	64	0	314	44	4	34	0	82	48	306	3	2	359	3	5	5	2	15	770
04:45 PM	2	251	39	2	294	36	1	37	3	77	51	317	3	0	371	4	2	6	1	13	755
Total	6	968	191	3	1168	166	18	150	4	338	168	1185	13	3	1369	12	12	13	5	42	2917
05:00 PM	2	231	45	0	278	65	6	39	2	112	49	265	3	1	318	0	4	2	0	6	714
05:15 PM	0	227	33	0	260	38	4	27	0	69	38	309	2	1	350	4	3	1	0	8	687
05:30 PM	2	202	31	0	235	42	5	45	0	92	37	275	2	0	314	0	3	4	0	7	648
05:45 PM	1	183	51	0	235	40	2	29	2	73	31	222	3	2	258	0	3	2	0	5	571
Total	5	843	160	0	1008	185	17	140	4	346	155	1071	10	4	1240	4	13	9	0	26	2620
Grand Total	30	4234	744	10	5018	690	66	558	16	1330	676	4653	57	23	5409	35	58	59	10	162	11919
Apprch %	0.6	84.4	14.8	0.2		51.9	5	42	1.2		12.5	86	1.1	0.4		21.6	35.8	36.4	6.2		
Total %	0.3	35.5	6.2	0.1	42.1	5.8	0.6	4.7	0.1	11.2	5.7	39	0.5	0.2	45.4	0.3	0.5	0.5	0.1	1.4	

wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

France Ave & Hazelton Rd
6-9am & 3-6pm
vehicles & peds

Start Time	France Ave From North					Hazelton Rd From East					France Ave From South					Hazelton Rd From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	1	195	29	0	**225**	13	**4**	13	0	30	22	163	0	0	185	0	2	**2**	0	4	444
08:15 AM	1	177	19	0	197	17	1	16	**1**	35	20	168	1	1	190	**1**	**3**	1	0	**5**	427
08:30 AM	1	183	**32**	**1**	217	**27**	2	**22**	0	**51**	15	162	3	**2**	182	0	1	1	0	2	452
08:45 AM	**2**	**196**	27	0	225	21	0	10	0	31	**24**	**183**	**11**	0	**218**	0	2	0	0	2	**476**
Total Volume	5	751	107	1	864	78	7	61	1	147	81	676	15	3	775	1	8	4	0	13	1799
% App. Total	0.6	86.9	12.4	0.1		53.1	4.8	41.5	0.7		10.5	87.2	1.9	0.4		7.7	61.5	30.8	0		
PHF	.625	.958	.836	.250	.960	.722	.438	.693	.250	.721	.844	.923	.341	.375	.889	.250	.667	.500	.000	.650	.945
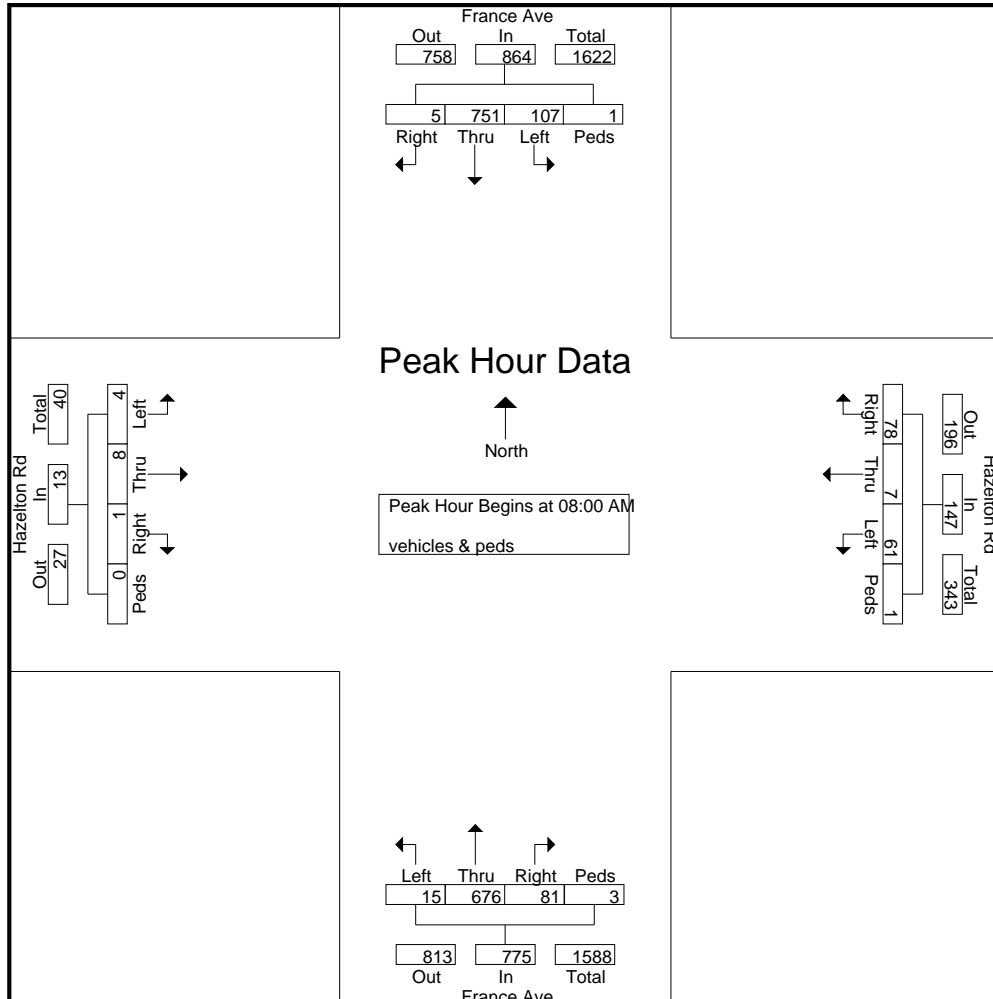
Peak Hour Data

Peak Hour Begins at 08:00 AM

vehicles & peds

France Ave & Hazelton Rd
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & Hazelton Rd
Site Code : 1
Start Date : 4/11/2023
Page No : 3

Start Time	France Ave From North					Hazelton Rd From East					France Ave From South					Hazelton Rd From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	250	**64**	0	**314**	44	4	34	0	82	48	306	**3**	**2**	359	3	**5**	5	**2**	**15**	**770**
04:45 PM	**2**	**251**	39	**2**	294	36	1	37	**3**	77	**51**	**317**	3	0	**371**	**4**	2	**6**	1	13	755
05:00 PM	2	231	45	0	278	**65**	**6**	**39**	2	**112**	49	265	3	1	318	0	4	2	0	6	714
05:15 PM	0	227	33	0	260	38	4	27	0	69	38	309	2	1	350	4	3	1	0	8	687
Total Volume	4	959	181	2	1146	183	15	137	5	340	186	1197	11	4	1398	11	14	14	3	42	2926
% App. Total	0.3	83.7	15.8	0.2		53.8	4.4	40.3	1.5		13.3	85.6	0.8	0.3		26.2	33.3	33.3	7.1		
PHF	.500	.955	.707	.250	.912	.704	.625	.878	.417	.759	.912	.944	.917	.500	.942	.688	.700	.583	.375	.700	.950

Peak Hour Data

France Ave

Out	In	Total
1394	1146	2540

4	959	181	2
Right	Thru	Left	Peds

North

Peak Hour Begins at 04:30 PM

vehicles & peds

Hazelton Rd

Total 72
In 42
Out 30

Left 14
Thru 14
Right 11
Peds 3

Hazelton Rd

Right 183
Thru 15
Left 137
Peds 5

Out 381
In 340
Total 721

Left	Thru	Right	Peds
11	1197	186	4

1107	1398	2505
Out	In	Total

France Ave

wsb

France Ave & 72nd St
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & 72nd St
Site Code : 2
Start Date : 4/11/2023
Page No : 1

Groups Printed- vehicles & peds

Start Time	France Ave From North					72nd St From East					France Ave From South					72nd St From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	1	29	0	0	30	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	34
06:15 AM	0	69	0	0	69	0	0	0	0	0	0	0	0	0	0	3	0	0	1	4	73
06:30 AM	0	45	0	0	45	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	54
06:45 AM	1	79	0	0	80	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	87
Total	2	222	0	0	224	0	0	0	0	0	0	0	0	0	0	23	0	0	1	24	248
07:00 AM	1	76	0	0	77	0	0	0	0	0	0	0	0	0	0	9	0	0	1	10	87
07:15 AM	1	139	0	0	140	0	0	0	0	0	0	0	0	0	0	12	0	0	0	12	152
07:30 AM	3	168	0	1	172	0	0	0	0	0	0	0	0	0	0	26	0	0	2	28	200
07:45 AM	7	202	0	0	209	0	0	0	0	0	0	0	0	0	0	33	0	0	0	33	242
Total	12	585	0	1	598	0	0	0	0	0	0	0	0	0	0	80	0	0	3	83	681
08:00 AM	2	199	0	0	201	0	0	0	0	0	0	0	0	0	0	22	0	0	1	23	224
08:15 AM	3	195	0	0	198	0	0	0	0	0	0	0	0	0	0	21	0	0	2	23	221
08:30 AM	2	205	0	0	207	0	0	0	0	0	0	0	0	0	0	18	0	0	1	19	226
08:45 AM	4	207	0	0	211	0	0	0	0	0	0	0	0	0	0	18	0	0	0	18	229
Total	11	806	0	0	817	0	0	0	0	0	0	0	0	0	0	79	0	0	4	83	900
03:00 PM	5	275	0	0	280	0	0	0	0	0	0	0	0	0	0	14	0	0	0	14	294
03:15 PM	6	286	0	0	292	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	298
03:30 PM	3	269	0	1	273	0	0	0	0	0	0	0	0	0	0	13	0	0	1	14	287
03:45 PM	6	231	0	0	237	0	0	0	0	0	0	0	0	0	0	14	0	0	0	14	251
Total	20	1061	0	1	1082	0	0	0	0	0	0	0	0	0	0	47	0	0	1	48	1130
04:00 PM	6	284	0	0	290	0	0	0	0	0	0	0	0	0	0	8	0	0	2	10	300
04:15 PM	2	253	0	0	255	0	0	0	0	0	0	0	0	0	0	20	0	0	8	28	283
04:30 PM	5	288	0	0	293	0	0	0	0	0	0	0	0	0	0	15	0	0	2	17	310
04:45 PM	9	282	0	0	291	0	0	0	0	0	0	0	0	0	0	15	0	0	1	16	307
Total	22	1107	0	0	1129	0	0	0	0	0	0	0	0	0	0	58	0	0	13	71	1200
05:00 PM	1	274	0	0	275	0	0	0	0	0	0	0	0	0	0	19	0	0	5	24	299
05:15 PM	3	256	0	2	261	0	0	0	0	0	0	0	0	0	0	6	0	0	2	8	269
05:30 PM	11	227	0	0	238	0	0	0	0	0	0	0	0	0	0	10	0	0	2	12	250
05:45 PM	4	218	0	0	222	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	228
Total	19	975	0	2	996	0	0	0	0	0	0	0	0	0	0	41	0	0	9	50	1046
Grand Total	86	4756	0	4	4846	0	0	0	0	0	0	0	0	0	0	328	0	0	31	359	5205
Apprch %	1.8	98.1	0	0.1		0	0	0	0		0	0	0	0		91.4	0	0	8.6		
Total %	1.7	91.4	0	0.1	93.1	0	0	0	0	0	0	0	0	0	0	6.3	0	0	0.6	6.9	

France Ave & 72nd St
6-9am & 3-6pm
vehicles & peds

Start Time	France Ave From North					72nd St From East					France Ave From South					72nd St From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	**7**	202	0	0	**209**	0	0	0	0	0	0	0	0	0	0	**33**	0	0	0	**33**	**242**
08:00 AM	2	199	0	0	201	0	0	0	0	0	0	0	0	0	0	22	0	0	1	23	224
08:15 AM	3	195	0	0	198	0	0	0	0	0	0	0	0	0	0	21	0	0	**2**	23	221
08:30 AM	2	**205**	0	0	207	0	0	0	0	0	0	0	0	0	0	18	0	0	1	19	226
Total Volume	14	801	0	0	815	0	0	0	0	0	0	0	0	0	0	94	0	0	4	98	913
% App. Total	1.7	98.3	0	0		0	0	0	0		0	0	0	0		95.9	0	0	4.1		
PHF	.500	.977	.000	.000	.975	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.712	.000	.000	.500	.742	.943

Peak Hour Data

France Ave

Out	In	Total
0	815	815

14	801	0	0
Right	Thru	Left	Peds

72nd St
Total 112
In 98
Out 14

	0	Left
0	Thru
94	Right
4	Peds

North

Peak Hour Begins at 07:45 AM
vehicles & peds

72nd St
Right 0
Thru 0
Left 0
Peds 0
Out 0
In 0
Total 0

Left	Thru	Right	Peds
0	0	0	0

Out	In	Total
895	0	895

France Ave

France Ave & 72nd St
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & 72nd St
Site Code : 2
Start Date : 4/11/2023
Page No : 3

Start Time	France Ave From North					72nd St From East					France Ave From South					72nd St From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	6	284	0	0	290	0	0	0	0	0	0	0	0	0	0	8	0	0	2	10	300
04:15 PM	2	253	0	0	255	0	0	0	0	0	0	0	0	0	0	20	0	0	8	28	283
04:30 PM	5	288	0	0	293	0	0	0	0	0	0	0	0	0	0	15	0	0	2	17	310
04:45 PM	9	282	0	0	291	0	0	0	0	0	0	0	0	0	0	15	0	0	1	16	307
Total Volume	22	1107	0	0	1129	0	0	0	0	0	0	0	0	0	0	58	0	0	13	71	1200
% App. Total	1.9	98.1	0	0		0	0	0	0		0	0	0	0		81.7	0	0	18.3		
PHF	.611	.961	.000	.000	.963	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.725	.000	.000	.406	.634	.968

Peak Hour Data

Peak Hour Begins at 04:00 PM

vehicles & peds

France Ave & Business Ave
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & Business Access
Site Code : 3
Start Date : 4/11/2023
Page No : 1

Groups Printed- vehicles & peds

Start Time	France Ave From North					Business Access From East					France Ave From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	0	0	0	0	0	2	0	0	0	2	1	43	0	0	44	0	0	0	0	0	46
06:15 AM	0	0	0	0	0	0	0	0	0	0	4	50	2	0	56	0	0	0	0	0	56
06:30 AM	0	0	0	0	0	6	0	0	0	6	5	73	1	0	79	0	0	0	0	0	85
06:45 AM	0	0	0	0	0	6	0	0	0	6	10	110	6	1	127	0	0	0	0	0	133
Total	0	0	0	0	0	14	0	0	0	14	20	276	9	1	306	0	0	0	0	0	320
07:00 AM	0	0	0	0	0	8	0	0	0	8	8	94	11	0	113	0	0	0	0	0	121
07:15 AM	0	0	0	0	0	11	0	0	0	11	4	117	12	0	133	0	0	0	0	0	144
07:30 AM	0	0	0	0	0	11	0	0	0	11	11	152	23	0	186	0	0	0	0	0	197
07:45 AM	0	0	0	0	0	8	0	0	0	8	9	147	11	0	167	0	0	0	0	0	175
Total	0	0	0	0	0	38	0	0	0	38	32	510	57	0	599	0	0	0	0	0	637
08:00 AM	0	0	0	0	0	17	0	0	0	17	11	161	13	0	185	0	0	0	0	0	202
08:15 AM	0	0	0	1	1	15	0	0	2	17	8	174	8	0	190	0	0	0	0	0	208
08:30 AM	0	0	0	0	0	7	0	0	0	7	13	175	1	0	189	0	0	0	0	0	196
08:45 AM	0	0	0	0	0	16	0	0	0	16	11	198	3	0	212	0	0	0	0	0	228
Total	0	0	0	1	1	55	0	0	2	57	43	708	25	0	776	0	0	0	0	0	834
03:00 PM	0	0	0	0	0	20	0	0	1	21	21	270	6	0	297	0	0	0	0	0	318
03:15 PM	0	0	0	0	0	20	0	0	0	20	23	294	12	0	329	0	0	0	0	0	349
03:30 PM	0	0	0	0	0	12	0	0	1	13	18	265	9	1	293	0	0	0	0	0	306
03:45 PM	0	0	0	0	0	31	0	0	0	31	17	276	18	0	311	0	0	0	0	0	342
Total	0	0	0	0	0	83	0	0	2	85	79	1105	45	1	1230	0	0	0	0	0	1315
04:00 PM	0	0	0	0	0	21	0	0	1	22	17	311	15	0	343	0	0	0	0	0	365
04:15 PM	0	0	0	0	0	24	0	0	2	26	22	275	18	0	315	0	0	0	0	0	341
04:30 PM	0	0	0	0	0	22	0	0	0	22	23	329	7	1	360	0	0	0	0	0	382
04:45 PM	0	0	0	0	0	28	0	0	3	31	18	342	21	1	382	0	0	0	0	0	413
Total	0	0	0	0	0	95	0	0	6	101	80	1257	61	2	1400	0	0	0	0	0	1501
05:00 PM	0	0	0	0	0	19	0	0	1	20	23	296	19	0	338	0	0	0	0	0	358
05:15 PM	0	0	0	0	0	26	0	0	1	27	32	332	20	0	384	0	0	0	0	0	411
05:30 PM	0	0	0	0	0	21	0	0	0	21	23	288	11	0	322	0	0	0	0	0	343
05:45 PM	0	0	0	0	0	18	0	0	1	19	19	236	16	0	271	0	0	0	0	0	290
Total	0	0	0	0	0	84	0	0	3	87	97	1152	66	0	1315	0	0	0	0	0	1402
Grand Total	0	0	0	1	1	369	0	0	13	382	351	5008	263	4	5626	0	0	0	0	0	6009
Apprch %	0	0	0	100		96.6	0	0	3.4		6.2	89	4.7	0.1		0	0	0	0		
Total %	0	0	0	0	0	6.1	0	0	0.2	6.4	5.8	83.3	4.4	0.1	93.6	0	0	0	0	0	

France Ave & Business Ave
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & Business Access
Site Code : 3
Start Date : 4/11/2023
Page No : 2

Start Time	France Ave From North					Business Access From East					France Ave From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 08:00 AM

Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
08:00 AM	0	0	0	0	0	**17**	0	0	0	**17**	11	161	**13**	0	185	0	0	0	0	0	202
08:15 AM	0	0	0	**1**	**1**	15	0	0	**2**	17	8	174	8	0	190	0	0	0	0	0	208
08:30 AM	0	0	0	0	0	7	0	0	0	7	**13**	175	1	0	189	0	0	0	0	0	196
08:45 AM	0	0	0	0	0	16	0	0	0	16	11	**198**	3	0	**212**	0	0	0	0	0	**228**
Total Volume	0	0	0	1	1	55	0	0	2	57	43	708	25	0	776	0	0	0	0	0	834
% App. Total	0	0	0	100		96.5	0	0	3.5		5.5	91.2	3.2	0		0	0	0	0		
PHF	.000	.000	.000	.250	.250	.809	.000	.000	.250	.838	.827	.894	.481	.000	.915	.000	.000	.000	.000	.000	.914

Peak Hour Data

France Ave

Out	In	Total
763	1	764

0	0	0	1
Right	Thru	Left	Peds

North

Peak Hour Begins at 08:00 AM
vehicles & peds

Total 25
In 0
Out 25
Left 0 / Thru 0 / Right 0 / Peds 0

Business Access
Right 55 / Thru 0 / Left 0 / Peds 2
Out 43 / In 57 / Total 100

Left	Thru	Right	Peds
25	708	43	0

Out	In	Total
0	776	776

France Ave

wsb
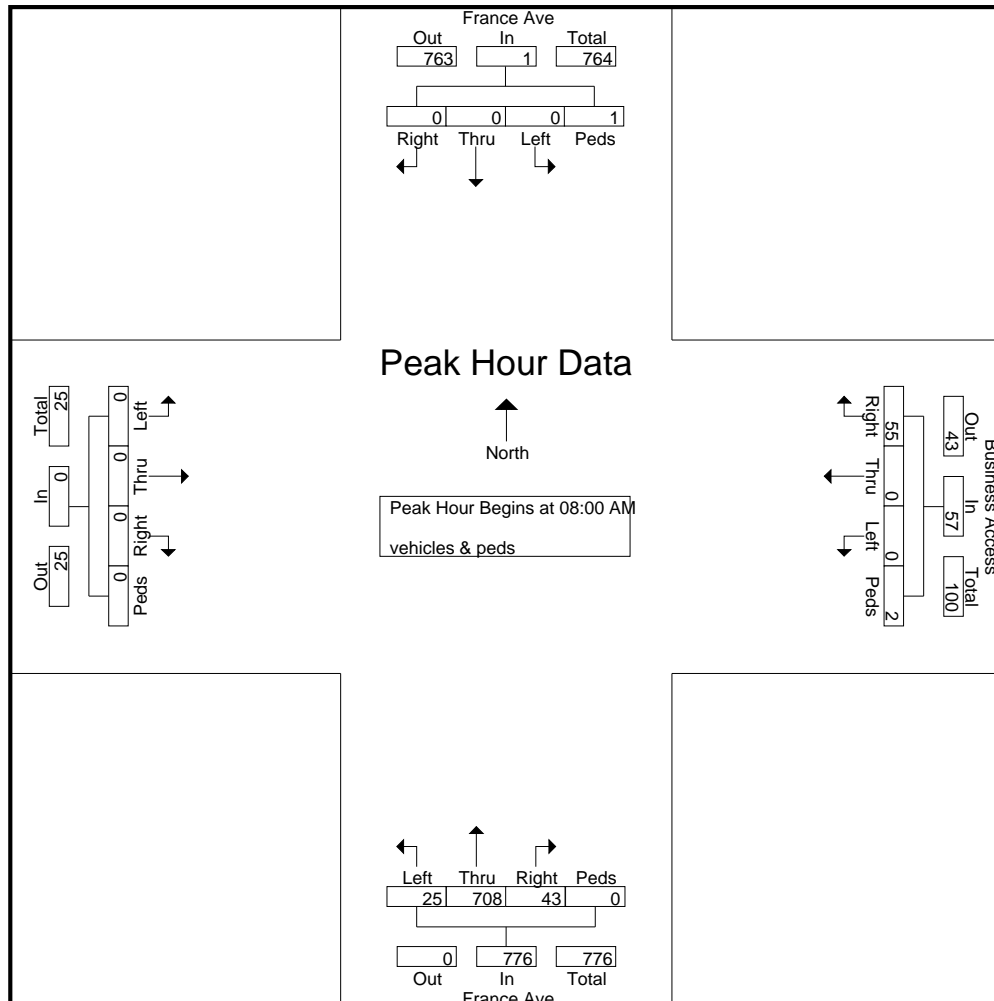
701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

