

VILLAGE OF DOWNERS GROVE
Report for the Village
8/7/2018

SUBJECT:	SUBMITTED BY:
Adoption of Traffic Control Amendments including Neighborhood Traffic Study Area 6	Nan Newlon Director of Public Works

SYNOPSIS

An ordinance has been prepared to amend sections of the Municipal Code concerning the modification to traffic control on various streets including those within Neighborhood Traffic Study Area 6, bounded by Ogden Avenue, Highland Avenue, 39th Street, and Williams Street and on Hitchcock Avenue east of Glenview Avenue.

STRATEGIC PLAN ALIGNMENT

The goals for 2017-2019 include *Exceptional Municipal Services*.

FISCAL IMPACT

N/A

RECOMMENDATION

Approval on the August 14, 2018 active agenda.

BACKGROUND

In July 2018, the Transportation and Parking Commission reviewed the report completed for the sixth neighborhood traffic study (final report is attached). The purpose of the study is to address traffic issues on a neighborhood basis to improve safety. The area was selected based on a number of petitions that were received by the Village with concerns of speeding, cut-through traffic and conflicts between pedestrian and motorists, arising from having a mix of uses including residential, commercial, grade schools, and two public parks.

The scope of the study included significant data collection which occurred during the Fall of 2017 and included:

- Traffic counts on streets within the study area
- Pedestrian counts
- Intersection peak hour counts
- Historical accident reports
- Intersection measurements

The study includes recommendations that were classified as short-term, mid-term, and long-term improvements, depending upon their complexity and cost. The Transportation and Parking Commission voted unanimously to approve the study's short-term intersection control recommendations which consist of traffic control amendments to intersection STOP controls and cross-walk markings. Under the recommended plan, all non-signalized intersections will be under stop control. Currently 20 intersections have no traffic control. Following previous Transportation and Parking Commission recommendations, the neighborhood will have driver right-of-way established at all intersections.

The specific amendments include STOP Signs at the following intersections:

Change	Intersection
Replace Yield Control with 4-way STOP	Earlston Road at 40th Street
	Douglas Road at 40th Street
	Earlston Road at 41st Street
Replace No Control with 3-way STOP	Washington Street at 40th Street
	Elm Street at 40th Street
	Elm Street at 41st Street
Replace No Control with 2-way STOP	Douglas Road at 41st Street
	Williams Street at 39th Street
	40th Street at Sterling Road
	Glendenning Road at 40th Street
Replace No Control with 1-way STOP	Biltmore at 39th Street
	40 Place at 41st Street/Shady Lane
	School Street at 39th Street
	School Street at Herbert Street
	Tower Road at Cumnor Road
	41st Street at Cumnor Road
	Foxfire Court at Cumnor Road
	Longmeadow Road at 41st Street
	Longmeadow Road at Tower Road
	West End Road at 41st Street
	West End Road at Tower Road
	Roslyn Road at Tower Road
	Roslyn Road at 41st Street
	Tower Road at Williams Street
40th Street at Williams Street	

These items were recommended for approval by a 7-0 vote of the Commission.

The May Transportation and Parking Commission meeting was focused on Hitchcock Avenue east of Glenview Avenue. Residents expressed concerns about drivers in the area and commuters causing parking issues. Staff presented to the Commission the follow proposed revisions.

- Replace No Control with 1-way STOP on Glenview Avenue at Hitchcock Avenue
- Replace No Control with 1-way STOP on Glenview Avenue at Curtiss Street
- 4 Hour Parking Restriction on Hitchcock Avenue on both North and South sides of the street from Glenview Avenue to Cornell Avenue

These items were recommended for approval by a 5-0 vote of the Commission.

ATTACHMENTS

Ordinance

Draft Meeting Minutes – TAP Commission July 11, 2018

Draft Meeting Minutes – TAP Commission May 9, 2018

Neighborhood Traffic Study 6

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ORDINANCE NO. _____

AN ORDINANCE AMENDING CERTAIN TRAFFIC PROVISIONS

BE IT ORDAINED by the Village Council of the Village of Downers Grove in DuPage County, Illinois, as follows: (Additions are indicated by **shading**/underline; deletions by ~~strikeout~~):

Section 1. That Section 14.63 is hereby amended to read as follows:**14.63 Isolated yield right-of-way signs.**

On the basis of traffic investigations at the below named intersections, it is found that traffic conditions warrant preference to traffic as indicated and that the enumerated streets should be designated as "yield right-of-way entrances".

Barrett Street. At the northwest and southeast corners of the intersection of 67th Street and Barrett Street, regulating northbound and southbound traffic on Barrett Street.

Belden Avenue. At the southeast corner of the intersection of Belden Avenue and Curtiss Street, regulating northbound traffic on Belden Avenue.

Brunette Drive. At the southeast corner of the intersection of Brunette Drive and Bolson Drive, regulating the eastbound traffic on Brunette Drive.

Burlington Avenue. At the northwest corner of the intersection of Burlington Avenue and Washington Street, regulating westbound traffic on Burlington Avenue.

Cambridge Road. At the southeast corner of the intersection of Cambridge Road and Concord Drive, regulating northbound traffic on Cambridge Road.

Centre Circle. At the northwest corner of the intersection of Centre Circle and Brook Drive, regulating southbound traffic on Brook Drive.

Claremont Court. At the northwest and southeast corners of the intersection of Claremont Court and Claremont Drive, regulating southbound and northbound traffic on Claremont Court.

Clayton Court. At the northwest corner of the intersection of Clayton Court and Claremont Drive, regulating southbound traffic on Clayton Court.

~~Douglas Road. At the northwest and southeast corners of the intersection of Douglas Road and 40th Street, regulating northbound and southbound traffic on Douglas Road.~~

Elizabeth Lane. At the northeast and southwest corners of the intersection of Elizabeth Lane and Knottingham Lane, regulating both eastbound and westbound traffic on Elizabeth Lane.

Fairmount Avenue. At the southeast and northwest corners of the intersection of Fairmount Avenue at 62nd Street, regulating northbound and southbound traffic on Fairmount Avenue.

Farley Place. At the northeast corner of the intersection of Farley Place and Lyman Avenue, regulating westbound traffic on Farley Place.

Farley Place. At the southwest corner of the intersection of Farley Place and Park Avenue, regulating eastbound traffic on Farley Place.

Hillcrest Road. At the southeast corner of the intersection of Hillcrest Road and 61st Street, regulating northbound traffic on Hillcrest Road.

Lyman Avenue. At the southwest and northwest corners of the intersection of Lyman Avenue at 62nd Street, regulating northbound and southbound traffic on Lyman Avenue.

Lyman Avenue. At the southeast corner of the southerly intersection of Lyman Avenue and 72nd Street, regulating northbound traffic on Lyman Avenue.

Lyman Avenue. At the northwest and southeast corners of the intersection of Lyman Avenue and Claremont Drive, regulating southbound and northbound traffic on Lyman Avenue.

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Meadowcrest Drive. At the northwest corner of the intersection of Meadowcrest Drive and Claremont Drive, regulating southbound traffic on Meadowcrest Drive.

Meadowcrest Drive. At the northwest and southeast corners of the intersection of Meadowcrest Drive and Valley View Drive, regulating northbound and southbound traffic on Meadowcrest Drive.

Osage Avenue. At the northwest and southeast corners of Osage Avenue and Claremont Drive, regulating southbound and northbound traffic on Osage Avenue.

Oxnard Drive. At the southeast corner of the intersection of Oxnard Drive and Bolson Drive, regulating northbound traffic on Oxnard Drive.

Parkview Drive. At the northwest corner of Parkview Drive and Claremont Drive, regulating southbound traffic on Parkview Drive.

Pershing Avenue. At the northwest corner of Pershing Avenue and Warren Avenue, regulating southbound traffic on Pershing Avenue.

Plymouth Street. At the northwest and southeast corners of the intersection of Plymouth Street and Jefferson Avenue, regulating northbound and southbound traffic on Plymouth Street.

Powell Street. At the northwest and southeast corners of the intersection of 67th Street and Powell Street, regulating northbound and southbound traffic on Powell Street.

Pershing Avenue. At the northwest and southeast corners of the intersection of Grant Avenue and Pershing Avenue regulating northbound and southbound traffic on Pershing Avenue.

Saratoga Avenue. At the northwest and southeast corners of the intersection 67th Street and Saratoga Avenue, regulating northbound and southbound traffic on Saratoga Avenue.

Springside Avenue. At the southeast corner of Brunette Drive regulating northbound traffic on Springside Avenue.

Stonewall Avenue. At the northwest corner of Stonewall Avenue and Warren Avenue, regulating southbound traffic on Stonewall Avenue.

Stonewall Avenue. At the southeast corner of the intersection of Stonewall Avenue and Bolson Drive, regulating northbound traffic on Stonewall Avenue.

Summit Street. At the northeast corner of the intersection of Summit Street and Carpenter Street, regulating westbound traffic on Summit Street.

Summit Street. At the southwest and northeast corners of the intersection of Summit Street and Fairmount Avenue, regulating both eastbound and westbound traffic on Summit Street; and at the southwest and northeast corners of the intersection of Summit Street and Park Avenue, regulating both eastbound and westbound traffic on Summit Street.

Summit Street. At the southwest and northeast corners of the intersection of Summit Street and Benton Avenue, regulating both eastbound and westbound traffic on Summit Street.

Summit Street. At the southwest corner of the intersection of Summit Street and Blodgett Avenue, regulating eastbound traffic on Summit Street.

Thatcher Road. At the northeast corner of the intersection of Hitchcock Avenue and Thatcher Road regulating northbound traffic on Thatcher Road.

Webster Street. At the southeast and northwest corners of the intersection of Webster Street and Summit Street, regulating northbound and southbound traffic on Webster Street.

Woodward Avenue. At the northwest corner of Woodward Avenue and Warren Avenue, regulating southbound traffic on Woodward Avenue.

~~40th Street. At the southwest and northeast corners of the intersection of 40th Street, Glendenning Road and Earlston Road regulating eastbound and westbound traffic on 40th Street at such intersections.~~

60th Street. At the northeast and southwest corners of the intersection of 60th Street and Grand Avenue, regulating eastbound and westbound traffic on 60th Street.

62nd Place. At the northeast and southwest corners of the intersection of 62nd Place and Carpenter Street, regulating westbound traffic on 62nd Place.

65th Street. At the northeast and southwest corners of the intersection of 65th Street and

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Fairmount Avenue, regulating both eastbound and westbound traffic on 65th Street.

68th Street. At the northeast corner of the intersection of 68th Street and Fairmount Avenue, regulating westbound traffic on 68th Street.

72nd Street. At the southwest corner of the northerly intersection of 72nd Street and Lyman Avenue, regulating eastbound traffic on 72nd Street.

In compliance with such "yield right-of-way" signs, the driver of each vehicle approaching a yield right-of-way sign shall reduce the speed of such vehicle to not more than twenty miles per hour, and shall yield the right of way to vehicles which have entered the intersections or which are approaching so closely on such streets as to create an immediate hazard. (Ord. No. 1028, § 2; Ord. No. 1032, §§ 1, 2, 3; Ord. No. 1673, § 3; Ord. No. 1718, § 3; Ord. No. 1720, § 3; Ord. No. 1723, § 3; Ord. No. 1761, § 3; Ord. No. 1781, § 5; Ord. No. 1818, § 3; Ord. No. 1963, § 3; Ord. No. 2023, § 4; Ord. No. 2025, § 1; Ord. No. 2049, § 2; Ord. No. 2092, § 2; Ord. No. 2095, § 2; Ord. No. 2104, § 5; Ord. No. 2123, § 2; Ord. No. 2348, § 4; Ord. No. 2381, § 2; Ord. No. 2429, § 3; Ord. No. 2460, § 2; Ord. No. 2498, §§ 2, 3; Ord. No. 2570, § 3; Ord. No. 2726, § 2; Ord. No. 2750, § 2; Ord. No. 2948, § 2; Ord. No. 2995, § 2; Ord. No. 3049, §§ 2, 3; Ord. No. 3117, § 3; Ord. No. 3222, § 3; Ord. No. 3328, § 2; Ord. No. 3346, § 4.)

Section 2. That Section 14.80 is hereby amended to read as follows:

14.80 Isolated stop signs.

There shall be erected in conspicuous places as hereinafter designated, signs lettered with the word "Stop", which signs shall be so located as to direct vehicular traffic on the specified streets to come to a full stop before proceeding into or across the intersecting streets:

Aldrich Place. At the southwest corner of the intersection of Aldrich Place and Woodward Avenue, to direct vehicular traffic proceeding easterly on Aldrich Place to come to a full stop before proceeding across or into Woodward Avenue.

Applegate Avenue. At the northeast corner of the intersection of Applegate Avenue and Old Main Street, to direct vehicular traffic proceeding westerly on Applegate Avenue to come to a full stop before proceeding across or into Old Main Street.

Austin Street. At the northeast and southwest corners of the intersection of Austin Street and Douglas Road, to direct traffic proceeding easterly or westerly on Austin Street to come to a full stop before proceeding across or into Douglas Road.

Banchory Court. At the northeast corner of the intersection of Banchory Court and Lee Avenue, regulating westbound traffic on Banchory Court.

Barneswood Drive. At the northeast corner of the intersection of Barneswood Drive and Venard Road, regulating westbound traffic on Barneswood Drive.

Barrett Street. At the northwest corner of the intersection of Barrett Street and Norfolk Street to direct traffic proceeding southerly on Barrett Street to come to a full stop before proceeding across or into Norfolk Street.

Barrett Street. At the northwest and southeast corners of the intersection of Barrett Street and 71st Street, to direct vehicular traffic proceeding southerly and northerly on Barrett Street to come to a full stop before proceeding across or into 71st Street.

Belden Avenue. At the northwest corner of the intersection of Belden Avenue and Maple Avenue, to direct vehicular traffic proceeding southerly on Belden Avenue to come to a full stop before proceeding across or into Maple Avenue.

Benton Avenue. At the southeast corner of the intersection of Benton Avenue and Maple Avenue, to direct vehicular traffic proceeding northerly on Benton Avenue to come to a full stop before proceeding across or into Maple Avenue.

Birch Avenue. At the northeast corner of the intersection of Birch Avenue and Washington Street, to direct vehicular traffic proceeding westerly on Birch Avenue to come to a full stop before

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proceeding across or into Washington Street.

Birch Avenue. At the southwest corner of the intersection of Birch Avenue and Elm Street, regulating eastbound traffic on Birch Avenue.

Biltmore Road. At the southeast corner of the intersection of Biltmore Road and 39th Street.

Blackburn Avenue. At the southwest corner of the intersection of Blackburn Avenue and Fairview Avenue, to direct vehicular traffic proceeding easterly on Blackburn Avenue to come to a full stop before proceeding across or into Fairview Avenue.

Blackburn Avenue. At the northwest corner of the intersection of Blackburn Avenue and Claremont Drive, to direct traffic proceeding southerly on Blackburn Avenue to come to a full stop before proceeding across or into Claremont Drive.

Blackburn Avenue. At the southeast corner of the intersection of Blackburn Avenue and Claremont Drive, to direct traffic proceeding northerly on Blackburn Avenue to come to a full stop before proceeding across or into Claremont Drive.

Blanchard Street. At the northeast and southwest corners of the intersection of Blanchard Street and Webster Street, to direct traffic proceeding easterly or westerly on Blanchard Street to come to a full stop before proceeding across or into Webster Street.

Blanchard Street. At the northeast corner of the intersection of Blanchard Street and Dunham Road, to direct vehicular traffic proceeding westerly on Blanchard Street to come to a full stop before proceeding across or into Dunham Road.

Blodgett Avenue. At the southeast corner of the intersection of Blodgett Avenue and 59th Street, to direct vehicular traffic proceeding northerly on Blodgett Avenue to come to a full stop before proceeding across or into 59th Street.

Blodgett Avenue. At the southeast corner of the intersection of Blodgett Avenue and Maple Avenue, to direct vehicular traffic proceeding northerly on Blodgett Avenue to come to a full stop before proceeding across or into Maple Avenue.

Bolson Drive. At the southwest corner of the intersection of Bolson Drive and Dunham Road, to direct vehicular traffic proceeding easterly on Bolson Drive to come to a full stop before proceeding across or into Dunham Road.

Bolson Drive. At the northeast corner of the intersection of Bolson Drive and Woodward Avenue, to direct vehicular traffic proceeding westerly on Bolson Drive to come to a full stop before proceeding across or into Woodward Avenue.

Brookbank Road. At the southeast and northwest corners of the intersection of Brookbank Road and 59th Street, to direct vehicular traffic proceeding northerly and southerly on Brookbank Road to come to a full stop before proceeding across or into 59th Street.

Brookbank Road. At the southeast corner of the intersection of Brookbank Road and Gilbert Avenue, to direct vehicular traffic proceeding northerly on Brookbank Road to come to a full stop before proceeding across or into Gilbert Avenue.

Brookbank Road. at the northwest corner of the intersection of Brookbank Road and Jefferson Avenue, regulating the southbound traffic on Brookbank Road.

Brookbank Road. At the southeast and northwest corners of the intersection of Brookbank Road and Maple Avenue, to direct vehicular traffic proceeding northerly and southerly on Brookbank Road to come to a full stop before proceeding across or into Maple Avenue.

Brookbank Road. At the northwest and southeast corners of the intersection of Blanchard Street and Brookbank Road, regulating the northbound and southbound traffic on Brookbank Road.

Brookside Drive. At the southwest corner of the intersection of Brookside Drive and Fairview Avenue, to direct vehicular traffic proceeding easterly on Brookside Drive to come to a full stop before proceeding across or into Fairview Avenue.

Brookside Lane. At the southwest corner of the intersection of Brookside Lane and Saratoga Avenue, to direct vehicular traffic proceeding easterly in Brookside Lane to come to a full stop before proceeding into Saratoga Avenue.

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Brookside Lane. At the northeast corner of the intersection of Venard Road and Brookside Lane, regulating eastbound traffic on Brookside Lane.

Bryan Place. At the northwest corner and the southeast corner of the intersection of Bryan Place and Franklin Street, to direct vehicular traffic proceeding northerly and southerly on Bryan Place to come to a full stop before proceeding across or into Franklin Street.

Bryan Place. At the northwest corner of the intersection of Bryan Place and Rogers Street, to direct vehicular traffic proceeding southerly on Bryan Place to come to a full stop before proceeding across or into Rogers Street.

Bryan Place. At the northwest corner of the intersection of Bryan Place and Grant Street, to direct vehicular traffic proceeding southerly on Bryan Street to come to a full stop before proceeding across or into Grant Street.

Bryan Place. At the northwest corner of the intersection of Bryan Place and Lincoln Street, regulating southbound traffic on Bryan Place.

Buckingham Place. At the southwest corners of the intersection of Buckingham Place and Fairview Avenue, to direct vehicular traffic proceeding easterly on Buckingham Place to come to a full stop before proceeding across or into Fairview Avenue.

Bunning Drive. At the southwest corner of the intersection of Bunning Drive and Fairview Avenue, to direct vehicular traffic proceeding easterly on Bunning Drive to come to a full stop before proceeding across or into Fairview Avenue.

Burlington Avenue. At the northeast corner of the intersection of Burlington Avenue and Maple Avenue, to direct vehicular traffic proceeding westerly on Burlington Avenue to come to a full stop before proceeding across or into Maple Avenue.

Burlington Avenue. At the southwest corner of the intersection of Burlington Avenue and Fairview Avenue, to direct vehicular traffic proceeding easterly on Burlington Avenue to come to a full stop before proceeding across or into Fairview Avenue.

Burlington Avenue. At the northeast and southwest corners of the intersection of Burlington Avenue and Washington Street, to direct vehicular traffic proceeding westerly and easterly on Burlington Avenue to come to a full stop before proceeding across or into Washington Street.

Butterfield Frontage Road. At the southwest corner of the intersection of Butterfield Frontage Road and Downers Drive to direct vehicular traffic proceeding easterly in Butterfield Frontage Road to come to a full stop before proceeding into Downers Drive.

Camden Road. At the intersection of Camden Road and Devereux Road, to direct traffic proceeding northeasterly or southwesterly on Devereux Road or southerly on Camden Road, to come to a full stop before proceeding across or into said intersection.

Carol Street. At the northeast and southwest corners of the intersection of Carol Street and Lee Avenue, to direct vehicular traffic proceeding easterly and westerly on Carol Street to come to a full stop before proceeding across or into Lee Avenue.

Carpenter Street. At the northwest and southeast corners of the intersection of Blanchard Street and Carpenter Street, to direct traffic proceeding northerly and southerly in Carpenter Street to come to a full stop before proceeding across or into Blanchard Street.

Carpenter Street. At the southeast and northwest corners of the intersection of Carpenter Street and 59th Street, to direct vehicular traffic proceeding northerly and southerly on Carpenter Street to come to a full stop before proceeding across or into 59th Street.

Carpenter Street. At the southeast corner of the intersection of Carpenter Street and Gilbert Avenue, to direct vehicular traffic proceeding northerly on Carpenter Street to come to a full stop before proceeding across or into Gilbert Avenue.

Chase Avenue. At the northwest corner of the intersection of Chase Avenue and Burlington Avenue, regulating the southbound traffic on Chase Avenue.

Chase Avenue. At the northwest corner of the intersection of Chase Avenue and Curtiss Street, to direct vehicular traffic proceeding southerly on Chase Avenue to come to a full stop before proceeding

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across or into Curtiss Street.

Chase Avenue. At the southeast corner of the intersection of Chase Avenue and Haddow Avenue regulating the northbound traffic on Chase Avenue.

Chicago Avenue. At the northeast and southwest corners of the intersection of Chicago Avenue and Fairview Avenue, to direct vehicular traffic proceeding westerly and easterly on Chicago Avenue to come to a full stop before proceeding across or into Fairview Avenue.

Chicago Avenue. At the northeast and southwest corners of the intersection of Chicago Avenue and Main Street, to direct vehicular traffic proceeding westerly and easterly on Chicago Avenue to come to a full stop before proceeding across or into Main Street.

Chicago Avenue. At the southwest corner of the intersection of Chicago Avenue and Cumnor Road, to direct traffic proceeding in an easterly direction on Chicago Avenue to come to a full stop before proceeding into or across Cumnor Road.

Claremont Drive. At the southwest corner of the intersection of Claremont Drive and Fairview Avenue, to direct vehicular traffic proceeding easterly on Claremont Drive to come to a full stop before proceeding across or into Fairview Avenue.

Clyde Avenue. At the northeast corner of the intersection of Clyde Avenue and 60th Place, to direct vehicular traffic proceeding westerly on Clyde Avenue to come to a full stop before proceeding across or into 60th Place.

Concord Drive. At the southwest corner of the intersection of Concord Drive and Dunham Road, to direct vehicular traffic proceeding easterly on Concord Drive to come to a full stop before proceeding across or into Dunham Road.

Concord Drive. At the northeast corner of the intersection of Concord Drive and Woodward Avenue, to direct vehicular traffic proceeding westerly on Concord Drive to come to a full stop before proceeding across or into Woodward Avenue.

Coralberry Lane. At the southwest corner of the intersection of Coralberry Lane and Venard Road, to direct vehicular traffic proceeding easterly in Coralberry Lane to come to a full stop before proceeding into Venard Road.

Coralberry Lane. At the northeast corner of the intersection of Coralberry Lane and Downers Drive, regulating westbound traffic on Coralberry Lane.

Cornell Avenue. At the northwest corner of the intersection of Cornell Avenue and Warren Avenue, to direct vehicular traffic proceeding southerly on Cornell Avenue to come to a full stop before proceeding across or into Warren Avenue.

Cornell Avenue. At the northwest and southeast corners of the intersection of Cornell Avenue and Prairie Avenue, to direct vehicular traffic proceeding southerly and northerly on Cornell Avenue to come to a full stop before proceeding across or into Prairie Avenue.

Cross Street. At the northwest corner of the intersection of Cross Street and Burlington Avenue, regulating the southbound traffic on Cross Street.

Cross Street. At the northwest and southeast corners of the intersection of Cross Street and Haddow Street, to direct traffic proceeding northerly or southerly on Cross Street to come to a full stop before proceeding across or into Haddow Street.

Cumnor Road. At the northwest corner of the intersection of Cumnor Road and Burlington Avenue, to direct traffic proceeding southerly on Cumnor Road to come to a full stop before proceeding into Burlington Avenue.

Curtiss Street. At the northeast corner of the intersection of Curtiss Street and Walnut Avenue, to direct vehicular traffic proceeding westerly on Curtiss Street to come to a full stop before proceeding across or into Walnut Avenue.

Curtiss Street. At the southwest corner of the intersection of Curtiss Street and Cornell Avenue, to direct traffic proceeding easterly on Curtiss Street to come to a full stop before proceeding into Cornell Avenue.

Curtiss Street. At the northeast corner of the intersection of Curtiss Street and Carpenter Street,

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to direct vehicular traffic proceeding westerly on Curtiss Street to come to a full stop before proceeding across or into Carpenter Street.

Curtiss Street. At the southwest and northwest corners of the intersection of Curtiss Street and Forest Avenue, to direct vehicular traffic proceeding easterly and westerly on Curtiss Street to come to a full stop before proceeding across or into Forest Avenue.

Curtiss Street. At the southwest corner of the intersection of Curtiss Street and Mochel Drive, to direct vehicular traffic proceeding easterly on Curtiss Street to come to a full stop before proceeding across Mochel Drive.

Davis Street. At the southwest corner of the intersection of Davis Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on Davis Street to come to a full stop before proceeding across or into Fairview Avenue.

Davis Street. At the northeast and southwest corners of the intersection of Davis Street and Douglas Road, to direct vehicular traffic proceeding easterly and westerly on Davis Street to come to a full stop before proceeding across or into Douglas Road.

Dearborn Parkway. At the northwest corner of the intersection of Dearborn Parkway and 59th Street, to direct vehicular traffic proceeding southerly on Dearborn Parkway to come to a full stop before proceeding across or into 59th Street.

Debolt Avenue. At the northwest corner of the intersection of Debolt Avenue and Prairie Avenue, regulating southbound traffic on Debolt Avenue.

Downers Drive. At the southeast corner of the intersection of Downers Drive and Brook Drive, to direct vehicular traffic proceeding northerly on Downers Drive to come to a full stop before proceeding across or into Brook Drive.

Downers Drive. At the northwest corner of the intersection of Downers Drive and Chicago Avenue, to Direct vehicular traffic proceeding southerly on Downers Drive to come to a full stop before proceeding across or into Chicago Avenue.

Douglas Road. At the northwest and southeast corners of the intersection of Wilson Street and Douglas Road, to direct vehicular traffic proceeding southerly and northerly on Douglas Road to come to a full stop before proceeding across or into Wilson Street.

Douglas Road. At the northwest and southeast corners of the intersection of Douglas Road and Grant Street, to direct vehicular traffic proceeding southerly and northerly on Douglas Road to come to a full stop before proceeding across or into Grant Street.

Douglas Road. At the northwest corner of the intersection of Douglas Road and Rogers Street, to direct vehicular traffic proceeding southerly on Douglas Road to come to a full stop before proceeding across or into Rogers Street.

Douglas Road. At the northwest corner of the westerly intersection of Sherman Street and Douglas Road and the southeast corner of the easterly intersection of Sherman Street and Douglas Road, regulating northbound and southbound traffic on Douglas Road.

Douglas Road. At the northwest and southeast corners of the intersection of Douglas Road and 41st Street, regulating northbound and southbound traffic on Douglas Road.

Downers Drive. At the southeast and northwest corners of the intersection of Downers Drive and Frontage Road, to direct vehicular traffic proceeding northerly and southerly on Downers Drive to come to a full stop before proceeding across or into Frontage Road.

Drendel Road. At the northwest corner of the intersection of Drendel Road and Burlington Avenue, regulating the southbound traffic on Drendel Road.

Drove Avenue. At the northeast corner of the intersection of Belle Aire Lane and Drove Avenue, regulating westbound traffic on Drove Avenue.

Dunham Road. At the intersection of Dunham Road and 59th Street, to direct traffic proceeding northerly or southerly on Dunham Road or westerly on 59th Street to come to a full stop before proceeding across or into said intersection.

Duchess Court. At the northwest corner of the intersection of Brookside Lane and Duchess

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Court, regulating the southbound traffic on Duchess Court.

Earlston Road. At the southeast corner of the intersection of Earlston Road and 39th Street, to direct vehicular traffic proceeding northerly on Earlston Road to come to a full stop before proceeding across or into 39th Street.

Edward Avenue. At the northwest corner of the intersection of Edward Avenue and Burlington Avenue, regulating the southbound traffic on Edward Avenue.

Eldon Place. At the northwest corner of the intersection of Eldon Place and 59th Street, to direct vehicular traffic proceeding southerly on Eldon Place to come to a full stop before proceeding across or into 59th Street.

Elm Street. At the northwest corner of the intersection of Elm Street and Warren Avenue regulating southbound traffic on Elm Street.

Elm Street. At the southeast corner of the intersection of Elm Street and 39th Street, to direct vehicular traffic proceeding northerly on Elm Street to come to a full stop before proceeding across or into 39th Street.

Elm Street. At the northwest and southeast corners of the intersection of Elm Street and Chicago Avenue, to direct vehicular traffic proceeding southerly and northerly on Elm Street to come to a full stop before proceeding across or into Chicago Avenue.

Elm Street. At the northwest and southeast corners of the intersection of Elm Street and Grant Street, to direct vehicular traffic proceeding southerly and northerly on Elm Street to come to a full stop before proceeding across or into Grant Street.

Elm Street. At the northwest and southeast corners of the intersection of Elm Street and Rogers Street, to direct vehicular traffic proceeding southerly and northerly on Elm Street to come to a full stop before proceeding across or into Rogers Street.

Elmore Avenue. At the southwest corner of the intersection of Elmore Avenue and Lee Avenue, to direct traffic proceeding in an easterly direction on Elmore Avenue to come to a full stop before proceeding across or into Lee Avenue.

Elmwood Avenue. At the southeast corners of the intersection of Elmwood Avenue and Maple Avenue, to direct vehicular traffic proceeding northerly on Elmwood Avenue to come to a full stop before proceeding across or into Maple Avenue.

Elmwood Avenue. At the northwest corner of the intersection of Elmwood Avenue and Randall Street, regulating southbound traffic on Elmwood Avenue.

Fairmount Avenue. At the northwest corner of the intersection of Fairmount Avenue and 72nd Street, to direct vehicular traffic proceeding southerly on Fairmount Avenue to come to a full stop before proceeding across or into 72nd Street.

Fairmount Avenue. At the southeast corner of the intersection of Fairmount Avenue and Maple Avenue, to direct vehicular traffic proceeding northerly on Fairmount Avenue to come to a full stop before proceeding across or into Maple Avenue.

Fairmount Avenue. At the northwest corner of the intersection of Fairmount Avenue and Oxford Street, to direct traffic proceeding southerly in Fairmount Avenue to come to a full stop before proceeding across or into said intersection.

Florence Avenue. At the southeast corner of the intersection of Florence Avenue and Indianapolis Avenue to direct vehicular traffic proceeding northerly on Florence Avenue to come to a full stop before proceeding into Indianapolis Avenue.

Florence Avenue. At the northwest and southeast corners of the intersection of Florence Avenue and Sheldon Avenue, regulating both northbound and southbound traffic on Florence Avenue.

Florence Avenue. At the southeast corner of the intersection of Florence Avenue and 2nd Street, regulating the northbound traffic on Florence Avenue.

Florence Avenue. At the southeast corner of the intersection of Florence Avenue and Chicago Avenue regulating northbound traffic on Florence Avenue.

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Florence Avenue. At the northwest corner of the intersection of Florence Avenue and Chicago Avenue regulating southbound traffic on Florence Avenue.

Forest Avenue. At the northwest corner of the intersection of Forest Avenue and Curtiss Street, to direct traffic proceeding southerly on Forest Avenue to come to a full stop before proceeding into Curtiss Street.

Forest Avenue. At the northwest corner of the intersection of Forest Avenue and Sherman Street, to direct traffic proceeding southerly on Forest Avenue to come to a full stop before proceeding into Sherman Street.

Forest Avenue. At the northwest corner of Forest Avenue and Warren Avenue, to direct traffic proceeding southerly on Forest Avenue to come to a full stop before proceeding across or into Warren Avenue.

Forest Avenue. At the southeast corner of the intersection of Forest Avenue and Thirty-Ninth Street to direct traffic proceeding northerly on Forest Avenue to come to a full stop before proceeding into Thirty-Ninth Street.

Forest Avenue. At the southeast corner of the intersection of Forest Avenue and 41st Street to direct vehicular traffic proceeding northerly on Forest Avenue to come to a full stop before proceeding into 41st Street.

Forest Avenue. At the intersection of Forest Avenue and Franklin Street, to direct traffic proceeding northerly or southerly on Forest Avenue or easterly on Franklin Street, to come to a full stop before proceeding across or into said intersection.

Forest Avenue. At the northwest and southeast corners of the intersection of Forest Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly and northerly on Forest Avenue to come to a full stop before proceeding across or into Chicago Avenue.

Forest Avenue. At the northwest corner of the intersection of Forest Avenue and Warren Avenue, to direct vehicular traffic proceeding southerly on Forest Avenue to come to a full stop before proceeding across or into Warren Avenue.

Foxfire Court, at the southwest corner of Foxfire Court and Cumnor Road.

Francisco Avenue. At the northwest corner of the intersection of Francisco Avenue and Burlington Avenue, regulating the southbound traffic on Francisco Avenue.

Francisco Avenue. At the northwest and southeast corners of the intersection of Francisco Avenue and Hadow Avenue, regulating the northbound and southbound traffic on Francisco Avenue.

Franklin Street. At the northeast and southwest corners of the intersection of Franklin Street and Elm Street, to direct traffic proceeding easterly or westerly on Franklin Street to come to a full stop before proceeding across or into Elm Street.

Franklin Street. At the northeast and southwest corners of the intersection of Franklin Street and Highland Avenue, to direct traffic proceeding easterly or westerly on Franklin Street to come to a full stop before proceeding across or into Highland Avenue.

Franklin Street. At the northeast corner of Oakwood Avenue, regulating westbound traffic on Franklin Street.