France Ave & Business Ave
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & Business Access
Site Code : 3
Start Date : 4/11/2023
Page No : 3

Start Time	France Ave From North					Business Access From East					France Ave From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	22	0	0	0	22	23	329	7	1	360	0	0	0	0	0	382
04:45 PM	0	0	0	0	0	28	0	0	3	31	18	342	21	1	382	0	0	0	0	0	413
05:00 PM	0	0	0	0	0	19	0	0	1	20	23	296	19	0	338	0	0	0	0	0	358
05:15 PM	0	0	0	0	0	26	0	0	1	27	32	332	20	0	384	0	0	0	0	0	411
Total Volume	0	0	0	0	0	95	0	0	5	100	96	1299	67	2	1464	0	0	0	0	0	1564
% App. Total	0	0	0	0		95	0	0	5		6.6	88.7	4.6	0.1		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.848	.000	.000	.417	.806	.750	.950	.798	.500	.953	.000	.000	.000	.000	.000	.947

Peak Hour Data

France Ave

Out	In	Total
1394	0	1394

0	0	0	0
Right	Thru	Left	Peds

North

Peak Hour Begins at 04:30 PM

vehicles & peds

Total 67 — Left
In 0 — Thru
Out 67 — Right / Peds

Right 95 / Out 96
Thru 0 / In 100
Left / Peds 5 / Total 196

Business Access

Left	Thru	Right	Peds
67	1299	96	2

0	1464	1464
Out	In	Total

France Ave

wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

France Ave & Gallagher Dr
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & Gallagher Dr
Site Code : 4
Start Date : 4/11/2023
Page No : 1

Groups Printed- vehicles & peds

Start Time	France Ave From North					Gallagher Dr From East					France Ave From South					Gallagher Dr From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	1	31	1	0	33	0	0	0	1	1	2	40	0	2	44	0	0	4	0	4	82
06:15 AM	1	68	3	1	73	1	0	1	0	2	1	49	0	1	51	1	0	6	0	7	133
06:30 AM	3	48	3	0	54	0	0	1	0	1	1	72	0	2	75	2	0	7	0	9	139
06:45 AM	3	81	2	1	87	0	0	6	0	6	1	110	5	3	119	3	1	18	0	22	234
Total	8	228	9	2	247	1	0	8	1	10	5	271	5	8	289	6	1	35	0	42	588
07:00 AM	6	74	4	0	84	2	1	3	0	6	1	100	5	2	108	3	1	9	0	13	211
07:15 AM	11	135	5	0	151	3	0	7	0	10	3	114	10	3	130	9	0	16	0	25	316
07:30 AM	9	178	6	0	193	0	0	7	0	7	8	161	11	3	183	11	0	27	2	40	423
07:45 AM	25	198	6	0	229	0	1	9	0	10	7	147	10	1	165	7	0	15	0	22	426
Total	51	585	21	0	657	5	2	26	0	33	19	522	36	9	586	30	1	67	2	100	1376
08:00 AM	13	198	6	0	217	4	2	16	0	22	8	172	15	3	198	10	0	13	3	26	463
08:15 AM	20	201	5	0	226	0	1	7	0	8	5	170	8	2	185	7	0	18	2	27	446
08:30 AM	16	201	4	0	221	3	0	10	0	13	9	172	10	5	196	4	0	14	1	19	449
08:45 AM	20	202	6	1	229	2	0	7	3	12	7	208	17	8	240	6	0	6	0	12	493
Total	69	802	21	1	893	9	3	40	3	55	29	722	50	18	819	27	0	51	6	84	1851
03:00 PM	22	246	19	0	287	22	1	29	1	53	17	255	8	8	288	13	2	17	1	33	661
03:15 PM	24	249	22	0	295	26	0	19	0	45	26	272	6	5	309	10	0	29	0	39	688
03:30 PM	13	239	19	0	271	13	0	25	2	40	22	265	12	6	305	8	0	10	0	18	634
03:45 PM	11	210	31	0	252	24	1	33	0	58	17	255	5	8	285	9	3	27	0	39	634
Total	70	944	91	0	1105	85	2	106	3	196	82	1047	31	27	1187	40	5	83	1	129	2617
04:00 PM	23	251	26	0	300	19	2	20	1	42	17	310	16	11	354	11	2	11	2	26	722
04:15 PM	23	220	17	0	260	20	1	23	1	45	14	279	11	12	316	15	1	24	3	43	664
04:30 PM	23	261	19	1	304	15	4	22	2	43	13	321	7	3	344	13	0	19	1	33	724
04:45 PM	20	260	24	0	304	18	5	21	1	45	30	332	8	7	377	8	0	20	1	29	755
Total	89	992	86	1	1168	72	12	86	5	175	74	1242	42	33	1391	47	3	74	7	131	2865
05:00 PM	23	241	29	0	293	24	3	17	0	44	10	305	9	23	347	12	1	16	6	35	719
05:15 PM	25	230	21	0	276	18	2	28	1	49	34	334	6	6	380	14	1	19	0	34	739
05:30 PM	20	193	16	0	229	16	4	15	0	35	36	295	9	17	357	6	2	11	0	19	640
05:45 PM	16	185	25	0	226	29	4	24	1	58	20	219	7	13	259	3	0	20	0	23	566
Total	84	849	91	0	1024	87	13	84	2	186	100	1153	31	59	1343	35	4	66	6	111	2664
Grand Total	371	4400	319	4	5094	259	32	350	14	655	309	4957	195	154	5615	185	14	376	22	597	11961
Apprch %	7.3	86.4	6.3	0.1		39.5	4.9	53.4	2.1		5.5	88.3	3.5	2.7		31	2.3	63	3.7		
Total %	3.1	36.8	2.7	0	42.6	2.2	0.3	2.9	0.1	5.5	2.6	41.4	1.6	1.3	46.9	1.5	0.1	3.1	0.2	5	

France Ave & Gallagher Dr
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & Gallagher Dr
Site Code : 4
Start Date : 4/11/2023
Page No : 2

Start Time	France Ave From North					Gallagher Dr From East					France Ave From South					Gallagher Dr From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	13	198	6	0	217	4	2	16	0	22	8	172	15	3	198	10	0	13	3	26	463
08:15 AM	20	201	5	0	226	0	1	7	0	8	5	170	8	2	185	7	0	18	2	27	446
08:30 AM	16	201	4	0	221	3	0	10	0	13	9	172	10	5	196	4	0	14	1	19	449
08:45 AM	20	202	6	1	229	2	0	7	3	12	7	208	17	8	240	6	0	6	0	12	493
Total Volume	69	802	21	1	893	9	3	40	3	55	29	722	50	18	819	27	0	51	6	84	1851
% App. Total	7.7	89.8	2.4	0.1		16.4	5.5	72.7	5.5		3.5	88.2	6.1	2.2		32.1	0	60.7	7.1		
PHF	.863	.993	.875	.250	.975	.563	.375	.625	.250	.625	.806	.868	.735	.563	.853	.675	.000	.708	.500	.778	.939

Peak Hour Data

France Ave

| Out | In | Total |
| 782 | 893 | 1675 |

| 69 | 802 | 21 | 1 |
| Right | Thru | Left | Peds |

North

Peak Hour Begins at 08:00 AM

vehicles & peds

Gallagher Dr
Total 206
In 84
Out 122
Left 51
Thru 0
Right 27
Peds 6

Gallagher Dr
Out 50
In 55
Total 105
Right 9
Thru 3
Left 40
Peds 3

| Left | Thru | Right | Peds |
| 50 | 722 | 29 | 18 |

| Out | In | Total |
| 869 | 819 | 1688 |

France Ave

wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

France Ave & Gallagher Dr
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & Gallagher Dr
Site Code : 4
Start Date : 4/11/2023
Page No : 3

Start Time	France Ave From North					Gallagher Dr From East					France Ave From South					Gallagher Dr From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 04:30 PM

Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:30 PM	23	261	19	1	304	15	4	22	2	43	13	321	7	3	344	13	0	19	1	33	724
04:45 PM	20	260	24	0	304	18	5	21	1	45	30	332	8	7	377	8	0	20	1	29	755
05:00 PM	23	241	29	0	293	24	3	17	0	44	10	305	9	23	347	12	1	16	6	35	719
05:15 PM	25	230	21	0	276	18	2	28	1	49	34	334	6	6	380	14	1	19	0	34	739
Total Volume	91	992	93	1	1177	75	14	88	4	181	87	1292	30	39	1448	47	2	74	8	131	2937
% App. Total	7.7	84.3	7.9	0.1		41.4	7.7	48.6	2.2		6	89.2	2.1	2.7		35.9	1.5	56.5	6.1		
PHF	.910	.950	.802	.250	.968	.781	.700	.786	.500	.923	.640	.967	.833	.424	.953	.839	.500	.925	.333	.936	.973

Peak Hour Data

North

Peak Hour Begins at 04:30 PM

vehicles & peds

France Ave

Out	In	Total
1441	1177	2618

91	992	93	1
Right	Thru	Left	Peds

Gallagher Dr

Total	266
In	131
Out	135

74	Left
2	Thru
47	Right
8	Peds

Gallagher Dr

75	Right
14	Thru
88	Left
4	Peds

Out	182
In	181
Total	363

France Ave

Left	Thru	Right	Peds
30	1292	87	39

1127	1448	2575
Out	In	Total

France Ave & Parklawn Ave
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & Parklawn Ave
Site Code : 5
Start Date : 4/11/2023
Page No : 1

Groups Printed- vehicles & peds

Start Time	France Ave From North					Parklawn Ave From East					France Ave From South					Parklawn Ave From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	1	22	8	0	31	2	1	1	1	5	10	35	8	0	53	7	1	6	0	14	103
06:15 AM	9	42	12	0	63	3	3	1	0	7	16	45	11	0	72	6	1	2	0	9	151
06:30 AM	4	39	10	0	53	5	1	2	0	8	26	64	20	1	111	10	0	7	0	17	189
06:45 AM	11	53	20	0	84	8	3	3	0	14	35	103	23	0	161	8	5	7	1	21	280
Total	25	156	50	0	231	18	8	7	1	34	87	247	62	1	397	31	7	22	1	61	723
07:00 AM	7	51	16	0	74	9	4	4	0	17	17	90	19	0	126	11	4	4	1	20	237
07:15 AM	13	118	19	1	151	13	4	6	0	23	26	108	31	0	165	14	7	11	0	32	371
07:30 AM	15	155	21	0	191	17	3	4	0	24	22	143	22	4	191	11	4	18	0	33	439
07:45 AM	20	168	25	0	213	12	9	13	0	34	35	137	32	1	205	15	7	12	0	34	486
Total	55	492	81	1	629	51	20	27	0	98	100	478	104	5	687	51	22	45	1	119	1533
08:00 AM	13	166	37	0	216	16	6	14	0	36	24	157	25	2	208	18	10	15	1	44	504
08:15 AM	18	160	19	0	197	23	8	15	0	46	25	156	21	4	206	17	9	11	1	38	487
08:30 AM	19	171	24	0	214	24	3	14	0	41	15	150	18	3	186	19	2	11	0	32	473
08:45 AM	20	175	29	0	224	18	7	21	0	46	25	214	22	0	261	24	4	13	0	41	572
Total	70	672	109	0	851	81	24	64	0	169	89	677	86	9	861	78	25	50	2	155	2036
03:00 PM	17	240	40	0	297	30	13	36	1	80	21	231	28	4	284	26	5	13	1	45	706
03:15 PM	16	197	34	0	247	39	7	32	0	78	23	238	24	3	288	14	6	23	0	43	656
03:30 PM	16	250	27	0	293	35	9	35	0	79	22	243	33	5	303	22	5	17	0	44	719
03:45 PM	19	199	42	0	260	27	8	33	0	68	19	257	29	4	309	24	3	18	0	45	682
Total	68	886	143	0	1097	131	37	136	1	305	85	969	114	16	1184	86	19	71	1	177	2763
04:00 PM	12	216	37	0	265	38	12	38	2	90	15	265	19	2	301	38	8	16	0	62	718
04:15 PM	13	224	36	0	273	22	18	32	0	72	12	270	22	1	305	34	3	15	0	52	702
04:30 PM	11	241	41	0	293	35	10	25	0	70	18	293	18	1	330	35	9	22	1	67	760
04:45 PM	8	240	53	0	301	37	10	18	2	67	10	284	23	2	319	25	5	24	0	54	741
Total	44	921	167	0	1132	132	50	113	4	299	55	1112	82	6	1255	132	25	77	1	235	2921
05:00 PM	10	254	27	0	291	35	11	22	0	68	12	314	25	3	354	32	6	16	0	54	767
05:15 PM	14	219	26	0	259	24	10	19	1	54	12	314	19	6	351	15	7	14	0	36	700
05:30 PM	6	204	28	0	238	20	10	14	0	44	21	290	31	3	345	15	9	7	0	31	658
05:45 PM	7	173	24	0	204	20	5	17	2	44	18	265	31	6	320	19	8	9	1	37	605
Total	37	850	105	0	992	99	36	72	3	210	63	1183	106	18	1370	81	30	46	1	158	2730
Grand Total	299	3977	655	1	4932	512	175	419	9	1115	479	4666	554	55	5754	459	128	311	7	905	12706
Apprch %	6.1	80.6	13.3	0		45.9	15.7	37.6	0.8		8.3	81.1	9.6	1		50.7	14.1	34.4	0.8		
Total %	2.4	31.3	5.2	0	38.8	4	1.4	3.3	0.1	8.8	3.8	36.7	4.4	0.4	45.3	3.6	1	2.4	0.1	7.1	

France Ave & Parklawn Ave
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & Parklawn Ave
Site Code : 5
Start Date : 4/11/2023
Page No : 2

Start Time	France Ave From North					Parklawn Ave From East					France Ave From South					Parklawn Ave From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																				
Peak Hour for Entire Intersection Begins at 08:00 AM																				
08:00 AM	13	166	**37**	0	216	16	6	14	0	36	24	157	**25**	2	208	18	**10**	**15**	**1**	**44**	504
08:15 AM	18	160	19	0	197	23	**8**	15	0	**46**	**25**	156	21	**4**	206	17	9	11	1	38	487
08:30 AM	19	171	24	0	214	**24**	3	14	0	41	15	150	18	3	186	19	2	11	0	32	473
08:45 AM	**20**	**175**	29	0	**224**	18	7	**21**	0	46	25	**214**	22	0	**261**	**24**	4	13	0	41	**572**
Total Volume	70	672	109	0	851	81	24	64	0	169	89	677	86	9	861	78	25	50	2	155	2036
% App. Total	8.2	79	12.8	0		47.9	14.2	37.9	0		10.3	78.6	10	1		50.3	16.1	32.3	1.3		
PHF	.875	.960	.736	.000	.950	.844	.750	.762	.000	.918	.890	.791	.860	.563	.825	.813	.625	.833	.500	.881	.890

Peak Hour Data

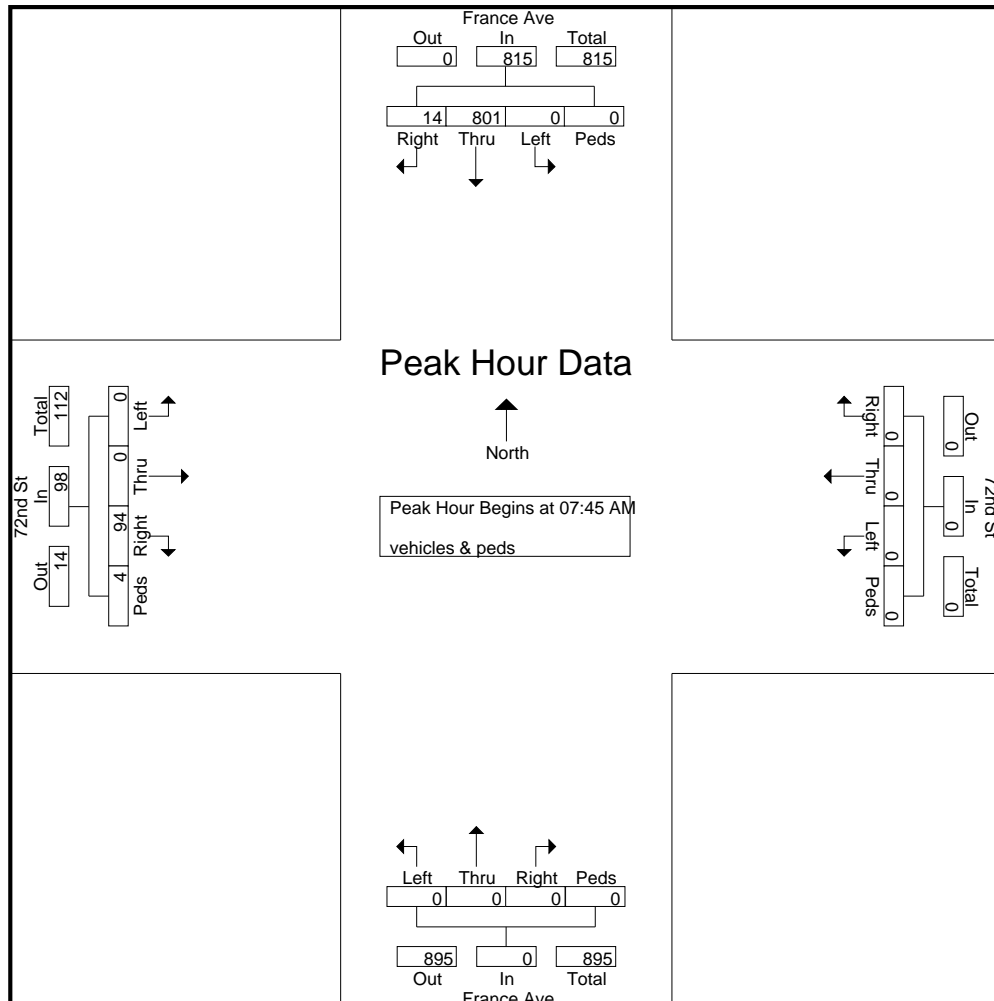Peak Hour Begins at 08:00 AM

vehicles & peds

wsb
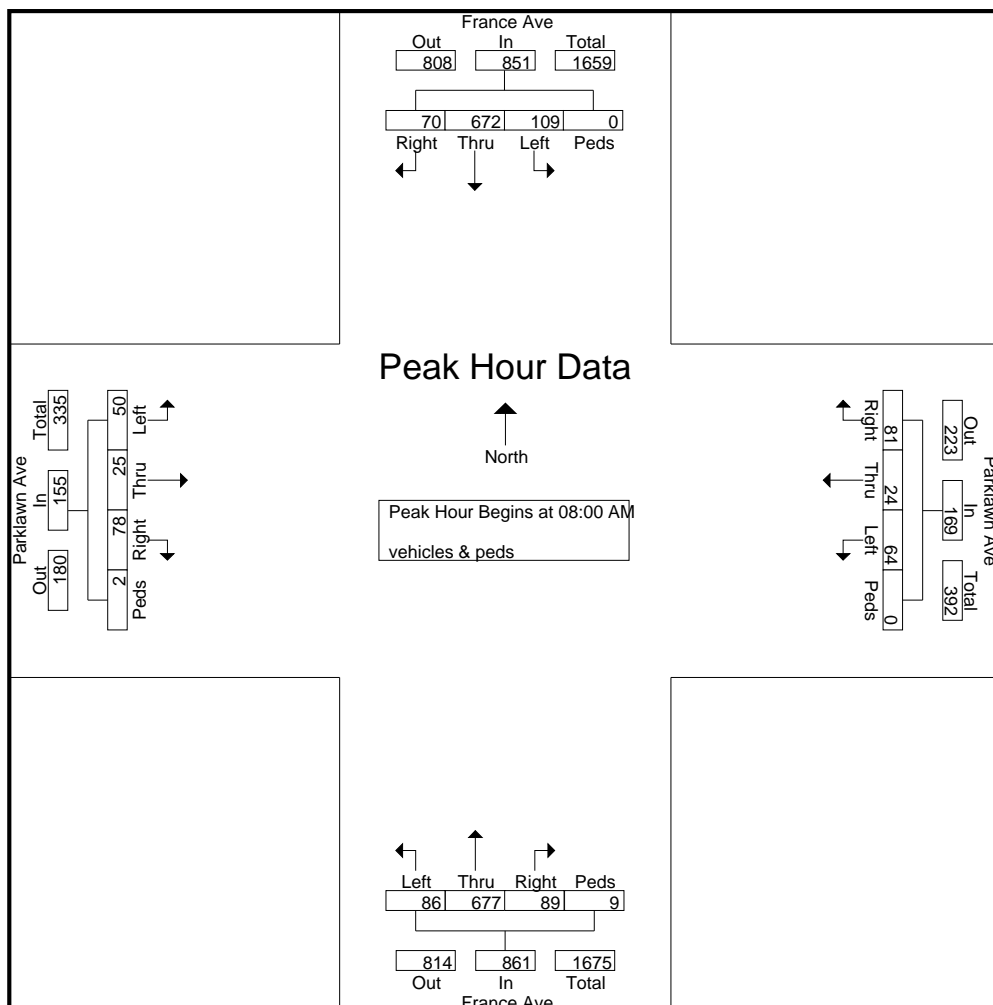
701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