Frontage Road. at the northeast corner of the intersection of Frontage Road and Oak Grove Drive, regulating the westbound traffic on Frontage Road.

Glen Avenue. At the northeast corner of the intersection of Lee Avenue and Glen Avenue, regulating westbound traffic on Glen Avenue.

Gierz Street. At the southwest and northeast corners of the intersection of Gierz Street and Douglas Road, to direct vehicular traffic proceeding easterly and westerly on Gierz Street to come to a full stop before proceeding into Douglas Road.

Gierz Street. At the northeast and southwest corners of the intersection of Gierz Avenue and Fairview Avenue, to direct vehicular traffic proceeding westerly and easterly on Gierz Avenue to come to a full stop before proceeding across or into Fairview Avenue.

Gierz Street. At the southwest corner of the intersection of Gierz Street and Florence Avenue,

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regulating the eastbound traffic on Gierz Street.

Gierz Street. At the northeast corner of the intersection of Gierz Street and Linden Place, regulating the westbound traffic on Gierz Street.

Glendenning Street. At the southeast and northwest corner of the intersection of Glendenning Street and 39th Street, to direct vehicular traffic proceeding northerly and southerly on Glendenning Street to come to a full stop before proceeding across or into 39th Street.

Glendenning Street. At the northwest and southeast corner of the intersection of Glendenning Street and 40th Street, to direct vehicular traffic proceeding northerly and southerly on Glendenning Street to come to a full stop before proceeding across or into 40th Street.

Glenview Avenue. At the southeast corner of Glenview and Hitchcock Avenue.

Glenview Avenue. At the northwest corner of Glenview Avenue and Curtiss Street.

Golden Bell Court. At the southwest corner of the intersection of Venard Road and Golden Bell Court, regulating the eastbound traffic on Golden Bell Court.

Grand Avenue. At the southeast corner of the intersection of Grand Avenue and 59th Street, to direct vehicular traffic proceeding northerly on Grand Avenue to come to a full stop before proceeding across or into 59th Street.

Grand Avenue. At the intersection of Grand Avenue and 74th Street, to direct traffic proceeding northerly or southerly on Grand Avenue or westerly on 74th Street, to come to a full stop before proceeding across or into said intersection.

Grand Avenue. At the southeast corner of the intersection of Grand Avenue and Burlington Avenue, regulating northbound traffic on Grand Avenue.

Grant Street. At the southwest corner of Lee Avenue, regulating eastbound traffic on Grant Street.

Grant Street. At the northeast corner of Downers Drive, regulating westbound traffic on Grant Street.

Grant Street. At the northeast corner and the southwest corner of the intersection of Grant Street and Cumnor Road, to direct vehicular traffic proceeding easterly or westerly on Grant Street to come to a full stop before proceeding across or into Cumnor Road.

Grant Street. At the southwest and northeast corners of the intersection of Grant Street and Fairview Avenue, to direct vehicular traffic proceeding easterly and westerly on Grant Street to come to a full stop before proceeding across or into Fairview Avenue.

Granville Avenue. At the northwest corner of the intersection of Granville Avenue and Burlington Avenue, regulating southbound traffic on Granville Avenue.

Grove Street. At the northeast corner of the intersection of Grove Street and Carpenter Street, to direct vehicular traffic proceeding westerly on Grove Street to come to a full stop before proceeding across or into Carpenter Street.

Grove Street. At the southwest corner of the intersection of Grove Street and Main Street, to direct vehicular traffic proceeding easterly on Grove Street to come to a full stop before proceeding across or into Main Street.

Haddow Street. At the northeast corner of the intersection of Haddow Street and Cross Street to direct traffic proceeding westerly on Haddow Street to come to a full stop before proceeding into Cross Street.

Hastings Avenue. At the northeast corner of the intersection of Hastings Avenue and Woodward Avenue, to direct vehicular traffic proceeding westerly on Hastings Avenue to come to a full stop before proceeding across or into Woodward Avenue.

Highland Avenue. At the northwest and southeast corners of the intersection of Highland Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly and northerly on Highland Avenue to come to a full stop before proceeding across or into Chicago Avenue.

Highland Avenue. At the northwest and southeast corners of the intersection of Highland Avenue and 41st Street, to direct vehicular traffic proceeding southerly and northerly on Highland Avenue to

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come to a full stop before proceeding across or into 41st Street.

Highland Avenue. At the northwest and southeast corners of the intersection of Highland Avenue and Rogers Street, to direct vehicular traffic proceeding southerly and northerly on Highland Avenue to come to a full stop before proceeding across or into Rogers Street.

Highland Court. At the northeast corner of the intersection of Highland Court and Highland Avenue regulating westbound traffic on Highland Court.

Hillcrest Road. At the northwest corner of the intersection of Hillcrest Road and Jefferson Avenue, regulating southbound traffic on Hillcrest Road.

Hitchcock Avenue. At the southwest corner of the intersection of Hitchcock Avenue and Cornell Avenue, to direct traffic proceeding easterly on Hitchcock Avenue to come to a full stop before proceeding into Cornell Avenue.

Hitchcock Avenue. At the southwest corner of the intersection of Hitchcock Avenue and Walnut Avenue, to direct vehicular traffic proceeding easterly on Hitchcock Avenue to come to a full stop before proceeding across or into Walnut Avenue.

Indianapolis Avenue. At the southwest and northeast corners of the intersection of Indianapolis Avenue and Cross Street, regulating the eastbound and westbound traffic on Indianapolis Avenue.

Indianapolis Avenue. At the northeast corner of the intersection of Indianapolis Avenue and Douglas Road, regulating westbound traffic on Indianapolis Avenue.

Indianapolis Avenue. At the southwest and northeast corners of the intersection of Indianapolis Avenue and Drendel Road, regulating the eastbound and westbound traffic on Indianapolis Avenue.

Indianapolis Avenue. At the southwest corner of the intersection of Indianapolis Avenue and Cumnor Road, regulating the eastbound traffic on Indianapolis Avenue.

Indianapolis Avenue. At the southwest and northeast corners of the intersection of Indianapolis Avenue and Fairview Avenue, to direct vehicular traffic proceeding easterly and westerly on Indianapolis Avenue to come to a full stop before proceeding across or into Fairview Avenue.

Indianapolis Avenue. At the northeast and southwest corners of the intersection of Indianapolis Avenue and Florence Avenue, to direct vehicular traffic proceeding easterly and westerly on Indianapolis Avenue to come to a full stop before proceeding across or into Florence Avenue.

Jacqueline Drive. At the southeast corner of the intersection of Jacqueline Drive and Gilbert Avenue, to direct vehicular traffic proceeding northerly on Jacqueline Drive to come to a full stop before proceeding across or into Gilbert Avenue.

Janet Street. At the northeast and southwest corners of the intersection of Janet Street and Downers Drive to direct traffic proceeding easterly or westerly on Janet Street to come to a full stop before proceeding into or across Downers Drive.

Janet Street. At the northeast and southwest corners of the intersection of Janet Street and Lee Avenue, to direct vehicular traffic proceeding easterly and westerly on Janet Street to come to a full stop before proceeding across or into Lee Avenue.

Jefferson Avenue. At the northeast corner of the intersection of Jefferson Avenue and Springside Avenue, to direct vehicular traffic proceeding westerly on Jefferson Avenue to come to a full stop before proceeding into Springside Avenue.

Jefferson Avenue. At the northeast and southwest corners of the intersection of Jefferson Avenue and Hillcrest Road, regulating westbound and eastbound traffic on Jefferson Avenue.

Jefferson Avenue. At the southwest and northeast corners of the intersection of Jefferson Avenue and Dunham Road, to direct vehicular traffic proceeding easterly and westerly on Jefferson Avenue to come to a full stop before proceeding across or into Dunham Road.

Jefferson Avenue. At the southwest and northeast corners of the intersection of Middaugh Avenue and Jefferson Avenue, regulating the eastbound and westbound traffic on Jefferson Avenue.

Katrine Avenue. At the southeast corner of the intersection of Katrine Avenue and Curtiss Street, to direct vehicular traffic proceeding northerly on Katrine Avenue to come to a full stop before proceeding across or into Curtiss Street.

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Lake Avenue. At the southwest corner of the intersection of Lake Avenue and Fairview Avenue, to direct vehicular traffic proceeding easterly on Lake Avenue to come to a full stop before proceeding across or into Fairview Avenue.

Lane Place. At the southeast corner of the intersection of Lane Place and Maple Avenue, to direct vehicular traffic proceeding northerly on Lane Place to come to a full stop before proceeding across or into Maple Avenue.

Lee Avenue. At the northwest corner of the intersection of Lee Avenue and Warren Avenue, regulating southbound traffic on Lee Avenue.

Lee Avenue. At the southeast corner of the intersection of Lee Avenue and Gilbert Avenue, to direct vehicular traffic proceeding northerly on Lee Avenue to come to a full stop before proceeding across or into Gilbert Avenue.

Lee Avenue. At the southeast and northwest corners of the intersection of Lee Avenue and Prairie Avenue, to direct vehicular traffic proceeding northerly and southerly on Lee Avenue to come to a full stop before proceeding across or into Prairie Avenue.

Lincoln Street. At the northeast corner of the intersection of Lincoln Street and Douglas Road, regulating westbound traffic on Lincoln Street.

Lincoln Street. At the southwest corner of the intersection of Lincoln Street and Sterling Road, regulating eastbound traffic on Lincoln Street.

Lincoln Street. At the northeast and southwest corners of the intersection of Lincoln Avenue and Main Street, to direct vehicular traffic proceeding westerly and easterly traffic on Lincoln Avenue to come to a full stop before proceeding across or into Main Street.

Lincoln Street. At the northeast and southwest corners of the intersection of Lincoln Street and Linscott Avenue, to direct vehicular traffic proceeding easterly and westerly on Lincoln Street to come to a full stop before proceeding into or across Linscott Avenue.

Lincoln Street. At the northeast and southwest corners of the intersection of Lincoln Street and Saratoga Avenue, to direct traffic proceeding easterly or westerly on Lincoln Street to come to a full stop before proceeding into or across Saratoga Avenue.

Lincoln Street. At the northeast and southwest corners of the intersection of Lincoln Street and Stanley Avenue, to direct traffic proceeding easterly or westerly on Lincoln Street to come to a full stop before proceeding into or across Stanley Avenue.

Lincoln Street. At the northeast and southwest corners of the intersection of Lincoln Street and Forest Avenue, to direct traffic proceeding easterly or westerly on Lincoln Street to come to a full stop before proceeding into or across Forest Avenue.

Lincoln Street. At the northeast and southwest corners of the intersection of Lincoln Street and Highland Avenue, to direct traffic proceeding easterly or westerly on Lincoln Street to come to a full stop before proceeding into or across Highland Avenue.

Lincoln Street. At the northeast corner of the intersection of Lincoln Street and Middaugh Avenue, to direct traffic proceeding westerly on Lincoln Street to come to a full stop before proceeding into or across Middaugh Avenue.

Lincoln Street. At the northeast and southwest corners of the intersection of Lincoln Street and Elm Street to direct vehicular traffic proceeding easterly or westerly on Lincoln Street to come to a full stop before proceeding across or into Elm Street.

Linden Place. At the southeast corner of the intersection of Linden Place and Chicago Avenue, to direct vehicular traffic proceeding northerly on Linden Place to come to a full stop before proceeding across or into Chicago Avenue.

Linden Place. At the southeast corner of the intersection of Linden Place and Franklin Street, to direct vehicular traffic proceeding northerly on Linden Place to come to a full stop before proceeding across or into Franklin Street.

Linden Place. At the northwest corner of the intersection of Linden Place and Rogers Street, to direct vehicular traffic proceeding southerly on Linden Place to come to a full stop before proceeding

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across or into Rogers Street.

Lindley Street. At the intersection of Lindley Street and 41st Street, to direct traffic proceeding northerly or southerly on Lindley Street to come to a full stop before proceeding across or into 41st Street.

Linscott Avenue. At the northwest corner of the intersection of Linscott Avenue and Warren Avenue, regulating southbound traffic on Linscott Avenue.

Linscott Avenue. At the southeast corner of the intersection of Linscott Avenue and Grant Street, regulating northbound traffic on Linscott Avenue.

Linscott Avenue. At the southeast and northwest corners of the intersection of Linscott Avenue and Chicago Avenue, to direct vehicular traffic proceeding northerly and southerly on Linscott Avenue to come to a full stop before proceeding across or into Chicago Avenue.

Longmeadow Road, at the northwest corner of Longmeadow Road and @ 41st Street.

Longmeadow Road, at the southeast corner of Longmeadow Road and Tower Road.

Loomes Avenue. At the northeast corner of the intersection of Loomes Avenue and Woodward Avenue, to direct traffic proceeding westerly on Loomes Avenue to come to a full stop before proceeding across or into Woodward Avenue.

Lyman Avenue. At the southeast and northwest corners of the intersection of Lyman Avenue and 59th Street, to direct vehicular traffic proceeding northerly and southerly on Lyman Avenue to come to a full stop before proceeding across or into 59th Street.

Mackie Place. At the northwest corner of the intersection of Mackie Place and Maple Avenue, to direct vehicular traffic proceeding southerly on Mackie Place to come to a full stop before proceeding across or into Maple Avenue.

Maplewood Place. At the southeast corner of the intersection of Maplewood Place and Maple Avenue, to direct vehicular traffic proceeding northerly on Maplewood Place to come to a full stop before proceeding across or into Maple Avenue.

Middaugh Avenue. At the northwest corner of Middaugh Avenue and Warren Avenue, regulating southbound traffic on Middaugh Avenue.

Middaugh Avenue. At the northwest and southeast corners of the intersection of Middaugh Avenue and Franklin Street, regulating both northbound and southbound traffic on Middaugh Avenue.

Middaugh Avenue. At the northwest and southeast corners of the intersection of Middaugh Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly and northerly on Middaugh Avenue to come to a full stop before proceeding across or into Chicago Avenue.

Middaugh Avenue. At the northwest corner of the intersection of Middaugh Avenue and 59th Street, to direct vehicular traffic proceeding southerly on Middaugh Avenue to come to a full stop before proceeding across or into 59th Street.

Middaugh Avenue. At the northwest and southeast corners of the intersection of Middaugh Avenue and Blanchard Street, regulating both northbound and southbound traffic on Middaugh Avenue.

Mochel Drive. At the southeast and southwest corners of the intersection of Mochel Drive and Burlington Avenue, to direct vehicular traffic proceeding northerly on Mochel Drive to come to a full stop before proceeding across or into Burlington Avenue.

Montgomery Avenue. At the northwest corner of Montgomery Avenue and Warren Avenue, regulating southbound traffic on Montgomery Avenue.

Montgomery Avenue. At the southeast corner of Montgomery Avenue and Chicago Avenue, regulating northbound traffic on Montgomery Avenue.

Montgomery Avenue. At the southeast and northwest corners of the intersection of Montgomery Avenue and Prairie Avenue, to direct vehicular traffic proceeding northerly and southerly on Montgomery Avenue to come to a full stop before proceeding across or into Prairie Avenue.

Northcott Avenue. At the northwest corner of Northcott Avenue and Warren Avenue, regulating southbound traffic on Northcott Avenue.

Northcott Avenue. At the southeast corner of Northcott Avenue and Chicago Avenue, regulating northbound traffic on Northcott Avenue.

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Northcott Avenue. At the southeast and northwest corners of the intersection of Northcott Avenue and Prairie Avenue, to direct vehicular traffic proceeding northerly and southerly on Northcott Avenue to come to a full stop before proceeding across or into Prairie Avenue.

Oak Hill Court. At the southwest and northeast corners of the intersection of Oak Hill Court and Venard Road, regulating the eastbound and westbound traffic on Oak Hill Court.

Oakwood Avenue. At the northwest corner of Oakwood Avenue and Warren Avenue, regulating southbound traffic on Oakwood Avenue.

Otis Avenue. At the northeast corner of the intersection of Otis Avenue and Douglas Road, regulating westbound traffic on Otis Avenue.

Otis Avenue. At the southwest corner of the intersection of Otis Avenue and Cumnor Road, regulating the eastbound traffic on Otis Avenue.

Oxnard Drive. At the northeast and southwest corners of the intersection of Oxnard Drive and Woodward Avenue, to direct vehicular traffic proceeding westerly and easterly on Oxnard Drive to come to a full stop before proceeding across or into Woodward Avenue.

Parkway Drive. At the southeast corner of Franklin Street, regulating northbound traffic on Parkway Drive.

Parkway Drive. At the northeast corner of Linscott Avenue, regulating westbound traffic on Parkway Drive.

Pershing Avenue. At the southeast and northwest corners of the intersection of Pershing Avenue and Prairie Avenue, to direct vehicular traffic proceeding northerly and southerly on Pershing Avenue to come to a full stop before proceeding across or into Prairie Avenue.

Plymouth Street. At the northeast corner of the intersection of 61st Street and Plymouth Street, regulating the northbound traffic on Plymouth Street.

Plymouth Street. At the northwest corner of the intersection of 62nd Street and Plymouth Street, regulating the southbound traffic on Plymouth Street.

Pomeroy Court. At the northwest and southeast corners of the intersection of Pomeroy Court and 35th Street, regulating the northbound and southbound traffic on Pomeroy Court.

Powell Street. At the southeast and northwest corners of the intersection of Powell Street and Norfolk Street to direct traffic proceeding northerly and southerly on Powell Street to come to a full stop before proceeding into or across Norfolk Street.

Powell Street. At the northwest and southeast corners of the intersection of Powell Street and 68th Street to direct vehicular traffic proceeding northerly or southerly on Powell Street to come to a full stop before proceeding into 68th Street.

Prairie Avenue. At the southwest corner of the intersection of Prairie Avenue and Florence Avenue, regulating the eastbound traffic on Prairie Avenue.

Prince Street. At the northwest and southeast corners of the intersection of Prince and Lincoln Streets, to direct traffic proceeding northerly or southerly on Prince Street to come to a full stop before proceeding into or across Lincoln Street.

Prince Street. At the northwest corner of Franklin Street, regulating southbound traffic on Prince Street.

Prince Street. At the southeast and northwest corners of the intersection of Prince Street and Chicago Avenue, to direct vehicular traffic proceeding northerly and southerly on Prince Street to come to a full stop before proceeding across or into Chicago Avenue.

Prospect Avenue. At the southeast corner of the intersection of Prospect Avenue and Lincoln Street, regulating northbound traffic on Prospect Avenue.

Prospect Avenue. At the northwest and southeast corners of the intersection of Prospect Avenue and Sherman Street, to direct vehicular traffic proceeding southerly and northerly on Prospect Avenue to come to a full stop before proceeding across or into Sherman Street.

Prospect Avenue. At the northwest corner of the intersection of Prospect Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly on Prospect Avenue to come to a full stop before

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proceeding across or into Chicago Avenue.

Prospect Avenue. At the northwest and southeast corners of the intersection of Prospect Avenue and Rogers Street, to direct vehicular traffic proceeding southerly and northerly on Prospect Avenue to come to a full stop before proceeding across or into Rogers Street.

Prospect Avenue. At the northwest and southeast corners of the intersection of Franklin Street and Prospect Avenue, to direct traffic proceeding northerly or southerly on Prospect Avenue to come to a full stop before proceeding across or into Franklin Street.

Provence Court. At the southwest corner of the intersection of Provence Court and Walnut Avenue, regulating the eastbound traffic on Provence Court.

Puffer Road. At the southeast corner of the intersection of Puffer Road and Haddow Avenue to direct traffic proceeding northerly on Puffer Road to come to a full stop before proceeding into or across Haddow Avenue.

Randall Street. At the intersection of Randall Street and Lyman Avenue, to direct traffic proceeding easterly or westerly on Randall Street to come to a full stop before proceeding across or into Lyman Avenue.

Randall Street. At the northwest and southeast corners of the intersection of Randall Street and Benton Avenue, to direct vehicular traffic proceeding northerly and southerly on Benton Avenue to come to a full stop before proceeding across or into Randall Street.

Randall Street. At the northwest and southeast corners of the intersection of Randall Street and Fairmount Avenue to direct vehicular traffic proceeding northerly or southerly on Fairmount Avenue to come to a full stop before proceeding into Randall Street.

Randall Street. At the northeast and southwest corners of the intersection of Randall Street and Washington Street, to direct vehicular traffic proceeding easterly and westerly on Randall Street to come to a full stop before proceeding across or into Washington Street.

Ridgewood Circle. At the southwest corner of the intersection of Ridgewood Circle and Dunham Road, to direct vehicular traffic proceeding easterly on Ridgewood Circle to come to a full stop before proceeding across or into Dunham Road.

Rogers Street. At the northeast corner of the intersection of Rogers Street and Main Street, to direct vehicular traffic proceeding westerly on Rogers Street to come to a full stop before proceeding across or into Main Street.

Rogers Street. At the southwest corner of the intersection of Rogers Street and Maple Avenue, to direct vehicular traffic proceeding easterly on Rogers Street to come to a full stop before proceeding across or into Maple Avenue.

Rose Avenue. At the northwest corner of the intersection of Rose Avenue and Burlington Avenue regulating the southbound traffic on Rose Avenue.

Rose Avenue. At the southeast corner of the intersection of Rose Avenue and Haddow Avenue, regulating the northbound traffic on Rose Avenue.

Roslyn Road, at the southeast corner of Roslyn Road and Tower Road.

Roslyn Road, at the northwest corner of Roslyn Road and 41st Street.

Ross Court. At the southwest corner of the intersection of Ross Court and Carpenter Street, to direct vehicular traffic proceeding easterly on Ross Court to come to a full stop before proceeding across or into Carpenter Street.

Saratoga Avenue. At the northwest corner of Saratoga Avenue and Warren Avenue, regulating southbound traffic on Saratoga Street.

Saratoga Avenue. At southeast corner of Franklin Street, regulating northbound traffic on Saratoga Street.

Saratoga Avenue. At northwest corner of Franklin Street, regulating southbound traffic on Saratoga Street.

Saratoga Avenue. At the intersection of Saratoga Avenue and Black Oak Drive, to direct traffic proceeding northerly or southerly on Saratoga Avenue or westerly on Black Oak Drive to come to a full

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stop before proceeding across or into said intersection.

Saratoga Avenue. At the southeast corner and the northwest corner of the intersection of Saratoga Avenue and 35th Street, to direct traffic proceeding northerly or southerly on Saratoga Avenue to come to a full stop before proceeding across or into 35th Street.

Saratoga Avenue. At the southeast corner of the intersection of Saratoga Avenue and 41st Street, to direct vehicular traffic proceeding northerly on Saratoga Avenue to come to a full stop before proceeding across or into 41st Street.

Saratoga Avenue. At the northwest corner of the intersection of Saratoga Avenue and Norfolk Street to direct traffic proceeding southerly on Saratoga Avenue to come to a full stop before proceeding across or into Norfolk Street.

Saratoga Avenue. At the northwest and southeast corners of the intersection of 39th Street and Saratoga Avenue, regulating northbound and southbound traffic on Saratoga Avenue.

Saylor Street. At the northeast corner of the intersection of Saylor Street and Dunham Road, to direct vehicular traffic proceeding westerly on Saylor Street to come to a full stop before proceeding across or into Dunham Road.

School Street, at the southeast corner of School Street and 39th Street.

School Street, at the northwest corner of School Street and Herbert Street.

Seeley Avenue. At the northwest corner of Seeley Avenue and Warren Avenue, regulating southbound traffic on Seeley Avenue.

Seeley Avenue. At the southeast and northwest corners of the intersection of Seeley Avenue and Prairie Avenue, to direct vehicular traffic proceeding northerly and southerly on Seeley Avenue to come to a full stop before proceeding across or into Prairie Avenue.

Sheldon Avenue. At the southwest corner of the intersection of Sheldon Avenue and Cumnor Road, regulating the eastbound traffic on Sheldon Avenue.

Scheldrup Street. At the northwest corner of the intersection of Scheldrup Street and Branding Lane regulating the southbound traffic on Scheldrup Street.

Sheridan Place. At the northeast corner of the intersection of Sheridan Place and Washington Street, to direct vehicular traffic proceeding westerly on Sheridan Place to come to a full stop before proceeding across or into Washington Street.

Sherman Street. At the northeast corner of Saratoga Avenue, regulating westbound traffic on Sherman Street.

Sherman Street. At the northeast corner of Prince Street, regulating westbound traffic on Sherman Street.

Sherman Street. At the northeast corner of the intersection of Sherman Street and Elm Street, regulating westbound traffic on Sherman Street.

Sherman Street. At the southwest corner of the intersection of Sherman Street and Highland Avenue, regulating eastbound traffic on Sherman Street.

Sherman Street. At the southwest corner of the intersection of Sherman Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on Sherman Street to come to a full stop before proceeding across or into Fairview Avenue.

Sherman Street. At the northeast corner and the southwest corner of the intersection of Sherman Street and Stanley Avenue, to direct vehicular traffic proceeding easterly or westerly on Sherman Street to come to a full stop before proceeding across or into Stanley Avenue.

Sherwood Avenue. At the northwest corner of the intersection of Sherwood Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly on Sherwood Avenue to come to a full stop before proceeding across or into Chicago Avenue.

Sherwood Avenue. At the southeast corner of the intersection of Sherwood Avenue and Grant Street, to direct vehicular traffic proceeding northerly on Sherwood Avenue to come to a full stop before proceeding across or into Grant Street.

Stanford Avenue. At the northeast corner of the intersection of Stanford Avenue and Dunham

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Road, to direct vehicular traffic proceeding westerly on Stanford Avenue to come to a full stop before proceeding across or into Dunham Road.

Stanley Avenue. At the northwest corner of the intersection of Stanley Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly on Stanley Avenue to come to a full stop before proceeding across or into Chicago Avenue.

Stanley Avenue. At the northwest and southeast corners of the intersection of Stanley Avenue and Grant Street, to direct vehicular traffic proceeding southerly and northerly on Stanley Avenue to come to a full stop before proceeding across or into Grant Street.

Stanley Avenue. At the northwest corner of the intersection of Stanley Avenue and Rogers Street, to direct vehicular traffic proceeding southerly on Stanley Avenue to come to a full stop before proceeding across or into Rogers Street.

Stanley Avenue. At the northwest and southeast corners of the intersection of Franklin Street and Stanley Avenue, to direct traffic proceeding northerly or southerly on Stanley Avenue to come to a full stop before proceeding across or into Franklin Street.

Statton Street. At the southeast corner of the intersection of Statton Street and Grant Street, to direct vehicular traffic proceeding northerly on Statton Street to come to a full stop before proceeding across or into Grant Street.

Statton Street. At the northwest corner of the intersection of Statton Street and Lincoln Street, regulating southbound traffic on Statton Street.

Sterling Road. At the northwest corner of the intersection of Sterling Road and Sherman Street, regulating southbound traffic on Sterling Road.

Sterling Road. At the northwest and southeast corners of the intersection of Sterling Road and 41st Street, to direct vehicular traffic proceeding northerly and southerly on Sterling Road to come to a full stop before proceeding across or into 41st Street.

Sterling Road. At the southeast and northwest corners of the intersection of Sterling Road and 39th Street, to direct vehicular traffic proceeding northerly and southerly on Sterling Road to come to a full stop before proceeding across or into 39th Street.

Sterling Road. At the northwest corner of the intersection of Sterling Road and Chicago Avenue, to direct vehicular traffic proceeding southerly on Sterling Road to come to a full stop before proceeding across or into Chicago Avenue.

Stonewall Avenue. At the northwest and southeast corners of the intersection of Stonewall Avenue and Prairie Avenue, to direct vehicular traffic proceeding southerly and northerly on Stonewall Avenue to come to a full stop before proceeding across or into Prairie Avenue.

Stonewall Avenue. At the northwest and southeast corners of the intersection of Stonewall Avenue and Grant Street, to direct traffic proceeding northerly or southerly on Stonewall Avenue to come to a full stop before proceeding into or across Grant Street.

Stonewall Avenue. At the northwest and southeast corners of the intersection of Stonewall Avenue and Oxnard Road, to direct traffic proceeding northerly or southerly on Stonewall Avenue to come to a full stop before proceeding across or into Oxnard Road.

Summit Street. At the southwest corner of the intersection of Summit Street and Washington Street, to direct vehicular traffic proceeding easterly on Summit Street to come to a full stop before proceeding into Washington Street.

Summit Street. At the northeast and southwest corners of the intersection of Summit Street and Main Street, to direct vehicular traffic proceeding westerly and easterly on Summit Street to come to a full stop before proceeding across or into Main Street.

Tower Road, at the southwest corner of Tower Road and Cumnor Road.

Tower Road, at the southwest corner of Tower Road and Williams Street.

Thatcher Road. At the southwest corner of Thatcher Road and Walnut Avenue, to direct vehicular traffic proceeding easterly on Thatcher Road to come to a full stop before proceeding into or across Walnut Avenue.

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Thornwood Drive. At the southwest corner of the intersection of Thornwood Drive and Dunham Road, to direct vehicular traffic proceeding easterly on Thornwood Drive to come to a full stop before proceeding across or into Dunham Road.

Traube Avenue. At the southwest and northeast corners of the intersection of Traube Avenue and Roslyn Road, to direct traffic proceeding in an easterly and westerly direction on Traube Avenue to come to a full stop before proceeding into or across Roslyn Road.

Venard Road. At the northwest corner of the intersection of Venard Road and 35th Street, regulating southbound traffic on Venard Road.

Victor Street. At the northwest and southeast corners of the intersection of Victor Street and 7th Street, regulating northbound and southbound traffic on Victor Street.

Victor Street. At the southeast corner of the intersection of Victor Street and for 2nd Street, regulating the northbound traffic on Victor Street.

Virginia Street. At the northeast and southwest corners of the intersection of Virginia Street and Lee Avenue, to direct vehicular traffic proceeding easterly and westerly on Virginia Street to come to a full stop before proceeding across or into Lee Avenue.

Wall Place. At the northwest corner of the intersection of Wall Place and 59th Street, to direct vehicular traffic proceeding southerly on Wall Place to come to a full stop before proceeding across or into 59th Street.

Wallbank Avenue. At the northwest corner of Wallbank Avenue and Warren Avenue, regulating southbound traffic on Wallbank Avenue.

Wallbank Avenue. At the southeast corner of Wallbank Avenue and Chicago Avenue, regulating north bound traffic on Wallbank Avenue.

Wallbank Avenue. At the northwest and southeast corners of the intersection of Wallbank Avenue and Prairie Avenue, to direct vehicular traffic proceeding southerly and northerly on Wallbank Avenue to come to a full stop before proceeding across or into Prairie Avenue.

Warren Avenue. at the northwest corner of the intersection of Warren Avenue and Burlington Avenue, regulating southbound traffic on Warren Avenue.

Warren Avenue. At the southeast corner of the intersection of Warren Avenue and Forest Avenue, to direct vehicular traffic proceeding easterly on Warren Avenue to come to a full stop before proceeding across or into Forest Avenue.

Warren Avenue. At the northeast and southwest corners of the intersection of Highland Avenue and Warren Avenue, which signs shall be so located as to direct vehicular traffic proceeding easterly and westerly on Warren Avenue, to come to a full stop before proceeding into Highland Avenue.

Warren Avenue. At the southwest corner of Warren Avenue and Forest Avenue, to direct traffic proceeding easterly on Warren Avenue to come to a full stop before proceeding across or into Forest Avenue.

Warren Avenue. At the northeast corner of Warren Avenue at the East Loop ramp.

Washington Street. At the northwest and southeast corners of the intersection of Washington Street and Blanchard Street, to direct traffic proceeding northerly or southerly on Washington Street to come to a full stop before proceeding across or into Blanchard Street.

Washington Street. At the northwest corner of the intersection of Washington Street and Warren Avenue, to direct traffic proceeding southerly on Washington Street to come to a full stop before proceeding across or into Warren Avenue.

Washington Street. At the northwest and southeast corners of the intersection of Washington Street and 59th Street, to direct vehicular traffic proceeding southerly and northerly on Washington Street to come to a full stop before proceeding across or into 59th Street.

Washington Street. At the northeast and southwest corners of the intersection of Washington Street and Lincoln Avenue, to direct vehicular traffic proceeding westerly and easterly on Washington Street to come to a full stop before proceeding across or into Lincoln Avenue.

Washington Street. At the northwest corner of the intersection of Washington Street and Clyde

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Avenue, to direct traffic proceeding southerly on Washington Street to come to a full stop before proceeding across or into Clyde Avenue.

Washington Street. At the northeast corner of the intersection of Washington Street and Clyde Avenue, to direct traffic proceeding northerly on Washington Street to come to a full stop before proceeding across or into Clyde Avenue.

Webster Place. At the southeast corner of the intersection of Webster Street and 59th Street, to direct vehicular traffic proceeding northerly on Webster Street to come to a full stop before proceeding across or into 59th Street.

Webster Street. At the northwest corner of the intersection of Webster Street and 59th Street, to direct vehicular traffic proceeding southerly on Webster Street to come to a full stop before proceeding across or into 59th Street.

Webster Street. At the northwest and southeast corners of the intersection of Webster Street and Kenyon Street, to direct traffic proceeding northerly or southerly on Webster Street to come to a full stop before proceeding across or into Kenyon Street.

Webster Street. At the southeast corner of the intersection of Webster Street and Randall Street, regulating northbound traffic on Webster Street.

Wells Street. At the southwest corner of the intersection of Wells Street and Springside Avenue to direct traffic proceeding easterly on Wells Street to come to a full stop before proceeding across or into Springside Avenue.

West End Road, at the northwest corner of West End Road and 41st Street.

West End Road, at the southeast corner of West End Road and Tower Road.

Western Avenue. At the southeast corner of the intersection of Western Avenue and Haddow Avenue, regulating northbound traffic on Western Avenue.

Whiffin Place. At the northwest corner of the intersection of Whiffin Place and Rogers Street, to direct vehicular traffic proceeding southerly on Whiffin Place to come to a full stop before proceeding across or into Rogers Street.

Wilcox Avenue. At the northwest corner of the intersection of Wilcox Avenue and Burlington Avenue, regulating the southbound traffic on Wilcox Avenue.

Wilson Avenue. At the northwest and southeast corners of the intersection of Wilson Avenue and Grant Street, to direct vehicular traffic proceeding northerly and southerly on Wilson Avenue to come to a full stop before proceeding into Grant Street.

Wilson Avenue. At the northwest corner of the intersection of Wilson Avenue and Chicago Avenue, to direct vehicular traffic proceeding southerly on Wilson Avenue to come to a full stop before proceeding across or into Chicago Avenue.

Wilson Street. At the northeast corner of the intersection of Wilson Street and Linden Place, regulating westbound traffic on Wilson Street.

Williams Street. At the northwest and southeast corners of the intersection of Williams Street and 39th Street, regulating the northbound and southbound traffic on Williams Street.

Wisconsin Avenue. At the northeast corner of Wisconsin Avenue and Walnut Avenue, to direct vehicular traffic proceeding westerly on Wisconsin Avenue to come to a full stop before proceeding across or into Walnut Avenue.

Woodward Avenue. At the northwest and southeast corners of the intersection of Grant Street and Woodward Avenue, to direct traffic proceeding northerly or southerly on Woodward Avenue to come to a full stop before proceeding across or into Grant Street.

Woodward Avenue. At the northwest and southeast corners of the intersection of Woodward Avenue and Prairie Avenue, to direct vehicular traffic proceeding southerly and northerly on Washington Street to come to a full stop before proceeding across or into Prairie Avenue.

2nd Street. At the southwest corner of the intersection of 2nd Street and Williams Street to direct traffic proceeding easterly on 2nd Street to come to a full stop before proceeding into Williams Street.

3rd Street. At the northeast and southwest corners of the intersection of 3rd Street and Florence

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Avenue, to direct vehicular traffic proceeding easterly and westerly on 3rd Street to come to a full stop before proceeding across or into Florence Avenue.

3rd Street. At the northeast corner of the intersection of 3rd Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 3rd Street to come to a full stop before proceeding across or into Fairview Avenue.

4th Street. At the northeast corner of the intersection of 4th Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 4th Street to come to a full stop before proceeding across or into Fairview Avenue.

4th Street. At the northeast and southwest corners of the intersection of 4th Street and Florence Avenue, regulating both eastbound and westbound traffic on 4th Street.

4th Street. At the northeast and southwest corners of the intersection of 4th Street and Victor Street, regulating both eastbound and westbound traffic on 4th Street.

4th Street (south). At the southwest corner of the intersection of 4th Street (south) and Cumnor Road, regulating the eastbound traffic on 4th Street.

4th Street (north). At the northeast corner of the intersection of 4th Street (north) and Cumnor Road regulating the westbound traffic on 4th Street.

4th Street. At the southeast, southwest and northwest corners of the intersection of 4th Street and Williams Street, regulating the northbound, southbound and eastbound traffic of 4th Street and Williams Street.

5th Street. At the northeast and southwest corners of the intersection of 5th Street and Florence Avenue, to direct vehicular traffic proceeding easterly and westerly on 5th Street to come to a full stop before proceeding across or into Florence Avenue.

5th Street. At the northeast corner of the intersection of 5th Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 5th Street to come to a full stop before proceeding across or into Fairview Avenue.

5th Street. At the southwest corner of the intersection of 5th Street and Cumnor Road, regulating the eastbound traffic on 5th Street.

6th Street. At the northeast corner of the intersection of 6th Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 6th Street to come to a full stop before proceeding across or into Fairview Avenue.

6th Street. At the northeast and southwest corners of the intersection of 6th Street and Victor Street, regulating the eastbound and westbound traffic on 6th Street.

6th Street. At the southwest corner of the intersection of 6th Street and Williams Street, regulating the eastbound traffic on 6th Street.

6th Street. At the southeast and northwest corners of the intersection of 6th Street and Cumnor Road, regulating the northbound and southbound traffic on Cumnor Road.

7th Street. At the northeast corner and the southwest corner of the intersection of 7th Street and Cumnor Road, to direct traffic proceeding easterly or westerly on 7th Street to come to a full stop before proceeding across or into Cumnor Road.

7th Street. At the northeast corner of the intersection of 7th Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 7th Street to come to a full stop before proceeding across or into Fairview Avenue.

7th Street. At the northeast and southwest corners of the intersection of 7th Street and Florence Avenue, regulating both eastbound and westbound traffic on 7th Street.

8th Street. At the northeast and southwest corners of the intersection of 8th Street and Cumnor Road, regulating both eastbound and westbound traffic on 8th Street.

8th Street. At the northeast and southwest corners of the intersection of 8th Street and Florence Avenue, regulating the eastbound and westbound traffic on 8th Street.

8th Street. At the northeast and southwest corners of the intersection of 8th Street and Victor Street, regulating the eastbound and westbound traffic on 8th Street.

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8th Street. At the southwest corner of the intersection of 8th Street and Williams Street, regulating the eastbound traffic on 8th Street.

40th Place. At the northeast corner of the intersection of 40th Place and Fairview Avenue, to direct vehicular traffic proceeding westerly on 40th Place to come to a full stop before proceeding across or into Fairview Avenue.

40th Place, at the southwest corner of 40th Place and 41st Street/Shady Lane.

40th Street. At the southwest corner of the intersection of 40th Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 40th Street to come to a full stop before proceeding across or into Fairview Avenue.

40th Street. At the southwest and northeast corners of the intersection of 40th Street and Sterling Road, regulating eastbound and westbound traffic on 40th Street at such intersections.

40th Street, at the southwest and northeast corners of 40th Street and Sterling Road.

40th Street, at the northeast corner of 40th Street and Williams Street.

41st Street. At the southwest corner of the intersection of 41st Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 41st Street to come to a full stop before proceeding across or into Fairview Avenue.

41st Street. At the northeast and southwest corners of the intersection of 41st Street and Glendenning Road, to direct vehicular traffic proceeding easterly and westerly on 41st Street to come to a full stop before proceeding across or into Glendenning Road.

41st Street. At the northeast corner of the intersection of 41st Street and Saratoga Avenue, to direct traffic proceeding westerly on 41st Street to come to a full stop before proceeding across or into Saratoga Avenue.

41st Street. At the northeast and southwest corners of the intersection of 41st Street and Washington Street, to direct vehicular traffic proceeding easterly and westerly on 41st Street to come to a full stop before proceeding across or into Washington Street.

41st Street. At the northeast corner and the southwest corner of the intersection of 41st Street and Williams Street, to direct vehicular traffic proceeding easterly or westerly on 41st Street to come to a full stop before proceeding across or into Williams Street.

41st Street, at the northeast corner of 41st Street and Cumnor Road.

56th Street. At the northeast corner of the intersection of 56th Street and Fairview Avenue, to direct vehicular traffic proceeding westerly on 56th Street to come to a full stop before proceeding across or into Fairview Avenue.

57th Street. At the southwest corner of the intersection of 57th Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 57th Street to come to a full stop before proceeding across or into Fairview Avenue.

61st Street. At the northeast corner of the intersection of Brookbank Road and 61st Street, to direct vehicular traffic proceeding westerly on 61st Street to come to a complete stop before proceeding southerly into Brookbank Road.

61st Street. At the northeast and southwest corners of the intersection of Chase Avenue and 61st Street, which signs shall be so located as to direct vehicular traffic proceeding easterly and westerly on 61st Street, to come to a full stop before proceeding into Chase Avenue.

61st Street. At the northeast and southwest corners of the intersection of Puffer Road and 61st Street, which signs shall be located as to direct vehicular traffic proceeding easterly and westerly on 61st Street, to come to a full stop before proceeding into Chase Avenue.

61st Street. At the southwest and northeast corners of the intersection of 61st Street and Chase Avenue, to direct vehicular traffic proceeding easterly and westerly on 61st Street to come to a full stop before proceeding across or into Chase Avenue.

62nd Street. At the southwest corner of the intersection of 62nd Street and Dunham Road, to direct vehicular traffic proceeding easterly on 62nd Street to come to a full stop before proceeding across or into Dunham Road.

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64th Street. At the northeast corner of the intersection of 64th Street and Puffer Road, to direct vehicular traffic proceeding westerly on 64th Street to come to a full stop before proceeding across or into Puffer Road.

66th Street. At the southwest corner of the intersection of 66th Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 66th Street to come to a full stop before proceeding across or into Fairview Avenue.

67th Court. At the southwest corner of the intersection of 67th Court and Fairview Avenue, to direct vehicular traffic proceeding easterly on 67th Court to come to a full stop before proceeding across or into Fairview Avenue.

67th Place. At the northeast corner of the intersection of 67th Place and Dunham Road, to direct vehicular traffic proceeding westerly on 67th Place to come to a full stop before proceeding across or into Dunham Road.

67th Street. At the northeast and southwest corners of the intersection of 67th Street and Dunham Road, to direct vehicular traffic proceeding westerly and easterly on 67th Street to come to a full stop before proceeding across or into Dunham Road.

68th Street. At the northeast corner of the intersection of 68th Street and Dunham Road, to direct vehicular traffic proceeding westerly on 68th Street to come to a full stop before proceeding across or into Dunham Road.

68th Street. At the southwest corner of the intersection of 68th Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 68th Street to come to a full stop before proceeding across or into Fairview Avenue.

72nd Street. At the southwest corner of the intersection of 72nd Street and Fairmount Avenue, to direct vehicular traffic proceeding easterly on 72nd Street to come to a full stop before proceeding across or into Fairmount Avenue.

72nd Street. At the northwest intersection of 72nd Street and Fairmount Avenue to direct vehicular traffic proceeding southerly on Fairmount Avenue and easterly on 72nd Street to come to a full stop before proceeding into said intersection.

72nd Street. At the southeast intersection of 72nd Street and Fairmount Avenue to direct vehicular traffic proceeding northerly on Fairmount Avenue and westerly on 72nd Street to come to a full stop before proceeding into said intersection.

73rd Street. At the southwest corner of the intersection of 73rd Street and Fairmount Avenue, to direct vehicular traffic proceeding easterly on 73rd Street to come to a full stop before proceeding across or into Fairmount Avenue.

73rd Street. At the northeast corner of the intersection of 73rd Street and Old Main Street, to direct vehicular traffic proceeding westerly on 73rd Street to come to a full stop before proceeding across or into Old Main Street.

74th Street. At the southwest corner of the intersection of 74th Street and Fairview Avenue, to direct vehicular traffic proceeding easterly on 74th Street to come to a full stop before proceeding across or into Fairview Avenue. (Ord. No. 1023, § 1; Ord. No. 1097, § 1; Ord. No. 1135, § 1; Ord. No. 1136, § 1; Ord. No. 1178, § 1; Ord. No. 1245, § 1; Ord. No. 1303, § 1; Ord. No. 1304, § 1; Ord. No. 1332, §§ 1 to 3; Ord. No. 1353, §§ 1, 2; Ord. No. 1363, § 1; Ord. No. 1364, § 1; Ord. No. 1366, § 1; Ord. No. 1367, § 1; Ord. No. 1368, §§ 1, 2; Ord. No. 1374, §§ 1, 2; Ord. No. 1405, § 1; Ord. No. 1413, § 1; Ord. No. 1435, § 1; Ord. No. 1437, §§ 1, 2; Ord. No. 1444, §§ 1 to 5; Ord. No. 1446, §§ 1 to 4; Ord. No. 1451, § 1; Ord. No. 1454, §§ 1, 2; Ord. No. 1460, § 1; Ord. No. 1461, §§ 1, 2; Ord. No. 1482, § 1; Ord. No. 1487, § 1; Ord. No. 1498, § 1; Ord. No. 1517, § 1; Ord. No. 1538, § 1; Ord. No. 1596, § 1; Ord. No. 1606, § 1; Ord. No. 1607, § 1; Ord. No. 1707, § 3; Ord. No. 1717, § 3; Ord. No. 1722, § 3; Ord. No. 1760, § 5; Ord. No. 1781, § 7; Ord. No. 1815, § 3; Ord. No. 1817, § 4; Ord. No. 1837, § 3; Ord. No. 1866, § 3; Ord. No. 1911, § 3; Ord. No. 1933, § 4; Ord. No. 1946, § 3; Ord. No. 2095, § 4; Ord. No. 2104, § 8; Ord. No. 2141, § 2; Ord. No. 2219, § 2; Ord. No. 2297, § 2; Ord. No. 2303, § 2; Ord. No. 2323, § 2; Ord. No. 2333, § 2; Ord. No. 2348, § 2; Ord. No. 2352, § 2; Ord. No. 2353, § 2; Ord. No. 2360, § 2; Ord. No. 2372, § 2; Ord. No.

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2380, § 2; Ord. No. 2391, § 2; Ord. No. 2485, § 1; Ord. No. 2550, § 4; Ord. No. 2560, § 2; Ord. No. 2611, § 2; Ord. No. 2620, § 2; Ord. No. 2624, § 2; Ord. No. 2663, § 5; Ord. No. 2675, § 2; Ord. No. 2682, § 3; Ord. No. 2788, § 2; Ord. No. 2804, § 2; Ord. No. 2829, § 2; Ord. No. 2844, § 2; Ord. No. 2867, § 2; Ord. No. 2879, § 2; Ord. No. 2899, § 2; Ord. No. 2914, § 2; Ord. No. 2995, § 3; Ord. No. 3022, § 2; Ord. No. 3023, § 2; Ord. No. 3035, § 2; Ord. No. 3102, § 6; Ord. No. 3113, § 2; Ord. No. 3117, § 4; Ord. No. 3123 § 2; Ord. No. 3153 § 2; Ord. No. 3192, § 3; Ord. No. 3269, § 2; Ord. No. 3291, § 2.)

Section 3. That Section 14.80.1. is hereby amended to read as follows:

14.80.1. All-way stop signs.

There shall be erected in conspicuous places at the following intersections signs lettered with the words "All-Way Stop", which signs shall be so located as to direct all traffic to come to a full stop before proceeding into the intersection:

Barneswood Drive and Saratoga Avenue.
Blodgett Avenue and 60th Street
Bolson Drive and Springside Avenue.
Chicago Avenue and Douglas Road.
Chicago Avenue and Oakwood Avenue.
Chicago Avenue and Saratoga Avenue.
Chicago Avenue and Lee Avenue.
Chicago Avenue and Roslyn Road.
Chicago Avenue and Cumnor Road.
Claremont Drive and Fairmount Avenue.
Curtiss Street and Washington Street.
Douglas Road and Franklin Street.
Douglas Road and 40th Street.
Downers Drive and Herbert Street.
Downers Drive and 40th Street.
Dunham Road, Andrus Avenue and 71st Street.
Earlston Road and 40th Street.
Earlston Road and 41st Street.
Elm Street and 40th Street.
Elm Street and 41st Street.
Florence Avenue and Grant Street.
Forest Avenue and Lincoln Street.
Grand Avenue and Hill Street.
Grant Street and Highland Avenue.
Grant Street and Middaugh Avenue.
Grant Street and Oakwood Avenue.
Grant Street and Prince Street.
Grant Street and Saratoga Avenue.
Grant Street and Seeley Avenue.
Grant Street and Stanley Avenue.
Grant Street/Traube Avenue and Cumnor Road.
Haddow Avenue and Edward Avenue.
Hill Street and Blodgett Street.
Highland Avenue and Franklin Street.
Highland Avenue and Warren Avenue.

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Kenyon Street and Washington Street.
Lacey Road and Esplanade Road.
Lee Avenue and Chicago Avenue.
Linscott Avenue and Franklin Street.
Lyman Avenue and Summit Street.
Maple Avenue and Carpenter Street.
Maple Avenue and Washington Street.
Norfolk Street and Dunham Road.
Palmer Street and Dunham Road.
Park Avenue and Randall Street.
Prairie Avenue and Douglas Avenue.
Randall Street and Blodgett Avenue.
Saratoga Avenue and Candlewood Drive.
Seeley Avenue and Chicago Avenue.
Springside Avenue and Concord Drive.
Venard Road and Drove Avenue.
Washington Street and Chicago Avenue.
Washington Street and Grant Street.
Washington Street and Rogers Street.
Washington Street and 40th Street.
6th Street and Florence Avenue.
7th Street/DesMoines Street and Williams Street.
39th Street and Cumnor Road.
39th Street and Washington Street.
59th Street and Fairmount Avenue.
61st Street and Lee Avenue.
61st Street and Pershing Avenue.
61st Street and Sherman Road.
61st Street and Woodward Avenue.

(Ord. No. 1362, § 1; Ord. No. 1365, § 1; Ord. No. 1558, § 1; Ord. No. 1559, § 1; Ord. No. 1589, § 1; Ord. No. 1654, § 3; Ord. No. 1655, § 3; Ord. No. 1781, § 6; Ord. No. 2024, § 4; Ord. No. 2095, §§ 5, 6; Ord. No. 2104, § 10; Ord. No. 2145, § 2; Ord. No. 2220, § 2; Ord. No. 2352, § 4; Ord. No. 2365, § 2; Ord. No. 2408, § 2; Ord. No. 2409, § 2; Ord. No. 3022, § 3; Ord. No. 3117, § 5; Ord. No. 3123, § 3; Ord. No. 3192, § 2; Ord. No. 3333, § 2.)

Section 4. That Section 14.107. is hereby amended to read as follows:

14.107. Four-hour parking--Between 6:00 A.M. and 6:00 P.M., except on weekends and holidays.

It shall be unlawful for any person to park or let stand any vehicle in a parking space in any of the locations in paragraph (a) of this Section in such manner that the front of such vehicle is directed away from the curbing or not in accordance with the posted signage; provided, that the provisions of this subsection shall not apply to any parking space unless there shall be posted in conspicuous places in the vicinity of such parking space appropriate signs stating the restriction imposed by this subsection.

(a) Except on Saturdays, Sundays and holidays, it shall be unlawful for any person to park, stop or let stand any automobile, motor vehicle or other vehicle for more than four consecutive hours at any time between the hours of 6:00 A.M. and 6:00 P.M. local time, in any of the following locations:

Austin Avenue, on the north side, from Douglas Avenue to Fairview Avenue.
Belden Avenue, on the east side from Curtiss Street to Maple Avenue.
Benton Avenue, on both sides, from Randall Street to Maple Avenue.

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Birch Avenue, on the south side, from Elm Street to Washington Street.

Bryan Place, on the west side from a point one hundred ten feet north of the north line of Rogers Street to Prairie Avenue.

Burlington Avenue, on the north side, from Wilcox Avenue to a point ninety (90) feet east of the east line of Fairview Avenue.

Burlington Avenue, on the south side, from Wilcox Avenue to a point ninety (90) feet east of the east line of Florence Avenue.

Carpenter Street, on the east side, from Maple Avenue to Grove Street and from Gilbert Avenue to a point two hundred feet south of the south line of Gilbert Avenue.

Carpenter Street, on the west side, from Maple Avenue to Summit Street.

Chase Avenue, on the east side, from Haddow Avenue to Burlington Avenue.

Cross Street, on the east and west sides, from Burlington Avenue to Haddow Avenue.

Cumnor Road, on the west side, from Burlington Avenue to Maple Avenue.

Cumnor Road, on both sides, from 2nd Street to 6th Street.

Curtiss Street, on the south side, from Belden Avenue to a point one hundred thirty feet west of Mackie Place.

East Parkway, on both sides, from Linscott Avenue to Franklin Street.

Edward Avenue, on the east side, from Haddow Avenue to Warren Avenue.

Elm Street, on the east side, from Rogers Street to Franklin Street and, on the west side, from Warren Avenue to Franklin Street.

Elm Street, on the west side, from Franklin Street to Prairie Avenue.

Elm Street, on both sides, from Prairie Avenue to Chicago Avenue.

Elmwood Avenue, on both sides, from Maple Avenue to Blodgett Avenue.

Fairmount Avenue, on both sides, from Summit Street to Maple Avenue.

Farley Place, on both sides, from Lyman Avenue to Park Avenue.

Florence Avenue, on both sides from 2nd Street to 6th Street.

Florence Avenue, on the east side, from Burlington Avenue to Maple Avenue.

Franklin Street, on the north side, from Douglas Avenue to Fairview Avenue.

Franklin Street, on the south side, from the west line of Forest Avenue to a point one hundred and four feet west of the west line of Forest Avenue.

Franklin Street, on the south side, from a point one hundred thirty-five feet west of Forest Avenue to a point one hundred fifty feet east of the east line of Saratoga Avenue.

Franklin Street, on the south side, from the east line of Saratoga Avenue to a point ninety feet east of the east line of Saratoga Avenue.

Franklin Street, on the south side, from a point one hundred twenty feet east of the east line of Saratoga Avenue to Linscott Avenue.

Franklin Street, on the north side, from Washington Street to Stanley Avenue.

Franklin Street, on the south side, from Prospect Avenue to Stanley Avenue.

Franklin Street, on the south side, from Washington Street to Highland Avenue.

Grand Avenue, on both sides, from Hill Street to Burlington Avenue.

Grove Street, on the north side, from Carpenter Street to the northwest corner of the alley adjacent to Fishel Park.

Haddow Avenue, on the north side, from Belmont Road to the east entrance of the Puffer School circular drive.

Haddow Avenue, on the south side, from Francisco Street to Belmont Road.

Highland Avenue, on the west side, from the north line of Rogers Street (as extended from the east) to Prairie Avenue.

Hill Street, on the north side, from Blodgett Avenue to Fairview Avenue, excepting therefrom that portion designated by the Downers Grove Municipal Code as a school bus loading zone.

Hitchcock Avenue, on the south side, from Belmont Road to Glenview Avenue.

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Hitchcock Avenue, on the north and south sides, from the east line of Glenview Avenue to the west line of Cornell Avenue.

- Lane Place*, on the west side, from Maple Avenue to Summit Street.
- Linscott Avenue*, on the west side, from Warren Avenue to Franklin Street
- Linscott Avenue*, on the west side, from East Parkway to Franklin Street
- Lyman Avenue*, on the west side, from Maple Avenue to 55th Street.
- Mackie Place*, on the east side, from Curtiss Street to Maple Avenue.
- Maple Avenue*, on the north side, from the west line of Lyman Avenue extended to Elmwood Avenue (as extended from the south).
- Maple Avenue*, on the north side, from Carpenter Street to a point one hundred seventy-four feet west of the west line of Main Street.
- Maple Avenue*, on the north side, from Carpenter Street to Brookbank Road.
- Maplewood Place*, on both sides.
- Middaugh Avenue*, on the west side, from Warren Avenue to Franklin Street.
- Oakwood Avenue*, on the west side from Warren Avenue to Franklin Street.
- Park Avenue*, on both sides, from Farley Place to Summit Street, and on the west side from Summit Street to Randall Street.
- Pershing Road*, on the east side, from Prairie Avenue to Warren Avenue.
- Prairie Avenue*, on the south side from a point six hundred fifty (650) feet east of Belmont Road to a point one hundred fifty (150) feet west of Montgomery Avenue.
- Prince Street*, on the east side, from Franklin Street to Prairie Avenue.
- Prospect Avenue*, on both sides, from Rogers Street to Prairie Avenue.
- Puffer Road*, on the east side, from Haddow Avenue to Burlington Avenue.
- Randall Street*, on the south side, from Webster Street to Lyman Avenue.
- Randall Street*, on the south side from Lyman Avenue to Fairmount Avenue, and on both sides, from Fairmount Avenue to Benton Avenue.
- Rogers Street*, on the south side, from Prospect Avenue to Washington Street.
- Ross Court*, on both sides, commencing at Carpenter Street and extending along the entire length of Ross Court.
- Saratoga Avenue*, on the west side, from Warren Avenue to Franklin Street.
- Summit Street*, on both sides, from Main Street to Washington Street and from Lyman Avenue to Park Avenue.
- Summit Street*, on the south side, from Main Street to Carpenter Street.
- Victor Street* on both sides, from 2nd Street to 6th Street.
- Warren Avenue*, on the south side, from thirty-five (35) feet west of Linscott Avenue to the east right-of-way line of Middaugh Avenue.
- Warren Avenue*, on the south side, from a point one hundred sixty-five feet west of Middaugh Avenue to Oakwood Avenue.
- Warren Avenue*, on the south side, from the west line of Saratoga Street to a point three hundred thirty (330) feet west of the west line of Saratoga Street.
- Washington Street*, on both sides, from 55th Street to Randall Street.
- Washington Street*, on the east side, from the north line of Rogers Street to a point one hundred thirty-six feet south of Prairie Avenue.
- Washington Street*, on the west side, from Maple Avenue to Randall Street.
- Webster Street*, on the east side, from Summit Street to Randall Street.
- Webster Street*, on both sides, from Summit Street to 55th Street.
- Wilson Street*, on the north side, from a point fifty-one feet east of Douglas Avenue to Fairview Avenue.
- Woodward Avenue*, on both sides, from Warren Avenue to Prairie Avenue.
- 2nd Street*, on the south side, from a point fifty feet east of the east line of Fairview Avenue to a

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point three hundred sixty-six feet east of the east line of Fairview Avenue.

2nd Street, on the south side, from a point four hundred sixty-six feet east of the east line of Fairview Avenue to Williams Street.

3rd Street, on both sides, from Fairview Avenue to Cumnor Road.

4th Street, on the south side, from Fairview Avenue to Cumnor Road and, on the north side, from Florence Avenue to Cumnor Road.

4th Street, on both sides, from Cumnor Road to Williams Street.

5th Street, on the south side, from Fairview Avenue to Cumnor Road and, on the north side, from Florence Avenue to Cumnor Road.

6th Street, on both sides, from Fairview Avenue to Cumnor Road.

(Ord. No. 1543, § 3; Ord. No. 1546, § 3; Ord. No. 1757, §§ 5, 6; Ord. No. 1759, § 4; Ord. No. 1795, § 13; Ord. No. 1780, § 7; Ord. No. 1799, § 12; Ord. No. 1803, § 7; Ord. No. 1809, § 11; Ord. No. 1813, § 4; Ord. No. 1814, § 5; Ord. No. 1819, § 6; Ord. No. 1825, § 3; Ord. No. 1857, § 4; Ord. No. 1869, § 3; Ord. No. 1884, § 3; Ord. No. 1902, § 3; Ord. No. 1912, § 5; Ord. No. 1941, § 4; Ord. No. 1944, § 4; Ord. No. 1962, § 4; Ord. No. 2027, § 1; Ord. No. 2133, § 1; Ord. No. 2185, § 3; Ord. No. 2745, §§ 1, 38; Ord. No. 2968, § 3; Ord. No. 3027, § 5; Ord. No. 3055, § 4; Ord. No. 3146, § 22; Ord. No. 3314, § 3.)

Section 5. That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

Section 6. That this ordinance shall be in full force and effect from and after its passage and publication in the manner provided by law.

Mayor

Passed:

Published:

Attest: _____
 Village Clerk

DRAFT

TRANSPORTATION AND PARKING COMMISSION
Minutes – July 11, 2018
Council Chambers – Village Hall
801 Burlington Avenue, Downers Grove

Chairwoman Dunne called the July 11, 2018 meeting of the Transportation and Parking Commission to order at 7:03 P.M. and led the recitation of the Pledge of Allegiance.

ROLL CALL

Present: Chairwoman Dunne, Commissioners Wrobel, Wilkinson, Schiller, Saricks, Carter, Jenkins

Absent:

Staff: Public Works Traffic Engineer Will Lorton, Public Works Administrative Secretary Andrea Banke

Visitor Roster: Fanny Vlahos, Marianna & Harrison Holm, Selena & David Morriel, Nicole Balsavich, Aleksandra Lenart, Phyllis Knetz, Bill Petersen, Brandon Thiele, John Lowe, Jason & Elizabeth Pugh, Jerome Loftus, Karen Snell

A quorum was established.

Chairwoman Dunne reviewed the procedures to be followed for the meeting, explaining that the Commission will forward a recommendation to the Village Council for approval.

APPROVAL OF MAY 9, 2018 MINUTES

COMMISSIONER CONSENSUS IS TO HAVE FUTURE MEETING MINUTES BE LESS DETAILED AND MORE SUMARIZED. COMMISSIONER SCHILLER MOVED TO ACCEPT MINUTES AS PRESENTED. COMMISSIONER SARICKS SECONDED THE MOTION.

ALL IN FAVOR. THE MOTION PASSED UNANIMOUSLY BY VOICE VOTE 7:0.

PUBLIC COMMENT ON NON-AGENDA ITEMS

No public comment on non-agenda items.

Chairwoman Dunne proceeded to files on the agenda.

File #3-18 NTS #6 Stop Control Neighborhood Traffic Study Area 6

Traffic Engineer Will Lorton presented a comprehensive summary of Neighborhood Traffic Study Area 6 which addressed vehicular speeding issues, cut-through traffic, pedestrian safety, and evaluated overall traffic performance within one specific neighborhood.

The study recommends intersection control treatments, traffic calming and diversion measures, revisions to roadway land configurations, and signalized intersection capacity improvement

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measures. Proposed intersection control modifications include the conversion of all uncontrolled and yield-controlled intersection to stop control.

As part of the data collection effort, TERRA Engineering collected midblock traffic data at 45 locations, intersection turning movement counts at four signalized intersections, and conducted observations of the study area. Crash records were collected by the Village, indicating the crash history within the study area for the most recent 7 years of available data. Field observations and available aerial imagery and photography were used to review the existing pedestrian and bicyclist network.

Recommended measures to meet the goals of the study are divided into short, mid, and long term time frames.

CHAIRWOMAN DUNNE OPENED UP THE PUBLIC COMMENT PERIOD**PUBLIC COMMENT ON AGENDA ITEMS****Chairwoman Dunne requested public comments from residents between Main St. & Elm St.:**

1. Brandon Thiele 4237 Elm: Did the petition for Elm Street regarding traffic concerns in neighborhood. Concerned about safety of pedestrian traffic on Washington, cut through traffic between 6-9am, and speed enforcement.
2. John Lowe 4117 Highland: States there is too much traffic going to school drop off and pick up between the times of 7:45am-8:30am and 2:45pm-3:30pm. States that residents living near the school have issues getting in and out of their own driveways as well as with parking. Concerned with speeding issues caused by parents dropping off and picking up children. Would like enforcement of speed and rules of the road by school officials as well as law enforcement.

Commissioner Wrobel suggested a dialogue with school officials regarding these issues.

3. Brandon Thiele 4237 Elm: Brought up issues at 40th and Washington and 41st and Washington. Stated that more pedestrians walk from Washington to 41st to Highland to school because 40th does not go through. Would like to see enforcement of laws and speed with ticketing.
4. Fanny Vlahos 625 39th St.: Home is at the southeast corner of 39th and Glendenning. Concerned about safety of children walking to school on 39th Street. There are many families with young children in the neighborhood and the speeding on 39th street is unsafe. Would like both PD and school principal to enforce speed and safety laws. For Highland traffic suggested the use of speed bumps, restricted parking, and police presence. Stated enrollment at Highland school increased from 170 incoming students in 2011 to 320 in 2016. Some neighborhood students are being bussed to Belle Aire school due to overcrowding at Highland contributing to traffic issues.

Commissioner Wrobel suggested Village and County PD for enforcement due to jurisdiction in regards to Main St. and 39th.

Chairwoman Dunne requested public comments from residents between Elm St. & Glendenning:

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5. Jason Pugh 3912 Earlston: Brought up yield sign on Earlston and 40th. States there are often near misses at the intersection. Is in favor of all way stops.
6. Fanny Vlahos 625 39th St.: Questioned changing yield signs to stops signs.
7. Elizabeth Pugh 3912 Earlston Rd.: Concerned with traffic at 39th and Earlston using route as a cut through and rolling through stop signs.

Commissioner Saricks addressed speed issues on 41st street.

Chairwoman Dunne requested public comments from residents between Glendenning & Douglas:

8. Nicole Balsavich 3902 Douglas Rd.: Concerned with 39th street speed enforcement and school speed zone signs regarding how far of a distance speed enforcement for school zone needs to be and enforcement of it. Wants signage that is noticed.

Chairwoman Dunne requested public comments from residents between Douglas & Cumnor:

9. Jerome Loftus 3917 Biltmore: Questioned stop signs. Thinks attention should be spent elsewhere.
10. Karen Snell 309 Shady Ln.: Questioned stop signs on 40th place and received clarification.
11. Bill Petersen 200 Foxfire Ct.: Concerned with safety of children in school zone as well as on Cumnor by park entrances and playground. There is traffic control issue on Cumnor with traffic in regards to entering and exiting strip mall parking lot. Also has concerns with car dealership test drive customers speeding up and down Cumnor and 39th.

Chairwoman Dunne requested public comments from residents between Cumnor & Williams:

12. Aleksandra Lenart 4020 Williams St.: Very concerned about speeding on Williams. Would like several measures taken to control speed such as law enforcement, speed bumps, pavement markings. Would like a crosswalk to Whitlock park for children to safely cross the street to the park.
13. Fanny Vlahos 625 39th St.: Very concerned with speeding and wants a four way stop on 39th to slow traffic and so that families north of 39th can safely cross 39th to walk to school on south side of 39th. Thinks 39th street is very dangerous and will not allow children to play near it.

Commissioner Carter has concerns about substantial family pedestrian traffic and controlling traffic speed on 39th. Suggested sidewalk and smart speed signs.

14. Brandon Thiele 4237 Elm.: Concerns about biking safety and pedestrian signage for Whitlock park crossing. Wants park speed limit and law enforcement.

Commissioner Wilkinson questioned amount of traffic and whether hospital traffic and employees causes larger issues.

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15. Bill Petersen 200 Foxfire Ct.: Reiterated busy park traffic and what can be done to slow traffic for children's safety.

16. Aleksandra Lenart 4020 Williams St.: Reiterated speeding concerns on Williams and suggested pavement markings to make Williams look narrower and slow traffic.

WRITTEN COMMENTS SUBMITTED FOR TR-024 AS FOLLOWS:

1. Submitted by Aleksandra Lenart, 4020 Williams: "Please address speeding issues on Williams St. beyond the police patrols. Consider pavement markings and speed bumps."

No more public comment: Chairwoman Dunne closed public hearing

CHAIRWOMAN DUNNE CLOSED PUBLIC HEARING AND OPENED DISCUSSION AMONGST THE COMMISSION.

Mr. Lorton referred to page 29 of the Traffic Study Report and went over the short term recommendations.

Commissioners discussed the recommendations and came to the consensus that more needs to be done in addition to the approval of the proposals and that additional enforcement is needed.