France Ave & Parklawn Ave
6-9am & 3-6pm
vehicles & peds

File Name : France Ave & Parklawn Ave
Site Code : 5
Start Date : 4/11/2023
Page No : 3

| Start Time | France Ave From North | | | | | Parklawn Ave From East | | | | | France Ave From South | | | | | Parklawn Ave From West | | | | | Int. Total |
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	13	224	36	0	273	22	18	32	0	72	12	270	22	1	305	34	3	15	0	52	702
04:30 PM	11	241	41	0	293	35	10	25	0	70	18	293	18	1	330	35	9	22	1	67	760
04:45 PM	8	240	53	0	301	37	10	18	2	67	10	284	23	2	319	25	5	24	0	54	741
05:00 PM	10	254	27	0	291	35	11	22	0	68	12	314	25	3	354	32	6	16	0	54	767
Total Volume	42	959	157	0	1158	129	49	97	2	277	52	1161	88	7	1308	126	23	77	1	227	2970
% App. Total	3.6	82.8	13.6	0		46.6	17.7	35	0.7		4	88.8	6.7	0.5		55.5	10.1	33.9	0.4		
PHF	.808	.944	.741	.000	.962	.872	.681	.758	.250	.962	.722	.924	.880	.583	.924	.900	.639	.802	.250	.847	.968

Peak Hour Data

France Ave

Out	In	Total
1367	1158	2525

42	959	157	0
Right	Thru	Left	Peds

North

Peak Hour Begins at 04:15 PM

vehicles & peds

Parklawn Ave

Total 406
In 227
Out 179

Left 77
Thru 23
Right 126
Peds 1

Parklawn Ave

Right 129
Thru 49
Left 97
Peds 2

Out 232
In 277
Total 509

Left	Thru	Right	Peds
88	1161	52	7

Out	In	Total
1182	1308	2490

France Ave
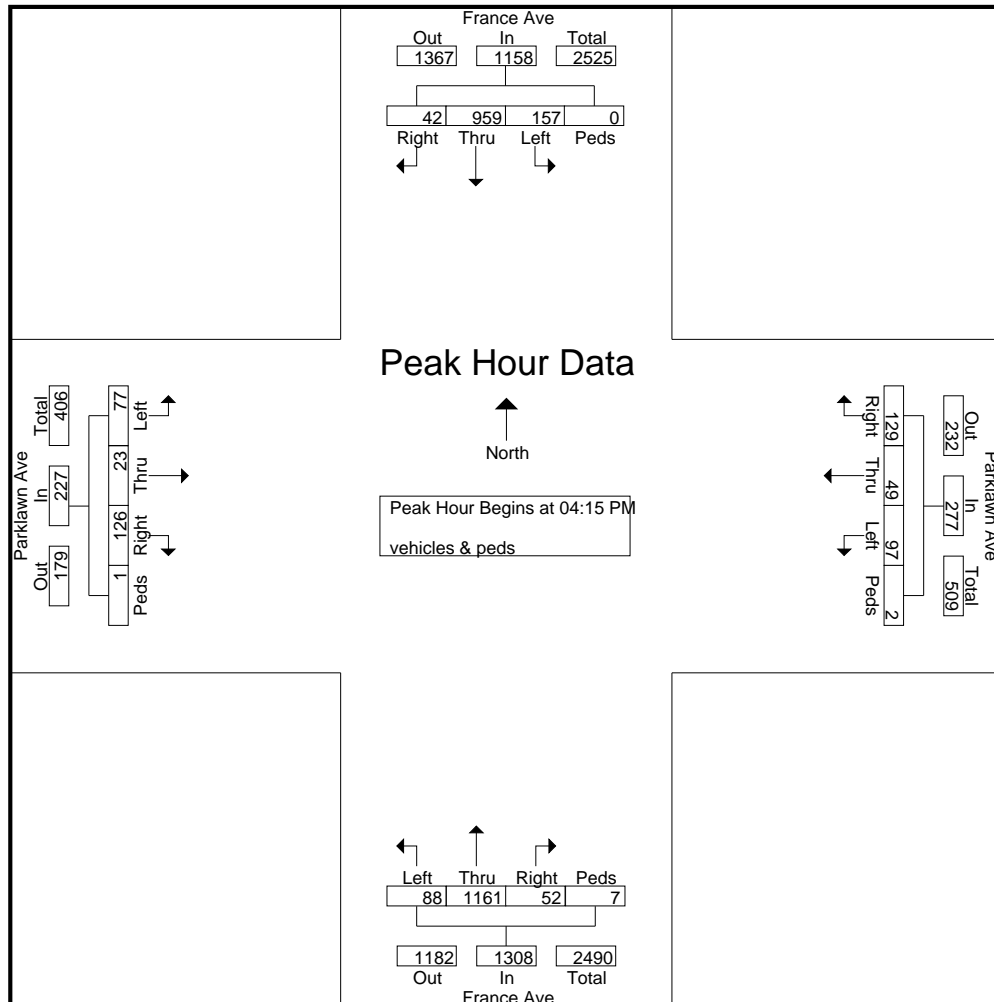
APPENDIX B
Traffic Operations Analysis Worksheets

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	2447	2629	2497	2477	2383	2486
Vehs Exited	2451	2591	2505	2479	2384	2480
Starting Vehs	71	65	89	68	71	69
Ending Vehs	67	103	81	66	70	76
Denied Entry Before	0	1	0	0	0	0
Denied Entry After	0	0	1	0	0	0
Travel Distance (mi)	2121	2271	2161	2130	2052	2147
Travel Time (hr)	75.3	81.6	77.8	76.3	72.9	76.8
Total Delay (hr)	15.7	17.8	16.4	15.8	14.6	16.1
Total Stops	2118	2358	2246	2162	2034	2184
Fuel Used (gal)	70.0	75.9	72.2	70.6	67.5	71.2

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	2447	2629	2497	2477	2383	2486
Vehs Exited	2451	2591	2505	2479	2384	2480
Starting Vehs	71	65	89	68	71	69
Ending Vehs	67	103	81	66	70	76
Denied Entry Before	0	1	0	0	0	0
Denied Entry After	0	0	1	0	0	0
Travel Distance (mi)	2121	2271	2161	2130	2052	2147
Travel Time (hr)	75.3	81.6	77.8	76.3	72.9	76.8
Total Delay (hr)	15.7	17.8	16.4	15.8	14.6	16.1
Total Stops	2118	2358	2246	2162	2034	2184
Fuel Used (gal)	70.0	75.9	72.2	70.6	67.5	71.2

1: France Ave & Hazelton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	3.9	0.1	0.1	3.2	0.3	3.1	0.0	0.0	0.0	2.3	0.1	0.1
Total Delay (hr)	0.0	0.1	0.0	0.5	0.1	0.1	0.1	1.3	0.1	0.8	0.7	0.0
Total Del/Veh (s)	29.2	30.8	4.1	29.9	28.6	5.4	37.8	6.9	2.8	30.0	3.1	0.9
Stop Delay (hr)	0.0	0.1	0.0	0.5	0.1	0.1	0.1	0.8	0.1	0.8	0.2	0.0
Stop Del/Veh (s)	27.7	27.4	3.9	27.6	25.5	5.2	35.7	4.2	2.3	27.2	1.1	0.4
Total Stops	2	7	2	55	7	70	12	231	33	89	106	1
Stop/Veh	0.67	1.00	1.00	0.93	0.88	0.86	0.92	0.34	0.41	0.89	0.14	0.25
Travel Dist (mi)	0.4	1.1	0.4	12.4	1.7	17.1	1.0	56.3	6.7	27.0	213.8	1.2
Travel Time (hr)	0.0	0.1	0.0	1.0	0.1	0.8	0.2	2.7	0.3	1.7	6.1	0.0
Avg Speed (mph)	11	12	22	13	14	22	6	21	21	17	35	34
Fuel Used (gal)	0.0	0.0	0.0	0.5	0.1	0.5	0.0	1.6	0.1	0.9	5.9	0.0
Fuel Eff. (mpg)	26.9	29.2	38.9	27.0	29.3	34.1	21.1	34.5	46.6	31.1	36.5	41.1
HC Emissions (g)	0	0	0	2	0	6	0	18	2	5	79	0
CO Emissions (g)	1	3	1	66	9	129	7	573	62	205	2197	6
NOx Emissions (g)	0	0	0	7	1	17	0	63	5	22	301	1
Vehicles Entered	3	7	2	59	8	81	13	676	81	98	770	4
Vehicles Exited	3	7	2	58	7	80	13	681	81	98	773	4
Hourly Exit Rate	3	7	2	58	7	80	13	681	81	98	773	4
Input Volume	4	8	1	61	7	78	15	680	81	107	753	5
% of Volume	75	88	200	95	100	103	87	100	100	92	103	80
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	0	0	0	1	0	1	0	3	0	2	6	0

1: France Ave & Hazelton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.4
Total Delay (hr)	3.8
Total Del/Veh (s)	7.5
Stop Delay (hr)	2.7
Stop Del/Veh (s)	5.3
Total Stops	615
Stop/Veh	0.34
Travel Dist (mi)	339.2
Travel Time (hr)	13.1
Avg Speed (mph)	26
Fuel Used (gal)	9.7
Fuel Eff. (mpg)	35.1
HC Emissions (g)	112
CO Emissions (g)	3260
NOx Emissions (g)	417
Vehicles Entered	1802
Vehicles Exited	1807
Hourly Exit Rate	1807
Input Volume	1800
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	995
Occupancy (veh)	13

2: France Ave & W 72nd St Performance by movement

Movement	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.2	0.0	0.4
Total Del/Veh (s)	4.1	4.4	0.2	1.0	0.5	0.8
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	3.5	2.9	0.0	0.1	0.1	0.3
Total Stops	85	13	0	0	0	98
Stop/Veh	0.98	0.54	0.00	0.00	0.00	0.06
Travel Dist (mi)	22.8	1.0	31.0	71.1	1.3	127.3
Travel Time (hr)	0.9	0.1	0.9	2.1	0.1	4.0
Avg Speed (mph)	25	13	35	34	26	31
Fuel Used (gal)	0.6	0.0	0.9	3.0	0.0	4.6
Fuel Eff. (mpg)	36.3	36.2	33.8	23.5	41.1	27.5
HC Emissions (g)	7	0	12	45	0	64
CO Emissions (g)	135	6	375	1917	13	2446
NOx Emissions (g)	19	1	45	161	1	226
Vehicles Entered	86	24	772	817	16	1715
Vehicles Exited	86	24	771	817	16	1714
Hourly Exit Rate	86	24	771	817	16	1714
Input Volume	94	25	777	801	14	1711
% of Volume	91	96	99	102	114	100
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Density (ft/veh)						890
Occupancy (veh)	1	0	1	2	0	4

3: France Ave & Business Access Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.2	0.0	0.0	0.3
Total Del/Veh (s)	1.6	1.0	0.9	0.2	0.6
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	1.2	0.1	0.1	0.0	0.1
Total Stops	12	0	0	0	12
Stop/Veh	0.24	0.00	0.00	0.00	0.01
Travel Dist (mi)	3.4	58.3	3.8	36.3	101.8
Travel Time (hr)	0.2	1.7	0.2	1.1	3.2
Avg Speed (mph)	19	34	23	34	32
Fuel Used (gal)	0.1	2.5	0.1	1.2	3.9
Fuel Eff. (mpg)	42.0	23.1	33.2	30.0	25.9
HC Emissions (g)	1	33	2	18	53
CO Emissions (g)	17	1538	62	598	2215
NOx Emissions (g)	2	121	6	65	194
Vehicles Entered	51	745	48	903	1747
Vehicles Exited	51	744	48	904	1747
Hourly Exit Rate	51	744	48	904	1747
Input Volume	55	746	43	895	1739
% of Volume	93	100	112	101	100
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					809
Occupancy (veh)	0	2	0	1	3

4: France Ave & Gallagher Dr Performance by movement

Movement	EBL	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	4.0	0.3	4.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay (hr)	0.4	0.0	0.3	0.0	0.0	0.4	0.9	0.0	0.2	0.8	0.0	3.2
Total Del/Veh (s)	30.7	5.4	28.0	25.0	5.2	27.5	4.6	3.1	33.9	3.6	1.8	6.2
Stop Delay (hr)	0.4	0.0	0.3	0.0	0.0	0.4	0.3	0.0	0.2	0.4	0.0	2.1
Stop Del/Veh (s)	28.5	4.8	26.0	22.5	4.9	24.0	1.7	1.3	32.4	1.9	1.4	4.0
Total Stops	45	23	32	3	8	50	115	7	18	141	16	458
Stop/Veh	0.90	0.88	0.91	0.75	0.89	0.93	0.16	0.22	0.95	0.17	0.23	0.25
Travel Dist (mi)	7.9	4.1	4.5	0.5	1.1	10.7	146.4	6.3	1.4	61.6	5.4	249.9
Travel Time (hr)	0.8	0.2	0.5	0.0	0.1	0.7	4.8	0.2	0.2	2.4	0.2	10.2
Avg Speed (mph)	11	21	10	11	20	14	31	28	6	26	22	25
Fuel Used (gal)	0.3	0.1	0.2	0.0	0.0	0.5	5.9	0.2	0.1	1.9	0.1	9.3
Fuel Eff. (mpg)	24.2	35.3	24.4	27.0	36.8	22.5	25.0	28.6	22.0	32.8	54.1	27.0
HC Emissions (g)	2	2	1	0	0	3	84	4	0	24	1	121
CO Emissions (g)	53	37	28	3	4	197	3499	145	10	844	32	4853
NOx Emissions (g)	5	5	3	0	0	14	299	12	1	86	3	428
Vehicles Entered	50	26	35	4	9	54	738	32	19	816	71	1854
Vehicles Exited	49	26	35	4	9	53	736	32	19	816	71	1850
Hourly Exit Rate	49	26	35	4	9	53	736	32	19	816	71	1850
Input Volume	51	27	40	3	9	50	729	29	21	806	69	1834
% of Volume	96	96	88	133	100	106	101	110	90	101	103	101
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												863
Occupancy (veh)	1	0	0	0	0	1	5	0	0	2	0	10

5: France Ave & Parklawn Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.3	0.2	0.1	0.5	0.2	0.1	0.7	1.7	0.1	0.8	1.8	0.1
Total Del/Veh (s)	26.0	27.5	5.3	26.6	31.5	4.8	30.8	8.7	2.5	27.3	9.2	5.5
Stop Delay (hr)	0.3	0.2	0.1	0.4	0.2	0.1	0.6	1.0	0.1	0.7	1.1	0.1
Stop Del/Veh (s)	24.2	25.2	4.6	24.7	28.5	5.1	27.3	5.0	2.1	23.9	5.5	3.8
Total Stops	41	24	68	56	20	75	74	239	36	95	242	31
Stop/Veh	0.87	0.86	0.87	0.88	0.95	0.86	0.87	0.34	0.38	0.87	0.34	0.44
Travel Dist (mi)	6.0	3.6	10.1	4.0	1.4	5.6	30.8	252.0	34.7	21.1	137.2	13.7
Travel Time (hr)	0.6	0.4	0.6	0.6	0.2	0.4	1.6	8.1	1.0	1.5	5.3	0.5
Avg Speed (mph)	10	10	18	6	6	15	20	31	33	14	26	26
Fuel Used (gal)	0.2	0.1	0.3	0.2	0.1	0.1	0.9	6.9	0.9	0.8	4.7	0.4
Fuel Eff. (mpg)	25.2	25.5	34.5	20.1	21.6	44.3	33.7	36.7	38.8	25.9	29.4	30.7
HC Emissions (g)	1	2	2	1	0	1	8	79	13	5	62	8
CO Emissions (g)	24	39	53	30	5	18	227	2242	343	278	2300	282
NOx Emissions (g)	3	5	8	3	0	2	31	311	48	20	221	25
Vehicles Entered	47	28	78	63	21	87	85	689	94	107	698	70
Vehicles Exited	45	28	78	62	21	86	84	692	94	108	696	69
Hourly Exit Rate	45	28	78	62	21	86	84	692	94	108	696	69
Input Volume	50	25	78	64	24	81	86	677	89	109	694	70
% of Volume	90	112	100	97	88	106	98	102	106	99	100	99
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	1	1	0	0	2	8	1	1	5	1

5: France Ave & Parklawn Ave Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	6.7
Total Del/Veh (s)	11.5
Stop Delay (hr)	4.9
Stop Del/Veh (s)	8.4
Total Stops	1001
Stop/Veh	0.48
Travel Dist (mi)	520.2
Travel Time (hr)	20.8
Avg Speed (mph)	25
Fuel Used (gal)	15.7
Fuel Eff. (mpg)	33.2
HC Emissions (g)	182
CO Emissions (g)	5839
NOx Emissions (g)	678
Vehicles Entered	2067
Vehicles Exited	2063
Hourly Exit Rate	2063
Input Volume	2047
% of Volume	101
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	800
Occupancy (veh)	21

Total Network Performance

Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.6
Total Delay (hr)	15.7
Total Del/Veh (s)	22.1
Stop Delay (hr)	10.0
Stop Del/Veh (s)	14.0
Total Stops	2184
Stop/Veh	0.85
Travel Dist (mi)	2146.7
Travel Time (hr)	76.8
Avg Speed (mph)	28
Fuel Used (gal)	71.2
Fuel Eff. (mpg)	30.1
HC Emissions (g)	892
CO Emissions (g)	30275
NOx Emissions (g)	3236
Vehicles Entered	2486
Vehicles Exited	2480
Hourly Exit Rate	2480
Input Volume	12725
% of Volume	19
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	645
Occupancy (veh)	76

Intersection: 1: France Ave & Hazelton Rd

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	30	40	78	36	59	64	106	124	113	63	115	96
Average Queue (ft)	3	8	35	5	25	12	46	57	50	22	54	38
95th Queue (ft)	16	31	69	23	49	40	85	105	103	54	100	86
Link Distance (ft)		817		1108			385	385	385			1451
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	80		130		130	170					300	300
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: France Ave & Hazelton Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	80	49
Average Queue (ft)	17	11
95th Queue (ft)	53	35
Link Distance (ft)	1451	1451
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: France Ave & W 72nd St

Movement	EB	NB
Directions Served	R	L
Maximum Queue (ft)	75	45
Average Queue (ft)	34	12
95th Queue (ft)	57	37
Link Distance (ft)	1411	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		220
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: France Ave & Business Access

Movement	WB
Directions Served	R
Maximum Queue (ft)	30
Average Queue (ft)	7
95th Queue (ft)	24
Link Distance (ft)	344
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: France Ave & Gallagher Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	90	55	74	39	85	72	91	88	46	93	82	92
Average Queue (ft)	36	18	27	10	37	25	32	36	16	40	35	34
95th Queue (ft)	73	46	59	33	72	60	75	79	41	78	73	71
Link Distance (ft)		834		678		967	967	967		343	343	343
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	140		120		270				240			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 5: France Ave & Parklawn Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	R	L	T	T	T	R	L
Maximum Queue (ft)	80	78	62	90	38	74	112	143	132	94	54	136
Average Queue (ft)	33	22	34	36	13	22	51	68	47	36	18	59
95th Queue (ft)	66	59	58	73	35	48	100	121	96	75	43	107
Link Distance (ft)		632			277	277		1925	1925	1925	1925	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	80			320					400
Storage Blk Time (%)	0	0		1								
Queuing Penalty (veh)	0	0		0								

Intersection: 5: France Ave & Parklawn Ave

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	102	120	129
Average Queue (ft)	46	60	52
95th Queue (ft)	87	108	104
Link Distance (ft)	967	967	967
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	3843	3875	3772	3786	3884	3831
Vehs Exited	3839	3862	3728	3776	3869	3814
Starting Vehs	121	139	93	124	116	118
Ending Vehs	125	152	137	134	131	133
Denied Entry Before	1	2	0	1	0	0
Denied Entry After	1	0	1	0	1	0
Travel Distance (mi)	3226	3273	3167	3190	3230	3217
Travel Time (hr)	128.6	129.8	123.3	126.3	128.7	127.3
Total Delay (hr)	37.3	37.4	34.3	35.8	36.9	36.4
Total Stops	4344	4333	4028	4162	4253	4224
Fuel Used (gal)	114.8	116.5	111.7	113.4	114.2	114.1

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	3843	3875	3772	3786	3884	3831
Vehs Exited	3839	3862	3728	3776	3869	3814
Starting Vehs	121	139	93	124	116	118
Ending Vehs	125	152	137	134	131	133
Denied Entry Before	1	2	0	1	0	0
Denied Entry After	1	0	1	0	1	0
Travel Distance (mi)	3226	3273	3167	3190	3230	3217
Travel Time (hr)	128.6	129.8	123.3	126.3	128.7	127.3
Total Delay (hr)	37.3	37.4	34.3	35.8	36.9	36.4
Total Stops	4344	4333	4028	4162	4253	4224
Fuel Used (gal)	114.8	116.5	111.7	113.4	114.2	114.1