WITH RESPECT TO FILE #3-18 NTS #6, MR. SARICKS MADE A MOTION THAT THE TRANSPORTATION AND PARKING COMMISSION FORWARD A POSITIVE RECOMMENDATION TO THE VILLAGE COUNCIL TO IMPLEMENT THE STUDY PROPOSALS AND ADD ADDITIONAL ENFORCEMENT.

SECONDED BY MR. SCHILLER.

ALL IN FAVOR. THE MOTION PASSED UNANIMOUSLY BY VOICE VOTE 7:0.

DISCUSSION OF OLD BUSINESS:

Mr. Lorton stated there is no old business to discuss. The next meeting date is to be determined.

Communications

1. No communications to report.

ADJOURN

MR. SCHILLER MOVED TO ADJOURN, SECONDED BY MR. WROBEL. MOTION CARRIED UNANIMOUSLY BY VOICE VOTE 7:0.

Chairwoman Dunne adjourned the meeting at 8:30 PM.

Respectfully submitted,

/s/ Andrea Banke

Recording Secretary

(Transcribed from Mr. Lorton's notes. No recording available.)

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TRANSPORTATION AND PARKING COMMISSION
Minutes – May 9, 2018
Council Chambers – Village Hall
801 Burlington Avenue, Downers Grove

Chairwoman Dunne called the May 9, 2018 meeting of the Transportation and Parking Commission to order at 7:01 P.M. and led the recitation of the Pledge of Allegiance.

ROLL CALL

Present: Chairwoman Dunne, Commissioners Wilkinson, Schiller, Saricks, Carter

Absent: Commissioners Wrobel, Jenkins

Staff: Public Works Traffic Engineer Will Lorton

Visitors: Officer Sembach

Residents: Emil Balarjan, Michael Robertson, Barb Delgato, Jennifer Chavez, Carol Doty, Joe Gertoff, Lee Johnson,

A quorum was established.

Chairwoman Dunne reviewed the procedures to be followed for the meeting, explaining that the Commission will forward a recommendation to the Village Council for approval.

APPROVAL OF FEBRUARY 14, 2018 MINUTES

CORRECTIONS FOR CLARIFICATION. UNDER POINT 1 PUBLIC COMMENT ON THE AGENDA ITEMS: THINKS THERE ALREADY IS A STOP SIGN AT 63RD AND BROOKBANK, COULD THAT ACTUALLY MEAN 60TH FOR THE RECOMMENDATION AS TO POSSIBLE TRAFFIC CALMING STRATEGIES. PAGE 2 POINT 2 THE LAST SENTENANCE REFERS TO LIGHTS AT DUNHAM AND MAIN WHICH CANNOT BE CORRECT BECAUSE THOSE ARE PARALLEL STREETS, SO IT MUST BE 63RD AND DUNHAM. PAGE 4 OLD BUSINESS TALKING ABOUT THE REVISIONS TO THE SIGN ON 55TH STREET, THERE ARE TWO REFERENCES TO SIGHT TIME – SHOULD BE CYCLE TIMES. FURTHER DOWN THE SITE DISTANCE SHOULD BE SIGHT. SAME PARAGRAPH SECOND LINE DUDOT SHOULD BE DUPAGE COUNTY.

ALL IN FAVOR. THE MOTION PASSED UNANIMOUSLY BY VOICE VOTE 5:0.

PUBLIC COMMENT ON NON-AGENDA ITEMS

1. Emil Balarjan, 1938 Hitchcock: Has lived at address since 2010, eight years. Is right in line with Glenview, so the people that are impeded by the traffic on Glenview and Hitchcock are probably the most impacted. When backing out of driveway has to look out for traffic coming from East and West, and the South. Except for the parking with which he agrees with what has been proposed with enforcing more stringent parking on the west side of Glenview, hasn't had issue with situation. Thinks there is speeding from time to time on Hitchcock, but doesn't feel

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adding stop signs is a good way to enforce speed limits. If the police were interested in enforcing the speed limit on Hitchcock they're welcome to sit in his driveway and have a good view of Hitchcock going in both directions and that would be the way to fix that.

Chairwoman Dunne thanked for comments and stated comments on that item would be later, currently asking for comments on non-agenda items. Invited to speak later after staff presents.

Chairwoman Dunne proceeded to files on the agenda.

File #2-18 Hitchcock at Glenview and Curtiss at Glenview – Traffic Control Revisions

Traffic Engineer Will Lorton reported this was initiated by a request from a resident who had been in touch with PD via phone call and email. Currently the intersection at Hitchcock and Glenview, and Curtiss and Glenview are both uncontrolled. There is a concern with speed and a request was for all way stop control at these intersections.

Will provided an overview of the layout, geometry, traffic patterns and parking restrictions. Staff visited the site multiple times and reviewed various speed data. The traffic volume on Hitchcock was around 500 vehicles per day, and the 85th percentile speeds are approximately 36 mph. The traffic volume on Curtiss was around 300 vehicles per day, with 85th percentile speeds are approximately 35 mph. Glenview had less than 200 vehicles per day. Crash data was reviewed at both intersections. There were three crashes at Hitchcock and Glenview and two crashes at Curtiss and Glenview, with the majority of those being related to parked cars. Based on the available count data, speed data, and crash data; staff recommends that the T intersections become stop controlled in both north and south directions.

In addition to this staff reviewed parking restrictions . West of Glenview there are parking restrictions on both Hitchcock and Curtiss, and east of Glenview there are no parking restrictions. One of the concerns expressed by residents is that commuters park on either side of the street causing sight distance issues as well as narrowing the roadway. Staff recommends extending the parking restrictions on Hitchcock east of Glenview to Cornell.

Chairwoman Dunne pointed out that the data does not support all way stop signs, and that stop signs are used to control right of way – not speed. Putting the stop sign on the terminating leg because it's part of the Village initiative to go through and have uncontrolled intersections become controlled. In support of stop sign for consistency and having all the uncontrolled intersections be controlled. She does not see where speeding is addressed and the 85th percentile speeds are pretty high. Questioned if there are any possible measures to control the speeding or if removing the parking will help control the speeding on the roadway.

Mr. Lorton reported that with the counts are the fifteen minute data increments showing the problematic times. Staff will work with giving those peak speed periods to PD for enforcement.

Commissioner questioned parking restrictions going right up to the intersections and with narrow streets some of the crash data shows some of the accidents are related to parked cars. Asked if it would make sense to limit some of the parking restriction to the intersection and give people some sight lines with the new stop signs.

Mr. Lorton reported that in addition to how parking regulations are identified, there is also a 20 ft buffer that's enforced in chapter 14 municipal code for intersections. Even though it shows going

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to, it would be defined as going to the west line of Glenview, and beginning again at the east line of Glenview and it's how it's defined in the municipal code.

Commissioner asked if the lines are actually pushed back than what is shown. Mr. Lorton confirmed this.

Chairwoman Dunne asked Mr. Lorton to confirm which residents were invited to this meeting. Mr. Lorton responded everyone on Hitchcock from Belmont to Cornell, as well as everyone on Curtiss from Belmont to Cornell. No addresses are actually on Glenview – they're all on Hitchcock and Curtiss.

CHAIRWOMAN DUNNE OPENED UP THE PUBLIC COMMENT PERIOD**PUBLIC COMMENT ON AGENDA ITEMS**

1. Michael Robertson 1941 Hitchcock: Has one of the houses on the corner of Glenview and Hitchcock. One of the homes that don't have addresses. Is one of the people that has been raising this concern for years and appreciates it getting on docket. Wants to be clear that they don't want to create another problem which was already created by creating the underpass. Creating the underpass was wonderful for travel, however creating a large parking lot on both the north and south side of tracks, plus the VFW hall which rents out parking spaces, no one can turn left there at peak times. What happens is there is a three block radius to get back to up Hitchcock, down Glenview, down Curtiss to turn left. If you are a commuter coming out of the lot, you're not happy about that. They come flying down the block, turn hard on Glenview, they turn hard onto Curtiss and are probably not thrilled about the situation created by simply missing a light. A new light was created at the other corner at the other lot on the north side, but they skipped the one on their side. Originally it was proposed that they were going to dead end that street which would have been significantly worse traffic around their block. The solution is not putting the stop sign in because that will create another problem of noise. Cars driving by are not that loud. With stop signs there will be either rolling stops or hard acceleration creating another issue. The stop sign will cause people to come up and fly out of the stop sign. There are over 30 kids that live on the block of Hitchcock between Cornell and Belmont. Concerned and states that 99% of time cars whipping around the corner are coming out of the commuter lot. Brought this to the attention of PW staff and is not trying to recreate another issue, but is trying to solve the issue of people who are trying to turn left and can't. Suggests speed bumps and police monitoring speed. Has only seen one police officer monitor speed once in twelve years of living there, and it was a Cook County Sheriff who only monitored speed and did not write tickets. Maybe if it is monitored that is a speed control. Doesn't think it's a right of way issue, thinks it's a speed and safety issue. If monitored on their block it would be seen. Is 100% in agreement that the problem is at the bottom of the street at Belmont and Hitchcock, not at Glenview or Curtiss, but down where people are trying to turn left. Thank you.

2. Barb Delgato 1936 Hitchcock: Agrees with everything Michael and Emil said. The stop sign is not the issue. The speed and parking are the issues. Has lived there all her life, 55 years, and ever since the underpass was put in (which is great) they have a parking problem. The parking problem for her is they park right by her driveway. She doesn't want to back into a car, and there are three cars that do it, unsure how the lot works and if people park there when lot is full or if they're assigned by quarter. Doesn't understand why parking wouldn't be the same on the east and west. Doesn't understand why that didn't happen. Doesn't want a stop sign and doesn't think that's the issue. Police are invited to stop in her driveway anytime, there is a big

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tree and people wouldn't see them. Anytime PD wants to park in her driveway come on down.

3. Jennifer Chavez 1903 Hitchcock: Furthest east on Hitchcock right before the stop sign at Cornell. On the part of the block where the majority of the children are. Not sure what to do to reduce the speed. Doesn't know what the stop signs would or would not do. Her concern is the parking, continuing the parking ban down at the intersection of Hitchcock. They have a lot of new families that have moved in and a lot of new construction that has torn down small houses. They have big families, holidays, birthday parties and they're all having people over. She has neighbors across the street who Friday night there were six cars parked outside their house, Saturday there were cars, which is fine but they're on their side which is the north side. She lives on south side of the street. By saying no parking on north side of the street, all those people are going to be parking on her side which is already difficult enough to get in and out of her driveway because people are flying from Gilbert around the corner down Hitchcock. Her personal thing is there should be a stop sign there too because it's like trying to watch out for your life trying to get the mail or even pulling in and out of the driveway. Putting the parking ban in just takes away people's space to be able to park, and if anything, the cars on the street are probably slowing people down because they have to kind of maneuver around. The accidents that were there are because people were speeding, it's not because the cars are parked there. If you hit a parked car, there's obviously an issue with the driver because there's no one in the other vehicle. Has an issue with the parking as far as a lot of families have companies that come and do grass work, landscaping, and there are these huge trucks and trailers. Right now they're on the north side doing their work. If you put the parking ban into place, they're going to be on her side parking, which again impedes her from getting in and out of her driveway and blocking her way, and for people to be able to park for her family. She's against that and it will create more havoc with all the families there and all the things going on. They don't have any commuter issues going on there. Her family has been in that house for over thirty-five years, and she's never seen anyone park down there and walk to the train station. If they did, they're walking so far it's really not an issue and it's not consistent. Could be for a special event, but has not seen it to be an issue. It's mainly families parking and having parties and stuff, which they should be able to park closest to their house. It's an inconvenience to have them all park on one side.

Chairwoman Dunne asked if she would be opposed to the north side instead of no parking anytime, to just a four hour restricted parking.

Resident responded that because it's only Monday through Friday then weekends and holidays are not included. Stated she had not thought of that and maybe it would be a solution, but to have absolutely no parking, there are so many families there, so many large homes being built on north side, she's in a smaller home on the south side and has children too. Doesn't think parking is the issue, thinks it's definitely the speeding and it probably is the commuters because they are coming from Gilbert and coming around, and then parking, and then going back that way or cutting down Glenview to go to Belmont. It is coming both directions. They witnessed quite a bit. She was coming up Lee Street to make a left on Gilbert and come around to Hitchcock and she has to go literally 5 mph just so the people behind her realize she's turning into her driveway immediately after she turns that corner because they are on her like crazy. There was an incident where someone was racing pretty much behind her and got out of the vehicle and started yelling at her because they were trying to go around her while she was pulling into her driveway. There just happened to be a police officer in the area driving by so she waved them down, but it's very very rare that they see any kind of police doing any kind of speed regulation over there. If they

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sat there for one week they would probably get so many people it would be unbelievable. Everyone's in a hurry they've got to get to work, they've got to catch that train, and instead of leaving ten minutes early they decide to fly down our street. But it is starting all the way from Gilbert coming around.

4. Carol Doty 1921 Curtiss: Has lived there about 45 years. There's a huge difference between Curtiss and the other street. Curtiss has almost no children. Hitchcock has lots of children and their safety with all the speeding should be a high priority. Can't see what putting stop lights, stop signs would solve. Issue began with the underpass as already noted. When you go down Curtiss to Belmont that stoplight is so long that a lot of people use Glenview to go over to Hitchcock and get on Belmont without the light, which adds to that traffic. Does not see what putting in two stop signs is actually doing.

Chairwoman Dunne stated that part of the initiative that the Village has been going through the past couple years is going through systematically every uncontrolled intersection with no signage will be signed to have the appropriate right of way that is essentially for safety, friendlier to younger drivers, just for consistency in the area. Thinks they're in agreement that yes those stop signs don't solve the issue, but now that they're taking a look at this neighborhood per Village policy the stop signs should go in on an uncontrolled intersection.

Resident concerned about noise. States there must be some solution to this because it's largely commuters going down Hitchcock and what can be done about that is the real issue.

5. Joe Gertoff 5128 Cornell: Has been a resident in that neighborhood for over 35 years now and has seen a lot of change. With regards to comments wants to point out that on Glenview northbound, when you get to that intersection at Hitchcock if you look at the terrain to the west you're actually going downhill. It's hard for cars on the hill approaching the intersection. Thinks parking proposals will make it more difficult in the intersection when trying to make a left turn. Thinks parking, hill and intersection make it hard to make a left turn. One suggestion might be to instead of using 20 feet off the intersection, perhaps expand that to 120 feet which should be sufficient visibility to see oncoming traffic and able to proceed with a safe turn. The other thought too is with the parking on the south side of Hitchcock you are creating some issues there with visibility. Why not just move the parking over to the north side and then you'll have the same kind of experience there at Hitchcock and Glenview that you currently have at Glenview and Curtiss. When you approach Curtiss from Glenview you don't have any parked cars there in the area to be concerned about and can easily see oncoming traffic when turning there. While he appreciates the Village's thoughts about needing to put controls at uncontrolled intersections, living at the corner of Curtiss and Cornell there will be cars that will come south with a peel out making noise and especially in the middle of the night. Does not know that there will be a gain of any kind of traffic control but it will create a nuisance.

Chairwoman Dunne stated the Village sight distance of 20 feet but asked Mr. Lorton due to curvature of road to make sure national standards are still being met at the intersection.

6. Lee Johnson 1920 Curtiss: Halfway east of the intersection. Had a question for the police officer in attendance and one comment. He is pretty severely hearing impaired, really only hears sounds from one side, and is retired. He worries about himself when walking his dog twice a day. At least on two occasions on Curtiss at Glenview he's had people come down Curtiss so fast that they ignored him and he went out into the intersection not realizing they were coming that fast.

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Grew up with hearing impairment and is very visually aware of everything around him but can't hear a car coming at him. Doesn't worry as much about himself as he does the little kids. Is a retired school teacher and is sensitive to children, and parents aren't always as vigilant in seeing the cars as he is. He doesn't see creating a problem for commuters as an issue. Understands impatience of commuters wanting to get home but if putting a stop sign would slow people down on both streets but wonders if people are more likely to run a stop sign or speed. Wonders if running a stop sign is a more costly ticket than a speeding ticket. Thinks people are more likely to stop at a stop sign than to obey the speed limit. Thinks having the sidewalks put in years ago was a large help to children. Has an issue with city trucks going faster than speed limit on Curtiss and their vehicles won't stop as quickly as a regular vehicle will. Thinks stop sign will possibly help people to stop. Doesn't see the presence of police to curb speeding. Sees police presence on Belmont for speeding. Light at Belmont has helped left hand turners, but is too long a light that encourages jay-walkers. Thinks penalty needs to be higher and visible for people to stop and slow down on the street when the police aren't present.

7. Emil Balarjan, 1938 Hitchcock.: Apologized for speaking earlier than was intended for public comment. Wants to add that there's a stop sign in the parking lot coming out of the train station and he's gone down Hitchcock where people are going through at 5-10 mph blowing through the stop sign. Thinks enforcing that stop sign would be helpful. If it's permissible, day and night the police are welcome to sit in his driveway and monitor traffic.

8. Jennifer Chavez 1903 Hitchcock: Wants to know why the parking is even an issue if the problem is the speeding. Wants to know what parking will prevent or deter because there isn't an issue of commuter parking down there so how will that help reduce speeding?

Mr. Lorton responded that the original request was from residents for an all way stop at both the intersection of Hitchcock and Glenview and Curtiss and Glenview. There was also a request to look at parking east of Glenview. This was driven by residents, not by staff. Stop signs and parking are not to correct the speeding issue. To correct the speeding issue the count data will be given to the traffic officers so they can be out there in those specific fifteen and thirty minute intervals when speeding is happening most frequently.

Ms. Chavez asked if there's more than one resident who reported commuter parking down there.

Mr. Lorton responded it was driven by one for the phone call and he's unsure if it was included in the petition since he was handed the petition the evening of the meeting.

Chairwoman Dunne asked if there were other residents on the east section of Hitchcock. It was confirmed by a resident they are in favor of no parking on north side and that it should be the same east and west, weekdays 6am-6pm, and won't affect weekends and holidays.

9. Resident from earlier: Lives right in line with Glenview. In regards to the parking he knows there are people that are going just past Glenview, parking, and walking to the train station. Has had people park in front of his house on the north side in front of his mailbox and the mail carrier can't even get to the mailbox.

No more public comment: Chairwoman Dunne closed public hearing

COMMENT FROM STAFF

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Mr. Lorton stated staff received one email that was not in favor of any revisions at all. There were five phone calls received: three in favor of stop control, two in favor of more enforcement and tickets, and two in favor of the parking. Only one of the address in favor of parking was to the east of Glenview.

CHAIRWOMAN DUNNE CLOSED PUBLIC HEARING AND OPENED DISCUSSION AMONGST THE COMMISSION.

Commissioner asked Mr. Lorton if he had any discussions with Metra regarding their lot and is wondering if there is a way to restrict them from driving into the neighborhood when they leave that lot with a right turn out, and a right turn on Belmont. Thinks that could alleviate a lot of the speeding from the commuters.

Mr. Lorton stated some of the peak periods for speeding were after hours, roughly later than midnight and around 2-3am. It's not just commuters contributing to the speeds.

Commissioner asked if a right turn out could be considered and Mr. Lorton responded yes. Lot is the daily fee lot that the Village is responsible for. Officer Sembach explained they are three dollar daily spaces that they arrive and pay for that morning. Chairwoman Dunne stated that enforcement-wise it would be very effective if it's the same group of commuters every day that get ticketed as opposed to a group of people that infrequently use the lot, which would not be as effective.

Chairwoman Dunne asked about Curtiss and why the restriction there wasn't being extended and saw there wasn't anyone there from Curtiss there asking for it to be extended, so is ok with leaving that as is as proposed if the Commissioners are in agreement. All Commissioners were in agreement.

Commissioner stated that judging that the original request for 4 ways at both those intersections had to do with trying to get some control over the speeding on Hitchcock and to a lesser extent Curtiss, and while this doesn't address that, other than enforcement actions, are there any possibility of considering traffic calming measures that will get traffic to slow down through those areas – the east west traffic that's accessing or coming off of Belmont? Thought that was the driving force behind the request for the 4 way stops including the stops for east and west traffic on Hitchcock and Curtiss.

Chairwoman Dunne responded it sounded like a commuter speeding issue was the basis of this.

Commissioner stated to explore possible other mitigating measures even though the volumes do not meet the criteria, at least it will do something to get the speeding issue under control.

Chairwoman Dunne suggested an interim approach of starting with enforcement and then maybe a year from now in the spring do another follow up study and see if that has impacted the speeding behavior or not and that can be the trigger. The speeds are very high for an 85th percentile on a neighborhood road. If enforcement isn't working then they should definitely see if there are other measures.

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Commissioner stated in addition to the enforcement, radar speed driver feedback signs could be put out there to start getting some more visible awareness, and then follow up with enforcement so the message gets across.

Mr. Lorton responded yes.

Commissioner asked Mr. Lorton it seems like the problem is caused by a lot of people who can't get out of the lot effectively. Wants to know if there is a way to put a stop and go light at the exit to the lot and have it electronically connected to the traffic signals on Belmont to create a one minute buffer between stoplights on Belmont giving exiting traffic a clear shot to pull out.

Mr. Lorton clarified synchronizing lights at Curtiss and Haddow to create empty space for people coming out of lots to make their turns. Does not think it would be easily addressed using that method because of the lots north of the tracks and ramps coming from Burlington and Warren which are controlled by stop signs. Any gaps on Belmont would be utilized by that traffic.

Commissioner asked if Mr. Lorton would entertain looking at dynamic of the intersections and parking lots on Belmont and see if there is a solution so the traffic coming out of the lot doesn't have to go through the neighborhood.

Mr. Lorton stated staff would look at it, however the right of way on Belmont is County, so any improvements on Belmont would not be driven by the Village.

Chairwoman Dunne suggested pulling the report from the phase one study of the underpass to see what projected traffic volumes were and if it's operating today as what was proposed whenever the study was done. Speeding, mitigation enforcement, talked about stop control. Outstanding item is whether to move forward with the parking restrictions as proposed, or if it would be better to have the north side be a four hour restricted parking instead of no parking at any time.

Commissioner would like to see the north side restricted to four hours so both sides would be four hours. All agreed Monday through Friday 4 hours restricted parking except weekends and holidays, consistent with what it is now 6am-6pm with four hour parking.

Motion to modify as the recommendation to proceed: First two - accepting the stop sign. The second two – the no parking restriction would be changed to a four hour parking restriction will be extended on the north side of Hitchcock from Glenview to Cornell. The four hour parking restriction on the south side of Hitchcock with no effect on Curtiss. Everything will be the same west of Glenview. To the east of Glenview and on Hitchcock, instead of having a permanent no parking on the north side that will be a four hour prohibition from 6am to 6pm. It'll be the same on the north side as on the south side.

Mr. Lorton stated that everything east of Glenview on both Curtiss and Hitchcock presently has parking on either side of the street without restriction. Anyone who lives east of Glenview has parking on both sides of the street. The restrictions are west of Glenview.

Commissioner: This results in a modification to the recommendation where they're going to eliminate the specific recommendation about no parking and modify the second

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recommendation that the four hour parking restriction of the north and south side of Hitchcock be implemented from Glenview to Cornell.

Mr. Schiller seconded the motion.

ALL IN FAVOR. THE MOTION PASSED UNANIMOUSLY BY VOICE VOTE 5:0.

DISCUSISON OF OLD BUSINESS:

Mr. Lorton stated there is no old business to discuss. The next mini study counts will be taken as soon as possible and more than likely will have a meeting next month.

Chairwoman Dunne asked if 41st Street residents were going to be invited back in May. Mr. Lorton stated there will have to be another round of counts taken at that location as well.

Commissioner asked about study area six. Mr. Lorton stated that will probably not be at next month's meeting due to slower process.

Communications

1. No communications to report.

ADJOURN

**MR. SARCKS MOVED TO ADJOURN, SECONDED BY MR. SCHILLER.
MOTION CARRIED UNANIMOUSLY BY VOICE VOTE 4:0.**

Chairwoman Dunne adjourned the meeting at 8:01 PM.

Respectfully submitted,

/s/ Andrea Banke

Recording Secretary

(Transcribed from MP3 recording)



Neighborhood Traffic Study Area 6



Preliminary Report

Prepared By:



TERRA
ENGINEERING LTD.

Colin C. Coad, P.E., PTOE, VMA

Michael C. Hutchinson, P.E., PTOE

June 26, 2018

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Neighborhood Traffic Study – Area 6

SECTION I – EXECUTIVE SUMMARY

The Village of Downers Grove is pursuing the Neighborhood Traffic Study – Area 6 project to address vehicular speeding issues, cut-through traffic, pedestrian safety and to evaluate overall traffic performance within one specific neighborhood. Data collected for the project include midblock traffic speed and volume data, parking data, pedestrian data and intersection peak hour traffic data.

The study recommends intersection control treatments, traffic calming and diversion measures, revisions to roadway lane configurations, and signalized intersection capacity improvement measures. Proposed intersection control modifications include the conversion of all uncontrolled and yield-controlled intersection to stop control.

As part of the data collection effort, TERRA Engineering collected midblock traffic data at 45 locations, intersection turning movement counts at four signalized intersections, and conducted observations of the study area. Crash records were collected by the Village, indicating the crash history within the study area for the most recent 7 years of available data. Field observations and available aerial imagery and photography were used to review the existing pedestrian and bicyclist network.

Recommended measures to meet the goals of the study are divided into short-, mid-, and long-term time frames.

SECTION II – EXISTING CONDITIONS

Study Area and Existing Land Uses

The study area is approximately 0.7 square miles in the northeast portion of the Village of Downers Grove. Figure 1 indicates the location of the study area.

The study area is predominantly residential. However, commercial businesses line the Ogden Avenue corridor. Highland Elementary School is in the northwest corner of the study area, located at the north terminus of Highland Avenue, southeast of the intersection of Main Street and 39th Street. The entire study area is within Highland Elementary's school boundary limits. There are two parks located within the study area: Wallingford Park, located on Elm Street between 41st Street and 40th Street; and Whitlock Park, spanning the block between Fairview Avenue and Cumnor Road, north of 40th Place.

Advocate Good Samaritan Hospital is located just north of the study area, northeast of the intersection of 39th Street and Main Street/Highland Avenue. A Downers Grove Fire Station is located just outside the study area in the southwest corner of the same intersection.

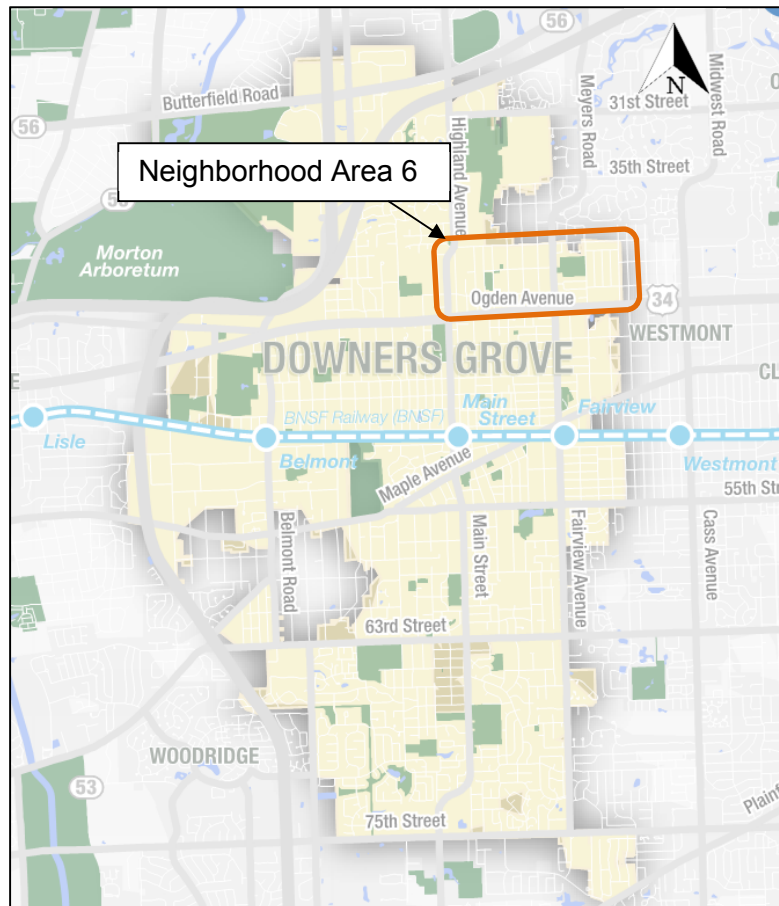


Figure 1 – Map: Location of Neighborhood Area 6

Figure 2 indicates the notable land uses within the study area.

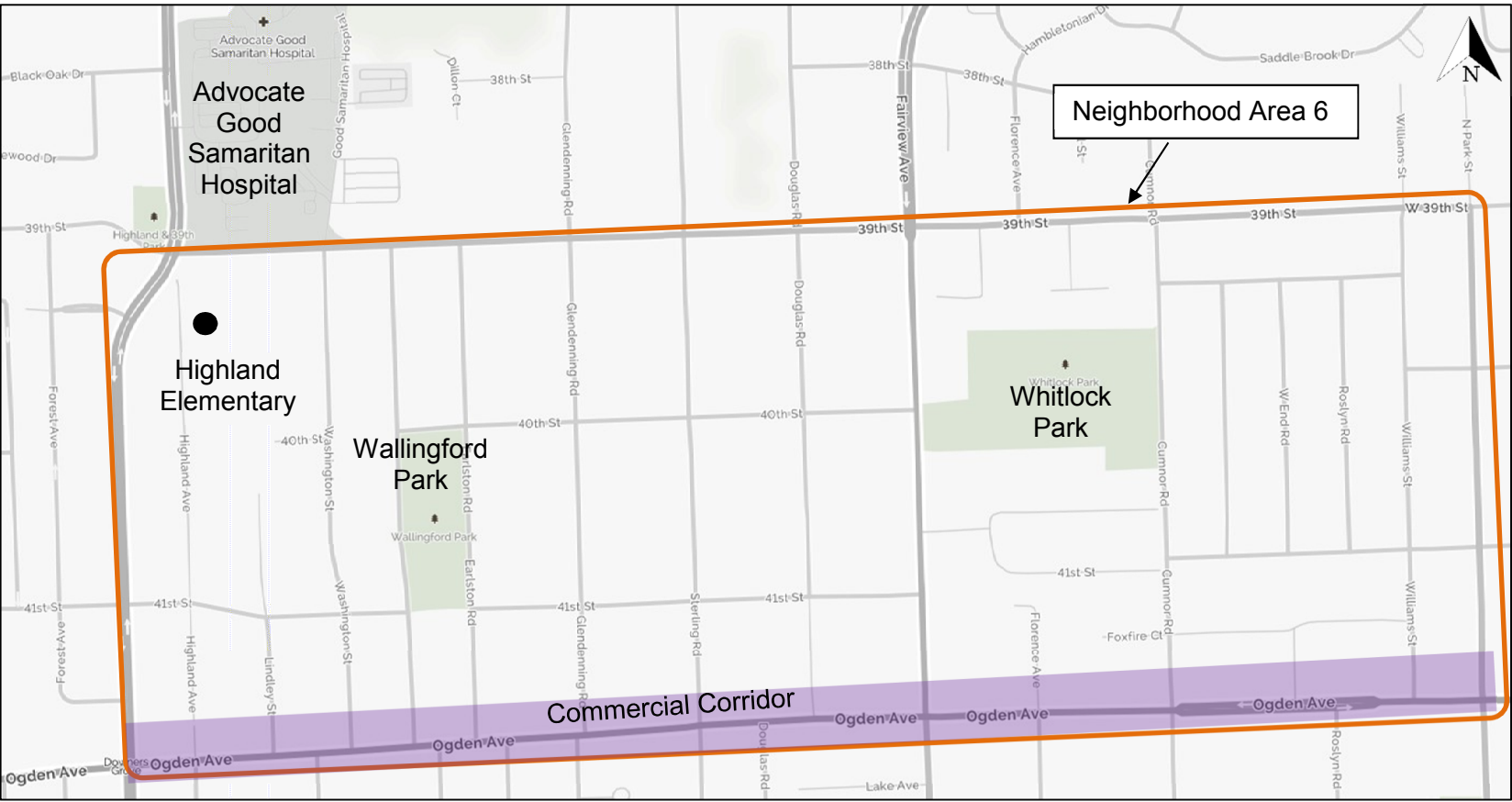


Figure 2 – Map: Notable Land Uses

Existing Roadway System

In the north/south direction, the major roadways include Main Street, Fairview Avenue, and Williams Street. Cumnor Road also accommodates a relatively high traffic volume compared to the other local streets. In the east/west direction, the major roadways are Ogden Avenue and 39th Street. Other east/west roadways are limited in their extent through the neighborhood due to dead ends or T intersections.

Ogden Avenue (US Route 34) is an east/west roadway under the jurisdiction of the Illinois Department of Transportation (IDOT). It has a five-lane section with a posted speed limit of 35 mph within the study limits. Traffic signal control is provided at its intersections with Main Street, Fairview Avenue, and the entrance to Downers Plaza Shopping Center.

Main Street is a north/south roadway under the jurisdiction of DuPage County. It has a 4-lane section, with a posted speed of 30 mph within the study limits. Traffic signal control is provided at its intersections with Ogden Avenue and 39th Street.

Fairview Avenue is a north/south roadway under the jurisdiction of DuPage County. It has a 4-lane section, with a posted speed of 30 mph within the study limits. Traffic signal control is provided at its intersections with Ogden Avenue and 39th Street.

39th Street is an east/west roadway under the jurisdiction of the Village of Downers Grove. It has a 3-lane section west of Washington Street and a 2-lane section east of Washington Street. Traffic signal control is provided at its intersections with Main Street and Fairview Avenue. Curb and gutter are provided on 39th Street east of Cumnor Road and west of Washington Street; between Washington Street and Cumnor Road, 39th Street has a rural section.

The following roadways are north/south roadways with one lane in each direction under the jurisdiction of the Village of Downers Grove, with a posted/regulatory speed of 25 mph:

- Highland Avenue
- Lindley Street
- Washington Street
- Elm Street
- Earlston Road
- Glendenning Road
- Sterling Road
- Douglas Road
- Biltmore Road
- Florence Avenue
- School Street
- Cumnor Road
- Longmeadow Road
- West End Road
- Roslyn Road
- Williams Street

The following roadways are east/west roadways with one lane in each direction under the jurisdiction of the Village of Downers Grove, with a posted/regulatory speed of 25 mph:

- 41st Street
- Foxfire Court
- 40th Place
- Shady Lane
- 40th Street
- Tower Road

Typically, the local streets are signed speed limit 25 mph upon entering the neighborhood. The local streets are also frequently signed with a 5-ton weight limit (except for local deliveries), as shown in the adjacent photo. Figure 3 presents the speed limit signage within the neighborhood, as well as warning signage indicating school zones, park zones and pedestrian crossings. Per Section 14.34 of the Village Municipal Code, the speed limit on all streets – unless signed otherwise or specifically altered in the Municipal Code – is 25 mph. School zone and park zone speed limits (20 mph) are posted for the two parks and the elementary school within the study area, affecting portions of the following roadways: Highland Avenue, 39th Street, Elm Street, and Cumnor Road.



Figure 3 also indicates locations of dead ends within the neighborhood. Compared to typical residential neighborhoods, there are a high number of dead end streets. It is worth noting that between 39th Street and Ogden Avenue the east/west roadways (predominantly 41st Street and 40th Street) do not provide a continuous route due to T intersections and dead ends. In the north/south direction, the following roadways provide a continuous route through the study area: Main Street, Washington Street, Earlston Road, Glendenning Road, Sterling Road, Fairview Avenue, Cumnor Road, and Williams Street.

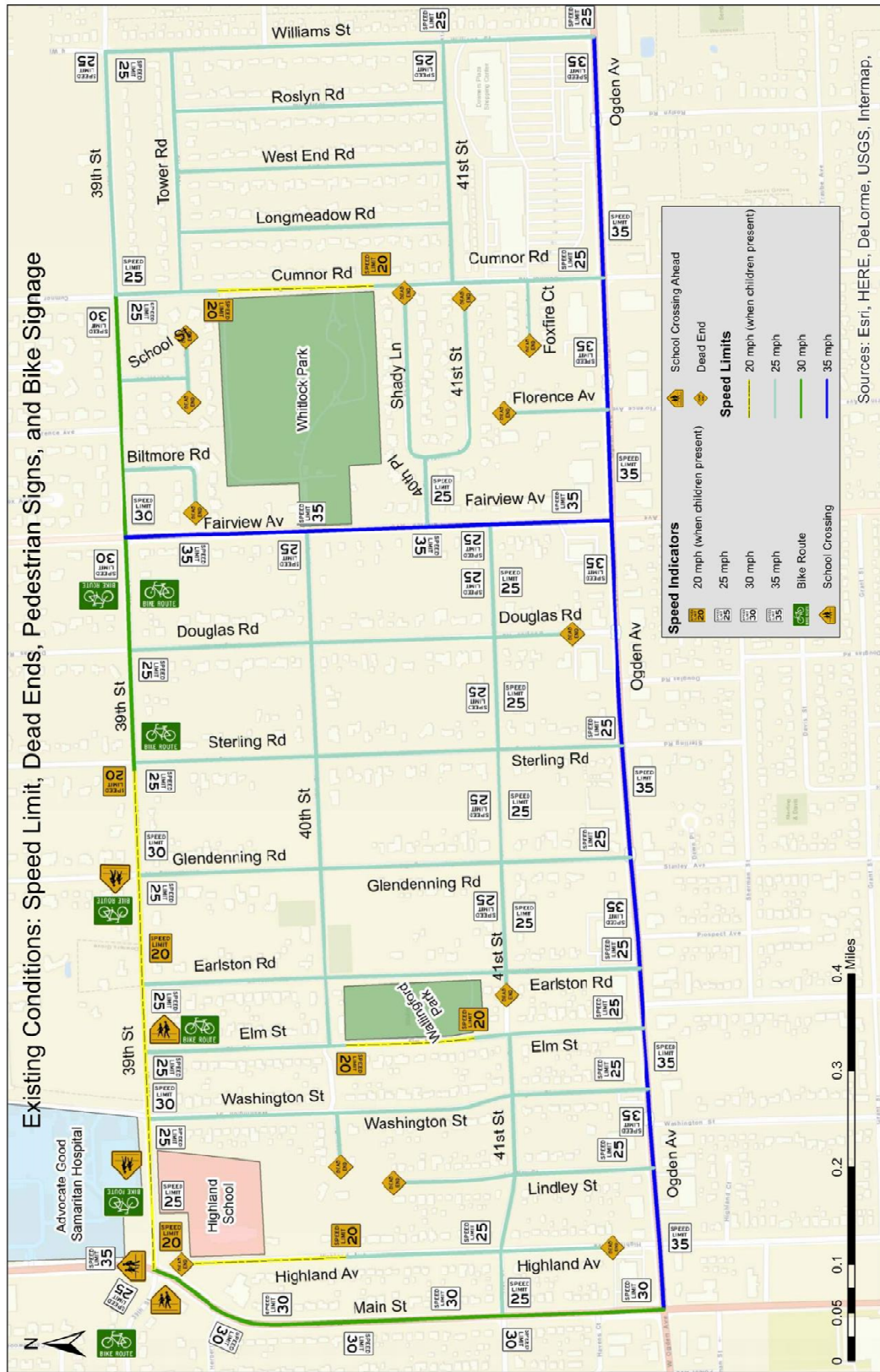


Figure 3 – Existing Speed Limit and Warning Signage

Pedestrian and Bicyclist Facilities

With few exceptions, each roadway within the study area has sidewalk within the right-of-way on at least one side. Figure 4 indicates the locations of sidewalks, marked crosswalks and paths (i.e., paved or gravel paths not adjacent to roadways) within the study area. Note that sidewalk is not indicated on 40th Place, Shady Lane, and 41st Street (all part of the “Shady Lane Estates” sub-neighborhood), but there are existing 3-ft carriage walks immediately adjacent to the curbs. While there is depressed curb, there is no marked/signed crossing allowing pedestrians/bicyclist from the community area west of Fairview Avenue to Whitlock Park (on the east side of Fairview Avenue).

“Bike Route” signage is present on 39th Street from Main Street to Fairview Avenue, as indicated on Figure 3 and in the adjacent photo.



The 2013 *Village of Downers Grove Bicycle and Pedestrian Plan* proposes a three-phase implementation of bicyclist signage and facilities for the Village. The first two phases affect this neighborhood. Specifically, Phase I proposes signed bicyclist routes along Highland, 41st, Earlston and 40th as indicated in the following map. Note that the existing signing along 39th Street does not extend as far to the east as indicated in the map from the Bicycle and Pedestrian Plan.



Phase II of the Bicycle and Pedestrian Plan proposes the implementation of a road diet on Fairview Avenue within the project area.

The Bicycle and Pedestrian Plan also recommends marking all four crosswalks at signalized intersections and at all-way stop intersections.

Existing Intersection Traffic Control

Within the study area, intersection control methods range from uncontrolled (20 intersections), yield control (4 intersections), side-street stop control (25 intersections), all-way stop control (2 intersections), and signalized (5 intersections). Figure 5 presents a map with the control method at each intersection in the study area.

Signalized Intersections

There are five signalized intersections located on the boundary of the study area. One serves the access to Downers Plaza Shopping Center, while the other four serve intersections of higher functional classification roadways.

- Fairview Avenue and 39th Street: the signal provides a designated northbound left-turn phase (green arrow); the only crosswalk at the intersection is crossing the south leg, with pedestrian push buttons; the eastbound approach is signed “no turn on red” due to limited visibility caused by the vegetation in the northwest corner.
- Fairview Avenue and Ogden Avenue: crosswalks exist on all four legs, but are worn away; pedestrian signals are push-button activated for crossing Ogden; designated left-turn phases are provided when vehicles are present.
- Main Street and Ogden Avenue: the signal provides designated left-turn phases for all four approaches; there are four crosswalks, all push-button activated, which are striped with continental crosswalk markings. The eastbound left turn movement was observed to be high, and data collection confirms that 445 eastbound vehicles turn left during the morning peak hour.
- Main Street/Highland Avenue and 39th Street: three approaches to this intersection are on curve; northbound, southbound and westbound approaches are provided a designated left-turn phase when vehicles are present; there are push-button activated crosswalks crossing the west, south and east legs, but not on the north leg; the crosswalks have continental markings.
- Ogden Avenue at Downers Plaza Shopping Center: this intersection provides access to the shopping center. Since it does not affect neighborhood traffic circulation, it has not been analyzed in this report.

All-Way Stop Intersections

Both all-way stop controlled intersections within the study area are located on 39th Street. One serves an Advocate Good Samaritan Hospital entrance.

Side-Street Stop Intersections

Constituting 45% of the study area intersections, side-street stop control is the most common method of control. The higher functional classification roadways (Ogden, Main, Fairview, 39th, and Williams) are given priority, allowing traffic to flow freely on them while the intersecting local street is required to stop.

Yield Control Intersections

All four yield controlled intersections are located on 40th Street in succession. At three of the four (Earlston, Glendenning and Sterling), priority is given to east/west traffic, while at the fourth location (Douglas) priority is given to north/south traffic.

Uncontrolled Intersections

17 of the 20 uncontrolled intersections within the study area are “T” intersections. The other three are four-way intersections.

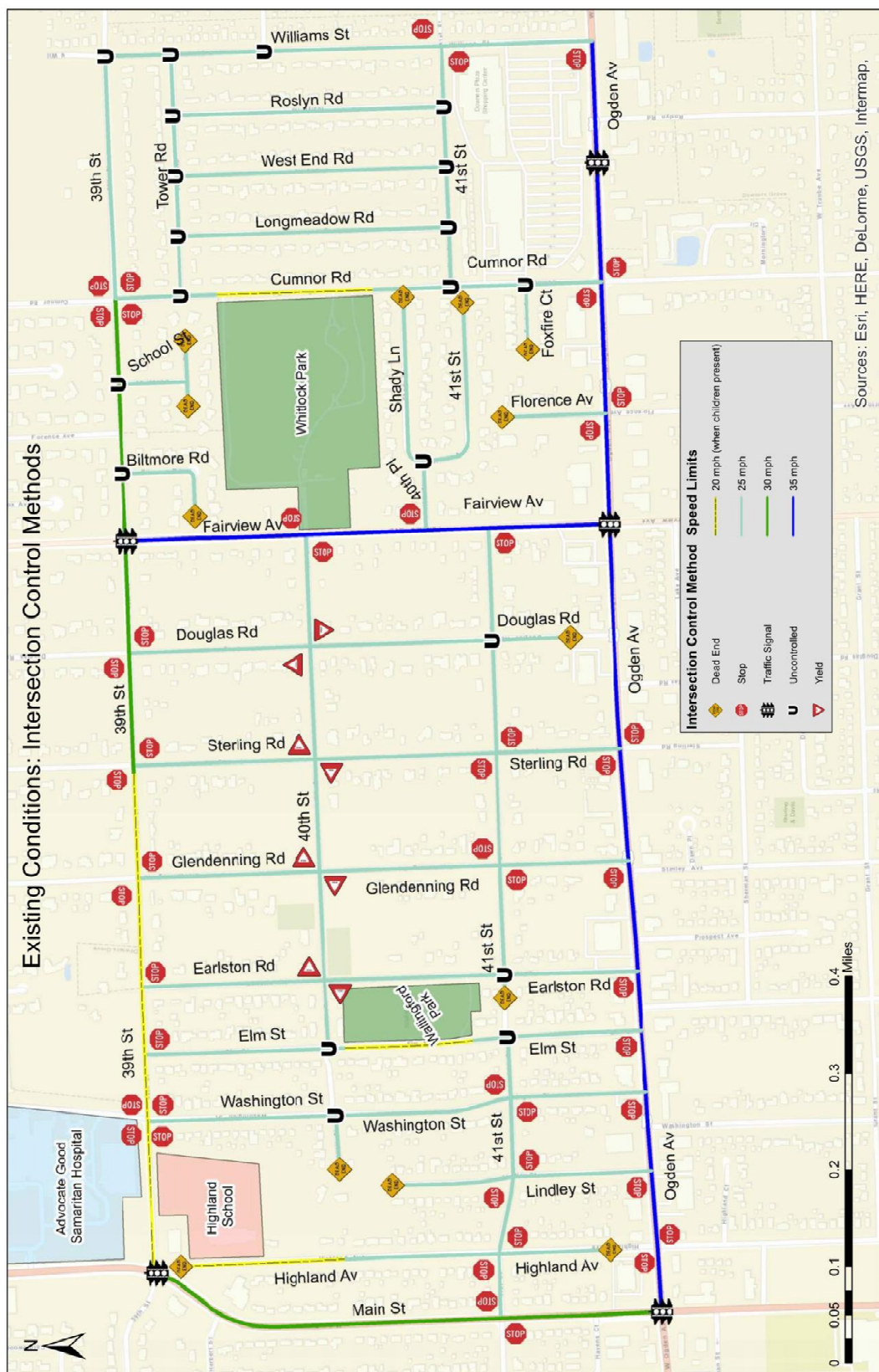


Figure 5 – Existing Intersection Control

Parking

Parking is generally allowed on-street within the study area, with the following exceptions:

- Parking is prohibited on Main Street
- Parking is prohibited on Williams Street south of 41st Street
- Parking is prohibited on Cumnor Road south of 41st Street, and north of 41st Street from 8 AM to 6 PM in the northbound direction
- Parking is prohibited on Florence Avenue on the east side, and on the west side from 6 AM to 6 PM. However, four vehicles were observed to be parked at 10:30 AM.
- Parking is prohibited on 41st Street near Highland from 8 AM to 11 AM.
- Parking is prohibited on Lindley Street from 8 AM to 11 AM (except weekends and holidays)
- Parking is prohibited on Highland Avenue on 8 AM to 11 AM (except weekends and holidays)

Observed on-street parking use was generally low within the study area. Vehicles parked on-street were often parked such that the vehicles right wheels were well into the adjacent turf.

SECTION III – DATA COLLECTION

Data collection efforts include conducting observations in the study area, collecting traffic data, retrieving recent crash reports, and conducting a neighborhood public meeting.

Traffic Data

In addition to conducting observations of the study area, TERRA collected traffic data at 49 locations. Two methods of data collection were used: HiStar portable traffic analyzers were utilized to collect traffic volume, speed and vehicle classification data at 45 midblock locations. The midblock data were collected for 24-hours on October 3, 2017, except at two locations (Rolsyn Road between Tower and 41st, and Fairview Avenue between 40th and 41st) where the data were collected on October 17, 2017. Miovision video cameras were utilized to collect detailed turning movement counts at four signalized intersections on October 3, 2017: Ogden/Main, 39th/Main, 39th/Fairview, and Ogden/Fairview. The fifth signalized intersection within the study area (Ogden at Downers Plaza Shopping Center) was not a focus of the study, as the traffic operation do not impact the neighborhood. Raw traffic data from both methods are included in Appendices A and B. The data collection locations are shown on Figure 6. Raw traffic data information are provided in Appendix B (midblock data) and Appendix C (intersection data).

Figure 6 presents the midblock traffic volumes (over 24-hours), color coded to indicate high traffic volume locations.

Figure 7 presents the peak hour traffic volumes (AM and PM hours with highest traffic volumes) for the four signalized intersections. The measured AM peak hour is from 7:30 to 8:30, while the measured PM peak hour is from 4:45 to 5:45.

Figure 8 presents the 85th percentile speed at each midblock data collection location, color coded to indicate measurements of higher speeds. The 85th percentile speed is the speed at or below which 85% of all vehicles are observed to travel under free-flowing conditions past a monitored point. The *Policy on Geometric Design of Highways and Streets* (6th Edition), published by the American Association of State highway and Transportation Officials, states, “Posted speed limits, as a matter of policy, are not the highest speeds that might be used by drivers. Instead, such limits are usually set to approximate the 85th percentile speed of traffic as determined by measuring the speeds of a sizable sample of vehicles.” While the 85th percentile speed is a nationally-accepted metric utilized in determining speed limits, it’s important to note that drivers are influenced by a number of factors, including the posted speed limit, lane widths and configurations, presence of vertical and horizontal curves, available sight distance and roadside obstructions, and the adjacent land use and developments. With so many factors influencing the speeds on a roadway, the 85th percentile speed becomes a reasonable metric that is accepted as a reasonable number that takes into account these variables.

Figure 9 presents the calculated differential between the 85th percentile speed and the posted or regulatory speed. The map is color coded according to the magnitude of the differential. This is meant to indicate locations where the measured speed is very high (or low) compared to the speed limit on the roadway. In the north/south directions, four locations have been identified as having an 85th percentile speed that is 10 to 14 mph greater than the speed limit: Elm Street between 41st and 40th; Earlston Road between

41st and 40th; Glendenning Road between 39th and 40th; and Williams Street between 41st and Tower. In the east/west direction, one location has been identified as having an 85th percentile speed that is 10 to 14 mph greater than the speed limit: 39th Street between Elm Street and Earlston Road.

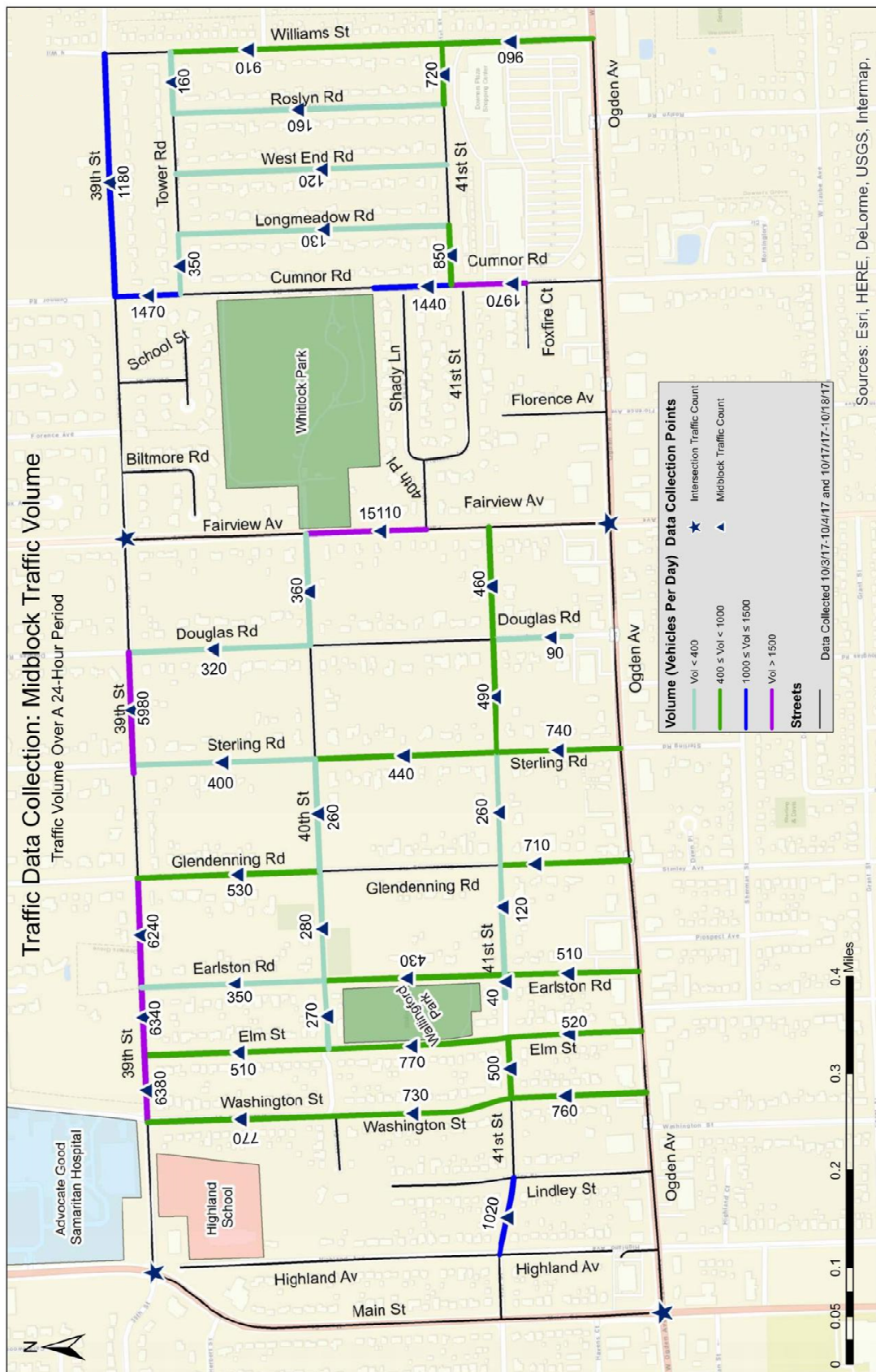


Figure 6 – Midblock Traffic Volume

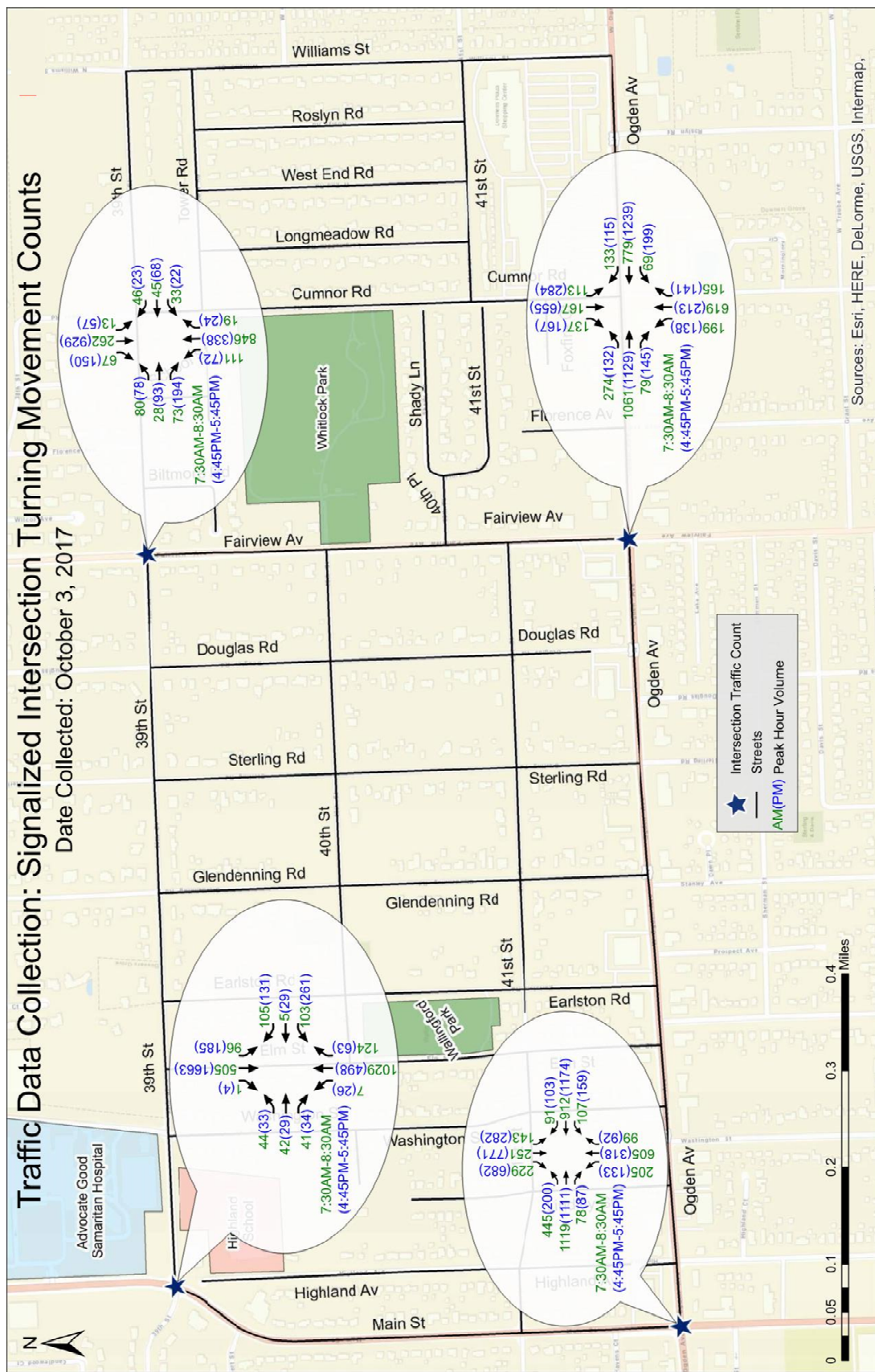


Figure 7 – Signalized Intersection Traffic Volumes



Figure 9 – Speed Differential

Crash History

Records of crashes occurring within the study limits were obtained by the Village of Downers Grove for years 2011 through 2016 and were provided to TERRA in GIS Shapefile format. Additionally, the following map (Figure 10), taken from the 2013 *Village of Downers Grove Bicycle and Pedestrian Plan*, indicates bicyclist and pedestrian crash locations occurring from 2007 through 2011.

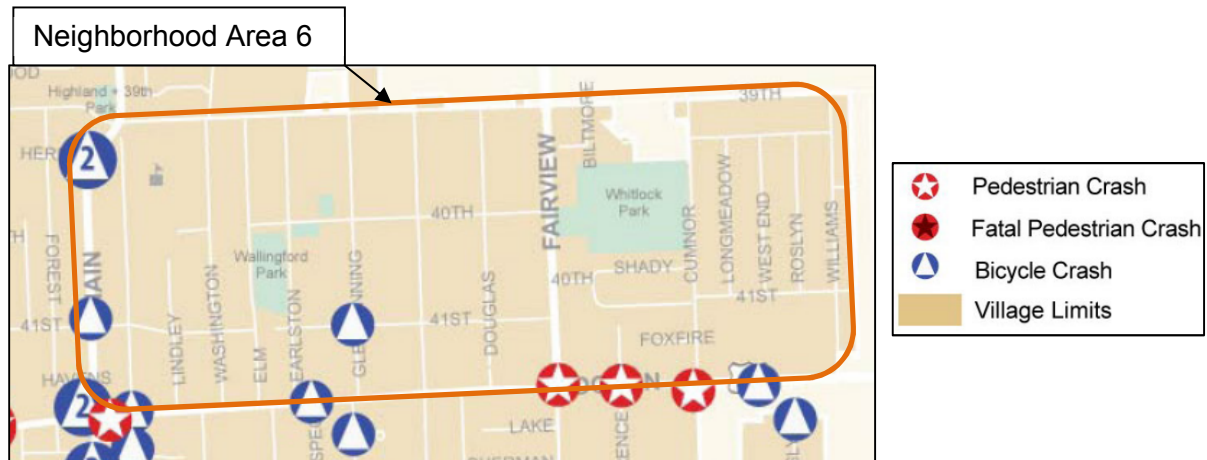


Figure 10 – Bicyclist and Pedestrian crashes occurring from 2007 through 2011 (source: *Village of Downers Grove Bicycle and Pedestrian Plan, March 2013*)

Figure 11 presents crash type and severity for years 2011 through 2016. Crash severity is divided into the following categories:

- Fatal
- A-injury, defined as any injury, other than a fatal injury, which prevents the injured person from walking, driving, or normally continuing the activities he/she was cable of performing before the injury
- B-injury, defined as any injury, other than fatal or incapacitating injury, that is evident to observers at the scene of the crash
- C-injury, defined as any injury reported or claimed that is not either an “A”, “B” or fatal injury.
- Property damage (PD) only, defined as a crash occurring without injury

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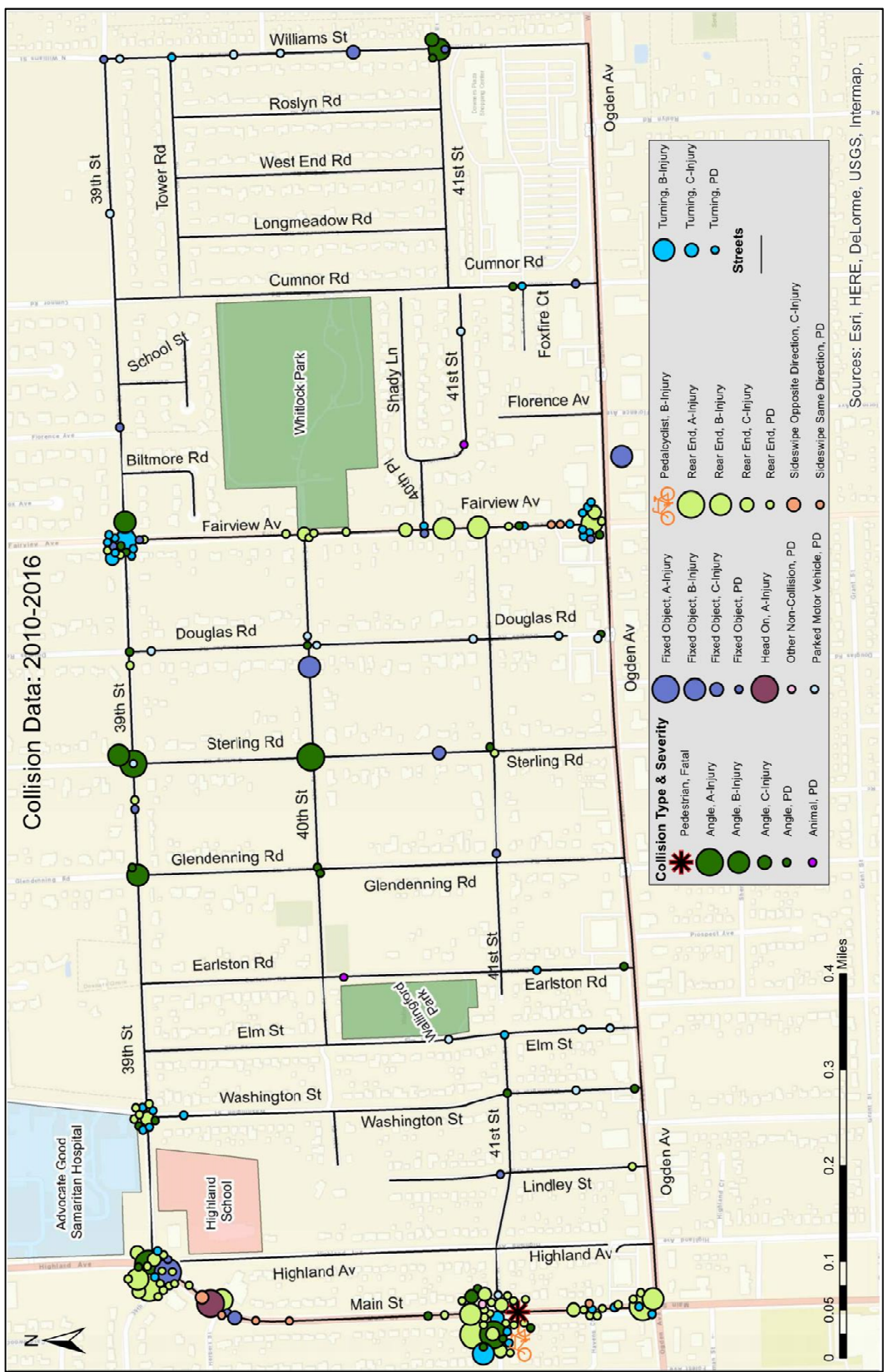


Figure 11 – Crash History 2010 through 2016

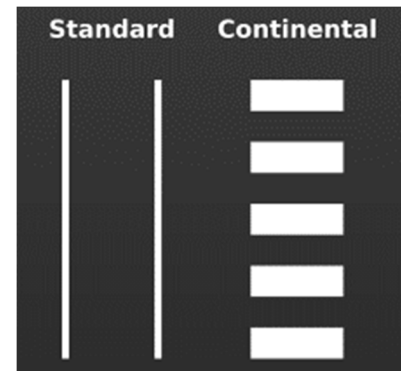
Additional Field Observations

TERRA conducted field observations of the study area on October 13, 2017. In addition to the information already presented in this report, the following information was noted.

PACE operates bus routes 722 and 834 along Main Street within the study area. Bus stops are present at the Ogden Avenue/Main Street intersection and at the 41st Street/Main Street intersection.

The intersection of Highland Avenue and Ogden Avenue has signage prohibiting left turns onto Highland Avenue from both eastbound and westbound Ogden Avenue. Additionally, northbound and southbound Highland Avenue is signed as “right turn only” at the stop sign. These movement-control signs are likely in place due to the development of the westbound left-turn lane on Ogden Avenue for its intersection with Main Street.

Continental crosswalks and crosswalk warning signage were installed at the intersection of Main Street and 41st Street in late 2015 or early 2016. It is likely that this improvement was made to address the crash history at this location, discussed later in this report. Continental crosswalk markings are compared to standard crosswalk markings in the adjacent image.



Pick-up/drop-off operations at Highland Elementary School were also observed. During school pick-up (observed to affect Highland Avenue between 2:35 and 3:10 PM), the northbound queue length on Highland Avenue was observed to be a maximum of 25. Since Highland Avenue has a cul-de-sac just north of the school and does not intersect with another roadway for over 1,400 feet south of the school (at 41st Street), the queue did not have a significant impact on the traffic operations on Highland Avenue or the overall roadway network.

A tabular summary of field observations is included in Appendix A.

Public Involvement

An overview of the information provided in this report is scheduled to be presented at the Transportation and Parking Commission Meeting on July 11, 2018. Invitations have been mailed to the 1,067 residences within the study area.