1: France Ave & Hazelton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.1	0.0
Denied Del/Veh (s)	4.0	0.1	0.2	3.0	0.6	3.0	0.0	0.0	0.0	2.1	0.2	0.1
Total Delay (hr)	0.1	0.1	0.0	1.1	0.1	0.5	0.1	5.0	0.2	1.5	1.5	0.0
Total Del/Veh (s)	29.4	23.8	6.3	29.3	26.5	9.8	33.4	14.4	5.0	29.7	5.6	2.7
Stop Delay (hr)	0.1	0.1	0.0	1.0	0.1	0.5	0.1	3.4	0.1	1.3	0.7	0.0
Stop Del/Veh (s)	27.7	20.8	6.0	26.1	22.9	8.8	30.9	9.7	3.8	25.7	2.4	2.1
Total Stops	14	11	7	113	12	151	12	661	62	149	225	1
Stop/Veh	0.93	0.79	0.78	0.86	0.86	0.78	0.92	0.53	0.54	0.85	0.23	0.33
Travel Dist (mi)	2.3	2.1	1.4	27.4	2.9	40.4	1.0	101.7	9.4	48.0	273.4	0.8
Travel Time (hr)	0.2	0.2	0.1	2.2	0.2	2.2	0.2	7.6	0.5	2.9	8.5	0.0
Avg Speed (mph)	11	13	20	13	14	20	7	13	18	17	32	31
Fuel Used (gal)	0.1	0.1	0.0	1.1	0.1	1.3	0.0	3.4	0.2	1.6	7.6	0.0
Fuel Eff. (mpg)	27.0	28.7	35.2	25.9	28.9	31.7	22.5	29.7	39.6	30.7	36.1	39.4
HC Emissions (g)	0	0	0	11	0	12	0	28	2	13	90	0
CO Emissions (g)	7	9	6	267	14	301	7	901	95	446	2771	4
NOx Emissions (g)	1	1	1	32	1	35	0	98	7	47	344	1
Vehicles Entered	15	13	9	130	14	191	13	1255	114	174	986	3
Vehicles Exited	15	14	9	129	14	191	12	1254	114	172	987	3
Hourly Exit Rate	15	14	9	129	14	191	12	1254	114	172	987	3
Input Volume	14	14	11	137	15	183	11	1246	116	181	981	4
% of Volume	107	100	82	94	93	104	109	101	98	95	101	75
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	0	0	0	2	0	2	0	8	1	3	8	0

1: France Ave & Hazelton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.5
Total Delay (hr)	10.2
Total Del/Veh (s)	12.6
Stop Delay (hr)	7.3
Stop Del/Veh (s)	8.9
Total Stops	1418
Stop/Veh	0.48
Travel Dist (mi)	511.0
Travel Time (hr)	24.8
Avg Speed (mph)	21
Fuel Used (gal)	15.5
Fuel Eff. (mpg)	33.0
HC Emissions (g)	158
CO Emissions (g)	4826
NOx Emissions (g)	568
Vehicles Entered	2917
Vehicles Exited	2914
Hourly Exit Rate	2914
Input Volume	2913
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	528
Occupancy (veh)	24

2: France Ave & W 72nd St Performance by movement

Movement	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.1	0.2	0.5	0.0	0.8
Total Del/Veh (s)	4.6	6.2	0.4	1.5	1.1	1.1
Stop Delay (hr)	0.1	0.1	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	4.1	4.5	0.0	0.1	0.1	0.2
Total Stops	56	40	1	0	1	98
Stop/Veh	1.00	0.62	0.00	0.00	0.05	0.04
Travel Dist (mi)	15.0	2.6	55.7	96.5	1.8	171.6
Travel Time (hr)	0.6	0.2	1.7	3.1	0.1	5.7
Avg Speed (mph)	24	11	33	31	23	30
Fuel Used (gal)	0.4	0.1	1.7	4.9	0.1	7.1
Fuel Eff. (mpg)	37.0	32.2	32.5	19.7	30.1	24.0
HC Emissions (g)	4	0	24	73	0	102
CO Emissions (g)	81	13	887	3385	26	4392
NOx Emissions (g)	11	2	83	256	2	354
Vehicles Entered	56	64	1384	1106	21	2631
Vehicles Exited	56	63	1383	1111	21	2634
Hourly Exit Rate	56	63	1383	1111	21	2634
Input Volume	58	67	1374	1108	22	2629
% of Volume	97	94	101	100	95	100
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Density (ft/veh)						631
Occupancy (veh)	1	0	2	3	0	6

3: France Ave & Business Access Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.7	0.1	0.1	0.9
Total Del/Veh (s)	3.9	1.9	2.0	0.3	1.3
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	3.3	0.1	0.1	0.0	0.2
Total Stops	44	0	0	0	44
Stop/Veh	0.47	0.00	0.00	0.00	0.02
Travel Dist (mi)	6.3	105.9	7.7	46.9	166.8
Travel Time (hr)	0.4	3.6	0.4	1.3	5.7
Avg Speed (mph)	16	30	21	35	29
Fuel Used (gal)	0.2	5.7	0.3	1.4	7.7
Fuel Eff. (mpg)	35.3	18.5	24.9	32.5	21.8
HC Emissions (g)	1	82	4	21	108
CO Emissions (g)	42	3898	158	701	4799
NOx Emissions (g)	4	294	16	74	388
Vehicles Entered	94	1358	98	1165	2715
Vehicles Exited	94	1359	99	1165	2717
Hourly Exit Rate	94	1359	99	1165	2717
Input Volume	95	1350	96	1165	2706
% of Volume	99	101	103	100	100
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					450
Occupancy (veh)	0	4	0	1	6

4: France Ave & Gallagher Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	3.9	0.4	0.3	3.8	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.6	0.0	0.1	0.7	0.1	0.2	0.2	4.3	0.3	0.7	1.1	0.1
Total Del/Veh (s)	28.7	25.7	5.6	27.7	25.1	9.7	28.9	11.7	10.8	32.2	4.0	2.2
Stop Delay (hr)	0.6	0.0	0.1	0.6	0.1	0.2	0.2	2.1	0.1	0.7	0.6	0.0
Stop Del/Veh (s)	26.3	20.4	5.0	24.9	21.4	8.5	24.6	5.8	5.9	30.1	2.2	1.6
Total Stops	67	1	41	77	12	63	29	424	35	78	185	22
Stop/Veh	0.87	1.00	0.80	0.83	0.80	0.80	0.97	0.32	0.41	0.95	0.19	0.23
Travel Dist (mi)	12.1	0.2	7.9	11.8	1.9	10.1	5.9	259.5	17.0	6.1	74.8	7.1
Travel Time (hr)	1.1	0.0	0.4	1.2	0.2	0.6	0.4	11.1	0.8	1.0	3.0	0.3
Avg Speed (mph)	11	15	21	10	11	17	14	23	21	6	25	21
Fuel Used (gal)	0.5	0.0	0.2	0.5	0.1	0.3	0.3	11.5	0.7	0.3	2.3	0.1
Fuel Eff. (mpg)	23.6	30.0	35.1	21.4	25.2	30.0	22.4	22.6	25.7	21.0	33.1	55.2
HC Emissions (g)	4	0	2	5	0	5	4	152	11	2	27	1
CO Emissions (g)	108	1	53	156	15	124	135	6503	412	69	929	33
NOx Emissions (g)	11	0	6	15	1	13	12	546	37	6	99	3
Vehicles Entered	77	1	50	92	15	78	30	1301	85	82	988	94
Vehicles Exited	75	1	50	91	15	78	29	1303	85	81	988	94
Hourly Exit Rate	75	1	50	91	15	78	29	1303	85	81	988	94
Input Volume	79	2	47	88	14	75	30	1292	87	93	981	91
% of Volume	95	50	106	103	107	104	97	101	98	87	101	103
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	0	1	0	1	0	11	1	1	3	0

4: France Ave & Gallagher Dr Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	8.4
Total Del/Veh (s)	10.4
Stop Delay (hr)	5.4
Stop Del/Veh (s)	6.6
Total Stops	1034
Stop/Veh	0.36
Travel Dist (mi)	414.3
Travel Time (hr)	20.2
Avg Speed (mph)	21
Fuel Used (gal)	16.8
Fuel Eff. (mpg)	24.7
HC Emissions (g)	214
CO Emissions (g)	8539
NOx Emissions (g)	750
Vehicles Entered	2893
Vehicles Exited	2890
Hourly Exit Rate	2890
Input Volume	2879
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	434
Occupancy (veh)	20

5: France Ave & Parklawn Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.6	0.2	0.2	0.6	0.4	0.3	0.8	4.7	0.0	1.2	3.3	0.1
Total Del/Veh (s)	26.0	30.4	7.4	25.9	29.1	8.7	34.4	13.8	2.9	27.0	12.6	8.0
Stop Delay (hr)	0.5	0.2	0.2	0.6	0.3	0.3	0.7	2.7	0.0	1.0	2.1	0.1
Stop Del/Veh (s)	23.9	28.1	6.6	23.7	26.1	8.7	30.1	8.1	2.6	23.0	8.0	5.3
Total Stops	67	21	102	74	38	115	76	555	25	136	403	18
Stop/Veh	0.87	0.88	0.84	0.84	0.83	0.85	0.88	0.46	0.47	0.88	0.43	0.46
Travel Dist (mi)	9.9	3.1	15.6	5.6	2.9	8.8	31.2	438.9	19.0	30.1	185.2	7.6
Travel Time (hr)	1.0	0.3	0.9	0.9	0.5	0.7	1.7	15.8	0.6	2.1	8.1	0.3
Avg Speed (mph)	10	9	17	6	6	12	19	28	33	14	23	23
Fuel Used (gal)	0.4	0.1	0.5	0.3	0.1	0.2	1.0	12.0	0.5	1.2	6.7	0.3
Fuel Eff. (mpg)	24.5	24.5	33.0	19.9	21.4	38.4	32.8	36.6	38.3	25.7	27.5	28.4
HC Emissions (g)	3	0	3	2	1	1	5	128	8	10	89	4
CO Emissions (g)	62	10	71	46	23	33	184	3696	206	456	3429	163
NOx Emissions (g)	8	1	10	5	2	4	22	494	28	36	308	14
Vehicles Entered	76	24	121	87	46	136	85	1200	52	153	939	38
Vehicles Exited	77	24	120	88	45	136	84	1204	52	150	935	38
Hourly Exit Rate	77	24	120	88	45	136	84	1204	52	150	935	38
Input Volume	77	23	126	97	49	129	88	1203	52	157	918	42
% of Volume	100	104	95	91	92	105	95	100	100	96	102	90
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	1	1	0	1	2	16	1	2	8	0

5: France Ave & Parklawn Ave Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	12.4
Total Del/Veh (s)	15.0
Stop Delay (hr)	8.8
Stop Del/Veh (s)	10.6
Total Stops	1630
Stop/Veh	0.55
Travel Dist (mi)	758.1
Travel Time (hr)	33.0
Avg Speed (mph)	23
Fuel Used (gal)	23.3
Fuel Eff. (mpg)	32.6
HC Emissions (g)	254
CO Emissions (g)	8380
NOx Emissions (g)	933
Vehicles Entered	2957
Vehicles Exited	2953
Hourly Exit Rate	2953
Input Volume	2961
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	505
Occupancy (veh)	33

Total Network Performance

Denied Delay (hr)	0.8
Denied Del/Veh (s)	0.7
Total Delay (hr)	35.6
Total Del/Veh (s)	32.5
Stop Delay (hr)	22.0
Stop Del/Veh (s)	20.0
Total Stops	4224
Stop/Veh	1.07
Travel Dist (mi)	3217.2
Travel Time (hr)	127.3
Avg Speed (mph)	25
Fuel Used (gal)	114.1
Fuel Eff. (mpg)	28.2
HC Emissions (g)	1372
CO Emissions (g)	49725
NOx Emissions (g)	4960
Vehicles Entered	3831
Vehicles Exited	3814
Hourly Exit Rate	3814
Input Volume	19273
% of Volume	20
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	389
Occupancy (veh)	127

Intersection: 1: France Ave & Hazelton Rd

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	42	57	142	36	111	43	168	201	206	77	181	150
Average Queue (ft)	12	17	70	10	51	13	108	129	134	33	84	68
95th Queue (ft)	37	48	125	31	93	37	159	185	192	63	145	124
Link Distance (ft)		817		1108			385	385	385			1451
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	80		130		130	170				300	300	
Storage Blk Time (%)		0	1		0		0					
Queuing Penalty (veh)		0	2		0		0					

Intersection: 1: France Ave & Hazelton Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	116	94
Average Queue (ft)	37	25
95th Queue (ft)	84	65
Link Distance (ft)	1451	1451
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: France Ave & W 72nd St

Movement	EB	NB	SB
Directions Served	R	L	TR
Maximum Queue (ft)	62	61	24
Average Queue (ft)	26	26	1
95th Queue (ft)	50	55	10
Link Distance (ft)	1411		385
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		220	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: France Ave & Business Access

Movement	WB
Directions Served	R
Maximum Queue (ft)	67
Average Queue (ft)	21
95th Queue (ft)	46
Link Distance (ft)	344
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: France Ave & Gallagher Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	100	59	121	117	80	152	164	196	127	99	108	103
Average Queue (ft)	49	26	53	43	25	74	88	110	54	47	48	42
95th Queue (ft)	91	53	97	85	62	131	146	186	101	85	89	84
Link Distance (ft)		834		678		967	967	967		343	343	343
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	140		120		270				240			
Storage Blk Time (%)			1	0								
Queuing Penalty (veh)			0	0								

Intersection: 5: France Ave & Parklawn Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	R	L	T	T	T	R	L
Maximum Queue (ft)	95	57	104	93	102	102	119	181	174	183	50	166
Average Queue (ft)	45	21	44	45	26	37	52	117	105	92	13	83
95th Queue (ft)	83	51	76	86	72	75	95	169	164	156	36	144
Link Distance (ft)		632			277	277		1925	1925	1925	1925	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	80			320					400
Storage Blk Time (%)	0		0	2	1							
Queuing Penalty (veh)	1		0	1	1							

Intersection: 5: France Ave & Parklawn Ave

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	128	141	158
Average Queue (ft)	68	85	86
95th Queue (ft)	115	133	137
Link Distance (ft)	967	967	967
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 6

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	2482	2550	2553	2457	2471	2502
Vehs Exited	2483	2517	2540	2436	2469	2490
Starting Vehs	66	74	71	63	78	63
Ending Vehs	65	107	84	84	80	85
Denied Entry Before	0	2	0	0	0	0
Denied Entry After	0	1	0	0	0	0
Travel Distance (mi)	2130	2188	2196	2106	2128	2149
Travel Time (hr)	75.9	77.8	78.9	76.2	76.7	77.1
Total Delay (hr)	15.6	16.0	16.4	16.5	16.2	16.1
Total Stops	2189	2132	2257	2190	2172	2185
Fuel Used (gal)	70.3	72.5	72.9	69.9	70.2	71.2

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	2482	2550	2553	2457	2471	2502
Vehs Exited	2483	2517	2540	2436	2469	2490
Starting Vehs	66	74	71	63	78	63
Ending Vehs	65	107	84	84	80	85
Denied Entry Before	0	2	0	0	0	0
Denied Entry After	0	1	0	0	0	0
Travel Distance (mi)	2130	2188	2196	2106	2128	2149
Travel Time (hr)	75.9	77.8	78.9	76.2	76.7	77.1
Total Delay (hr)	15.6	16.0	16.4	16.5	16.2	16.1
Total Stops	2189	2132	2257	2190	2172	2185
Fuel Used (gal)	70.3	72.5	72.9	69.9	70.2	71.2

1: France Ave & Hazelton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Denied Del/Veh (s)	4.8	0.2	0.1	3.2	0.5	3.1	0.0	0.0	0.0	2.3	0.2	0.1
Total Delay (hr)	0.0	0.0	0.0	0.5	0.1	0.1	0.2	1.3	0.1	0.9	0.6	0.0
Total Del/Veh (s)	23.0	24.4	3.9	31.0	29.8	5.3	37.4	6.9	2.7	28.4	3.0	0.9
Stop Delay (hr)	0.0	0.0	0.0	0.5	0.1	0.1	0.2	0.8	0.0	0.8	0.2	0.0
Stop Del/Veh (s)	21.1	21.6	3.7	28.8	26.3	5.0	35.4	4.1	2.3	25.5	1.0	0.6
Total Stops	3	5	2	55	6	72	16	236	29	96	99	0
Stop/Veh	1.00	0.83	1.00	0.92	0.86	0.87	0.94	0.34	0.38	0.85	0.13	0.00
Travel Dist (mi)	0.5	0.8	0.3	12.5	1.6	17.5	1.4	56.8	6.3	30.9	211.0	1.1
Travel Time (hr)	0.0	0.1	0.0	1.0	0.1	0.9	0.2	2.8	0.3	1.8	6.0	0.0
Avg Speed (mph)	14	12	21	13	14	22	6	21	21	17	35	32
Fuel Used (gal)	0.0	0.0	0.0	0.5	0.1	0.5	0.1	1.6	0.1	1.0	5.8	0.0
Fuel Eff. (mpg)	31.3	29.9	37.8	26.8	29.5	33.5	22.2	35.1	47.0	31.1	36.7	41.3
HC Emissions (g)	0	0	0	2	0	8	0	18	1	9	59	0
CO Emissions (g)	1	2	1	66	6	160	7	559	56	293	1886	4
NOx Emissions (g)	0	0	0	7	1	21	1	64	4	34	248	1
Vehicles Entered	3	5	2	59	7	83	17	683	76	112	761	4
Vehicles Exited	3	6	2	58	7	83	17	687	76	111	762	4
Hourly Exit Rate	3	6	2	58	7	83	17	687	76	111	762	4
Input Volume	4	8	1	62	7	79	15	691	82	109	765	5
% of Volume	75	75	200	94	100	105	113	99	93	102	100	80
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	0	0	0	1	0	1	0	3	0	2	6	0

1: France Ave & Hazelton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.5
Total Delay (hr)	3.8
Total Del/Veh (s)	7.6
Stop Delay (hr)	2.7
Stop Del/Veh (s)	5.4
Total Stops	619
Stop/Veh	0.34
Travel Dist (mi)	340.8
Travel Time (hr)	13.3
Avg Speed (mph)	26
Fuel Used (gal)	9.7
Fuel Eff. (mpg)	35.2
HC Emissions (g)	99
CO Emissions (g)	3040
NOx Emissions (g)	381
Vehicles Entered	1812
Vehicles Exited	1816
Hourly Exit Rate	1816
Input Volume	1828
% of Volume	99
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	986
Occupancy (veh)	13

2: France Ave & W 72nd St Performance by movement

Movement	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.0	0.0	0.2	0.0	0.4
Total Del/Veh (s)	4.5	5.2	0.2	1.0	0.6	0.9
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	3.8	3.7	0.0	0.1	0.1	0.3
Total Stops	93	15	0	0	0	108
Stop/Veh	0.98	0.60	0.00	0.00	0.00	0.06
Travel Dist (mi)	25.0	1.0	31.3	70.3	1.4	129.0
Travel Time (hr)	1.0	0.1	0.9	2.1	0.1	4.1
Avg Speed (mph)	24	12	35	34	25	31
Fuel Used (gal)	0.7	0.0	0.9	2.9	0.0	4.6
Fuel Eff. (mpg)	35.9	37.8	33.6	24.2	39.5	28.1
HC Emissions (g)	5	0	12	38	0	56
CO Emissions (g)	119	6	374	1713	14	2225
NOx Emissions (g)	15	1	46	140	1	202
Vehicles Entered	94	25	779	806	16	1720
Vehicles Exited	93	25	778	808	16	1720
Hourly Exit Rate	93	25	778	808	16	1720
Input Volume	96	25	790	814	14	1739
% of Volume	97	100	98	99	114	99
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Density (ft/veh)						871
Occupancy (veh)	1	0	1	2	0	4

3: France Ave & Business Access Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.2	0.0	0.1	0.3
Total Del/Veh (s)	1.7	1.0	0.9	0.2	0.6
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	1.4	0.1	0.1	0.0	0.1
Total Stops	16	0	0	0	16
Stop/Veh	0.30	0.00	0.00	0.00	0.01
Travel Dist (mi)	3.6	58.7	3.3	36.1	101.7
Travel Time (hr)	0.2	1.8	0.1	1.1	3.2
Avg Speed (mph)	19	33	23	33	32
Fuel Used (gal)	0.1	2.5	0.1	1.2	3.9
Fuel Eff. (mpg)	42.3	23.3	33.5	29.5	25.9
HC Emissions (g)	1	33	1	15	50
CO Emissions (g)	18	1534	47	556	2154
NOx Emissions (g)	2	122	4	56	184
Vehicles Entered	54	749	42	901	1746
Vehicles Exited	54	748	43	901	1746
Hourly Exit Rate	54	748	43	901	1746
Input Volume	56	758	44	910	1768
% of Volume	96	99	98	99	99
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					805
Occupancy (veh)	0	2	0	1	3