SECTION IV – DATA EVALUATION

Speeds

For the purpose of this (and all similar traffic studies), the 85th percentile speed is often used in comparison to the posted speed limit, with some variation being acceptable. However, when speeds often exceed it, additional steps can be taken to help resolve any speed issues. The measured 85th percentile exceeds the posted speed on the following roadways:

- 41st Street between Highland and Lindley, between Earlston Fairview, between Cumnor and Longmeadow, and between Roslyn and Williams
- 40th Street between Elm Street and Sterling Road, and between Douglas Road and Fairview Avenue
- 39th Street between Washington and Glendenning, between Sterling and Douglas, and between Cumnor and Williams
- Tower Road between Cumnor and Longmeadow and between Roslyn and Williams
- Elm Street between 39th and Ogden
- Washington Street between 39th and Ogden
- Earlston Road between 39th and Ogden
- Glendenning Road between 41st and Ogden and between 39th and 40th
- Sterling Road between 39th and Ogden
- Douglas Road between 39th and 40th
- Fairview Avenue between 40th and 41st
- Cumnor Road between 39th and Tower and between Whitlock Park and Foxfire Court
- Longmeadow Road between Tower and 41st
- West End Road between Tower and 41st
- Roslyn Road between Tower and 41st
- Williams Street between Tower and Ogden

Volumes

“Cut-through traffic” means vehicular traffic passing through a residential area without stopping or without at least an origin or destination within the area. Based on the functional classification of the roadways, Ogden Avenue, Main Street, Fairview Avenue, 39th Street and Williams Street should be accommodating traffic that is passing through the area, potentially not having an origin or destination within the study area. The other roadways, however, should be utilized for local access only.

Previous Village studies have defined an approximate daily traffic volume of 1,500 as an acceptable maximum for neighborhood streets. The measured traffic volume on the neighborhood streets within the study area is less than this cutoff, except for Cumnor Road south of 41st Street, which was measured as having 1,970 vehicles per day. This may be due to Cumnor’s network connectivity extending south of Ogden. While Williams Street provides access to homes both east and west of the roadway, Cumnor (within the study area) connects only to local streets to the east. With its access to Whitlock Park, local street functional classification, and relatively high average daily traffic volume, it is

reasonable to conclude that Cumnor Road is experiencing some degree of cut-through traffic and would benefit from a traffic volume deterrent.

West of Fairview Avenue, the east/west roadway network is discontinuous: 40th Street and 41st Street do not connect Main Street to Fairview Avenue. The measured volume on these roads is near or close to the cutoff of a “very low volume road” of 400 vehicles/day, which is based roughly on a volume when the number of vehicles in the busiest hour of the day is about 1 vehicle per minute. No cut-through traffic has been identified on these east/west streets. In the north/south direction, there are five roadways with local functional classifications that connect Ogden Avenue with 39th Street. Measured daily traffic volumes on these local north/south streets range from 350 to 770 vehicles with the heaviest volume occurring on Washington Street between 40th and 39th and on Elm Street next to Wallingford Park. Cut-through traffic may be occurring on these roadways, but the traffic volumes indicate that the five roadways are sharing the traffic. If a volume deterrent is installed on one or several of these roadways, traffic volume would likely re-balance with the adjacent north/south roadways. Elm Street, with its access to Wallingford Park and relatively daily traffic volume, is a reasonable candidate for a traffic volume deterrent. Glendenning Road, too, may be a reasonable candidate for a volume deterrent or closure based on the natural land use surrounding the intersection of Glendenning and 40th. Note that none of the traffic volumes on these roadways is greater than 1,000 vehicles per day, which is considered a typical cut off for low-volume to high-volume.

Intersection Traffic Control

The study area intersections that are currently uncontrolled, under yield control, or under stop control have been evaluated. Uncontrolled and yield controlled intersections are proposed to be converted to stop controlled intersections, in accordance with the Village’s goals to reduce crash potential and clarify right of way assignment. The Manual on Uniform Traffic Control Devices (MUTCD) provides criteria to assist in determining whether side-street stop control and all-way stop control are warranted at a given intersection. The following relevant criteria were considered per MUTCD (*in italics*).

Side street stop control:

MUTCD Section 2B.06: *The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:*

- A. *The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;*
- B. *A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or*
- C. *Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.*

All-way stop control:

The MUTCD states that the criteria should be considered for multi-way stop sign installation; if any one criterion is met, multi-way stop control should be considered.

Section 2B.07 – B: *“Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.”*

The available crash data for 2010 through 2016 indicates that the neighborhood intersections under consideration for all-way stop control do not meet this condition.

Section 2B.07 – C: *“The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and the combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but if the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.”*

From the traffic volume data collected, this condition is not met for any intersection of two locally classified roadways within the study area.

Optional criterion that is relevant to this location per MUTCD is as follows:

“Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop”

Note that visibility at the intersection of 40th Street and Douglas road was identified to be low. See the adjacent photo for a view looking west from southbound Douglas road. Per Section 28-3.03 of the IDOT *Bureau of Local Roads and Streets Manual*, the calculated intersection sight distance for a side-street stop condition (with a 25 mph design speed and a passenger design vehicle) is approximately 275-ft. The available sight distance is approximately 195-ft. For this reason, this intersection would benefit from being converted to all-way stop control.



Intersection Capacity Analysis

Level of Service (LOS) analysis is a means of determining the ability of an intersection to accommodate vehicular traffic volumes. The analysis is based on intersection geometrics, traffic controls and traffic (vehicle, pedestrian, and bicycle) volumes. The analysis

produces an indication of the LOS at which an intersection is functioning or is expected to function in the future.

LOS is defined by letter characters that range from A to F, with A representing the best traffic operating conditions that have little or no delay to vehicles utilizing the intersection and F characterizing poor conditions that have significant delay. Typically, LOS A through D is considered acceptable and LOS E is considered representative of conditions where improvements are needed. LOS F operating conditions are unacceptable and indicate that improvements may be needed, in the form of traffic control modification, geometric changes, or a combination of both, for the purpose of reducing vehicle delay. The delay limits for each LOS category, based on the Transportation Research Board's *Highway Capacity Manual* (HCM), are shown in Table 1.

Table 1 – Level of Service Thresholds for Control Delay (seconds/vehicle)		
Level of Service	Control Delay per Vehicle (sec/veh)	
	Signalized	Unsignalized
A	0-10 sec	0-10 sec
B	> 10-20 sec	> 10-15 sec
C	> 20-35 sec	> 15-25 sec
D	> 35-55 sec	> 25-35 sec
E	> 55-80 sec	> 35-50 sec
F	> 80 sec	> 50 sec

As stated above, LOS is a measure of the acceptability of the amount of delay, therefore it is considered slightly subjective as what is acceptable in a major metropolitan area may not be acceptable in a small city or rural area. These delays are computed as the average control delay per vehicle arriving at the intersection. IDOT typically accepts an overall LOS of D on corridors.

Synchro version 10, a software program that implements concepts from the HCM for signalized and unsignalized intersections, was utilized to analyze and provide LOS and delay for each approach at the four analyzed signalized intersections. Analysis results were based on HCM methodology.

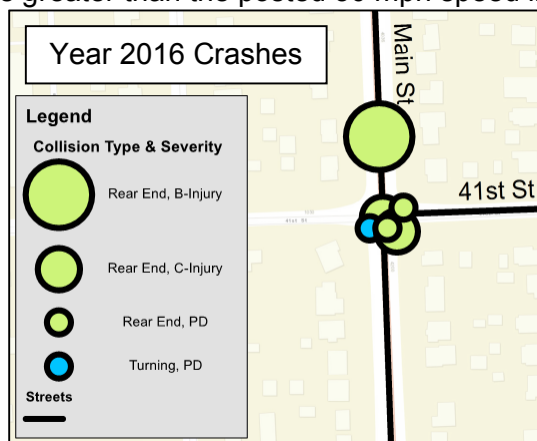
Refer to Appendix D for a summary table of the Intersection Capacity Analysis for the existing condition AM and PM peak hours, as well as the detailed capacity analyses. It is notable that the northbound and southbound approaches at intersections with Ogden Avenue operate at low levels of service (LOS E or F) depending on the time of day. Since Ogden Avenue is a State Route in a highly urbanized area, this is not an unusual condition.

Crash History

Available recent crash history indicates only one bicyclist crash and one pedestrian crash within the study area. However, the pedestrian crash was a fatality, occurring in 2013 in the 10 PM hour under dry conditions.

From the crash diagram shown in Figure 11 (indicating crash type and severity from 2010 through 2016), clusters of crashes and notable trends are present at the following locations:

- Intersection of Main Street and 41st Street: This intersection was improved in late 2015/early 2016 to provide high visibility crosswalks with signage and to upgrade the sidewalk ramps for ADA compliance. See the before and after photos from this improvement. There is a street light attached to a utility pole in the southwest corner. The crash history at this location indicates frequent rear end crashes, angle crashes and turning crashes. The year 2016 crash history (post improvement) indicates a continued trend of rear end crashes. See the following diagram for crashes that occurred in 2016 at this intersection. Contributing factors to this trend may include frequent driveways near the intersection, limited visibility of intersecting traffic due to roadside obstructions, and the “feel” of the street may be encouraging speeds greater than the posted 30 mph speed limit.



- Intersection of Main Street and 39th Street
- Intersection of Fairview Avenue and 39th Street

- Intersection of Fairview Avenue and Ogden Avenue
- The reverse curves on Main Street just south of 39th Street: these curves meet the policy value for horizontal curves on a roadway with normal crown presented in IDOT's *Bureau of Local Roads and Streets Manual*, which indicates a minimum curve radius of 495-ft for a 35 mph design speed (5 mph greater than the posted speed). The approximate curve radii are 600-ft. Nevertheless, the crash history indicates a trend of sideswipe crashes, two fixed object crashes, a rear end crash, and an A-injury head-on crash at this location. Curve warning signage is present for the northbound and southbound approaches.
- Angle crashes at the yield controlled intersections along 40th Street at Glendenning Road, Sterling Road, and Douglas Road: this type of crash may be reduced by installing stop control in place of the existing yield control, as angle crashes are a result of a failure to yield.
- Rear end crashes on Fairview Avenue between Ogden Avenue and 40th Street
- Intersection of Washington Street and 39th Street: a mix of turning, rear end, and angle crashes.
- Intersection of Williams Street and 41st Street: angle crashes

Pedestrian/Bicyclist Network

Overall, the study area's pedestrian accommodations provide a reasonable level of connectivity, typically providing at least one sidewalk per block.

At the intersection of Fairview/40th, there is an unmarked crosswalk crossing the north leg, connecting the community west of Fairview to Whitlock Park. Since Fairview Avenue is free-flow through this intersection with a posted speed limit of 35 mph, this crosswalk may benefit from additional pavement markings and signage, as well as curb ramps that meet current ADA/PROWAG standards.

Fairview Avenue has been identified as a top ten roadway for bicycling and in need of bicyclist improvements. With a measured average daily traffic (ADT) of just over 15,000 vehicles per day, the roadway is a viable candidate for a road diet, reducing the number of vehicular lanes from four to three. Installation of a road diet would create opportunities for on-street bike lanes and pedestrian refuge islands.

The unmarked crosswalk crossing Elm Street at 39th Street is located on the south side of the northbound stop sign and stop bar. This is a very unconventional placement of the crosswalk, since it may increase the risk of a pedestrian collision. Refer to the adjacent aerial image. A similar condition exists on Earlston Road at 39th Street.

Along 39th Street near/within the school zone, there is sidewalk on



both sides. However, there is no designated crosswalk crossing 39th Street between Highland Avenue (signalized) and Glendenning Road (signed with crosswalk warning), which are approximately 0.4 miles apart. Since the intersection of 39th/Washington is an existing all-way stop and is near Highland Elementary School and Advocate Good Samaritan Hospital, a new crosswalk crossing 39th Street at this intersection would provide additional benefit to the pedestrian network while taking advantage of the existing all-way stop control.

Parking Evaluation

While vehicles were observed to be illegally parked on Florence Avenue, this is a short dead-end street serving several residences. While on-street parking limits the traversable roadway width, the parking was not observed to deteriorate roadway operations since the traffic volume is very low.

Other parking restrictions within the study area were observed to have a high level of compliance and appear to be appropriate for preventing long term on-street parking and prioritizing traffic flow during critical hours of the day.

Signage

Existing school zone signage on 39th Street should be accompanied by a “school zone ends” sign, per the MUTCD Section 7B.15.

Existing park zone speed limit signage is accompanied by a sign indicating “when children are present”. However, there is poor visibility for drivers traveling northbound on Cumnor Road to see whether children are present due to existing vegetation at the right-of-way edge. Additionally, the message of a speed limit contingent on a visible child’s presence offers justification for the driver to ignore the advised 20 mph speed limit. Both park zones have also been measured to be locations of frequent speeding:

- On Elm Street by Wallingford Park the measured 85th percentile speed was 37 mph. The speed limit is 25 mph, but this location is a school zone (i.e., 20 mph when children are present).
- On Cumnor Road just south of Whitlock Park, the measured 85th percentile speed was 34 mph. The speed limit is 25 mph, but this location is a school zone (i.e., 20 mph when children are present).

For these reasons (visibility and speeding), the removal of the “when children are present” signage may be beneficial in reducing the speeds.

An additional measure to calm traffic in the park zones would be the installation of portable speed radar signs. While these signs sometimes lose their effectiveness over time, they typically produce measurable results. Speed radar signs could be placed on both approaches to each park zone.

SECTION V – RECOMMENDATIONS

Recommendations are categorized by short-, mid- and long-term timeframes, which correspond to the level of effort and cost associated with each improvement.

Short-term Recommendations

The following short-term improvement recommendations generally have lower costs or address immediate concerns.

Table 2 – Short-term Recommendations		
Location	Identified Issue	Recommendation
39 th Street, immediately east of Glendenning Road (eastbound)	MUTCD compliance & speed limit clarity	Install “School zone ends” signage (MUTCD sign code S5-3)
39 th Street, east of Elm Street (westbound)	Speed limit clarity	Install additional school zone 20 mph sign, indicating the beginning of the westbound school zone corresponding with the location of sidewalk on the north side of 39 th .
Washington Street; Elm Street; Earlston Road; Glendenning Road; Cumnor Road (full limits of study area)	Speeding Issues	Install centerline pavement marking, with stop bars at stop signs, clearly defining a northbound and southbound lane, creating a narrower feel to the roadway
Intersection: 39 th /Washington	Sidewalk network connectivity	Install new sidewalk ramps and crosswalk across the west leg of the intersection, connecting the sidewalks on the north and south sides of 39 th Street
Crosswalks within School Zones	Driver awareness of the crosswalks	Install continental crosswalk pavement markings at all crosswalks within and near the school zones
Intersection: Fairview/Ogden	Driver awareness of the crosswalks	Install continental crosswalk pavement markings, since existing (traditional crosswalk) marking are worn away
Intersection: Fairview/40 th	Pedestrian network connectivity; Driver awareness of the crosswalks	Install continental crosswalk pavement markings with pedestrian crossing warning signage on the north leg of the intersection, increasing awareness of the crosswalk connecting the community west of Fairview to Whitlock Park

Table 2 – Short-term Recommendations (continued)		
Location	Identified Issue	Recommendation
Full neighborhood, with a focus on school and park zones	Excessive Speeding	Increase police enforcement, especially in the school and park zones

The following table recommends intersection traffic control modifications:

Table 3 – Short-term Recommendations – Intersection Control		
Intersection Location	Existing Condition	Recommended Condition
Earlston Rd / 40 th St	Yield Control (on 40 th)	All-way stop
Glendenning Rd / 40 th St	Yield Control (on 40 th)	Stop signs on both Glendenning Rd approaches
Sterling Rd / 40 th St	Yield Control (on 40 th)	Stop signs on both 40 th St approaches
Douglas Rd / 40 th St	Yield Control (on Douglas)	All-way stop
Washington St / 40 th St	Uncontrolled T	All-way stop
Elm St / 40 th St	Uncontrolled T	All-way stop
Elm St / 41 st St	Uncontrolled T	All-way stop
Earlston Rd / 41 st St	Uncontrolled 4-way	All-way stop
Douglas Rd / 41 st St	Uncontrolled 4-way	Stop signs on both Douglas Road approaches
Biltmore Rd / 39 th St	Uncontrolled T	Stop sign on Biltmore Rd
40 th Pl / 41 st St / Shady Ln	Uncontrolled T	Stop sign on the 40 th Place approach
School St / 39 th St	Uncontrolled T	Stop Sign on School St
School St / Herbert St	Uncontrolled T	Stop Sign on School St
Cumnor Rd / Tower Rd	Uncontrolled T	Stop Sign on Tower Rd
Cumnor Rd / 41 st St	Uncontrolled T	Stop sign on 41 st St
Cumnor Rd / Foxfire Ct	Uncontrolled T	Stop sign on Foxfire Ct
Longmeadow Rd / Tower Rd	Uncontrolled T	Stop sign on Longmeadow Rd
Longmeadow Rd / 41 st St	Uncontrolled T	Stop sign on Longmeadow Rd
West End Rd / Tower Rd	Uncontrolled T	Stop sign on West End Rd
West End Rd / 41 st St	Uncontrolled T	Stop sign on West End Rd
Roslyn Rd / Tower Rd	Uncontrolled T	Stop sign on Roslyn Rd
Roslyn Rd / 41 st St	Uncontrolled T	Stop sign on Roslyn Rd
Williams St / 39 th St	Uncontrolled 4-way	Stop signs on both Williams St approaches
Williams St / Tower Rd	Uncontrolled T	Stop sign on Tower Rd
Williams St / 40 th St	Uncontrolled T	Stop sign on 40 th St

Mid-term Recommendations

The following mid-term improvement recommendations represent improvements that require additional effort or cost, but provide a significant benefit to the neighborhood in terms of the goal of the study.

Speed Radar Signs

Installation of temporary speed radar signs within the neighborhood are recommended at identified locations of excessive speeding. The temporary speed radar signs should be relocated within the neighborhood periodically to promote their effectiveness. Recommended priority locations are at each approach to both park zones (on Elm Street and on Cumnor Road) are recommended to deter speeding in areas where lower speeds are essential for continued safety. Two radar signs should be sufficient, intermittently relocated within the neighborhood area.

Elm Street and Earlston Road Crosswalk Relocation at 39th Street

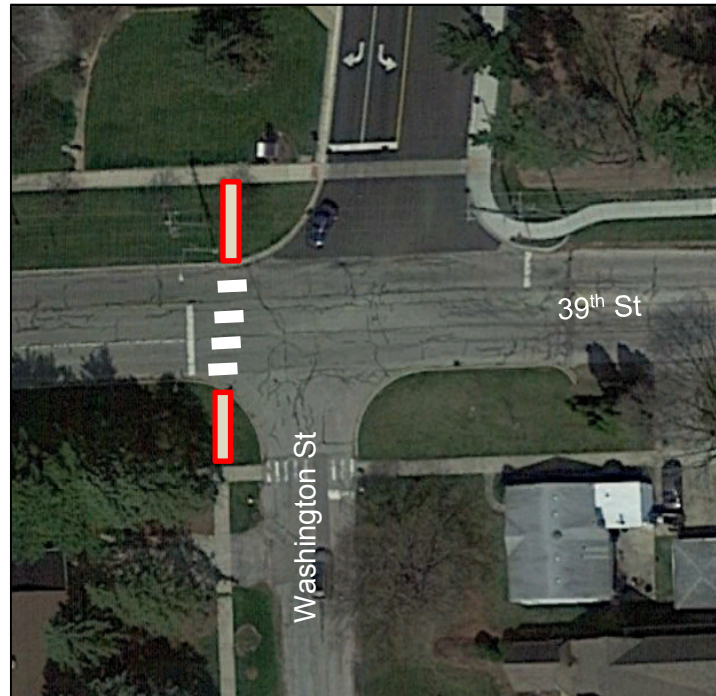
The unmarked crosswalks crossing Elm Street and crossing Earlston Street at 39th Street should be relocated to the north (including the installation of new ADA/PROWAG compliant curb ramps), and the northbound stop bar and sign should be relocated to the south. The crosswalks are within a school zone and are recommended to be striped with continental crosswalk markings. The final condition should allow northbound vehicles to stop at the stop sign, evaluate the intersection for pedestrian conflicts, evaluate the intersection for vehicular conflicts, and then proceed.



This may require the removal of trees/vegetation to accommodate the needed intersection sight distance. The adjacent image indicates an approximation of this recommendation on Elm. A similar condition is recommended to be installed at Earlston.

New Crosswalk on 39th Street at Washington Street

A new crosswalk is recommended to be installed crossing the west leg of the intersection of 39th Street and Washington Street. The crosswalk is recommended to be marked with continental crosswalk markings. The new pedestrian network connection expands the connectivity within the school zone (while utilizing an existing all-way stop intersection to accommodate pedestrian crossings) and adjacent to a hospital. The adjacent image indicates an approximation of this recommendation.



Long-term Recommendations

The following long-term improvement recommendations require significant effort or cost, but come with a transformational benefit to the neighborhood by addressing traffic calming needs and balancing the needs of all users of the right-of-way. The recommendations may also require additional study, or may benefit from additional analysis beyond this study's scope/limits.

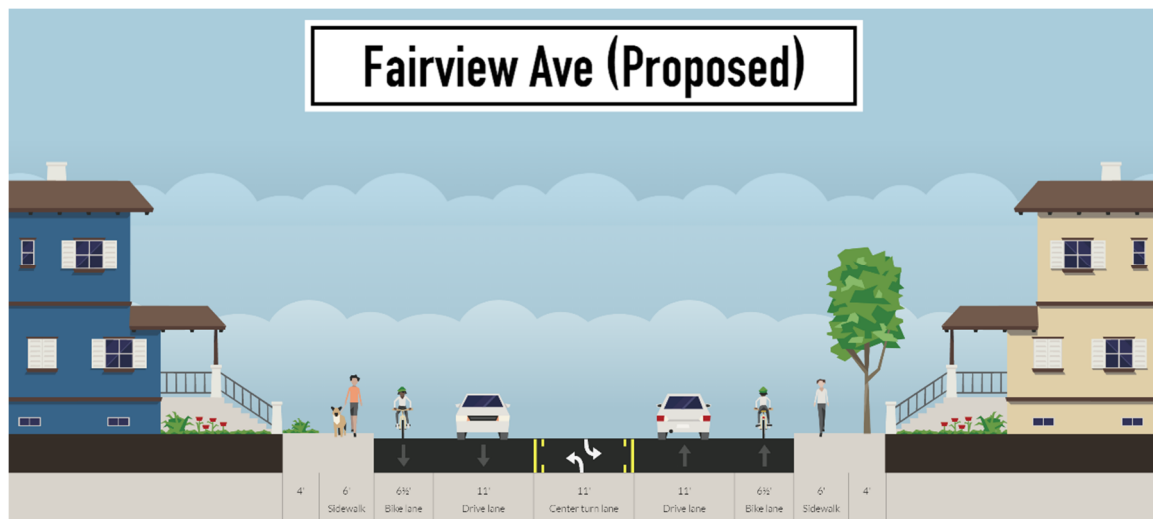
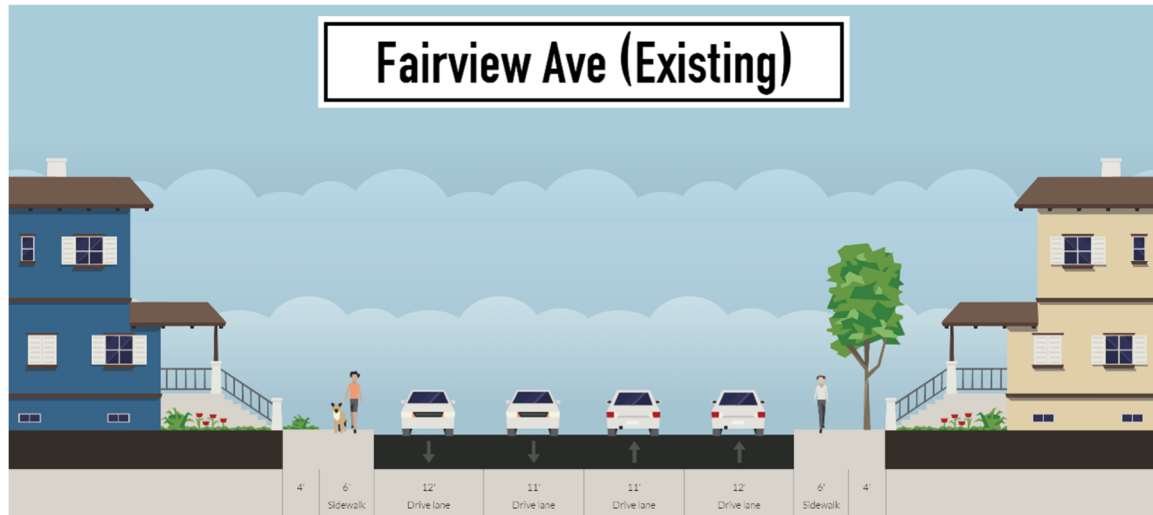
Curb Elm St between 40th Street and 41st Street

Elm Street was identified to have a high occurrence of speeding adjacent to Wallingford Park. A long-term traffic calming effect can be achieved by converting the roadway from a rural section (i.e., no curb/gutter, with roadside ditches) to an urban section (i.e., curbed). This change in the nature of the roadway will have a calming effect, especially when vehicles are parked on-street. Installing curb along this portion of Elm Street should be considered if the Village pursues drainage improvement projects in this area. To further encourage traffic calming, curb extensions (sometimes called "bump outs") may be installed at the intersections of Elm and 40th and at the intersection of Elm/41st. Curb extensions are an effective tool in creating a tighter "feel" to the roadway and promoting awareness to drivers that the roadway is intended to be low speed.

Fairview Avenue Road Diet

Fairview Avenue consists of two lanes in each direction. A road diet should be considered along Fairview Avenue if the entire corridor is to be improved. Applying a road diet (reducing the vehicular lanes from 4 to 3) is a viable option based on the measured average daily traffic and peak hour analysis at the intersection of Fairview and 39th. A road diet can result in traffic calming, and creates an opportunity to install a pedestrian refuge island at the Whitlock Park entrance (on the north leg of the intersection of Fairview and

40th) and to provide on-street bicyclist accommodations. The existing roadway is typically a 44-ft section. The proposed roadway section would consist of 5-ft bike lanes on both sides (adjacent to the curbs), 11-ft vehicle lanes, and a 12-ft two-way left-turn lane. The following images indicate this change.



Intersection capacity analysis (using Synchro software) indicates that the intersection of Fairview and Ogden would result in LOS E and F for some movements. The intersection is already belabored due to the high traffic volumes on Ogden Avenue, and the signal cycle length is relatively long (130 seconds, coordinated along Ogden). By reducing the lane capacity on Fairview, the LOS drops further on Fairview, or phase time must be pulled from the Ogden approaches. For this reason, the transition from the existing section to the proposed road diet section is proposed to occur immediately north of Ogden. At Fairview and 39th, peak hour intersection capacity analysis indicates that LOS C or better can be maintained during AM and PM peak hours for all movements. Note, however, that a southbound right-turn lane should be maintained.

A road diet on Fairview is consistent with the recommendations presented in the 2013 *Village of Downers Grove Bicycle and Pedestrian Plan*, which notes that Fairview Avenue was voted in the top ten of best bicycling routes and needing bicycle improvements.

With the Fairview Avenue road diet, a pedestrian crosswalk and refuge island is recommended on Fairview Avenue at 40th Street (i.e., the Whitlock Park Entrance). The new crosswalk should be accompanied by crosswalk warning signage and advance warning signage. This will provide pedestrian network continuity across Fairview Avenue, connecting the walking community on the west side of Fairview Avenue with Whitlock Park.

The road diet on Fairview Avenue is further recommended to be studied along Fairview Avenue to the north and south of the Neighborhood Area 6 study limits to determine logical starting and ending points in the broader context of the roadway within the Village.

...

Figure 12 presents many of the recommendations graphically.

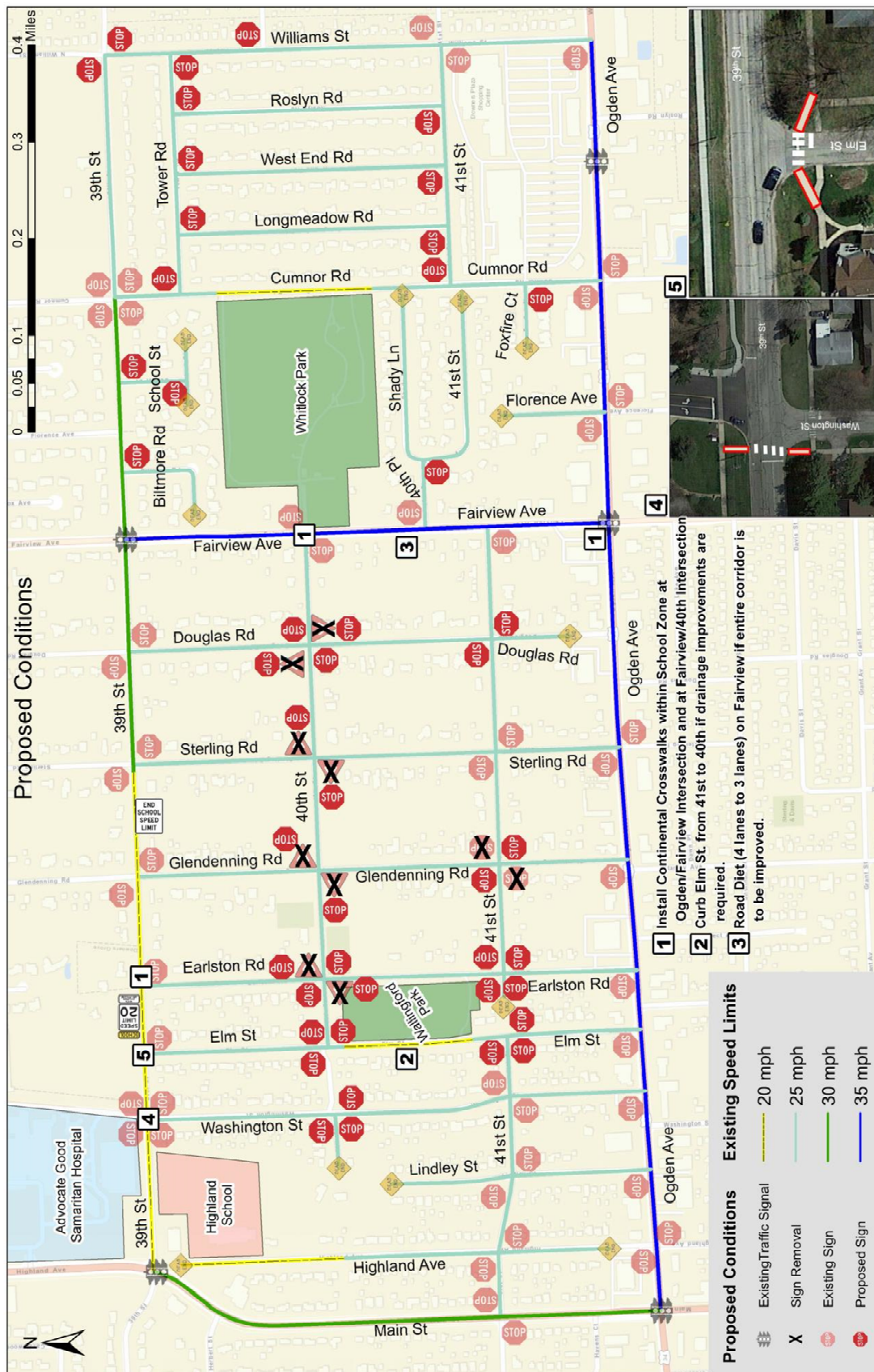


Figure 12 – Proposed Conditions

Appendix A

Additional Field Observations

Summary of Observations	
Roadway	Observations
Main Street	Dupage County route 9; Speed limit: 30 mph; signed and marked pedestrian crosswalks at 41 st Street; 2 lanes in each direction with painted 4-ft median; widens at intersections for left-turn lanes; horizontal curve south of 39 th Street; no parking
39 th Street	Signed bike route from east of Washington to west of Fairview; Speed limit 25 mph west of Washington, but 30 mph east of Washington; School zone speed limit 20 mph east of Highland; not clear where school zone speed limit ends for eastbound travel; 3 lanes west of Washington, and 2 lanes east of Washington; pedestrian crosswalks and signage at Glendenning; no centerline pavement markings east of Florence; east of Cummings, the roadway widens and curb/gutter is present
Williams Street	Approximately 30-ft wide; curbed; no pavement markings; speed limit 25 mph; free flow from 39 th to Ogden, but with uncontrolled intersection at 40 th Street; parking is prohibited south of 41 st Street
Tower Road	Approximately 30-ft wide; curbed; no pavement markings; parking is allowed
Cumnor Road	Approximately 30-ft wide; curbed; park zone speed limit 20 mph (when children present) from south of Tower to south of Whitlock Park; “no parking” adjacent to park from 8 AM to 6 PM northbound; no parking south of 41 st ; no parking north of 41 st Street 8 AM to 6 PM northbound, southbound not signed; long southbound right-turn lane at Ogden; park visibility: difficult to determine if children are present at the park until the driver is immediately adjacent to the park.
41 st Street (Cumnor to Williams)	Approximately 30-ft wide; curbed; no signs
Ogden Avenue	Illinois Route 34; 5-lane section; speed limit 35 mph; commercial corridor; 3 signalized intersections within study area
Fairview Avenue	Dupage County Route 25; Speed limit 35 mph; 2 lanes in each direction; no median; widens at Ogden and at 39 th to develop left-turn lanes
40 th Place, Shady Lane, 41 st Street	“Shady Lane Estates”; relatively wide roadways; speed limit 25 mph; 3-ft carriage walks adjacent to the curb; dense foliage adjacent to the roadway
41 st Street	Relatively narrow roadway (estimated 20-ft to 22-ft) with patches of aggregate shoulder; speed limit 25 mph; no parking 8 AM to 11 AM near Highland
40 th Street	Relatively narrow roadway (estimated 20-ft to 22-ft) with patches of aggregate shoulder
Lindley Street	No parking 8 AM to 11 AM; speed limit 25 mph; school zone speed limit 20 mph near Highland Elementary; no parking 8 AM to 9 AM and 2 PM to 3 PM near school; Speedway gas station lot entrance on Lindley (at Ogden) is signed “no right turn” onto Lindley
Washington Street	No curb, but appears to be wider than the other neighborhood rural-section roadways; hill at 40 th St; signed “no left turn” into Washington from Ogden 6 AM to 9 AM