4: France Ave & Gallagher Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	4.1	0.4	0.2	4.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.5	0.0	0.0	0.3	0.0	0.0	0.4	0.9	0.0	0.2	0.8	0.0
Total Del/Veh (s)	30.9	14.6	5.4	28.0	18.9	5.3	28.5	4.6	3.6	32.4	3.5	1.5
Stop Delay (hr)	0.4	0.0	0.0	0.3	0.0	0.0	0.3	0.3	0.0	0.2	0.4	0.0
Stop Del/Veh (s)	28.7	11.9	4.9	26.0	16.7	5.1	24.9	1.6	1.6	30.9	1.8	1.1
Total Stops	48	0	26	35	2	6	43	114	8	17	139	13
Stop/Veh	0.91	0.00	0.84	0.85	0.67	0.86	0.91	0.15	0.24	0.94	0.17	0.18
Travel Dist (mi)	8.3	0.1	4.9	5.2	0.4	0.9	9.2	146.1	6.6	1.4	61.3	5.4
Travel Time (hr)	0.8	0.0	0.2	0.6	0.0	0.0	0.7	4.8	0.2	0.2	2.3	0.2
Avg Speed (mph)	11	15	21	10	13	20	14	30	27	7	26	22
Fuel Used (gal)	0.3	0.0	0.1	0.2	0.0	0.0	0.4	5.8	0.2	0.1	1.9	0.1
Fuel Eff. (mpg)	24.4	28.0	35.8	23.8	25.8	36.7	22.7	25.1	27.5	22.7	32.8	54.2
HC Emissions (g)	1	0	2	3	0	0	3	80	5	0	20	1
CO Emissions (g)	51	1	41	58	3	3	173	3374	172	10	793	31
NOx Emissions (g)	5	0	5	7	0	0	13	289	15	1	75	2
Vehicles Entered	52	1	31	41	3	7	46	735	33	18	812	71
Vehicles Exited	53	1	30	41	3	7	46	732	33	18	811	71
Hourly Exit Rate	53	1	30	41	3	7	46	732	33	18	811	71
Input Volume	52	1	27	41	3	9	51	741	29	21	819	70
% of Volume	102	100	111	100	100	78	90	99	114	86	99	101
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	0	1	0	0	1	5	0	0	2	0

4: France Ave & Gallagher Dr Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.2
Total Delay (hr)	3.2
Total Del/Veh (s)	6.2
Stop Delay (hr)	2.1
Stop Del/Veh (s)	4.0
Total Stops	451
Stop/Veh	0.24
Travel Dist (mi)	249.6
Travel Time (hr)	10.2
Avg Speed (mph)	25
Fuel Used (gal)	9.2
Fuel Eff. (mpg)	27.1
HC Emissions (g)	115
CO Emissions (g)	4709
NOx Emissions (g)	413
Vehicles Entered	1850
Vehicles Exited	1846
Hourly Exit Rate	1846
Input Volume	1864
% of Volume	99
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	862
Occupancy (veh)	10

5: France Ave & Parklawn Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.4	0.2	0.1	0.5	0.2	0.1	0.7	1.6	0.1	0.8	1.8	0.1
Total Del/Veh (s)	25.4	31.1	5.5	27.8	28.7	4.2	32.3	8.6	2.6	26.5	9.2	5.6
Stop Delay (hr)	0.3	0.2	0.1	0.5	0.2	0.1	0.7	1.0	0.1	0.7	1.1	0.1
Stop Del/Veh (s)	23.5	28.9	5.0	25.8	25.9	4.5	28.9	5.0	2.1	22.8	5.5	3.6
Total Stops	44	19	67	59	21	66	73	235	37	94	245	31
Stop/Veh	0.85	0.90	0.88	0.86	0.81	0.85	0.89	0.34	0.41	0.86	0.35	0.40
Travel Dist (mi)	6.7	2.8	9.9	4.3	1.7	5.1	29.6	249.9	33.2	21.1	136.9	15.2
Travel Time (hr)	0.6	0.3	0.6	0.7	0.3	0.3	1.6	8.0	1.0	1.4	5.3	0.6
Avg Speed (mph)	10	9	18	6	6	15	19	31	33	15	26	25
Fuel Used (gal)	0.3	0.1	0.3	0.2	0.1	0.1	0.9	6.8	0.8	0.8	4.7	0.5
Fuel Eff. (mpg)	25.0	25.0	34.3	19.6	21.4	45.7	33.2	36.6	39.6	25.8	29.4	31.1
HC Emissions (g)	1	0	2	1	0	1	10	79	9	6	56	5
CO Emissions (g)	34	12	43	33	7	16	266	2237	273	303	2219	232
NOx Emissions (g)	4	1	6	4	1	2	37	309	37	24	205	18
Vehicles Entered	51	21	76	68	26	78	81	685	91	108	697	77
Vehicles Exited	51	21	76	67	25	78	81	685	91	108	698	77
Hourly Exit Rate	51	21	76	67	25	78	81	685	91	108	698	77
Input Volume	51	25	79	65	24	82	87	688	90	111	705	71
% of Volume	100	84	96	103	104	95	93	100	101	97	99	108
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	1	1	0	0	2	8	1	1	5	1

5: France Ave & Parklawn Ave Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	6.7
Total Del/Veh (s)	11.5
Stop Delay (hr)	4.9
Stop Del/Veh (s)	8.5
Total Stops	991
Stop/Veh	0.48
Travel Dist (mi)	516.4
Travel Time (hr)	20.8
Avg Speed (mph)	25
Fuel Used (gal)	15.6
Fuel Eff. (mpg)	33.1
HC Emissions (g)	170
CO Emissions (g)	5675
NOx Emissions (g)	647
Vehicles Entered	2059
Vehicles Exited	2058
Hourly Exit Rate	2058
Input Volume	2078
% of Volume	99
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	802
Occupancy (veh)	21

Total Network Performance

Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.6
Total Delay (hr)	15.7
Total Del/Veh (s)	22.0
Stop Delay (hr)	10.0
Stop Del/Veh (s)	14.0
Total Stops	2185
Stop/Veh	0.85
Travel Dist (mi)	2149.4
Travel Time (hr)	77.1
Avg Speed (mph)	28
Fuel Used (gal)	71.2
Fuel Eff. (mpg)	30.2
HC Emissions (g)	826
CO Emissions (g)	29153
NOx Emissions (g)	3064
Vehicles Entered	2502
Vehicles Exited	2490
Hourly Exit Rate	2490
Input Volume	12922
% of Volume	19
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	642
Occupancy (veh)	77

Intersection: 1: France Ave & Hazelton Rd

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	30	36	93	40	63	50	100	114	118	64	141	90
Average Queue (ft)	3	6	38	5	26	16	50	59	52	19	60	34
95th Queue (ft)	17	27	77	23	53	41	89	104	103	50	112	74
Link Distance (ft)		817		1108			385	385	385			1451
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	80		130		130	170				300	300	
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 1: France Ave & Hazelton Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	64	49
Average Queue (ft)	16	11
95th Queue (ft)	45	34
Link Distance (ft)	1451	1451
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: France Ave & W 72nd St

Movement	EB	NB	SB
Directions Served	R	L	TR
Maximum Queue (ft)	76	55	8
Average Queue (ft)	35	14	0
95th Queue (ft)	59	42	5
Link Distance (ft)	1411		385
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		220	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: France Ave & Business Access

Movement	WB
Directions Served	R
Maximum Queue (ft)	48
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	344
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: France Ave & Gallagher Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	90	64	80	35	80	68	88	106	54	93	89	92
Average Queue (ft)	39	20	30	7	34	27	32	33	15	38	32	34
95th Queue (ft)	73	50	65	28	73	58	71	79	41	77	74	74
Link Distance (ft)		834		678		967	967	967		343	343	343
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	140		120		270				240			
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 5: France Ave & Parklawn Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	R	L	T	T	T	R	L
Maximum Queue (ft)	85	58	63	94	48	66	117	126	129	85	57	122
Average Queue (ft)	35	18	33	38	14	20	52	65	44	33	19	58
95th Queue (ft)	73	50	57	76	38	43	92	109	90	74	46	106
Link Distance (ft)		632			277	277		1925	1925	1925	1925	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	80			320					400
Storage Blk Time (%)	0			1	0							
Queuing Penalty (veh)	0			0	0							

Intersection: 5: France Ave & Parklawn Ave

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	104	126	127
Average Queue (ft)	48	60	56
95th Queue (ft)	90	110	107
Link Distance (ft)	967	967	967
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	3935	3914	3845	3827	3863	3878
Vehs Exited	3901	3900	3841	3830	3823	3858
Starting Vehs	117	91	120	127	105	106
Ending Vehs	151	105	124	124	145	126
Denied Entry Before	1	3	1	1	0	0
Denied Entry After	1	0	0	0	0	0
Travel Distance (mi)	3304	3282	3233	3228	3245	3258
Travel Time (hr)	133.2	131.9	130.7	129.3	127.6	130.5
Total Delay (hr)	39.7	39.0	39.2	37.8	35.8	38.3
Total Stops	4484	4401	4388	4358	4149	4360
Fuel Used (gal)	118.4	118.3	115.0	114.7	114.3	116.1

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	3935	3914	3845	3827	3863	3878
Vehs Exited	3901	3900	3841	3830	3823	3858
Starting Vehs	117	91	120	127	105	106
Ending Vehs	151	105	124	124	145	126
Denied Entry Before	1	3	1	1	0	0
Denied Entry After	1	0	0	0	0	0
Travel Distance (mi)	3304	3282	3233	3228	3245	3258
Travel Time (hr)	133.2	131.9	130.7	129.3	127.6	130.5
Total Delay (hr)	39.7	39.0	39.2	37.8	35.8	38.3
Total Stops	4484	4401	4388	4358	4149	4360
Fuel Used (gal)	118.4	118.3	115.0	114.7	114.3	116.1

1: France Ave & Hazelton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.1	0.0
Denied Del/Veh (s)	4.0	0.1	0.2	3.0	0.6	3.1	0.0	0.0	0.0	2.1	0.2	0.1
Total Delay (hr)	0.1	0.1	0.0	1.2	0.1	0.5	0.1	5.3	0.2	1.6	1.5	0.0
Total Del/Veh (s)	28.6	25.0	6.2	30.5	23.8	8.9	34.8	14.9	5.1	30.0	5.3	1.4
Stop Delay (hr)	0.1	0.1	0.0	1.1	0.1	0.4	0.1	3.6	0.1	1.4	0.6	0.0
Stop Del/Veh (s)	26.5	22.1	5.5	27.4	20.3	8.0	32.5	10.3	3.9	25.7	2.2	0.9
Total Stops	15	9	11	127	10	140	9	676	67	164	213	1
Stop/Veh	0.88	0.82	0.92	0.88	0.77	0.77	1.00	0.53	0.58	0.85	0.21	0.20
Travel Dist (mi)	2.6	1.7	1.9	30.1	2.7	37.9	0.7	102.5	9.6	52.6	274.2	1.3
Travel Time (hr)	0.2	0.1	0.1	2.4	0.2	2.0	0.1	7.9	0.5	3.2	8.5	0.0
Avg Speed (mph)	11	13	20	13	15	20	6	13	18	17	33	32
Fuel Used (gal)	0.1	0.1	0.1	1.2	0.1	1.2	0.0	3.5	0.2	1.7	7.7	0.0
Fuel Eff. (mpg)	25.1	29.9	32.8	25.6	29.3	31.7	21.6	29.5	40.2	30.5	35.8	38.0
HC Emissions (g)	0	0	0	8	0	11	0	26	2	15	101	0
CO Emissions (g)	14	7	9	224	15	283	4	838	99	499	2994	8
NOx Emissions (g)	1	1	1	25	1	33	0	93	7	56	376	1
Vehicles Entered	17	11	12	143	13	179	9	1265	116	190	990	5
Vehicles Exited	17	11	12	143	13	181	9	1266	115	189	990	5
Hourly Exit Rate	17	11	12	143	13	181	9	1266	115	189	990	5
Input Volume	14	14	11	139	15	186	11	1266	118	184	997	4
% of Volume	121	79	109	103	87	97	82	100	97	103	99	125
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	0	0	0	2	0	2	0	8	1	3	8	0

1: France Ave & Hazelton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.5
Denied Del/Veh (s)	0.6
Total Delay (hr)	10.6
Total Del/Veh (s)	12.9
Stop Delay (hr)	7.6
Stop Del/Veh (s)	9.3
Total Stops	1442
Stop/Veh	0.49
Travel Dist (mi)	517.9
Travel Time (hr)	25.4
Avg Speed (mph)	21
Fuel Used (gal)	15.9
Fuel Eff. (mpg)	32.7
HC Emissions (g)	166
CO Emissions (g)	4996
NOx Emissions (g)	595
Vehicles Entered	2950
Vehicles Exited	2951
Hourly Exit Rate	2951
Input Volume	2959
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	516
Occupancy (veh)	25

2: France Ave & W 72nd St Performance by movement

Movement	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.1	0.2	0.5	0.0	0.8
Total Del/Veh (s)	5.0	6.7	0.4	1.4	1.0	1.1
Stop Delay (hr)	0.1	0.1	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	4.5	5.1	0.0	0.1	0.1	0.3
Total Stops	59	43	0	0	0	102
Stop/Veh	1.00	0.67	0.00	0.00	0.00	0.04
Travel Dist (mi)	15.8	2.6	56.0	98.0	1.9	174.2
Travel Time (hr)	0.7	0.2	1.7	3.1	0.1	5.8
Avg Speed (mph)	24	11	33	31	23	30
Fuel Used (gal)	0.4	0.1	1.7	4.9	0.1	7.2
Fuel Eff. (mpg)	36.5	32.2	32.6	19.8	29.5	24.1
HC Emissions (g)	5	0	23	76	0	104
CO Emissions (g)	87	14	851	3461	31	4444
NOx Emissions (g)	13	2	80	263	2	359
Vehicles Entered	59	64	1392	1123	22	2660
Vehicles Exited	59	63	1390	1123	22	2657
Hourly Exit Rate	59	63	1390	1123	22	2657
Input Volume	59	68	1396	1125	22	2670
% of Volume	100	93	100	100	100	100
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Density (ft/veh)						622
Occupancy (veh)	1	0	2	3	0	6

3: France Ave & Business Access Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.7	0.1	0.1	1.0
Total Del/Veh (s)	4.4	1.9	1.9	0.3	1.3
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	3.8	0.1	0.1	0.0	0.2
Total Stops	40	0	0	1	41
Stop/Veh	0.43	0.00	0.00	0.00	0.01
Travel Dist (mi)	6.2	106.7	7.8	47.7	168.4
Travel Time (hr)	0.4	3.6	0.4	1.4	5.7
Avg Speed (mph)	15	30	21	35	29
Fuel Used (gal)	0.2	5.8	0.3	1.4	7.8
Fuel Eff. (mpg)	33.8	18.3	25.3	32.9	21.7
HC Emissions (g)	2	81	4	23	109
CO Emissions (g)	49	3940	149	730	4869
NOx Emissions (g)	5	292	14	79	390
Vehicles Entered	93	1370	100	1183	2746
Vehicles Exited	93	1368	99	1183	2743
Hourly Exit Rate	93	1368	99	1183	2743
Input Volume	97	1371	98	1185	2751
% of Volume	96	100	101	100	100
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					444
Occupancy (veh)	0	4	0	1	6

4: France Ave & Gallagher Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	3.9	0.5	0.3	3.8	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.7	0.0	0.1	0.7	0.1	0.2	0.2	4.6	0.3	0.8	1.1	0.1
Total Del/Veh (s)	29.4	33.9	5.8	27.7	26.9	9.4	28.6	12.5	10.9	31.3	4.1	2.0
Stop Delay (hr)	0.6	0.0	0.1	0.6	0.1	0.2	0.2	2.4	0.1	0.7	0.6	0.0
Stop Del/Veh (s)	27.0	30.5	5.0	25.0	23.5	8.2	23.8	6.4	6.1	29.0	2.2	1.4
Total Stops	69	3	40	78	12	56	30	449	40	85	182	21
Stop/Veh	0.86	1.00	0.80	0.86	0.80	0.80	0.97	0.34	0.45	0.91	0.18	0.23
Travel Dist (mi)	12.4	0.5	7.8	11.7	1.9	8.9	6.2	264.2	17.4	7.0	75.7	7.0
Travel Time (hr)	1.2	0.0	0.4	1.2	0.2	0.5	0.4	11.6	0.8	1.1	3.0	0.3
Avg Speed (mph)	11	12	21	10	11	17	14	23	21	7	25	21
Fuel Used (gal)	0.5	0.0	0.2	0.5	0.1	0.3	0.3	11.8	0.7	0.3	2.4	0.1
Fuel Eff. (mpg)	23.7	24.6	34.8	21.5	25.0	31.2	21.1	22.4	25.3	21.5	32.1	57.2
HC Emissions (g)	3	0	2	6	0	4	5	145	9	2	30	2
CO Emissions (g)	107	4	58	166	16	103	163	6492	376	72	1048	39
NOx Emissions (g)	11	0	7	16	1	11	15	535	33	6	107	4
Vehicles Entered	79	3	50	91	15	69	31	1326	87	92	999	92
Vehicles Exited	77	3	49	89	15	69	30	1323	87	91	1000	92
Hourly Exit Rate	77	3	49	89	15	69	30	1323	87	91	1000	92
Input Volume	80	2	48	89	14	76	31	1313	88	95	997	93
% of Volume	96	150	102	100	107	91	97	101	99	96	100	99
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	0	1	0	1	0	12	1	1	3	0

4: France Ave & Gallagher Dr Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	8.9
Total Del/Veh (s)	10.9
Stop Delay (hr)	5.7
Stop Del/Veh (s)	6.9
Total Stops	1065
Stop/Veh	0.36
Travel Dist (mi)	420.6
Travel Time (hr)	20.8
Avg Speed (mph)	20
Fuel Used (gal)	17.2
Fuel Eff. (mpg)	24.4
HC Emissions (g)	209
CO Emissions (g)	8643
NOx Emissions (g)	746
Vehicles Entered	2934
Vehicles Exited	2925
Hourly Exit Rate	2925
Input Volume	2926
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	421
Occupancy (veh)	21

5: France Ave & Parklawn Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.7	0.3	0.3	0.7	0.4	0.3	0.8	5.2	0.0	1.4	3.3	0.1
Total Del/Veh (s)	28.4	33.6	7.5	26.8	30.3	8.1	34.2	15.1	3.4	28.7	13.0	8.8
Stop Delay (hr)	0.6	0.2	0.2	0.6	0.3	0.3	0.7	3.2	0.0	1.2	2.1	0.1
Stop Del/Veh (s)	26.2	30.8	6.6	24.7	27.2	8.3	30.0	9.2	3.0	24.4	8.3	6.3
Total Stops	74	25	107	76	38	111	76	598	27	149	405	24
Stop/Veh	0.88	0.93	0.87	0.85	0.83	0.85	0.90	0.48	0.53	0.86	0.44	0.50
Travel Dist (mi)	10.8	3.5	15.9	5.6	3.0	8.4	30.2	449.1	18.4	33.7	181.4	9.5
Travel Time (hr)	1.1	0.4	1.0	0.9	0.5	0.7	1.7	16.6	0.6	2.4	8.1	0.4
Avg Speed (mph)	10	9	17	6	6	12	19	27	33	14	22	23
Fuel Used (gal)	0.5	0.1	0.5	0.3	0.1	0.2	0.9	12.4	0.5	1.4	6.6	0.3
Fuel Eff. (mpg)	23.7	23.5	32.6	19.8	20.8	39.0	32.7	36.2	39.4	24.7	27.4	27.8
HC Emissions (g)	2	0	3	1	1	1	7	124	9	18	86	8
CO Emissions (g)	58	12	67	42	17	28	236	3674	222	638	3315	264
NOx Emissions (g)	8	1	10	5	2	3	28	489	32	56	296	24
Vehicles Entered	83	27	123	88	46	130	83	1227	50	172	919	48
Vehicles Exited	82	27	123	88	46	130	83	1232	50	169	917	48
Hourly Exit Rate	82	27	123	88	46	130	83	1232	50	169	917	48
Input Volume	78	23	128	99	50	131	89	1222	53	160	932	43
% of Volume	105	117	96	89	92	99	93	101	94	106	98	112
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	1	1	0	1	2	17	1	2	8	0

5: France Ave & Parklawn Ave Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	13.4
Total Del/Veh (s)	16.0
Stop Delay (hr)	9.6
Stop Del/Veh (s)	11.5
Total Stops	1710
Stop/Veh	0.57
Travel Dist (mi)	769.5
Travel Time (hr)	34.3
Avg Speed (mph)	23
Fuel Used (gal)	23.8
Fuel Eff. (mpg)	32.3
HC Emissions (g)	261
CO Emissions (g)	8575
NOx Emissions (g)	953
Vehicles Entered	2996
Vehicles Exited	2995
Hourly Exit Rate	2995
Input Volume	3008
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	485
Occupancy (veh)	34

Total Network Performance

Denied Delay (hr)	0.8
Denied Del/Veh (s)	0.7
Total Delay (hr)	37.5
Total Del/Veh (s)	33.9
Stop Delay (hr)	23.5
Stop Del/Veh (s)	21.2
Total Stops	4360
Stop/Veh	1.09
Travel Dist (mi)	3258.4
Travel Time (hr)	130.5
Avg Speed (mph)	25
Fuel Used (gal)	116.1
Fuel Eff. (mpg)	28.1
HC Emissions (g)	1400
CO Emissions (g)	50601
NOx Emissions (g)	5055
Vehicles Entered	3878
Vehicles Exited	3858
Hourly Exit Rate	3858
Input Volume	19585
% of Volume	20
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	379
Occupancy (veh)	130

Intersection: 1: France Ave & Hazelton Rd

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	43	52	144	95	117	71	206	225	246	72	188	155
Average Queue (ft)	14	16	78	10	47	10	115	132	137	35	94	65
95th Queue (ft)	41	44	127	49	89	44	176	192	206	65	157	124
Link Distance (ft)		817		1108			385	385	385			1451
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	80		130		130	170				300	300	
Storage Blk Time (%)		0	1		0		1					
Queuing Penalty (veh)		0	3		0		0					

Intersection: 1: France Ave & Hazelton Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	101	72
Average Queue (ft)	39	23
95th Queue (ft)	84	57
Link Distance (ft)	1451	1451
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: France Ave & W 72nd St

Movement	EB	NB	SB
Directions Served	R	L	TR
Maximum Queue (ft)	62	63	4
Average Queue (ft)	30	28	0
95th Queue (ft)	50	57	3
Link Distance (ft)	1411		385
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		220	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: France Ave & Business Access

Movement	WB
Directions Served	R
Maximum Queue (ft)	57
Average Queue (ft)	21
95th Queue (ft)	48
Link Distance (ft)	344
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: France Ave & Gallagher Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	114	76	108	99	75	166	179	235	123	96	91	98
Average Queue (ft)	49	26	55	40	25	77	93	121	58	46	45	40
95th Queue (ft)	91	58	97	75	57	139	157	197	106	86	80	82
Link Distance (ft)		834		678		967	967	967		343	343	343
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	140		120		270				240			
Storage Blk Time (%)	0		0	0								
Queuing Penalty (veh)	0		0	0								

Intersection: 5: France Ave & Parklawn Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	R	L	T	T	T	R	L
Maximum Queue (ft)	106	79	77	104	152	85	116	218	223	188	50	168
Average Queue (ft)	53	23	43	45	29	34	53	124	110	97	13	92
95th Queue (ft)	98	61	70	87	86	65	95	189	181	162	36	150
Link Distance (ft)		632			277	277		1925	1925	1925	1925	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	80			320					400
Storage Blk Time (%)	2	0	0	2	1							
Queuing Penalty (veh)	3	0	0	1	1							

Intersection: 5: France Ave & Parklawn Ave

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	170	168	166
Average Queue (ft)	71	88	88
95th Queue (ft)	125	144	152
Link Distance (ft)	967	967	967
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 9

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	3142	3169	3174	3079	3112	3134
Vehs Exited	3145	3152	3181	3055	3117	3132
Starting Vehs	104	80	95	93	91	92
Ending Vehs	101	97	88	117	86	95
Denied Entry Before	0	1	1	1	2	0
Denied Entry After	0	0	0	1	1	0
Travel Distance (mi)	2571	2596	2591	2501	2538	2559
Travel Time (hr)	101.7	101.7	101.6	99.9	100.6	101.1
Total Delay (hr)	27.6	27.0	26.9	27.3	27.1	27.2
Total Stops	3371	3432	3397	3389	3340	3385
Fuel Used (gal)	90.9	91.3	90.8	88.2	89.3	90.1

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	3142	3169	3174	3079	3112	3134
Vehs Exited	3145	3152	3181	3055	3117	3132
Starting Vehs	104	80	95	93	91	92
Ending Vehs	101	97	88	117	86	95
Denied Entry Before	0	1	1	1	2	0
Denied Entry After	0	0	0	1	1	0
Travel Distance (mi)	2571	2596	2591	2501	2538	2559
Travel Time (hr)	101.7	101.7	101.6	99.9	100.6	101.1
Total Delay (hr)	27.6	27.0	26.9	27.3	27.1	27.2
Total Stops	3371	3432	3397	3389	3340	3385
Fuel Used (gal)	90.9	91.3	90.8	88.2	89.3	90.1

1: France Ave & Hazelton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0
Denied Del/Veh (s)	4.2	0.1	0.1	3.2	0.3	3.1	0.0	0.0	0.0	2.0	0.2	0.2
Total Delay (hr)	0.0	0.1	0.0	0.8	0.0	0.1	0.1	1.9	0.1	0.9	1.1	0.0
Total Del/Veh (s)	34.4	22.4	4.8	29.6	21.8	5.5	33.4	8.8	3.2	30.6	4.4	0.8
Stop Delay (hr)	0.0	0.0	0.0	0.7	0.0	0.1	0.1	1.3	0.1	0.8	0.4	0.0
Stop Del/Veh (s)	32.7	19.7	4.7	27.0	18.4	5.1	31.8	6.0	2.6	27.4	1.6	0.6
Total Stops	3	7	1	86	5	63	14	302	39	94	162	1
Stop/Veh	1.00	0.78	0.50	0.89	0.71	0.84	1.00	0.39	0.43	0.89	0.17	0.20
Travel Dist (mi)	0.5	1.3	0.2	20.5	1.4	15.7	1.2	63.5	7.5	29.1	255.9	1.5
Travel Time (hr)	0.0	0.1	0.0	1.6	0.1	0.8	0.2	3.5	0.4	1.8	7.7	0.0
Avg Speed (mph)	10	13	20	13	16	22	7	18	20	17	34	34
Fuel Used (gal)	0.0	0.0	0.0	0.8	0.0	0.5	0.1	2.0	0.2	0.9	7.0	0.0
Fuel Eff. (mpg)	26.0	29.9	41.7	26.5	30.4	33.9	22.5	32.1	42.6	31.3	36.4	40.2
HC Emissions (g)	0	0	0	8	0	6	0	21	2	11	80	0
CO Emissions (g)	1	5	0	187	6	125	10	723	85	309	2438	8
NOx Emissions (g)	0	1	0	23	1	16	1	72	5	35	315	1
Vehicles Entered	3	8	2	97	7	74	14	763	90	105	922	5
Vehicles Exited	3	8	2	97	7	73	14	766	90	104	927	5
Hourly Exit Rate	3	8	2	97	7	73	14	766	90	104	927	5
Input Volume	4	8	1	97	7	79	15	760	97	109	928	5
% of Volume	75	100	200	100	100	92	93	101	93	95	100	100
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	0	0	0	2	0	1	0	4	0	2	8	0

1: France Ave & Hazelton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.5
Total Delay (hr)	5.2
Total Del/Veh (s)	8.8
Stop Delay (hr)	3.6
Stop Del/Veh (s)	6.2
Total Stops	777
Stop/Veh	0.37
Travel Dist (mi)	398.1
Travel Time (hr)	16.2
Avg Speed (mph)	25
Fuel Used (gal)	11.5
Fuel Eff. (mpg)	34.5
HC Emissions (g)	128
CO Emissions (g)	3899
NOx Emissions (g)	469
Vehicles Entered	2090
Vehicles Exited	2096
Hourly Exit Rate	2096
Input Volume	2110
% of Volume	99
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	809
Occupancy (veh)	16

2: France Ave & W 72nd St Performance by movement

Movement	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.2	0.0	0.1	0.4	0.0	0.7
Total Del/Veh (s)	6.0	5.8	0.2	1.4	0.8	1.2
Stop Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	5.2	4.2	0.0	0.1	0.1	0.4
Total Stops	112	14	0	0	0	126
Stop/Veh	0.99	0.56	0.00	0.00	0.00	0.06
Travel Dist (mi)	30.0	1.0	34.8	88.2	1.1	155.1
Travel Time (hr)	1.3	0.1	1.1	2.7	0.0	5.3
Avg Speed (mph)	23	12	31	32	25	29
Fuel Used (gal)	0.8	0.0	1.4	4.1	0.0	6.3
Fuel Eff. (mpg)	35.6	31.6	25.5	21.8	33.5	24.5
HC Emissions (g)	8	0	19	62	0	90
CO Emissions (g)	165	7	732	2715	12	3631
NOx Emissions (g)	22	1	71	217	1	312
Vehicles Entered	112	25	871	1013	12	2033
Vehicles Exited	112	25	869	1014	12	2032
Hourly Exit Rate	112	25	869	1014	12	2032
Input Volume	105	29	873	1012	14	2033
% of Volume	107	86	100	100	86	100
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Density (ft/veh)						684
Occupancy (veh)	1	0	1	3	0	5

3: France Ave & Business Access Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.5	0.1	0.1	0.8
Total Del/Veh (s)	2.2	2.4	2.7	0.3	1.3
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	1.3	0.2	0.2	0.0	0.2
Total Stops	32	0	0	0	32
Stop/Veh	0.24	0.00	0.00	0.00	0.01
Travel Dist (mi)	9.1	59.8	10.1	45.1	124.0
Travel Time (hr)	0.5	2.1	0.5	1.4	4.5
Avg Speed (mph)	18	29	20	33	28
Fuel Used (gal)	0.3	3.8	0.5	1.5	6.0
Fuel Eff. (mpg)	35.5	15.8	21.2	29.3	20.5
HC Emissions (g)	3	54	7	22	87
CO Emissions (g)	95	2771	271	807	3945
NOx Emissions (g)	10	192	25	79	306
Vehicles Entered	135	764	130	1126	2155
Vehicles Exited	135	761	128	1125	2149
Hourly Exit Rate	135	761	128	1125	2149
Input Volume	140	762	137	1116	2155
% of Volume	96	100	93	101	100
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					570
Occupancy (veh)	1	2	1	1	4

4: France Ave & Gallagher Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	4.0		0.3	3.9	0.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.3	0.0	0.0	1.1	0.0	0.0	0.4	4.1	0.8	1.6	1.2	0.1
Total Del/Veh (s)	22.9	24.0	4.6	26.3	20.1	6.3	27.2	17.4	17.1	25.1	5.4	2.5
Stop Delay (hr)	0.3	0.0	0.0	1.0	0.0	0.0	0.3	2.6	0.6	1.4	0.7	0.0
Stop Del/Veh (s)	20.8	22.6	4.2	23.5	16.9	5.6	22.7	11.0	11.6	21.9	3.1	1.9
Total Stops	39	1	19	122	4	11	47	423	118	199	210	20
Stop/Veh	0.80	1.00	0.79	0.84	0.80	0.85	0.92	0.50	0.66	0.86	0.25	0.27
Travel Dist (mi)	7.7	0.1	3.8	18.8	0.6	1.7	10.0	164.5	35.0	17.3	62.1	5.7
Travel Time (hr)	0.6	0.0	0.2	1.9	0.0	0.1	0.7	8.4	2.0	2.2	2.8	0.3
Avg Speed (mph)	13	7	21	11	12	19	14	19	18	8	22	20
Fuel Used (gal)	0.3	0.0	0.1	0.8	0.0	0.0	0.5	7.1	1.4	0.8	2.0	0.1
Fuel Eff. (mpg)	26.4	23.8	36.8	22.1	25.4	33.8	21.1	23.1	25.3	21.9	30.3	53.5
HC Emissions (g)	1	0	1	6	0	0	6	93	21	5	25	1
CO Emissions (g)	47	1	23	194	4	10	263	4018	786	192	1014	32
NOx Emissions (g)	5	0	3	19	0	1	20	317	66	15	86	3
Vehicles Entered	49	0	24	146	4	13	50	829	176	230	820	75
Vehicles Exited	48	1	24	145	5	13	51	832	176	230	822	75
Hourly Exit Rate	48	1	24	145	5	13	51	832	176	230	822	75
Input Volume	52	1	27	140	3	13	51	834	170	228	818	70
% of Volume	92	100	89	104	167	100	100	100	104	101	100	107
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	0	2	0	0	1	8	2	2	3	0

4: France Ave & Gallagher Dr Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.3
Total Delay (hr)	9.7
Total Del/Veh (s)	14.3
Stop Delay (hr)	6.9
Stop Del/Veh (s)	10.2
Total Stops	1213
Stop/Veh	0.50
Travel Dist (mi)	327.1
Travel Time (hr)	19.3
Avg Speed (mph)	17
Fuel Used (gal)	13.2
Fuel Eff. (mpg)	24.7
HC Emissions (g)	160
CO Emissions (g)	6582
NOx Emissions (g)	535
Vehicles Entered	2416
Vehicles Exited	2422
Hourly Exit Rate	2422
Input Volume	2407
% of Volume	101
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	454
Occupancy (veh)	19

5: France Ave & Parklawn Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.6	0.2	0.1	0.4	0.2	0.2	0.8	2.6	0.1	1.0	2.1	0.2
Total Del/Veh (s)	26.6	29.0	6.4	24.1	30.9	6.5	32.5	10.8	2.6	28.3	9.8	7.4
Stop Delay (hr)	0.6	0.2	0.1	0.4	0.2	0.2	0.7	1.5	0.1	0.9	1.2	0.1
Stop Del/Veh (s)	24.5	26.5	5.7	22.3	27.9	6.7	29.0	6.5	2.1	24.5	5.7	5.0
Total Stops	73	23	68	52	21	113	83	346	37	114	270	37
Stop/Veh	0.87	0.85	0.86	0.84	0.88	0.89	0.92	0.41	0.41	0.88	0.34	0.46
Travel Dist (mi)	10.8	3.5	10.1	3.9	1.6	8.2	32.6	308.1	32.6	25.1	154.6	15.7
Travel Time (hr)	1.1	0.4	0.6	0.6	0.3	0.6	1.7	10.4	1.0	1.8	6.2	0.7
Avg Speed (mph)	10	10	17	7	6	13	19	30	33	14	25	23
Fuel Used (gal)	0.4	0.1	0.3	0.2	0.1	0.2	1.0	8.5	0.9	1.1	5.9	0.6
Fuel Eff. (mpg)	24.3	25.0	33.9	21.5	20.8	41.7	32.8	36.2	38.2	23.6	26.4	28.1
HC Emissions (g)	1	1	3	0	0	1	9	102	13	11	77	8
CO Emissions (g)	49	24	67	20	7	25	254	2905	370	502	3228	332
NOx Emissions (g)	6	3	10	2	1	3	34	391	47	38	272	25
Vehicles Entered	84	27	78	62	24	127	89	843	89	128	783	80
Vehicles Exited	83	27	78	62	24	127	89	846	89	128	783	79
Hourly Exit Rate	83	27	78	62	24	127	89	846	89	128	783	79
Input Volume	82	25	79	65	24	122	87	851	90	128	773	84
% of Volume	101	108	99	95	100	104	102	99	99	100	101	94
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	1	1	0	1	2	10	1	2	6	1

5: France Ave & Parklawn Ave Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	8.6
Total Del/Veh (s)	12.7
Stop Delay (hr)	6.3
Stop Del/Veh (s)	9.3
Total Stops	1237
Stop/Veh	0.51
Travel Dist (mi)	607.0
Travel Time (hr)	25.3
Avg Speed (mph)	24
Fuel Used (gal)	19.2
Fuel Eff. (mpg)	31.6
HC Emissions (g)	228
CO Emissions (g)	7783
NOx Emissions (g)	832
Vehicles Entered	2414
Vehicles Exited	2415
Hourly Exit Rate	2415
Input Volume	2410
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	658
Occupancy (veh)	25

Total Network Performance

Denied Delay (hr)	0.6
Denied Del/Veh (s)	0.7
Total Delay (hr)	26.6
Total Del/Veh (s)	29.7
Stop Delay (hr)	17.3
Stop Del/Veh (s)	19.3
Total Stops	3385
Stop/Veh	1.05
Travel Dist (mi)	2559.2
Travel Time (hr)	101.1
Avg Speed (mph)	25
Fuel Used (gal)	90.1
Fuel Eff. (mpg)	28.4
HC Emissions (g)	1116
CO Emissions (g)	39808
NOx Emissions (g)	3981
Vehicles Entered	3134
Vehicles Exited	3132
Hourly Exit Rate	3132
Input Volume	15546
% of Volume	20
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	490
Occupancy (veh)	101

Intersection: 1: France Ave & Hazelton Rd

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	34	39	116	28	68	47	122	153	154	65	122	146
Average Queue (ft)	3	8	55	4	23	14	56	70	70	26	60	58
95th Queue (ft)	18	31	99	19	48	40	106	126	125	56	107	114
Link Distance (ft)		817		1108			385	385	385			1451
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	80		130		130	170				300	300	
Storage Blk Time (%)			0				0					
Queuing Penalty (veh)			0				0					

Intersection: 1: France Ave & Hazelton Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	129	62
Average Queue (ft)	25	15
95th Queue (ft)	69	44
Link Distance (ft)	1451	1451
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: France Ave & W 72nd St

Movement	EB	NB
Directions Served	R	L
Maximum Queue (ft)	79	48
Average Queue (ft)	41	13
95th Queue (ft)	67	39
Link Distance (ft)	1411	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		220
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: France Ave & Business Access

Movement	WB	NB
Directions Served	R	T
Maximum Queue (ft)	56	4
Average Queue (ft)	17	0
95th Queue (ft)	41	3
Link Distance (ft)	344	343
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: France Ave & Gallagher Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	84	51	131	79	102	129	150	268	218	96	104	109
Average Queue (ft)	31	16	74	16	36	71	88	139	113	49	50	48
95th Queue (ft)	69	42	123	62	78	119	140	232	187	87	89	93
Link Distance (ft)		834		678		967	967	967		343	343	343
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	140		120		270				240			
Storage Blk Time (%)			2						0			
Queuing Penalty (veh)			0						0			

Intersection: 5: France Ave & Parklawn Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	R	L	T	T	T	R	L
Maximum Queue (ft)	94	78	92	80	56	69	110	140	138	164	54	149
Average Queue (ft)	50	23	36	33	13	31	55	74	61	73	19	69
95th Queue (ft)	88	60	66	67	38	58	98	126	115	129	42	124
Link Distance (ft)		632			277	277		1925	1925	1925	1925	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	80			320					400
Storage Blk Time (%)	1	0	0	0	0							
Queuing Penalty (veh)	1	0	0	0	0							

Intersection: 5: France Ave & Parklawn Ave

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	107	119	127
Average Queue (ft)	46	59	62
95th Queue (ft)	88	101	111
Link Distance (ft)	967	967	967
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 2

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	4600	4677	4619	4678	4523	4620
Vehs Exited	4584	4662	4595	4686	4501	4604
Starting Vehs	138	142	136	136	135	137
Ending Vehs	154	157	160	128	157	150
Denied Entry Before	1	1	1	0	1	0
Denied Entry After	0	1	0	2	0	0
Travel Distance (mi)	3643	3699	3674	3691	3575	3656
Travel Time (hr)	158.8	161.4	157.0	161.4	153.8	158.5
Total Delay (hr)	54.1	55.2	51.9	55.4	50.9	53.5
Total Stops	5468	5578	5328	5621	5291	5455
Fuel Used (gal)	135.0	138.0	135.2	137.1	131.9	135.4

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	4600	4677	4619	4678	4523	4620
Vehs Exited	4584	4662	4595	4686	4501	4604
Starting Vehs	138	142	136	136	135	137
Ending Vehs	154	157	160	128	157	150
Denied Entry Before	1	1	1	0	1	0
Denied Entry After	0	1	0	2	0	0
Travel Distance (mi)	3643	3699	3674	3691	3575	3656
Travel Time (hr)	158.8	161.4	157.0	161.4	153.8	158.5
Total Delay (hr)	54.1	55.2	51.9	55.4	50.9	53.5
Total Stops	5468	5578	5328	5621	5291	5455
Fuel Used (gal)	135.0	138.0	135.2	137.1	131.9	135.4

1: France Ave & Hazelton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.1	0.0
Denied Del/Veh (s)	4.1	0.2	0.1	3.3	1.2	3.3	0.0	0.0	0.0	2.0	0.2	0.2
Total Delay (hr)	0.1	0.1	0.0	1.4	0.1	0.6	0.1	6.5	0.2	1.6	1.8	0.0
Total Del/Veh (s)	27.0	25.0	7.5	32.5	24.6	10.9	37.0	16.3	6.0	32.6	6.0	1.6
Stop Delay (hr)	0.1	0.1	0.0	1.3	0.1	0.5	0.1	4.6	0.2	1.4	0.8	0.0
Stop Del/Veh (s)	24.9	21.9	7.1	29.3	20.5	9.7	34.1	11.6	4.5	28.1	2.5	1.1
Total Stops	12	11	8	139	10	147	11	771	83	152	251	1
Stop/Veh	0.71	0.73	0.80	0.87	0.71	0.75	1.00	0.53	0.57	0.85	0.23	0.25
Travel Dist (mi)	2.6	2.3	1.5	32.9	3.0	40.7	0.9	116.9	12.1	48.5	295.4	1.0
Travel Time (hr)	0.2	0.2	0.1	2.8	0.2	2.3	0.1	9.5	0.7	3.1	9.3	0.0
Avg Speed (mph)	12	13	19	13	15	19	6	12	17	16	32	32
Fuel Used (gal)	0.1	0.1	0.0	1.3	0.1	1.3	0.0	4.3	0.3	1.6	8.3	0.0
Fuel Eff. (mpg)	24.2	29.4	34.0	24.8	28.3	31.4	21.2	27.2	35.7	29.6	35.6	41.7
HC Emissions (g)	0	0	0	10	0	15	0	37	4	13	99	0
CO Emissions (g)	15	11	5	264	18	336	8	1238	155	470	3069	6
NOx Emissions (g)	1	1	1	29	1	40	1	126	13	50	377	1
Vehicles Entered	17	15	10	157	14	193	11	1437	145	176	1066	4
Vehicles Exited	17	15	10	157	14	192	11	1428	145	176	1066	4
Hourly Exit Rate	17	15	10	157	14	192	11	1428	145	176	1066	4
Input Volume	14	14	11	154	15	186	11	1425	152	184	1064	4
% of Volume	121	107	91	102	93	103	100	100	95	96	100	100
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	0	0	0	3	0	2	0	10	1	3	9	0

1: France Ave & Hazelton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.5
Denied Del/Veh (s)	0.6
Total Delay (hr)	12.7
Total Del/Veh (s)	14.0
Stop Delay (hr)	9.2
Stop Del/Veh (s)	10.1
Total Stops	1596
Stop/Veh	0.49
Travel Dist (mi)	557.9
Travel Time (hr)	28.6
Avg Speed (mph)	20
Fuel Used (gal)	17.6
Fuel Eff. (mpg)	31.7
HC Emissions (g)	180
CO Emissions (g)	5595
NOx Emissions (g)	639
Vehicles Entered	3245
Vehicles Exited	3235
Hourly Exit Rate	3235
Input Volume	3234
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	458
Occupancy (veh)	28