Earlston Road	Speed limit 25 mph; hill north of 40 th ; poor visibility for northbound left-turn at 39 th due to vegetation
Elm Street	Speed limit 25 mph; park zone speed limit 20 mph south of 40 th
Glendenning Road	Speed limit 25 mph; relatively narrow roadway, but observed some parked cars; broad sag vertical curve at 40 th
Sterling Road	Speed limit 25 mph; "blind hill" signed south of 41 st ; another crest vertical curve at 41 st
Douglas Road	Relatively narrow (estimated 20-ft); recently paved; poor yield visibility at 40 th looking southbound right; dead end (fence) at south is gapped for pedestrians, with sidewalk on west side

Appendix B

Midblock Traffic Data

(HiStar Magnetic Detection)

Downers Grove - Neighborhood Traffic Study Area 6



Location #	On Road	Location	Street Direction	Posted Speed	Count Date	Count Duration	Volume			85th Percentile Speed			Differential: (85th Percentile Speed) - (Posted Speed)	Veh Length < 24'			Veh Length: 24' - 39'			Veh Length > 39'		
							EB/NB	WB/SB	Total	EB/NB	WB/SB	Total		EB/NB	WB/SB	Total	EB/NB	WB/SB	Total	EB/NB	WB/SB	Total
001	39th St	Washington to Elm	E/W	30	10/3/2017	24 hrs	3303	3076	6379	34	32	33	3	3139	2973	6112	121	76	197	43	27	70
002	39th St	Elm to Ealston	E/W	30	10/3/2017	24 hrs	3297	3042	6339	41	37	40	10	3078	2930	6008	180	86	266	39	26	65
003	39th St	Earlston to Glendenning	E/W	30	10/3/2017	24 hrs	3256	2986	6242	36	35	35	5	3182	2911	6093	55	49	104	19	26	45
004	39th St	Sterling to Douglas	E/W	30	10/3/2017	24 hrs	3136	2843	5979	35	37	36	6	3068	2761	5829	51	60	111	17	22	39
005	39th St	Cumnor to Williams	E/W	25	10/3/2017	24 hrs	637	539	1176	37.3	36	37	12	604	504	1108	25	25	50	8	10	18
006	Tower Rd	Williams to Roslyn	E/W	25	10/3/2017	24 hrs	88	73	161	28.65	27.9	28	3	75	62	137	9	9	18	4	2	6
007	Tower Rd	Longmeadow to Cumnor	E/W	25	10/3/2017	24 hrs	168	179	347	30	30	30	5	143	168	311	16	8	24	9	3	12
008	Cumnor Rd	Tower to 39th	N/S	25	10/3/2017	24 hrs	807	666	1473	31	33	32	7	782	617	1399	20	40	60	5	9	14
009	Williams St	39th to 40th	N/S	25	10/3/2017	24 hrs	331	579	910	38	34	35	10	290	530	820	32	31	63	9	18	27
010	Roslyn Rd	Tower to 41st	N/S	25	10/17/2017	24 hrs	94	66	160	29	32	30	5	86	61	147	7	4	11	1	1	2
011	W End Rd	Tower to 41st	N/S	25	10/3/2017	24 hrs	39	85	124	28	31	30	5	36	79	115	2	4	6	1	2	3
012	Longmeadow Rd	Tower to 41st	N/S	25	10/3/2017	24 hrs	66	63	129	30	33.8	31.8	6.8	55	50	105	6	11	17	5	2	7
013	Cumnor Rd	Tower to 41st	N/S	25	10/3/2017	24 hrs	779	657	1436	34	34	34	9	752	626	1378	20	25	45	7	6	13
014	41st St	Cumnor to Longmeadow	E/W	25	10/3/2017	24 hrs	357	492	849	29	28.05	28	3	333	463	796	14	15	29	10	14	24
015	41st St	Roslyn to Williams	E/W	25	10/3/2017	24 hrs	331	384	715	31	31	31	6	313	370	683	16	8	24	2	6	8
016	Williams St	41st to US-34	N/S	25	10/3/2017	24 hrs	532	426	958	31.05	30	31	6	470	406	876	45	14	59	17	6	23
017	Cumnor Rd	41st to US-34	N/S	25	10/3/2017	24 hrs	1030	941	1971	33	32	32.5	7.5	948	863	1811	61	57	118	21	21	42
018	Fairview Ave	40th to 41st	N/S	35	10/17/2017	24 hrs	7191	7917	15108	41	40	41	6	7016	7737	14753	122	112	234	53	68	121
019	40th St	Fairview to Douglas	E/W	25	10/3/2017	24 hrs	258	102	360	29	36	30	5	242	88	330	10	10	20	6	4	10
020	40th St	Glendenning to Earlston	E/W	25	10/3/2017	24 hrs	173	111	284	30	30	30	5	162	103	265	8	3	11	3	5	8
021	40th St	Earlston to Elm	E/W	25	10/3/2017	24 hrs	173	98	271	28	29	28	3	162	92	254	6	5	11	5	1	6
022	40th Street	Glendenning to Sterling	E/W	25	10/3/2017	24 hrs	148	111	259	31	30	30	5	141	95	236	3	12	15	4	4	8
023	41st st	Highland to Lindley	E/W	25	10/3/2017	24 hrs	594	424	1018	27	31	30	5	582	398	980	8	22	30	4	4	8
024	41st st	Washington to Elm	E/W	25	10/3/2017	24 hrs	295	200	495	25	19	25	0	289	189	478	3	4	7	3	7	10
025	41st st	Elm to Earlston	E/W	25	10/3/2017	24 hrs	19	18	37	17	11	10.6	-14.4	18	17	35	0	0	0	1	1	2
026	41st st	Earlston to Glendenning	E/W	25	10/3/2017	24 hrs	57	63	120	29	34.4	33	8	54	59	113	3	2	5	0	2	2
027	41st st	Glendenning to Sterling	E/W	25	10/3/2017	24 hrs	120	138	258	27	28	28	3	112	132	244	5	5	10	3	1	4
028	41st st	Sterling to Douglas	E/W	25	10/3/2017	24 hrs	237	249	486	33.3	36	34	9	220	236	456	16	10	26	1	3	4
029	41st st	Douglas to Fairview	E/W	25	10/3/2017	24 hrs	197	266	463	29	32	31	6	188	260	448	6	4	10	3	2	5
030	Douglas Rd	US-34 to 41st	N/S	25	10/3/2017	24 hrs	56	32	88	16.45	20.05	18	-7	52	31	83	3	1	4	1	0	1
031	Douglas Rd	40th to 39th	N/S	25	10/3/2017	24 hrs	206	115	321	31	36	32	7	195	104	299	7	9	16	4	2	6
032	Sterling Rd	39th to 40th	N/S	25	10/3/2017	24 hrs	216	187	403	31	32	31	6	198	162	360	11	17	28	7	8	15
033	Sterling Rd	40th to 41st	N/S	25	10/3/2017	24 hrs	227	210	437	33	32	33	8	196	198	394	27	9	36	4	3	7
034	Sterling Rd	41st to US-34	N/S	25	10/3/2017	24 hrs	370	365	735	30	32	31	6	334	339	673	28	19	47	8	7	15
035	Glendenning Rd	US-34 to 41st	N/S	25	10/3/2017	24 hrs	335	371	706	31	35	34	9	312	357	669	15	9	24	8	5	13
036	Glendenning Rd	40th to 39th	N/S	25	10/3/2017	24 hrs	258	274	532	34.15	37	36	11	240	249	489	11	16	27	7	9	16
037	Earlston Rd	39th to 40th	N/S	25	10/3/2017	24 hrs	186	166	352	32	32	32	7	179	159	338	6	7	13	1	0	1
038	Earlston Rd	40th to 41st	N/S	25	10/3/2017	24 hrs	213	212	425	36	40	39	14	198	196	394	12	8	20	3	8	11
039	Earlston Rd	41st to US-34	N/S	25	10/3/2017	24 hrs	242	265	507	31	32	31	6	235	255	490	6	4	10	1	6	7
040	Elm St	US-34 to 41st	N/S	25	10/3/2017	24 hrs	328	190	518	31	34.35	32	7	313	174	487	10	13	23	5	3	8
041	Elm St	41st to 40th	N/S	25	10/3/2017	24 hrs	433	338	771	36	37	37	12	380	294	674	43	32	75	10	12	22
042	Elm St	40th to 39th	N/S	25	10/3/2017	24 hrs	293	217	510	33	34	33	8	281	201	482	10	11	21	2	5	7
043	Washington St	39th to 40th	N/S	25	10/3/2017	24 hrs	476	296	772	31	35	32	7	449	270	719	10	16	26	17	10	27
044	Washington St	40th to 41st	N/S	25	10/3/2017	24 hrs	366	368	734	32	33	33	8	351	343	694	13	14	27	2	11	13
045	Washington St	41st to US-34	N/S	25	10/3/2017	24 hrs	270	490	760	33	30	31	6	242	473	715	18	10	28	10	7	17

Appendix C

Signalized Intersection Traffic Data

(Miovision Video Turning Movement Counts)



309-999-0123 ccoad@terraengineering.com

Count Name: 39th St at Fairview Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 1

Turning Movement Data

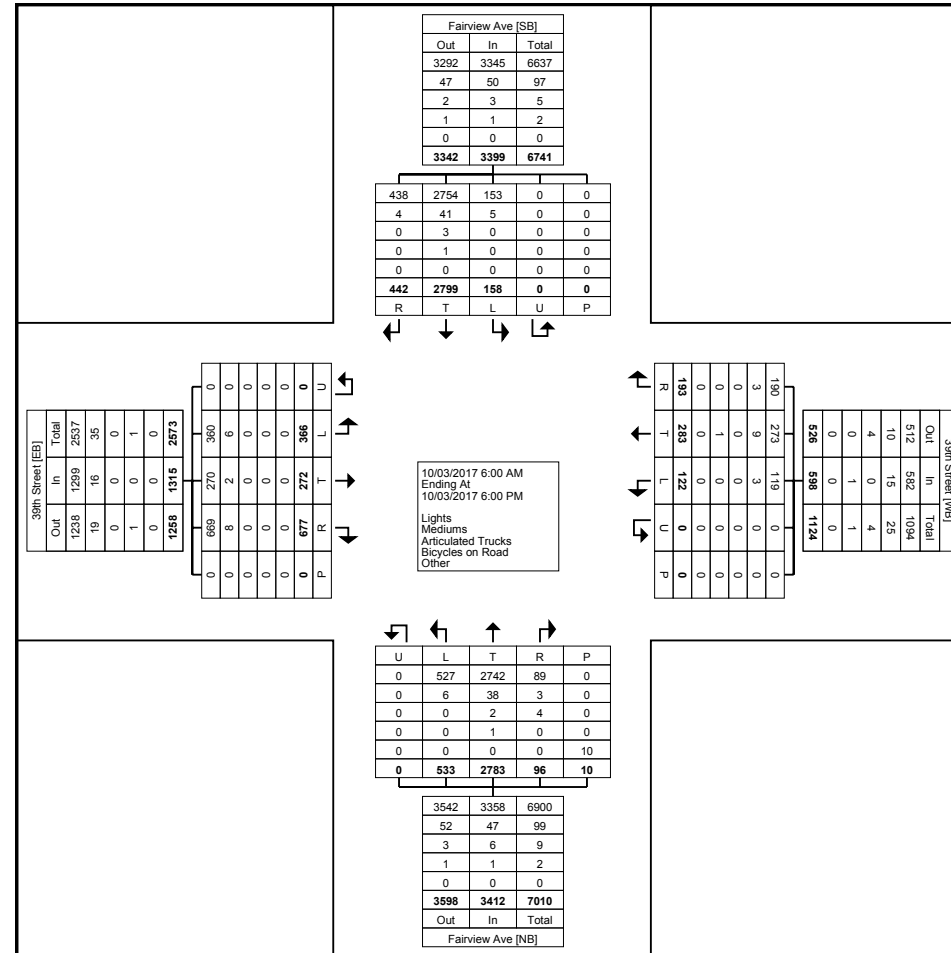
Start Time	Fairview Ave Southbound						39th Street Westbound						Fairview Ave Northbound						39th Street Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	0	22	6	0	0	28	1	3	5	0	0	9	14	36	0	0	0	50	3	1	7	0	0	11	98
6:15 AM	0	24	9	0	0	33	1	5	4	0	0	10	19	51	0	0	0	70	11	0	3	0	0	14	127
6:30 AM	1	36	8	0	0	45	3	6	4	0	0	13	27	72	0	0	0	99	10	4	5	0	0	19	176
6:45 AM	0	43	10	0	0	53	5	7	12	0	0	24	35	117	3	0	0	155	8	5	4	0	0	17	249
Hourly Total	1	125	33	0	0	159	10	21	25	0	0	56	95	276	3	0	0	374	32	10	19	0	0	61	650
7:00 AM	1	57	16	0	0	74	2	11	12	0	0	25	20	132	0	0	0	152	6	2	11	0	0	19	270
7:15 AM	2	62	15	0	0	79	11	14	8	0	0	33	19	198	1	0	1	218	15	5	16	0	0	36	366
7:30 AM	2	69	16	0	0	87	14	9	14	0	0	37	23	199	3	0	0	225	23	4	21	0	0	48	397
7:45 AM	3	67	26	0	0	96	12	14	12	0	0	38	35	256	7	0	0	298	18	6	18	0	0	42	474
Hourly Total	8	255	73	0	0	336	39	48	46	0	0	133	97	785	11	0	1	893	62	17	66	0	0	145	1507
8:00 AM	7	73	12	0	0	92	4	14	7	0	0	25	31	192	6	0	0	229	23	5	17	0	0	45	391
8:15 AM	1	53	13	0	0	67	3	8	13	0	0	24	26	215	6	0	0	247	16	13	17	0	0	46	384
8:30 AM	7	77	13	0	0	97	4	17	13	0	0	34	29	171	1	0	3	201	18	7	15	0	0	40	372
8:45 AM	4	73	12	0	0	89	2	9	6	0	0	17	37	170	3	0	1	210	15	3	16	0	0	34	350
Hourly Total	19	276	50	0	0	345	13	48	39	0	0	100	123	748	16	0	4	887	72	28	65	0	0	165	1497
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	6	106	6	0	0	118	1	5	11	0	0	17	14	56	6	0	0	76	8	12	38	0	0	58	269
3:15 PM	9	86	10	0	0	105	7	10	5	0	0	22	8	71	5	0	0	84	7	18	38	0	0	63	274
3:30 PM	9	136	11	0	0	156	5	12	9	0	0	26	20	80	6	0	0	106	17	13	51	0	0	81	369
3:45 PM	8	134	17	0	0	159	6	18	5	0	0	29	25	82	5	0	0	112	16	8	44	0	0	68	368
Hourly Total	32	462	44	0	0	538	19	45	30	0	0	94	67	289	22	0	0	378	48	51	171	0	0	270	1280
4:00 PM	2	176	23	0	0	201	5	12	6	0	0	23	16	84	4	0	0	104	25	15	42	0	0	82	410
4:15 PM	10	200	21	0	0	231	3	14	7	0	0	24	16	88	6	0	0	110	20	14	42	0	0	76	441
4:30 PM	17	216	22	0	0	255	6	8	8	0	0	22	18	88	6	0	0	112	20	25	57	0	0	102	491
4:45 PM	14	203	30	0	0	247	4	16	3	0	0	23	22	91	6	0	0	119	13	20	48	0	0	81	470
Hourly Total	43	795	96	0	0	934	18	50	24	0	0	92	72	351	22	0	0	445	78	74	189	0	0	341	1812
5:00 PM	17	243	28	0	0	288	6	8	7	0	0	21	20	88	6	0	1	114	26	26	46	0	0	98	521
5:15 PM	11	273	55	0	0	339	6	19	7	0	0	32	11	73	6	0	2	90	16	20	55	0	0	91	552
5:30 PM	15	210	37	0	0	262	6	25	6	0	0	37	19	88	6	0	1	113	23	27	45	0	0	95	507
5:45 PM	12	160	26	0	0	198	5	19	9	0	0	33	29	85	4	0	1	118	9	19	21	0	0	49	398
Hourly Total	55	886	146	0	0	1087	23	71	29	0	0	123	79	334	22	0	5	435	74	92	167	0	0	333	1978
Grand Total	158	2799	442	0	0	3399	122	283	193	0	0	598	533	2783	96	0	10	3412	366	272	677	0	0	1315	8724
Approach %	4.6	82.3	13.0	0.0	-	-	20.4	47.3	32.3	0.0	-	-	15.6	81.6	2.8	0.0	-	-	27.8	20.7	51.5	0.0	-	-	-
Total %	1.8	32.1	5.1	0.0	-	39.0	1.4	3.2	2.2	0.0	-	6.9	6.1	31.9	1.1	0.0	-	39.1	4.2	3.1	7.8	0.0	-	15.1	-
Lights	153	2754	438	0	-	3345	119	273	190	0	-	582	527	2742	89	0	-	3358	360	270	669	0	-	1299	8584
% Lights	96.8	98.4	99.1	-	-	98.4	97.5	96.5	98.4	-	-	97.3	98.9	98.5	92.7	-	-	98.4	98.4	99.3	98.8	-	-	98.8	98.4
Mediums	5	41	4	0	-	50	3	9	3	0	-	15	6	38	3	0	-	47	6	2	8	0	-	16	128

% Mediums	3.2	1.5	0.9	-	-	1.5	2.5	3.2	1.6	-	-	2.5	1.1	1.4	3.1	-	-	1.4	1.6	0.7	1.2	-	-	1.2	1.5
Articulated Trucks	0	3	0	0	-	3	0	0	0	0	-	0	0	2	4	0	-	6	0	0	0	0	-	0	9
% Articulated Trucks	0.0	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.1	4.2	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.1
Bicycles on Road	0	1	0	0	-	1	0	1	0	0	-	1	0	1	0	0	-	1	0	0	0	0	-	0	3
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.4	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.0	-	-	-	-	-	-	-	-



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Count Name: 39th St at Fairview Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 3



Turning Movement Data Plot



309-999-0123 ccoad@terraengineering.com

Count Name: 39th St at Fairview Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 4

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Fairview Ave Southbound						39th Street Westbound						Fairview Ave Northbound						39th Street Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:30 AM	2	69	16	0	0	87	14	9	14	0	0	37	23	199	3	0	0	225	23	4	21	0	0	48	397
7:45 AM	3	67	26	0	0	96	12	14	12	0	0	38	35	256	7	0	0	298	18	6	18	0	0	42	474
8:00 AM	7	73	12	0	0	92	4	14	7	0	0	25	31	192	6	0	0	229	23	5	17	0	0	45	391
8:15 AM	1	53	13	0	0	67	3	8	13	0	0	24	26	215	6	0	0	247	16	13	17	0	0	46	384
Total	13	262	67	0	0	342	33	45	46	0	0	124	115	862	22	0	0	999	80	28	73	0	0	181	1646
Approach %	3.8	76.6	19.6	0.0	-	-	26.6	36.3	37.1	0.0	-	-	11.5	86.3	2.2	0.0	-	-	44.2	15.5	40.3	0.0	-	-	-
Total %	0.8	15.9	4.1	0.0	-	20.8	2.0	2.7	2.8	0.0	-	7.5	7.0	52.4	1.3	0.0	-	60.7	4.9	1.7	4.4	0.0	-	11.0	-
PHF	0.464	0.897	0.644	0.000	-	0.891	0.589	0.804	0.821	0.000	-	0.816	0.821	0.842	0.786	0.000	-	0.838	0.870	0.538	0.869	0.000	-	0.943	0.868
Lights	10	247	65	0	-	322	33	41	46	0	-	120	111	846	19	0	-	976	80	26	70	0	-	176	1594
% Lights	76.9	94.3	97.0	-	-	94.2	100.0	91.1	100.0	-	-	96.8	96.5	98.1	86.4	-	-	97.7	100.0	92.9	95.9	-	-	97.2	96.8
Mediums	3	14	2	0	-	19	0	3	0	0	-	3	4	14	1	0	-	19	0	2	3	0	-	5	46
% Mediums	23.1	5.3	3.0	-	-	5.6	0.0	6.7	0.0	-	-	2.4	3.5	1.6	4.5	-	-	1.9	0.0	7.1	4.1	-	-	2.8	2.8
Articulated Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	1	2	0	-	3	0	0	0	0	-	0	4
% Articulated Trucks	0.0	0.4	0.0	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.0	0.1	9.1	-	-	0.3	0.0	0.0	0.0	-	-	0.0	0.2
Bicycles on Road	0	0	0	0	-	0	0	1	0	0	-	1	0	1	0	0	-	1	0	0	0	0	-	0	2
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	2.2	0.0	-	-	0.8	0.0	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Count Name: 39th St at Fairview Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 6

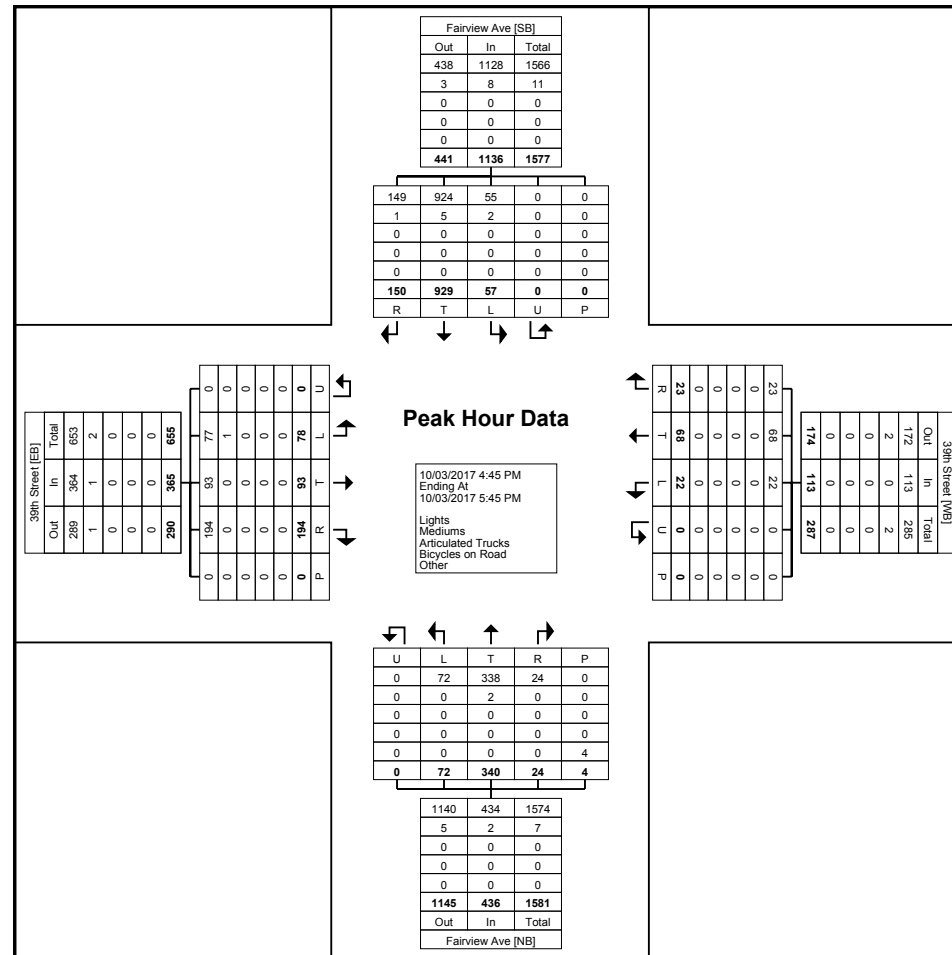
Turning Movement Peak Hour Data (4:45 PM)

Start Time	Fairview Ave Southbound						39th Street Westbound						Fairview Ave Northbound						39th Street Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:45 PM	14	203	30	0	0	247	4	16	3	0	0	23	22	91	6	0	0	119	13	20	48	0	0	81	470
5:00 PM	17	243	28	0	0	288	6	8	7	0	0	21	20	88	6	0	1	114	26	26	46	0	0	98	521
5:15 PM	11	273	55	0	0	339	6	19	7	0	0	32	11	73	6	0	2	90	16	20	55	0	0	91	552
5:30 PM	15	210	37	0	0	262	6	25	6	0	0	37	19	88	6	0	1	113	23	27	45	0	0	95	507
Total	57	929	150	0	0	1136	22	68	23	0	0	113	72	340	24	0	4	436	78	93	194	0	0	365	2050
Approach %	5.0	81.8	13.2	0.0	-	-	19.5	60.2	20.4	0.0	-	-	16.5	78.0	5.5	0.0	-	-	21.4	25.5	53.2	0.0	-	-	-
Total %	2.8	45.3	7.3	0.0	-	55.4	1.1	3.3	1.1	0.0	-	5.5	3.5	16.6	1.2	0.0	-	21.3	3.8	4.5	9.5	0.0	-	17.8	-
PHF	0.838	0.851	0.682	0.000	-	0.838	0.917	0.680	0.821	0.000	-	0.764	0.818	0.934	1.000	0.000	-	0.916	0.750	0.861	0.882	0.000	-	0.931	0.928
Lights	55	924	149	0	-	1128	22	68	23	0	-	113	72	338	24	0	-	434	77	93	194	0	-	364	2039
% Lights	96.5	99.5	99.3	-	-	99.3	100.0	100.0	100.0	-	-	100.0	100.0	99.4	100.0	-	-	99.5	98.7	100.0	100.0	-	-	99.7	99.5
Mediums	2	5	1	0	-	8	0	0	0	0	-	0	0	2	0	0	-	2	1	0	0	0	-	1	11
% Mediums	3.5	0.5	0.7	-	-	0.7	0.0	0.0	0.0	-	-	0.0	0.0	0.6	0.0	-	-	0.5	1.3	0.0	0.0	-	-	0.3	0.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.0	-	-	-	-	-	-	-	-



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Count Name: 39th St at Fairview Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 7



Turning Movement Peak Hour Data Plot (4:45 PM)



309-999-0123 ccoad@terraengineering.com

Count Name: 39th Street at Main St/Highland Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 1

Turning Movement Data

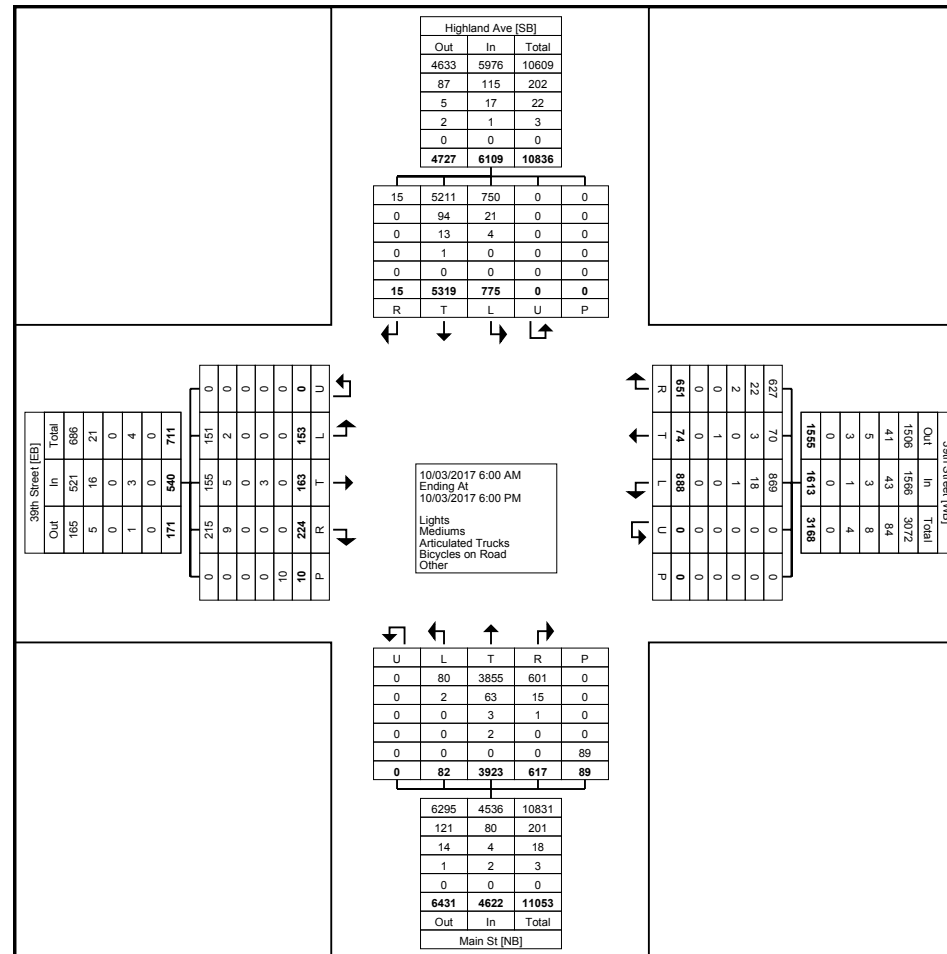
Start Time	Highland Ave Southbound						39th Street Westbound						Main St Northbound						39th Street Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	19	36	0	0	0	55	9	0	11	0	0	20	1	65	19	0	0	85	0	2	3	0	1	5	165
6:15 AM	21	60	0	0	0	81	6	0	11	0	0	17	1	111	39	0	0	151	1	2	7	0	1	10	259
6:30 AM	40	66	0	0	0	106	5	0	21	0	0	26	0	115	37	0	0	152	2	2	5	0	1	9	293
6:45 AM	32	100	0	0	0	132	9	2	17	0	0	28	4	148	57	0	0	209	6	3	14	0	0	23	392
Hourly Total	112	262	0	0	0	374	29	2	60	0	0	91	6	439	152	0	0	597	9	9	29	0	3	47	1109
7:00 AM	21	101	1	0	0	123	18	0	26	0	0	44	0	172	35	0	1	207	2	1	14	0	1	17	391
7:15 AM	26	113	0	0	0	139	24	2	32	0	0	58	3	242	41	0	2	286	14	5	11	0	1	30	513
7:30 AM	25	132	0	0	0	157	31	1	24	0	0	56	1	238	22	0	0	261	5	7	15	0	1	27	501
7:45 AM	27	142	1	0	0	170	26	1	24	0	0	51	3	285	29	0	0	317	16	15	9	0	0	40	578
Hourly Total	99	488	2	0	0	589	99	4	106	0	0	209	7	937	127	0	3	1071	37	28	49	0	3	114	1983
8:00 AM	21	111	0	0	0	132	26	1	35	0	0	62	0	244	36	0	22	280	10	13	7	0	0	30	504
8:15 AM	23	120	0	0	0	143	20	2	22	0	0	44	3	282	41	0	20	326	13	7	10	0	0	30	543
8:30 AM	25	101	0	0	0	126	28	0	27	0	0	55	2	241	27	0	1	270	9	7	10	0	0	26	477
8:45 AM	21	113	0	0	0	134	17	3	32	0	0	52	3	251	36	0	0	290	4	9	9	0	0	22	498
Hourly Total	90	445	0	0	0	535	91	6	116	0	0	213	8	1018	140	0	43	1166	36	36	36	0	0	108	2022
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	26	221	1	0	0	248	36	3	18	0	0	57	3	124	24	0	38	151	3	3	7	0	1	13	469
3:15 PM	35	205	0	0	0	240	45	2	28	0	0	75	3	109	11	0	0	123	6	8	10	0	0	24	462
3:30 PM	31	279	4	0	0	314	55	2	34	0	0	91	9	141	21	0	3	171	3	6	11	0	0	20	596
3:45 PM	35	336	1	0	0	372	50	1	39	0	0	90	5	145	18	0	0	168	5	5	8	0	0	18	648
Hourly Total	127	1041	6	0	0	1174	186	8	119	0	0	313	20	519	74	0	41	613	17	22	36	0	1	75	2175
4:00 PM	28	329	0	0	0	357	59	6	32	0	0	97	3	126	12	0	0	141	6	7	8	0	0	21	616
4:15 PM	42	378	2	0	0	422	53	10	24	0	0	87	5	131	20	0	0	156	5	10	6	0	0	21	686
4:30 PM	56	394	0	0	0	450	59	4	29	0	0	92	4	134	12	0	0	150	5	16	9	0	0	30	722
4:45 PM	43	420	1	0	0	464	57	8	26	0	0	91	4	114	19	0	0	137	10	5	4	0	0	19	711
Hourly Total	169	1521	3	0	0	1693	228	28	111	0	0	367	16	505	63	0	0	584	26	38	27	0	0	91	2735
5:00 PM	46	433	1	0	0	480	70	7	29	0	0	106	6	133	13	0	0	152	6	8	8	0	0	22	760
5:15 PM	53	413	1	0	0	467	71	9	36	0	0	116	9	135	15	0	1	159	8	4	10	0	0	22	764
5:30 PM	43	397	1	0	0	441	63	5	40	0	0	108	7	122	16	0	0	145	9	12	12	0	3	33	727
5:45 PM	36	319	1	0	0	356	51	5	34	0	0	90	3	115	17	0	1	135	5	6	17	0	0	28	609
Hourly Total	178	1562	4	0	0	1744	255	26	139	0	0	420	25	505	61	0	2	591	28	30	47	0	3	105	2860
Grand Total	775	5319	15	0	0	6109	888	74	651	0	0	1613	82	3923	617	0	89	4622	153	163	224	0	10	540	12884
Approach %	12.7	87.1	0.2	0.0	-	-	55.1	4.6	40.4	0.0	-	-	1.8	84.9	13.3	0.0	-	-	28.3	30.2	41.5	0.0	-	-	-
Total %	6.0	41.3	0.1	0.0	-	47.4	6.9	0.6	5.1	0.0	-	12.5	0.6	30.4	4.8	0.0	-	35.9	1.2	1.3	1.7	0.0	-	4.2	-
Lights	750	5211	15	0	-	5976	869	70	627	0	-	1566	80	3855	601	0	-	4536	151	155	215	0	-	521	12599
% Lights	96.8	98.0	100.0	-	-	97.8	97.9	94.6	96.3	-	-	97.1	97.6	98.3	97.4	-	-	98.1	98.7	95.1	96.0	-	-	96.5	97.8
Mediums	21	94	0	0	-	115	18	3	22	0	-	43	2	63	15	0	-	80	2	5	9	0	-	16	254