2: France Ave & W 72nd St Performance by movement

Movement	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.1	0.2	0.5	0.0	1.0
Total Del/Veh (s)	5.4	6.8	0.6	1.6	0.9	1.2
Stop Delay (hr)	0.1	0.1	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	5.1	5.1	0.0	0.1	0.1	0.3
Total Stops	58	54	1	0	0	113
Stop/Veh	1.00	0.68	0.00	0.00	0.00	0.04
Travel Dist (mi)	15.5	3.2	63.6	105.5	2.2	189.9
Travel Time (hr)	0.7	0.3	2.2	3.4	0.1	6.7
Avg Speed (mph)	24	11	29	31	24	28
Fuel Used (gal)	0.4	0.1	2.7	5.4	0.1	8.7
Fuel Eff. (mpg)	36.0	28.4	23.4	19.5	29.6	21.7
HC Emissions (g)	4	1	40	81	1	127
CO Emissions (g)	79	31	1572	3771	33	5486
NOx Emissions (g)	11	4	143	285	2	445
Vehicles Entered	58	79	1594	1208	25	2964
Vehicles Exited	58	79	1593	1209	24	2963
Hourly Exit Rate	58	79	1593	1209	24	2963
Input Volume	63	77	1588	1207	22	2957
% of Volume	92	103	100	100	109	100
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Density (ft/veh)						540
Occupancy (veh)	1	0	2	3	0	7

3: France Ave & Business Access Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.0	0.0	0.0	0.0
Total Delay (hr)	0.6	1.1	0.1	0.1	1.9
Total Del/Veh (s)	7.1	2.7	2.9	0.3	2.2
Stop Delay (hr)	0.4	0.0	0.0	0.0	0.5
Stop Del/Veh (s)	5.3	0.1	0.1	0.0	0.6
Total Stops	150	1	0	0	151
Stop/Veh	0.51	0.00	0.00	0.00	0.05
Travel Dist (mi)	19.6	108.1	10.4	50.0	188.2
Travel Time (hr)	1.5	4.0	0.5	1.5	7.5
Avg Speed (mph)	13	27	19	34	25
Fuel Used (gal)	0.7	6.6	0.5	1.5	9.3
Fuel Eff. (mpg)	27.3	16.3	21.7	33.1	20.2
HC Emissions (g)	7	95	8	22	133
CO Emissions (g)	248	4542	265	788	5843
NOx Emissions (g)	23	349	29	76	477
Vehicles Entered	292	1390	135	1266	3083
Vehicles Exited	292	1389	134	1266	3081
Hourly Exit Rate	292	1389	134	1266	3081
Input Volume	290	1380	137	1270	3077
% of Volume	101	101	98	100	100
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					342
Occupancy (veh)	1	4	1	1	7

4: France Ave & Gallagher Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	3.9	0.1	0.4	3.5	0.8	0.9	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (hr)	0.6	0.0	0.1	3.0	0.1	0.3	0.3	8.7	0.9	2.0	2.0	0.1
Total Del/Veh (s)	25.1	1.1	5.7	32.3	27.3	13.2	34.8	22.8	22.5	38.8	7.0	3.7
Stop Delay (hr)	0.5	0.0	0.1	2.5	0.1	0.2	0.2	5.4	0.6	1.8	1.2	0.1
Stop Del/Veh (s)	22.7	0.0	5.0	27.4	22.1	10.0	29.1	14.2	14.9	35.5	4.3	2.7
Total Stops	64	0	36	290	9	71	29	666	89	176	276	30
Stop/Veh	0.79	0.00	0.72	0.87	0.82	0.81	0.97	0.49	0.62	0.96	0.28	0.33
Travel Dist (mi)	12.7	0.1	7.9	42.3	1.4	11.2	5.9	270.6	28.3	13.2	73.2	6.6
Travel Time (hr)	1.1	0.0	0.4	4.9	0.1	0.8	0.5	15.8	1.8	2.5	3.8	0.4
Avg Speed (mph)	12	26	21	9	11	15	13	17	16	5	19	18
Fuel Used (gal)	0.5	0.0	0.2	2.1	0.1	0.4	0.3	12.6	1.2	0.8	2.5	0.1
Fuel Eff. (mpg)	24.8	31.6	34.6	19.8	23.1	28.6	20.4	21.4	23.4	17.1	28.8	49.9
HC Emissions (g)	3	0	3	17	0	6	5	161	16	5	28	2
CO Emissions (g)	102	1	70	571	12	152	171	6700	597	162	1129	43
NOx Emissions (g)	10	0	8	53	1	16	15	564	53	14	99	5
Vehicles Entered	80	1	50	329	11	87	30	1362	143	181	998	91
Vehicles Exited	81	1	50	329	11	87	30	1358	142	182	999	91
Hourly Exit Rate	81	1	50	329	11	87	30	1358	142	182	999	91
Input Volume	80	2	48	317	14	85	31	1352	145	181	997	93
% of Volume	101	50	104	104	79	102	97	100	98	101	100	98
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	0	5	0	1	0	16	2	2	4	0

4: France Ave & Gallagher Dr Performance by movement

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.5
Total Delay (hr)	17.9
Total Del/Veh (s)	19.0
Stop Delay (hr)	12.8
Stop Del/Veh (s)	13.6
Total Stops	1736
Stop/Veh	0.51
Travel Dist (mi)	473.6
Travel Time (hr)	32.0
Avg Speed (mph)	15
Fuel Used (gal)	20.9
Fuel Eff. (mpg)	22.7
HC Emissions (g)	246
CO Emissions (g)	9711
NOx Emissions (g)	838
Vehicles Entered	3363
Vehicles Exited	3361
Hourly Exit Rate	3361
Input Volume	3345
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	275
Occupancy (veh)	32

5: France Ave & Parklawn Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.2	0.1	0.0	0.0	0.0
Total Delay (hr)	0.9	0.2	0.3	0.8	0.5	0.4	0.9	5.9	0.1	1.9	3.7	0.2
Total Del/Veh (s)	33.0	33.3	8.8	27.9	33.5	8.7	34.3	16.3	3.4	32.7	12.0	9.5
Stop Delay (hr)	0.8	0.2	0.3	0.7	0.4	0.4	0.8	3.7	0.0	1.6	2.2	0.1
Stop Del/Veh (s)	30.7	30.9	7.9	25.6	30.3	8.7	29.8	10.0	3.1	27.9	7.2	6.5
Total Stops	87	21	108	78	44	125	87	658	28	180	405	38
Stop/Veh	0.88	0.84	0.86	0.80	0.90	0.84	0.89	0.50	0.49	0.87	0.37	0.48
Travel Dist (mi)	12.6	3.2	16.3	6.1	3.1	9.5	34.9	472.1	20.9	40.2	217.4	15.6
Travel Time (hr)	1.4	0.4	1.0	1.0	0.6	0.8	1.9	17.9	0.6	3.1	9.6	0.7
Avg Speed (mph)	9	9	16	6	6	12	18	26	33	13	23	21
Fuel Used (gal)	0.6	0.1	0.5	0.3	0.2	0.2	1.1	13.0	0.5	1.9	8.9	0.6
Fuel Eff. (mpg)	22.3	23.0	31.9	19.2	19.3	38.6	32.7	36.2	38.3	21.7	24.3	25.9
HC Emissions (g)	4	0	5	1	0	2	8	146	6	24	114	10
CO Emissions (g)	91	11	103	38	15	36	249	4089	183	955	5111	386
NOx Emissions (g)	12	1	15	4	1	4	32	547	24	74	396	30
Vehicles Entered	97	25	125	95	48	148	96	1289	57	205	1095	78
Vehicles Exited	97	25	126	96	48	146	95	1291	57	204	1097	78
Hourly Exit Rate	97	25	126	96	48	146	95	1291	57	204	1097	78
Input Volume	91	23	128	99	50	147	89	1289	53	199	1091	73
% of Volume	107	109	98	97	96	99	107	100	108	103	101	107
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	1	1	1	1	2	18	1	3	10	1

5: France Ave & Parklawn Ave Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	15.7
Total Del/Veh (s)	16.6
Stop Delay (hr)	11.2
Stop Del/Veh (s)	11.9
Total Stops	1859
Stop/Veh	0.55
Travel Dist (mi)	851.9
Travel Time (hr)	39.1
Avg Speed (mph)	22
Fuel Used (gal)	28.0
Fuel Eff. (mpg)	30.4
HC Emissions (g)	319
CO Emissions (g)	11267
NOx Emissions (g)	1141
Vehicles Entered	3358
Vehicles Exited	3360
Hourly Exit Rate	3360
Input Volume	3332
% of Volume	101
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	425
Occupancy (veh)	39

Total Network Performance

Denied Delay (hr)	1.1
Denied Del/Veh (s)	0.9
Total Delay (hr)	52.4
Total Del/Veh (s)	39.7
Stop Delay (hr)	34.1
Stop Del/Veh (s)	25.8
Total Stops	5455
Stop/Veh	1.15
Travel Dist (mi)	3656.4
Travel Time (hr)	158.5
Avg Speed (mph)	23
Fuel Used (gal)	135.4
Fuel Eff. (mpg)	27.0
HC Emissions (g)	1634
CO Emissions (g)	59340
NOx Emissions (g)	5852
Vehicles Entered	4620
Vehicles Exited	4604
Hourly Exit Rate	4604
Input Volume	21981
% of Volume	21
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	313
Occupancy (veh)	157

Intersection: 1: France Ave & Hazelton Rd

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	50	56	152	194	138	50	222	239	247	102	192	179
Average Queue (ft)	12	17	84	17	55	11	129	150	163	42	94	79
95th Queue (ft)	39	46	144	85	102	38	188	214	227	80	164	146
Link Distance (ft)		817		1108			385	385	385			1451
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	80		130		130	170				300	300	
Storage Blk Time (%)	0	0	3		0		1		0			
Queuing Penalty (veh)	0	0	6		0		0		0			

Intersection: 1: France Ave & Hazelton Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	121	102
Average Queue (ft)	42	28
95th Queue (ft)	92	71
Link Distance (ft)	1451	1451
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: France Ave & W 72nd St

Movement	EB	NB	SB
Directions Served	R	L	TR
Maximum Queue (ft)	57	91	4
Average Queue (ft)	29	33	0
95th Queue (ft)	50	68	3
Link Distance (ft)	1411		385
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		220	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: France Ave & Business Access

Movement	WB	NB
Directions Served	R	T
Maximum Queue (ft)	163	5
Average Queue (ft)	60	0
95th Queue (ft)	119	3
Link Distance (ft)	344	343
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: France Ave & Gallagher Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	112	62	145	332	81	220	242	295	212	135	116	125
Average Queue (ft)	46	26	127	123	26	118	139	178	111	66	60	58
95th Queue (ft)	92	55	163	293	65	188	216	268	178	113	100	103
Link Distance (ft)		834		678		967	967	967		343	343	343
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	140		120		270				240			
Storage Blk Time (%)	0		23	0		0			0			
Queuing Penalty (veh)	0		22	0		0			1			

Intersection: 5: France Ave & Parklawn Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	R	L	T	T	T	R	L
Maximum Queue (ft)	118	114	97	103	128	101	134	218	205	201	51	222
Average Queue (ft)	60	23	46	49	32	38	60	130	122	122	16	110
95th Queue (ft)	105	78	80	92	83	78	110	186	189	192	37	180
Link Distance (ft)		632			277	277		1925	1925	1925	1925	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	80			320					400
Storage Blk Time (%)	3		0	3	1							
Queuing Penalty (veh)	5		0	1	1							

Intersection: 5: France Ave & Parklawn Ave

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	131	144	179
Average Queue (ft)	69	88	90
95th Queue (ft)	118	134	152
Link Distance (ft)	967	967	967
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 37

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	3282	3248	3350	3177	3261	3265
Vehs Exited	3281	3212	3330	3177	3237	3245
Starting Vehs	97	94	84	109	87	88
Ending Vehs	98	130	104	109	111	114
Denied Entry Before	0	1	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Travel Distance (mi)	2681	2636	2742	2593	2663	2663
Travel Time (hr)	106.6	103.7	109.3	102.4	105.0	105.4
Total Delay (hr)	29.4	27.6	30.6	27.5	28.3	28.7
Total Stops	3563	3455	3722	3379	3532	3531
Fuel Used (gal)	94.5	93.0	97.4	91.0	94.1	94.0

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	3282	3248	3350	3177	3261	3265
Vehs Exited	3281	3212	3330	3177	3237	3245
Starting Vehs	97	94	84	109	87	88
Ending Vehs	98	130	104	109	111	114
Denied Entry Before	0	1	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Travel Distance (mi)	2681	2636	2742	2593	2663	2663
Travel Time (hr)	106.6	103.7	109.3	102.4	105.0	105.4
Total Delay (hr)	29.4	27.6	30.6	27.5	28.3	28.7
Total Stops	3563	3455	3722	3379	3532	3531
Fuel Used (gal)	94.5	93.0	97.4	91.0	94.1	94.0

1: France Ave & Hazelton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0
Denied Del/Veh (s)	4.5	0.1	0.1	3.2	0.5	3.1	0.0	0.0	0.0	2.1	0.2	0.1
Total Delay (hr)	0.0	0.0	0.0	0.8	0.1	0.1	0.1	2.0	0.1	0.9	1.3	0.0
Total Del/Veh (s)	24.2	23.1	1.6	29.9	26.3	5.6	31.5	9.1	3.6	31.1	4.7	0.7
Stop Delay (hr)	0.0	0.0	0.0	0.8	0.0	0.1	0.1	1.4	0.1	0.8	0.5	0.0
Stop Del/Veh (s)	22.2	20.5	1.5	27.4	22.9	5.2	29.4	6.1	2.8	27.7	1.8	0.3
Total Stops	2	5	0	91	6	67	16	316	52	95	182	1
Stop/Veh	0.67	0.83	0.00	0.91	0.86	0.83	0.94	0.40	0.50	0.87	0.19	0.20
Travel Dist (mi)	0.5	0.9	0.1	20.9	1.5	17.0	1.4	66.1	8.6	29.6	270.0	1.2
Travel Time (hr)	0.0	0.1	0.0	1.7	0.1	0.8	0.2	3.7	0.4	1.8	8.1	0.0
Avg Speed (mph)	13	13	25	13	15	22	7	18	20	17	33	33
Fuel Used (gal)	0.0	0.0	0.0	0.8	0.1	0.5	0.1	2.1	0.2	1.0	7.5	0.0
Fuel Eff. (mpg)	27.4	27.8	38.5	25.9	30.1	33.8	23.8	32.0	42.3	30.1	36.2	36.0
HC Emissions (g)	0	0	0	7	0	6	0	20	2	6	88	0
CO Emissions (g)	2	4	0	167	8	131	8	709	91	245	2673	10
NOx Emissions (g)	0	0	0	19	1	17	1	70	6	24	344	1
Vehicles Entered	3	6	1	99	7	81	17	795	104	107	976	4
Vehicles Exited	3	6	1	98	7	80	16	796	104	108	976	5
Hourly Exit Rate	3	6	1	98	7	80	16	796	104	108	976	5
Input Volume	4	8	1	99	7	82	16	789	101	113	959	5
% of Volume	75	75	100	99	100	98	100	101	103	96	102	100
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	0	0	0	2	0	1	0	4	0	2	8	0

1: France Ave & Hazelton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.5
Total Delay (hr)	5.6
Total Del/Veh (s)	9.0
Stop Delay (hr)	3.9
Stop Del/Veh (s)	6.3
Total Stops	833
Stop/Veh	0.38
Travel Dist (mi)	418.0
Travel Time (hr)	17.1
Avg Speed (mph)	25
Fuel Used (gal)	12.2
Fuel Eff. (mpg)	34.2
HC Emissions (g)	129
CO Emissions (g)	4048
NOx Emissions (g)	483
Vehicles Entered	2200
Vehicles Exited	2200
Hourly Exit Rate	2200
Input Volume	2184
% of Volume	101
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	764
Occupancy (veh)	17

2: France Ave & W 72nd St Performance by movement

Movement	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.2	0.0	0.1	0.4	0.0	0.7
Total Del/Veh (s)	6.7	5.7	0.3	1.4	0.7	1.3
Stop Delay (hr)	0.2	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	5.9	4.1	0.0	0.1	0.1	0.4
Total Stops	108	17	1	0	0	126
Stop/Veh	0.99	0.59	0.00	0.00	0.00	0.06
Travel Dist (mi)	29.0	1.2	36.7	92.1	1.6	160.4
Travel Time (hr)	1.3	0.1	1.2	2.9	0.1	5.5
Avg Speed (mph)	23	11	31	32	25	29
Fuel Used (gal)	0.8	0.0	1.4	4.3	0.0	6.7
Fuel Eff. (mpg)	35.4	28.9	25.7	21.2	35.8	24.0
HC Emissions (g)	8	0	19	63	0	90
CO Emissions (g)	170	8	751	2891	18	3839
NOx Emissions (g)	21	1	70	225	1	319
Vehicles Entered	109	29	916	1056	18	2128
Vehicles Exited	108	29	915	1055	18	2125
Hourly Exit Rate	108	29	915	1055	18	2125
Input Volume	108	30	905	1045	14	2102
% of Volume	100	97	101	101	129	101
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Density (ft/veh)						659
Occupancy (veh)	1	0	1	3	0	5

3: France Ave & Business Access Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.5	0.1	0.1	0.8
Total Del/Veh (s)	2.4	2.3	2.8	0.3	1.3
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	1.5	0.1	0.2	0.0	0.2
Total Stops	37	0	0	0	37
Stop/Veh	0.26	0.00	0.00	0.00	0.02
Travel Dist (mi)	9.7	62.9	10.5	46.8	129.8
Travel Time (hr)	0.6	2.2	0.5	1.4	4.7
Avg Speed (mph)	18	29	20	33	28
Fuel Used (gal)	0.3	3.9	0.5	1.6	6.2
Fuel Eff. (mpg)	35.0	16.2	21.8	29.8	20.9
HC Emissions (g)	2	55	7	23	86
CO Emissions (g)	76	2803	272	815	3965
NOx Emissions (g)	7	197	25	81	310
Vehicles Entered	145	806	134	1163	2248
Vehicles Exited	145	803	134	1164	2246
Hourly Exit Rate	145	803	134	1164	2246
Input Volume	142	795	138	1153	2228
% of Volume	102	101	97	101	101
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					545
Occupancy (veh)	1	2	1	1	5

4: France Ave & Gallagher Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	4.1	0.1	0.2	3.9	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.0	0.0	1.0	0.0	0.0	0.4	4.1	0.7	1.7	1.3	0.1
Total Del/Veh (s)	25.3	20.4	5.7	26.1	24.0	6.2	27.3	16.8	15.6	26.8	5.2	3.0
Stop Delay (hr)	0.3	0.0	0.0	0.9	0.0	0.0	0.3	2.6	0.5	1.5	0.7	0.0
Stop Del/Veh (s)	23.2	18.5	5.2	23.4	21.2	5.1	23.1	10.4	10.2	23.5	3.0	2.2
Total Stops	43	1	24	116	4	10	47	430	108	202	206	24
Stop/Veh	0.84	1.00	0.80	0.83	1.00	0.77	0.92	0.49	0.63	0.88	0.24	0.30
Travel Dist (mi)	7.9	0.1	4.7	17.7	0.5	1.7	10.1	172.5	33.6	17.1	64.9	6.0
Travel Time (hr)	0.7	0.0	0.2	1.8	0.0	0.1	0.7	8.7	1.8	2.3	2.9	0.3
Avg Speed (mph)	12	13	21	11	12	19	14	20	18	7	22	20
Fuel Used (gal)	0.3	0.0	0.1	0.8	0.0	0.0	0.5	7.5	1.3	0.8	2.1	0.1
Fuel Eff. (mpg)	25.5	26.6	35.8	22.2	27.8	34.4	21.8	22.9	25.3	21.2	30.3	52.7
HC Emissions (g)	1	0	3	7	0	0	4	97	12	6	26	1
CO Emissions (g)	48	1	53	216	2	10	214	4266	636	210	1048	36
NOx Emissions (g)	5	0	7	22	0	1	15	338	46	18	91	3
Vehicles Entered	50	1	30	138	4	13	51	873	170	228	857	79
Vehicles Exited	50	1	30	136	4	13	51	878	170	228	857	79
Hourly Exit Rate	50	1	30	136	4	13	51	878	170	228	857	79
Input Volume	54	1	29	141	3	14	53	865	179	229	851	73
% of Volume	93	100	103	96	133	93	96	102	95	100	101	108
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	0	2	0	0	1	9	2	2	3	0

4: France Ave & Gallagher Dr Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.3
Total Delay (hr)	9.8
Total Del/Veh (s)	14.0
Stop Delay (hr)	7.0
Stop Del/Veh (s)	9.9
Total Stops	1215
Stop/Veh	0.48
Travel Dist (mi)	336.7
Travel Time (hr)	19.6
Avg Speed (mph)	17
Fuel Used (gal)	13.7
Fuel Eff. (mpg)	24.6
HC Emissions (g)	159
CO Emissions (g)	6741
NOx Emissions (g)	546
Vehicles Entered	2494
Vehicles Exited	2497
Hourly Exit Rate	2497
Input Volume	2492
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	446
Occupancy (veh)	19

5: France Ave & Parklawn Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	0.6	0.2	0.1	0.5	0.2	0.2	0.8	2.9	0.1	1.1	2.4	0.2
Total Del/Veh (s)	26.2	29.2	5.8	25.9	29.7	7.1	31.0	11.7	2.9	28.6	10.8	7.3
Stop Delay (hr)	0.5	0.2	0.1	0.5	0.2	0.3	0.7	1.8	0.1	0.9	1.5	0.1
Stop Del/Veh (s)	24.3	26.8	5.1	24.1	26.9	7.2	27.3	7.1	2.3	24.7	6.4	4.8
Total Stops	69	26	69	60	17	110	84	376	42	120	306	41
Stop/Veh	0.87	0.90	0.83	0.85	0.77	0.87	0.88	0.42	0.43	0.89	0.38	0.49
Travel Dist (mi)	10.3	3.8	10.8	4.5	1.4	8.1	34.3	322.7	34.7	26.3	159.8	16.5
Travel Time (hr)	1.0	0.4	0.6	0.7	0.2	0.6	1.8	11.1	1.1	1.9	6.6	0.7
Avg Speed (mph)	10	10	18	6	6	13	19	29	33	14	24	23
Fuel Used (gal)	0.4	0.2	0.3	0.2	0.1	0.2	1.0	8.9	0.9	1.1	6.0	0.6
Fuel Eff. (mpg)	24.4	24.9	34.4	20.2	21.2	40.6	33.0	36.2	38.6	23.9	26.5	27.8
HC Emissions (g)	2	2	3	1	0	1	10	97	13	15	77	10
CO Emissions (g)	50	30	58	26	10	27	276	2889	372	564	3273	375
NOx Emissions (g)	7	4	9	3	1	3	37	383	48	48	273	31
Vehicles Entered	79	29	83	71	22	126	94	882	95	133	807	83
Vehicles Exited	78	29	82	70	22	126	93	883	95	133	808	83
Hourly Exit Rate	78	29	82	70	22	126	93	883	95	133	808	83
Input Volume	84	26	82	68	25	126	91	879	94	132	802	87
% of Volume	93	112	100	103	88	100	102	100	101	101	101	95
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	1	1	0	1	2	11	1	2	7	1

5: France Ave & Parklawn Ave Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	9.4
Total Del/Veh (s)	13.3
Stop Delay (hr)	6.8
Stop Del/Veh (s)	9.7
Total Stops	1320
Stop/Veh	0.52
Travel Dist (mi)	633.1
Travel Time (hr)	26.7
Avg Speed (mph)	24
Fuel Used (gal)	20.0
Fuel Eff. (mpg)	31.7
HC Emissions (g)	231
CO Emissions (g)	7951
NOx Emissions (g)	846
Vehicles Entered	2504
Vehicles Exited	2502
Hourly Exit Rate	2502
Input Volume	2496
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	623
Occupancy (veh)	27

Total Network Performance

Denied Delay (hr)	0.6
Denied Del/Veh (s)	0.7
Total Delay (hr)	28.1
Total Del/Veh (s)	30.1
Stop Delay (hr)	18.2
Stop Del/Veh (s)	19.5
Total Stops	3531
Stop/Veh	1.05
Travel Dist (mi)	2663.0
Travel Time (hr)	105.4
Avg Speed (mph)	25
Fuel Used (gal)	94.0
Fuel Eff. (mpg)	28.3
HC Emissions (g)	1129
CO Emissions (g)	41019
NOx Emissions (g)	4078
Vehicles Entered	3265
Vehicles Exited	3245
Hourly Exit Rate	3245
Input Volume	16091
% of Volume	20
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	470
Occupancy (veh)	105

Intersection: 1: France Ave & Hazelton Rd

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	33	35	116	31	56	59	139	146	148	74	138	150
Average Queue (ft)	2	6	58	4	25	14	62	71	72	30	59	63
95th Queue (ft)	15	25	104	20	48	42	115	125	131	63	108	124
Link Distance (ft)		817		1108			385	385	385			1451
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	80		130		130	170				300	300	
Storage Blk Time (%)			0				0					
Queuing Penalty (veh)			0				0					

Intersection: 1: France Ave & Hazelton Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	99	77
Average Queue (ft)	26	19
95th Queue (ft)	64	53
Link Distance (ft)	1451	1451
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: France Ave & W 72nd St

Movement	EB	NB
Directions Served	R	L
Maximum Queue (ft)	82	61
Average Queue (ft)	41	15
95th Queue (ft)	68	44
Link Distance (ft)	1411	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		220
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: France Ave & Business Access

Movement	WB
Directions Served	R
Maximum Queue (ft)	68
Average Queue (ft)	20
95th Queue (ft)	50
Link Distance (ft)	344
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: France Ave & Gallagher Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	73	58	134	92	85	154	183	275	220	158	99	115
Average Queue (ft)	33	19	72	14	35	70	83	145	118	48	47	49
95th Queue (ft)	68	50	122	54	70	124	145	235	190	102	86	97
Link Distance (ft)		834		678		967	967	967		343	343	343
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	140		120		270				240			
Storage Blk Time (%)			2						0	0		
Queuing Penalty (veh)			0						0	0		

Intersection: 5: France Ave & Parklawn Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	R	L	T	T	T	R	L
Maximum Queue (ft)	106	76	72	83	45	86	123	165	138	162	64	162
Average Queue (ft)	46	26	33	37	12	32	55	79	62	81	20	75
95th Queue (ft)	86	63	60	71	34	64	102	132	110	145	45	135
Link Distance (ft)		632			277	277		1925	1925	1925	1925	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	80			320					400
Storage Blk Time (%)	1	0	0	1								
Queuing Penalty (veh)	1	0	0	0								

Intersection: 5: France Ave & Parklawn Ave

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	112	131	142
Average Queue (ft)	53	68	73
95th Queue (ft)	95	114	124
Link Distance (ft)	967	967	967
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 2

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	4651	4790	4647	4658	4651	4678
Vehs Exited	4636	4753	4613	4659	4621	4656
Starting Vehs	141	158	127	162	131	140
Ending Vehs	156	195	161	161	161	162
Denied Entry Before	1	0	1	0	2	0
Denied Entry After	0	0	2	2	0	0
Travel Distance (mi)	3750	3845	3717	3756	3733	3760
Travel Time (hr)	163.0	169.6	160.1	166.1	162.8	164.3
Total Delay (hr)	55.5	59.2	53.6	58.2	55.4	56.4
Total Stops	5458	5746	5347	5544	5441	5507
Fuel Used (gal)	138.5	143.2	137.0	139.8	137.2	139.1

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	4651	4790	4647	4658	4651	4678
Vehs Exited	4636	4753	4613	4659	4621	4656
Starting Vehs	141	158	127	162	131	140
Ending Vehs	156	195	161	161	161	162
Denied Entry Before	1	0	1	0	2	0
Denied Entry After	0	0	2	2	0	0
Travel Distance (mi)	3750	3845	3717	3756	3733	3760
Travel Time (hr)	163.0	169.6	160.1	166.1	162.8	164.3
Total Delay (hr)	55.5	59.2	53.6	58.2	55.4	56.4
Total Stops	5458	5746	5347	5544	5441	5507
Fuel Used (gal)	138.5	143.2	137.0	139.8	137.2	139.1

1: France Ave & Hazelton Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.1	0.1	0.0
Denied Del/Veh (s)	4.1	0.1	0.2	3.4	1.1	3.2	0.0	0.0	0.0	2.0	0.2	0.1
Total Delay (hr)	0.2	0.1	0.0	1.7	0.1	0.6	0.1	6.7	0.3	1.9	1.8	0.0
Total Del/Veh (s)	33.9	28.3	5.5	34.6	27.3	11.7	31.3	16.6	6.7	34.6	6.0	2.7
Stop Delay (hr)	0.2	0.1	0.0	1.5	0.1	0.6	0.1	4.9	0.2	1.6	0.8	0.0
Stop Del/Veh (s)	31.9	25.2	5.0	31.2	22.9	10.5	28.9	12.1	5.2	29.8	2.5	1.8
Total Stops	15	11	8	153	12	149	9	747	95	164	251	1
Stop/Veh	0.88	0.69	0.73	0.87	0.80	0.76	0.90	0.51	0.59	0.84	0.23	0.20
Travel Dist (mi)	2.6	2.4	1.7	36.7	3.1	40.8	0.8	117.9	13.2	53.2	304.3	1.3
Travel Time (hr)	0.3	0.2	0.1	3.2	0.2	2.4	0.1	9.8	0.8	3.5	9.6	0.0
Avg Speed (mph)	10	12	21	12	14	19	7	12	16	16	32	31
Fuel Used (gal)	0.1	0.1	0.0	1.5	0.1	1.3	0.0	4.4	0.4	1.8	8.5	0.0
Fuel Eff. (mpg)	23.6	25.2	35.9	24.8	29.0	31.2	21.8	26.7	35.8	29.4	35.8	40.6
HC Emissions (g)	0	0	0	13	0	11	0	36	4	15	98	0
CO Emissions (g)	14	18	6	333	14	289	7	1227	160	497	3102	6
NOx Emissions (g)	1	1	1	38	1	32	0	124	12	54	378	1
Vehicles Entered	17	16	11	174	14	192	10	1456	159	193	1098	5
Vehicles Exited	16	16	11	175	14	193	10	1442	159	192	1096	5
Hourly Exit Rate	16	16	11	175	14	193	10	1442	159	192	1096	5
Input Volume	15	15	12	160	16	193	12	1475	157	191	1098	4
% of Volume	107	107	92	109	88	100	83	98	101	101	100	125
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	0	0	0	3	0	2	0	10	1	3	10	0

1: France Ave & Hazelton Rd Performance by movement

Movement	All
Denied Delay (hr)	0.5
Denied Del/Veh (s)	0.6
Total Delay (hr)	13.6
Total Del/Veh (s)	14.5
Stop Delay (hr)	10.1
Stop Del/Veh (s)	10.8
Total Stops	1615
Stop/Veh	0.48
Travel Dist (mi)	577.9
Travel Time (hr)	30.1
Avg Speed (mph)	20
Fuel Used (gal)	18.3
Fuel Eff. (mpg)	31.6
HC Emissions (g)	179
CO Emissions (g)	5673
NOx Emissions (g)	644
Vehicles Entered	3345
Vehicles Exited	3329
Hourly Exit Rate	3329
Input Volume	3348
% of Volume	99
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	435
Occupancy (veh)	30

2: France Ave & W 72nd St Performance by movement

Movement	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.2	0.3	0.6	0.0	1.1
Total Del/Veh (s)	6.2	7.2	0.6	1.6	1.2	1.3
Stop Delay (hr)	0.1	0.1	0.0	0.0	0.0	0.3
Stop Del/Veh (s)	5.7	5.6	0.0	0.1	0.2	0.3
Total Stops	64	53	0	0	0	117
Stop/Veh	1.00	0.69	0.00	0.00	0.00	0.04
Travel Dist (mi)	16.9	3.1	64.9	110.0	1.8	196.8
Travel Time (hr)	0.7	0.3	2.2	3.6	0.1	6.9
Avg Speed (mph)	23	10	29	31	23	28
Fuel Used (gal)	0.5	0.1	2.7	5.5	0.1	8.9
Fuel Eff. (mpg)	35.6	26.9	24.0	19.8	29.2	22.1
HC Emissions (g)	3	1	40	82	0	125
CO Emissions (g)	63	21	1570	3841	32	5526
NOx Emissions (g)	8	3	142	288	2	442
Vehicles Entered	63	77	1624	1264	21	3049
Vehicles Exited	64	77	1625	1260	21	3047
Hourly Exit Rate	64	77	1625	1260	21	3047
Input Volume	65	80	1644	1252	22	3063
% of Volume	98	96	99	101	95	99
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0
Density (ft/veh)						520
Occupancy (veh)	1	0	2	4	0	7

3: France Ave & Business Access Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.3	0.0	0.0	0.0	0.0
Total Delay (hr)	0.6	1.1	0.1	0.1	1.9
Total Del/Veh (s)	7.1	2.8	3.0	0.4	2.2
Stop Delay (hr)	0.4	0.0	0.0	0.0	0.5
Stop Del/Veh (s)	5.4	0.1	0.1	0.0	0.6
Total Stops	143	1	0	2	146
Stop/Veh	0.50	0.00	0.00	0.00	0.05
Travel Dist (mi)	19.1	111.0	10.9	53.4	194.4
Travel Time (hr)	1.5	4.1	0.6	1.6	7.7
Avg Speed (mph)	13	27	19	34	25
Fuel Used (gal)	0.7	6.8	0.5	1.6	9.6
Fuel Eff. (mpg)	27.5	16.3	21.5	33.2	20.2
HC Emissions (g)	6	96	9	22	133
CO Emissions (g)	228	4586	286	813	5914
NOx Emissions (g)	21	352	30	77	481
Vehicles Entered	284	1424	141	1323	3172
Vehicles Exited	285	1422	140	1324	3171
Hourly Exit Rate	285	1422	140	1324	3171
Input Volume	293	1437	140	1317	3187
% of Volume	97	99	100	101	99
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					332
Occupancy (veh)	1	4	1	2	8

4: France Ave & Gallagher Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	3.9	0.1	0.4	3.6	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.7	0.0	0.1	2.6	0.1	0.3	0.3	9.1	1.1	2.2	2.1	0.1
Total Del/Veh (s)	26.5	31.1	6.4	31.1	22.6	12.0	34.5	23.4	24.8	42.3	7.1	3.7
Stop Delay (hr)	0.6	0.0	0.1	2.3	0.1	0.2	0.3	5.6	0.7	2.0	1.3	0.1
Stop Del/Veh (s)	24.1	27.2	5.6	26.7	18.6	9.4	28.3	14.5	16.4	38.9	4.4	2.7
Total Stops	72	1	43	248	12	65	31	681	97	172	273	30
Stop/Veh	0.78	1.00	0.75	0.82	0.63	0.76	0.94	0.48	0.63	0.93	0.26	0.31
Travel Dist (mi)	14.3	0.2	8.9	38.6	2.3	10.8	6.4	276.8	30.6	13.7	79.2	7.3
Travel Time (hr)	1.3	0.0	0.5	4.3	0.2	0.7	0.5	16.4	2.1	2.7	4.1	0.4
Avg Speed (mph)	12	13	20	10	12	15	13	17	15	5	19	19
Fuel Used (gal)	0.6	0.0	0.3	1.9	0.1	0.4	0.3	13.1	1.3	0.8	2.7	0.1
Fuel Eff. (mpg)	24.1	28.5	34.0	19.9	23.8	29.8	20.0	21.2	23.3	16.6	29.7	50.4
HC Emissions (g)	4	0	3	16	0	3	4	157	16	4	30	2
CO Emissions (g)	129	2	78	547	25	111	155	6656	601	145	1151	42
NOx Emissions (g)	12	0	10	51	2	11	13	560	55	12	106	4
Vehicles Entered	90	1	57	300	18	84	32	1395	153	182	1046	96
Vehicles Exited	90	1	57	300	18	84	32	1394	154	183	1047	97
Hourly Exit Rate	90	1	57	300	18	84	32	1394	154	183	1047	97
Input Volume	84	2	50	321	15	88	31	1410	149	184	1038	96
% of Volume	107	50	114	93	120	95	103	99	103	99	101	101
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	1	0	0	4	0	1	1	16	2	3	4	0

4: France Ave & Gallagher Dr Performance by movement

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.4
Total Delay (hr)	18.6
Total Del/Veh (s)	19.3
Stop Delay (hr)	13.2
Stop Del/Veh (s)	13.7
Total Stops	1725
Stop/Veh	0.50
Travel Dist (mi)	489.1
Travel Time (hr)	33.1
Avg Speed (mph)	15
Fuel Used (gal)	21.6
Fuel Eff. (mpg)	22.6
HC Emissions (g)	240
CO Emissions (g)	9642
NOx Emissions (g)	836
Vehicles Entered	3454
Vehicles Exited	3457
Hourly Exit Rate	3457
Input Volume	3468
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	265
Occupancy (veh)	33

5: France Ave & Parklawn Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.1	0.1	0.0	0.0	0.0
Total Delay (hr)	1.0	0.2	0.4	0.8	0.5	0.4	1.0	6.6	0.0	2.1	3.6	0.2
Total Del/Veh (s)	33.2	33.5	10.0	27.1	33.8	10.1	39.2	17.5	3.3	35.9	11.4	9.9
Stop Delay (hr)	0.9	0.2	0.3	0.7	0.4	0.4	0.9	4.1	0.0	1.8	2.1	0.2
Stop Del/Veh (s)	30.9	31.0	9.0	24.8	30.4	10.2	34.4	10.9	3.0	30.9	6.7	6.6
Total Stops	90	21	121	86	43	123	82	701	28	186	383	40
Stop/Veh	0.87	0.84	0.86	0.83	0.86	0.83	0.91	0.51	0.52	0.88	0.34	0.47
Travel Dist (mi)	13.1	3.3	18.1	6.5	3.2	9.5	32.6	489.5	19.7	41.1	221.0	16.6
Travel Time (hr)	1.5	0.4	1.2	1.0	0.6	0.9	1.9	19.0	0.6	3.4	9.5	0.8
Avg Speed (mph)	9	9	15	6	6	11	17	26	33	12	23	21
Fuel Used (gal)	0.6	0.1	0.6	0.3	0.2	0.3	1.0	13.7	0.5	1.9	9.0	0.6
Fuel Eff. (mpg)	22.1	23.5	31.1	19.2	19.3	36.2	31.8	35.7	37.9	21.3	24.6	26.1
HC Emissions (g)	3	0	4	2	1	1	7	154	6	18	127	11
CO Emissions (g)	88	12	91	52	23	32	243	4353	174	870	5309	419
NOx Emissions (g)	11	1	13	6	2	3	30	574	22	62	432	34
Vehicles Entered	102	25	140	103	50	146	89	1340	54	208	1116	83
Vehicles Exited	100	25	139	103	50	147	89	1333	54	209	1119	84
Hourly Exit Rate	100	25	139	103	50	147	89	1333	54	209	1119	84
Input Volume	99	24	134	103	52	152	93	1339	55	205	1128	80
% of Volume	101	104	104	100	96	97	96	100	98	102	99	105
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												
Occupancy (veh)	2	0	1	1	1	1	2	19	1	3	10	1

5: France Ave & Parklawn Ave Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.1
Total Delay (hr)	16.8
Total Del/Veh (s)	17.3
Stop Delay (hr)	12.1
Stop Del/Veh (s)	12.5
Total Stops	1904
Stop/Veh	0.54
Travel Dist (mi)	874.3
Travel Time (hr)	40.8
Avg Speed (mph)	21
Fuel Used (gal)	28.9
Fuel Eff. (mpg)	30.3
HC Emissions (g)	335
CO Emissions (g)	11666
NOx Emissions (g)	1192
Vehicles Entered	3456
Vehicles Exited	3452
Hourly Exit Rate	3452
Input Volume	3464
% of Volume	100
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	408
Occupancy (veh)	41

Total Network Performance

Denied Delay (hr)	1.1
Denied Del/Veh (s)	0.9
Total Delay (hr)	55.3
Total Del/Veh (s)	41.3
Stop Delay (hr)	36.4
Stop Del/Veh (s)	27.2
Total Stops	5507
Stop/Veh	1.14
Travel Dist (mi)	3760.1
Travel Time (hr)	164.3
Avg Speed (mph)	23
Fuel Used (gal)	139.1
Fuel Eff. (mpg)	27.0
HC Emissions (g)	1635
CO Emissions (g)	59762
NOx Emissions (g)	5900
Vehicles Entered	4678
Vehicles Exited	4656
Hourly Exit Rate	4656
Input Volume	22791
% of Volume	20
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	302
Occupancy (veh)	163

Intersection: 1: France Ave & Hazelton Rd

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	62	57	153	163	131	46	196	224	266	109	205	162
Average Queue (ft)	16	16	91	15	57	9	128	148	166	45	102	75
95th Queue (ft)	46	46	141	75	111	33	188	212	237	87	173	136
Link Distance (ft)		817		1108			385	385	385			1451
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	80		130		130	170				300	300	
Storage Blk Time (%)	0	0	3		0		1		0			
Queuing Penalty (veh)	0	0	7		1		0		0			

Intersection: 1: France Ave & Hazelton Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	132	104
Average Queue (ft)	42	31
95th Queue (ft)	93	72
Link Distance (ft)	1451	1451
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: France Ave & W 72nd St

Movement	EB	NB	SB
Directions Served	R	L	TR
Maximum Queue (ft)	61	72	4
Average Queue (ft)	32	31	0
95th Queue (ft)	50	62	3
Link Distance (ft)	1411		385
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		220	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: France Ave & Business Access

Movement	WB	NB	SB
Directions Served	R	T	T
Maximum Queue (ft)	142	10	19
Average Queue (ft)	60	0	1
95th Queue (ft)	115	6	19
Link Distance (ft)	344	343	159
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: France Ave & Gallagher Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	TR	L	T	T	TR
Maximum Queue (ft)	107	58	144	315	76	219	248	326	207	166	168	137
Average Queue (ft)	51	27	126	108	26	124	146	195	112	69	63	64
95th Queue (ft)	98	55	163	263	59	197	222	288	191	149	120	112
Link Distance (ft)		834		678		967	967	967		343	343	343
Upstream Blk Time (%)										0	0	
Queuing Penalty (veh)										2	0	
Storage Bay Dist (ft)	140		120		270				240			
Storage Blk Time (%)	0		19	0					2			
Queuing Penalty (veh)	0		19	0					5			

Intersection: 5: France Ave & Parklawn Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	R	L	T	T	T	R	L
Maximum Queue (ft)	112	162	105	102	136	102	130	217	211	235	42	192
Average Queue (ft)	60	31	49	50	34	40	59	143	136	139	15	117
95th Queue (ft)	105	119	85	92	83	79	108	205	207	216	34	176
Link Distance (ft)		632			277	277		1925	1925	1925	1925	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	80			320					400
Storage Blk Time (%)	4	0	1	3	1							
Queuing Penalty (veh)	6	0	1	2	1							

Intersection: 5: France Ave & Parklawn Ave

Movement	SB	SB	SB
Directions Served	T	T	TR
Maximum Queue (ft)	128	153	168
Average Queue (ft)	65	84	95
95th Queue (ft)	116	137	160
Link Distance (ft)	967	967	967
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 44