% Mediums	2.7	1.8	0.0	-	-	1.9	2.0	4.1	3.4	-	-	2.7	2.4	1.6	2.4	-	-	1.7	1.3	3.1	4.0	-	-	3.0	2.0
Articulated Trucks	4	13	0	0	-	17	1	0	2	0	-	3	0	3	1	0	-	4	0	0	0	0	-	0	24
% Articulated Trucks	0.5	0.2	0.0	-	-	0.3	0.1	0.0	0.3	-	-	0.2	0.0	0.1	0.2	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.2
Bicycles on Road	0	1	0	0	-	1	0	1	0	0	-	1	0	2	0	0	-	2	0	3	0	0	-	3	7
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	1.4	0.0	-	-	0.1	0.0	0.1	0.0	-	-	0.0	0.0	1.8	0.0	-	-	0.6	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-	10.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	88	-	-	-	-	-	9	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	98.9	-	-	-	-	-	90.0	-	-



309-999-0123 ccoad@terraengineering.com

Count Name: 39th Street at Main St/Highland Ave
 Site Code:
 Start Date: 10/03/2017
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Turning Movement Data Plot



309-999-0123 ccoad@terraengineering.com

Count Name: 39th Street at Main St/Highland Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 4

Turning Movement Peak Hour Data (7:30 AM)

Start Time	Highland Ave Southbound						39th Street Westbound						Main St Northbound						39th Street Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:30 AM	25	132	0	0	0	157	31	1	24	0	0	56	1	238	22	0	0	261	5	7	15	0	1	27	501
7:45 AM	27	142	1	0	0	170	26	1	24	0	0	51	3	285	29	0	0	317	16	15	9	0	0	40	578
8:00 AM	21	111	0	0	0	132	26	1	35	0	0	62	0	244	36	0	22	280	10	13	7	0	0	30	504
8:15 AM	23	120	0	0	0	143	20	2	22	0	0	44	3	282	41	0	20	326	13	7	10	0	0	30	543
Total	96	505	1	0	0	602	103	5	105	0	0	213	7	1049	128	0	42	1184	44	42	41	0	1	127	2126
Approach %	15.9	83.9	0.2	0.0	-	-	48.4	2.3	49.3	0.0	-	-	0.6	88.6	10.8	0.0	-	-	34.6	33.1	32.3	0.0	-	-	-
Total %	4.5	23.8	0.0	0.0	-	28.3	4.8	0.2	4.9	0.0	-	10.0	0.3	49.3	6.0	0.0	-	55.7	2.1	2.0	1.9	0.0	-	6.0	-
PHF	0.889	0.889	0.250	0.000	-	0.885	0.831	0.625	0.750	0.000	-	0.859	0.583	0.920	0.780	0.000	-	0.908	0.688	0.700	0.683	0.000	-	0.794	0.920
Lights	92	487	1	0	-	580	97	3	99	0	-	199	7	1029	124	0	-	1160	44	40	38	0	-	122	2061
% Lights	95.8	96.4	100.0	-	-	96.3	94.2	60.0	94.3	-	-	93.4	100.0	98.1	96.9	-	-	98.0	100.0	95.2	92.7	-	-	96.1	96.9
Mediums	2	16	0	0	-	18	6	2	5	0	-	13	0	19	4	0	-	23	0	2	3	0	-	5	59
% Mediums	2.1	3.2	0.0	-	-	3.0	5.8	40.0	4.8	-	-	6.1	0.0	1.8	3.1	-	-	1.9	0.0	4.8	7.3	-	-	3.9	2.8
Articulated Trucks	2	2	0	0	-	4	0	0	1	0	-	1	0	1	0	0	-	1	0	0	0	0	-	0	6
% Articulated Trucks	2.1	0.4	0.0	-	-	0.7	0.0	0.0	1.0	-	-	0.5	0.0	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.3
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	100.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	42	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	0.0	-	-



309-999-0123 ccoad@terraengineering.com

Count Name: 39th Street at Main St/Highland Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 6

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Highland Ave Southbound						39th Street Westbound						Main St Northbound						39th Street Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:45 PM	43	420	1	0	0	464	57	8	26	0	0	91	4	114	19	0	0	137	10	5	4	0	0	19	711
5:00 PM	46	433	1	0	0	480	70	7	29	0	0	106	6	133	13	0	0	152	6	8	8	0	0	22	760
5:15 PM	53	413	1	0	0	467	71	9	36	0	0	116	9	135	15	0	1	159	8	4	10	0	0	22	764
5:30 PM	43	397	1	0	0	441	63	5	40	0	0	108	7	122	16	0	0	145	9	12	12	0	3	33	727
Total	185	1663	4	0	0	1852	261	29	131	0	0	421	26	504	63	0	1	593	33	29	34	0	3	96	2962
Approach %	10.0	89.8	0.2	0.0	-	-	62.0	6.9	31.1	0.0	-	-	4.4	85.0	10.6	0.0	-	-	34.4	30.2	35.4	0.0	-	-	-
Total %	6.2	56.1	0.1	0.0	-	62.5	8.8	1.0	4.4	0.0	-	14.2	0.9	17.0	2.1	0.0	-	20.0	1.1	1.0	1.1	0.0	-	3.2	-
PHF	0.873	0.960	1.000	0.000	-	0.965	0.919	0.806	0.819	0.000	-	0.907	0.722	0.933	0.829	0.000	-	0.932	0.825	0.604	0.708	0.000	-	0.727	0.969
Lights	183	1649	4	0	-	1836	259	28	128	0	-	415	26	498	63	0	-	587	31	28	33	0	-	92	2930
% Lights	98.9	99.2	100.0	-	-	99.1	99.2	96.6	97.7	-	-	98.6	100.0	98.8	100.0	-	-	99.0	93.9	96.6	97.1	-	-	95.8	98.9
Mediums	1	12	0	0	-	13	2	0	3	0	-	5	0	6	0	0	-	6	2	0	1	0	-	3	27
% Mediums	0.5	0.7	0.0	-	-	0.7	0.8	0.0	2.3	-	-	1.2	0.0	1.2	0.0	-	-	1.0	6.1	0.0	2.9	-	-	3.1	0.9
Articulated Trucks	1	1	0	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2
% Articulated Trucks	0.5	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.1
Bicycles on Road	0	1	0	0	-	1	0	1	0	0	-	1	0	0	0	0	-	0	0	1	0	0	-	1	3
% Bicycles on Road	0.0	0.1	0.0	-	-	0.1	0.0	3.4	0.0	-	-	0.2	0.0	0.0	0.0	-	-	0.0	0.0	3.4	0.0	-	-	1.0	0.1
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



309-999-0123 ccoad@terraengineering.com

Count Name: Fairview Ave at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 1

Turning Movement Data

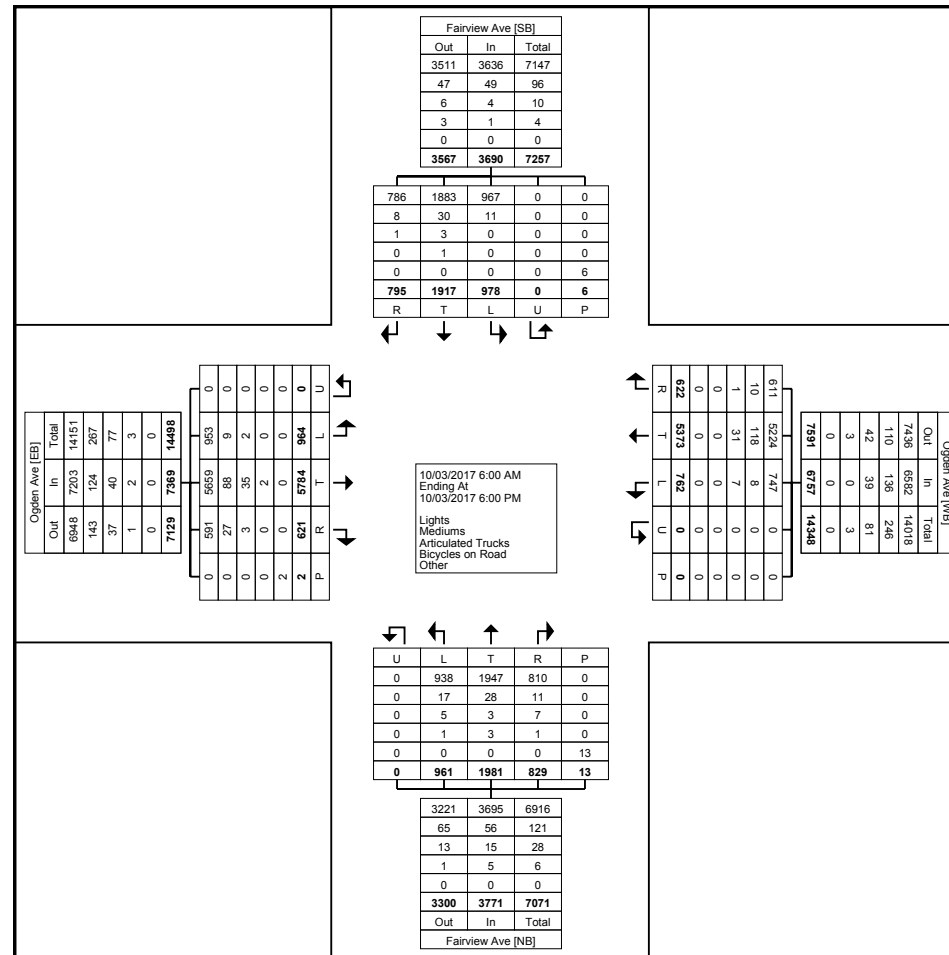
Start Time	Fairview Ave Southbound						Ogden Ave Westbound						Fairview Ave Northbound						Ogden Ave Eastbound						Int. Total	
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total		
6:00 AM	7	17	6	0	0	30	8	97	10	0	0	115	15	28	19	0	0	62	11	82	9	0	0	102	309	
6:15 AM	6	16	11	0	0	33	15	112	15	0	0	142	22	41	16	0	0	79	11	137	7	0	0	155	409	
6:30 AM	7	23	19	0	0	49	10	129	24	0	0	163	30	48	27	0	0	105	35	153	10	0	0	198	515	
6:45 AM	13	22	22	0	0	57	12	145	25	0	0	182	32	94	24	0	0	150	35	217	18	0	0	270	659	
Hourly Total	33	78	58	0	0	169	45	483	74	0	0	602	99	211	86	0	0	396	92	589	44	0	0	725	1892	
7:00 AM	20	23	22	0	1	65	16	195	23	0	0	234	39	93	33	0	0	165	34	214	13	0	1	261	725	
7:15 AM	15	48	26	0	0	89	31	196	24	0	0	251	64	142	42	0	0	248	59	236	20	0	0	315	903	
7:30 AM	30	42	54	0	0	126	14	181	29	0	0	224	61	158	54	0	0	273	80	275	19	0	0	374	997	
7:45 AM	35	46	27	0	0	108	22	222	38	0	0	282	50	182	30	0	0	262	75	292	19	0	0	386	1038	
Hourly Total	100	159	129	0	1	388	83	794	114	0	0	991	214	575	159	0	0	948	248	1017	71	0	1	1336	3663	
8:00 AM	26	46	27	0	0	99	15	182	37	0	0	234	42	135	39	0	0	216	51	246	20	0	0	317	866	
8:15 AM	22	33	29	0	0	84	18	194	29	0	0	241	50	158	49	0	0	257	68	248	21	0	0	337	919	
8:30 AM	36	46	22	0	0	104	23	200	25	0	0	248	52	117	46	0	0	215	59	277	13	0	1	349	916	
8:45 AM	31	36	26	0	0	93	21	199	34	0	0	254	37	130	31	0	0	198	45	245	20	0	0	310	855	
Hourly Total	115	161	104	0	0	380	77	775	125	0	0	977	181	540	165	0	0	886	223	1016	74	0	1	1313	3556	
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	39	77	28	0	2	144	40	264	24	0	0	328	34	38	25	0	0	97	18	214	25	0	0	257	826	
3:15 PM	50	66	27	0	0	143	37	220	13	0	0	270	41	49	30	0	0	120	31	258	24	0	0	313	846	
3:30 PM	47	104	43	0	0	194	43	224	25	0	0	292	36	68	30	0	0	134	35	243	48	0	0	326	946	
3:45 PM	54	94	34	0	0	182	49	261	23	0	0	333	42	52	37	0	1	131	38	274	38	0	0	350	996	
Hourly Total	190	341	132	0	2	663	169	969	85	0	0	1223	153	207	122	0	1	482	122	989	135	0	0	1246	3614	
4:00 PM	65	130	47	0	0	242	41	256	24	0	0	321	47	58	45	0	1	150	35	243	33	0	0	311	1024	
4:15 PM	67	130	58	0	0	255	50	314	25	0	0	389	31	54	29	0	0	114	39	256	33	0	0	328	1086	
4:30 PM	75	139	38	0	0	252	42	275	34	0	0	351	44	55	29	0	3	128	31	275	47	0	0	353	1084	
4:45 PM	72	178	40	0	3	290	42	291	25	0	0	358	36	58	46	0	0	140	25	264	31	0	0	320	1108	
Hourly Total	279	577	183	0	3	1039	175	1136	108	0	0	1419	158	225	149	0	4	532	130	1038	144	0	0	1312	4302	
5:00 PM	65	143	39	0	0	247	43	333	21	0	0	397	28	62	22	0	0	112	37	306	31	0	0	374	1130	
5:15 PM	78	177	48	0	0	303	49	312	29	0	0	390	41	53	41	0	4	135	30	268	38	0	0	336	1164	
5:30 PM	69	157	40	0	0	266	65	303	40	0	0	408	35	41	33	0	2	109	40	291	45	0	0	376	1159	
5:45 PM	49	124	62	0	0	235	56	268	26	0	0	350	52	67	52	0	2	171	42	270	39	0	0	351	1107	
Hourly Total	261	601	189	0	0	1051	213	1216	116	0	0	1545	156	223	148	0	8	527	149	1135	153	0	0	1437	4560	
Grand Total	978	1917	795	0	6	3690	762	5373	622	0	0	6757	961	1981	829	0	13	3771	964	5784	621	0	2	7369	21587	
Approach %	26.5	52.0	21.5	0.0	-	-	11.3	79.5	9.2	0.0	-	-	25.5	52.5	22.0	0.0	-	-	13.1	78.5	8.4	0.0	-	-	-	
Total %	4.5	8.9	3.7	0.0	-	17.1	3.5	24.9	2.9	0.0	-	31.3	4.5	9.2	3.8	0.0	-	17.5	4.5	26.8	2.9	0.0	-	34.1	-	
Lights	967	1883	786	0	-	3636	747	5224	611	0	-	6582	938	1947	810	0	-	3695	953	5659	591	0	-	7203	21116	
% Lights	98.9	98.2	98.9	-	-	98.5	98.0	97.2	98.2	-	-	97.4	97.6	98.3	97.7	-	-	98.0	98.9	97.8	95.2	-	-	97.7	97.8	
Mediums	11	30	8	0	-	49	8	118	10	0	-	136	17	28	11	0	-	56	9	88	27	0	-	124	365	

% Mediums	1.1	1.6	1.0	-	-	1.3	1.0	2.2	1.6	-	-	2.0	1.8	1.4	1.3	-	-	1.5	0.9	1.5	4.3	-	-	1.7	1.7
Articulated Trucks	0	3	1	0	-	4	7	31	1	0	-	39	5	3	7	0	-	15	2	35	3	0	-	40	98
% Articulated Trucks	0.0	0.2	0.1	-	-	0.1	0.9	0.6	0.2	-	-	0.6	0.5	0.2	0.8	-	-	0.4	0.2	0.6	0.5	-	-	0.5	0.5
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	1	3	1	0	-	5	0	2	0	0	-	2	8
% Bicycles on Road	0.0	0.1	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.1	0.2	0.1	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	16.7	-	-	-	-	-	-	-	-	-	-	-	23.1	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	10	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	83.3	-	-	-	-	-	-	-	-	-	-	-	76.9	-	-	-	-	-	100.0	-	-



309-999-0123 ccoad@terraengineering.com

Count Name: Fairview Ave at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
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Turning Movement Data Plot



Count Name: Fairview Ave at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
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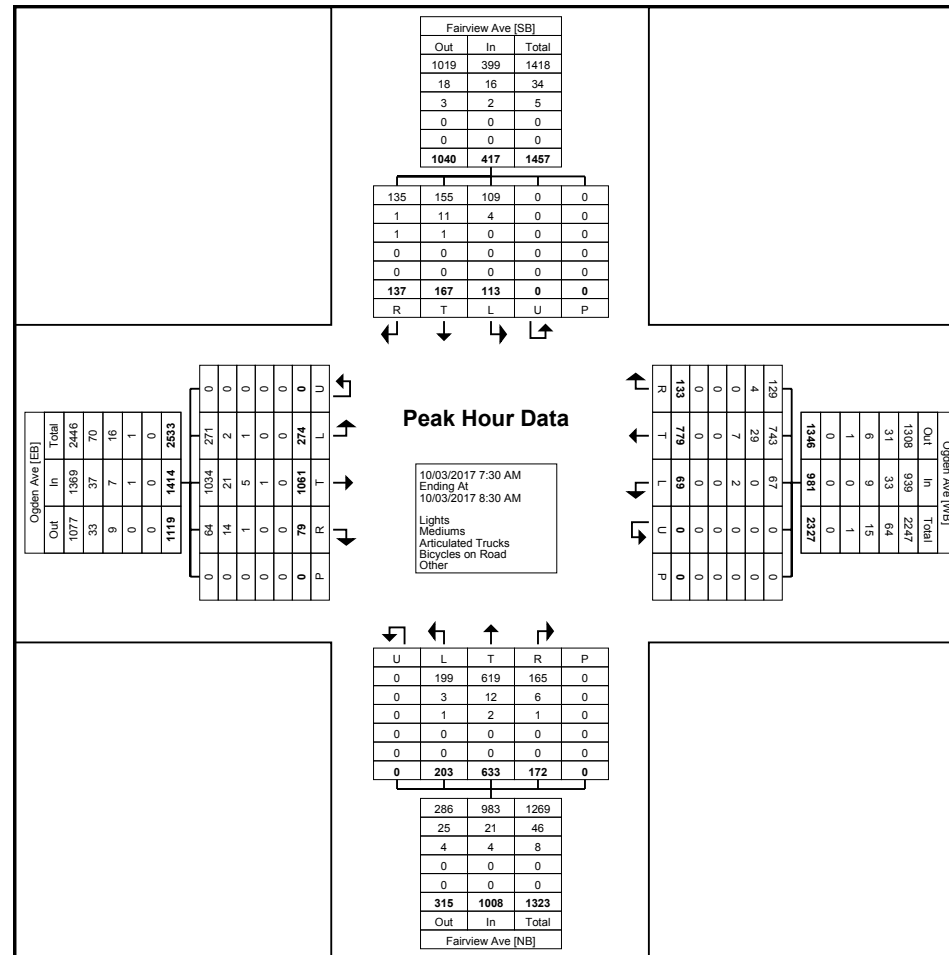
Turning Movement Peak Hour Data (7:30 AM)

Start Time	Fairview Ave Southbound						Ogden Ave Westbound						Fairview Ave Northbound						Ogden Ave Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:30 AM	30	42	54	0	0	126	14	181	29	0	0	224	61	158	54	0	0	273	80	275	19	0	0	374	997
7:45 AM	35	46	27	0	0	108	22	222	38	0	0	282	50	182	30	0	0	262	75	292	19	0	0	386	1038
8:00 AM	26	46	27	0	0	99	15	182	37	0	0	234	42	135	39	0	0	216	51	246	20	0	0	317	866
8:15 AM	22	33	29	0	0	84	18	194	29	0	0	241	50	158	49	0	0	257	68	248	21	0	0	337	919
Total	113	167	137	0	0	417	69	779	133	0	0	981	203	633	172	0	0	1008	274	1061	79	0	0	1414	3820
Approach %	27.1	40.0	32.9	0.0	-	-	7.0	79.4	13.6	0.0	-	-	20.1	62.8	17.1	0.0	-	-	19.4	75.0	5.6	0.0	-	-	-
Total %	3.0	4.4	3.6	0.0	-	10.9	1.8	20.4	3.5	0.0	-	25.7	5.3	16.6	4.5	0.0	-	26.4	7.2	27.8	2.1	0.0	-	37.0	-
PHF	0.807	0.908	0.634	0.000	-	0.827	0.784	0.877	0.875	0.000	-	0.870	0.832	0.870	0.796	0.000	-	0.923	0.856	0.908	0.940	0.000	-	0.916	0.920
Lights	109	155	135	0	-	399	67	743	129	0	-	939	199	619	165	0	-	983	271	1034	64	0	-	1369	3690
% Lights	96.5	92.8	98.5	-	-	95.7	97.1	95.4	97.0	-	-	95.7	98.0	97.8	95.9	-	-	97.5	98.9	97.5	81.0	-	-	96.8	96.6
Mediums	4	11	1	0	-	16	0	29	4	0	-	33	3	12	6	0	-	21	2	21	14	0	-	37	107
% Mediums	3.5	6.6	0.7	-	-	3.8	0.0	3.7	3.0	-	-	3.4	1.5	1.9	3.5	-	-	2.1	0.7	2.0	17.7	-	-	2.6	2.8
Articulated Trucks	0	1	1	0	-	2	2	7	0	0	-	9	1	2	1	0	-	4	1	5	1	0	-	7	22
% Articulated Trucks	0.0	0.6	0.7	-	-	0.5	2.9	0.9	0.0	-	-	0.9	0.5	0.3	0.6	-	-	0.4	0.4	0.5	1.3	-	-	0.5	0.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	1
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



309-999-0123 ccoad@terraengineering.com

Count Name: Fairview Ave at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 5



Turning Movement Peak Hour Data Plot (7:30 AM)



309-999-0123 ccoad@terraengineering.com

Count Name: Fairview Ave at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 6

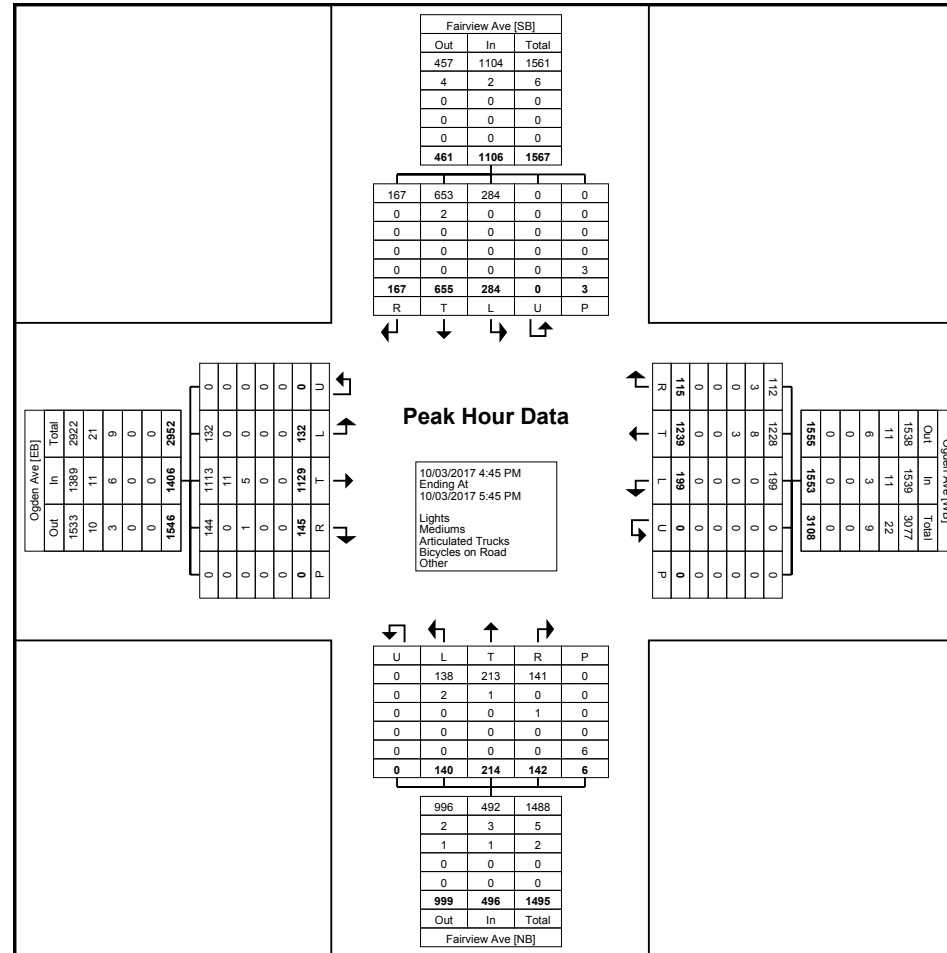
Turning Movement Peak Hour Data (4:45 PM)

Start Time	Fairview Ave Southbound						Ogden Ave Westbound						Fairview Ave Northbound						Ogden Ave Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:45 PM	72	178	40	0	3	290	42	291	25	0	0	358	36	58	46	0	0	140	25	264	31	0	0	320	1108
5:00 PM	65	143	39	0	0	247	43	333	21	0	0	397	28	62	22	0	0	112	37	306	31	0	0	374	1130
5:15 PM	78	177	48	0	0	303	49	312	29	0	0	390	41	53	41	0	4	135	30	268	38	0	0	336	1164
5:30 PM	69	157	40	0	0	266	65	303	40	0	0	408	35	41	33	0	2	109	40	291	45	0	0	376	1159
Total	284	655	167	0	3	1106	199	1239	115	0	0	1553	140	214	142	0	6	496	132	1129	145	0	0	1406	4561
Approach %	25.7	59.2	15.1	0.0	-	-	12.8	79.8	7.4	0.0	-	-	28.2	43.1	28.6	0.0	-	-	9.4	80.3	10.3	0.0	-	-	-
Total %	6.2	14.4	3.7	0.0	-	24.2	4.4	27.2	2.5	0.0	-	34.0	3.1	4.7	3.1	0.0	-	10.9	2.9	24.8	3.2	0.0	-	30.8	-
PHF	0.910	0.920	0.870	0.000	-	0.913	0.765	0.930	0.719	0.000	-	0.952	0.854	0.863	0.772	0.000	-	0.886	0.825	0.922	0.806	0.000	-	0.935	0.980
Lights	284	653	167	0	-	1104	199	1228	112	0	-	1539	138	213	141	0	-	492	132	1113	144	0	-	1389	4524
% Lights	100.0	99.7	100.0	-	-	99.8	100.0	99.1	97.4	-	-	99.1	98.6	99.5	99.3	-	-	99.2	100.0	98.6	99.3	-	-	98.8	99.2
Mediums	0	2	0	0	-	2	0	8	3	0	-	11	2	1	0	0	-	3	0	11	0	0	-	11	27
% Mediums	0.0	0.3	0.0	-	-	0.2	0.0	0.6	2.6	-	-	0.7	1.4	0.5	0.0	-	-	0.6	0.0	1.0	0.0	-	-	0.8	0.6
Articulated Trucks	0	0	0	0	-	0	0	3	0	0	-	3	0	0	1	0	-	1	0	5	1	0	-	6	10
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.2	0.0	-	-	0.2	0.0	0.0	0.7	-	-	0.2	0.0	0.4	0.7	-	-	0.4	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	33.3	-	-	-	-	-	-	-	-	-	-	-	16.7	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	66.7	-	-	-	-	-	-	-	-	-	-	-	83.3	-	-	-	-	-	-	-	-



309-999-0123 ccoad@terraengineering.com

Count Name: Fairview Ave at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 7



Turning Movement Peak Hour Data Plot (4:45 PM)



309-999-0123 ccoad@terraengineering.com

Count Name: Main St at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 1

Turning Movement Data

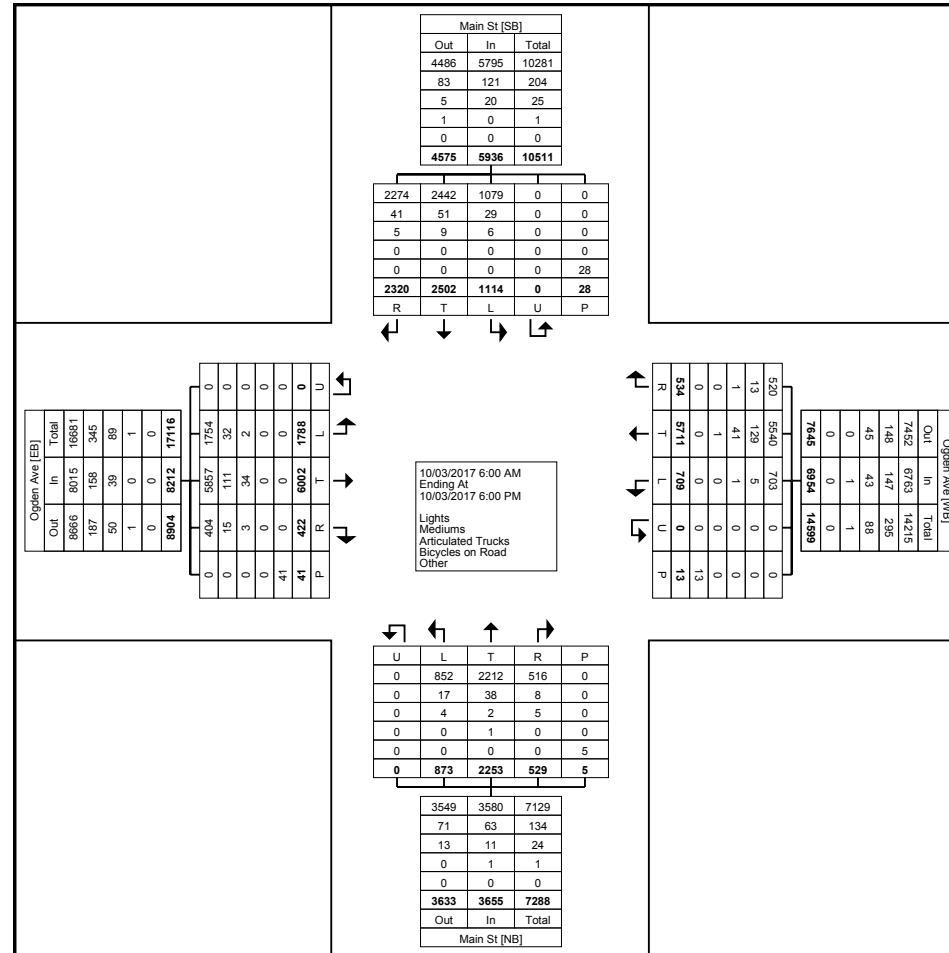
Start Time	Main St Southbound						Ogden Ave Westbound						Main St Northbound						Ogden Ave Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	11	17	17	0	0	45	6	114	5	0	0	125	12	27	6	0	0	45	57	89	12	0	1	158	373
6:15 AM	14	32	30	0	0	76	10	103	20	0	0	133	9	49	12	0	0	70	81	128	11	0	1	220	499
6:30 AM	15	34	22	0	0	71	9	179	18	0	0	206	22	76	15	0	0	113	73	150	8	0	0	231	621
6:45 AM	29	53	50	0	0	132	14	174	10	0	0	198	25	88	16	0	0	129	103	226	14	0	1	343	802
Hourly Total	69	136	119	0	0	324	39	570	53	0	0	662	68	240	49	0	0	357	314	593	45	0	3	952	2295
7:00 AM	41	49	37	0	1	127	18	209	20	0	1	247	40	90	16	0	0	146	88	230	12	0	1	330	850
7:15 AM	37	65	44	0	2	146	26	239	28	0	0	293	44	120	22	0	0	186	114	271	15	0	2	400	1025
7:30 AM	39	72	52	0	4	163	24	236	23	0	0	283	55	115	31	0	0	201	107	316	23	0	4	446	1093
7:45 AM	42	77	56	0	3	175	37	240	25	0	0	302	50	162	19	0	0	231	120	295	23	0	11	438	1146
Hourly Total	159	263	189	0	10	611	105	924	96	0	1	1125	189	487	88	0	0	764	429	1112	73	0	18	1614	4114
8:00 AM	33	52	60	0	0	145	26	227	23	0	0	276	49	162	29	0	0	240	109	241	20	0	2	370	1031
8:15 AM	29	50	61	0	0	140	20	209	20	0	0	249	55	176	24	0	0	255	109	267	12	0	0	388	1032
8:30 AM	31	46	57	0	0	134	27	285	25	0	0	337	39	135	27	0	0	201	96	261	16	0	1	373	1045
8:45 AM	50	59	47	0	1	156	26	214	20	0	1	260	29	142	32	0	0	203	113	277	8	0	0	398	1017
Hourly Total	143	207	225	0	1	575	99	935	88	0	1	1122	172	615	112	0	0	899	427	1046	56	0	3	1529	4125
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	53	95	105	0	0	253	38	236	23	0	2	297	33	78	23	0	0	134	46	230	13	0	0	289	973
3:15 PM	42	105	116	0	2	263	41	226	24	0	2	291	39	70	26	0	0	135	57	244	28	0	3	329	1018
3:30 PM	63	133	143	0	2	339	28	267	33	0	2	328	50	111	20	0	0	181	61	281	27	0	10	369	1217
3:45 PM	66	172	142	0	0	380	35	234	22	0	0	291	50	76	32	0	0	158	57	238	19	0	1	314	1143
Hourly Total	224	505	506	0	4	1235	142	963	102	0	6	1207	172	335	101	0	0	608	221	993	87	0	14	1301	4351
4:00 PM	42	126	150	0	4	318	40	280	24	0	0	344	34	63	17	0	0	114	49	288	22	0	1	359	1135
4:15 PM	76	155	149	0	0	380	48	292	24	0	0	364	37	73	29	0	0	139	44	260	14	0	0	318	1201
4:30 PM	61	178	162	0	1	401	42	256	18	0	0	316	40	70	24	0	0	134	50	277	15	0	1	342	1193
4:45 PM	75	177	181	0	2	433	40	302	26	0	1	368	26	62	23	0	0	111	46	279	16	0	0	341	1253
Hourly Total	254	636	642	0	7	1532	170	1130	92	0	1	1392	137	268	93	0	0	498	189	1104	67	0	2	1360	4782
5:00 PM	68	209	173	0	3	450	42	282	22	0	1	346	31	88	23	0	0	142	59	273	15	0	0	347	1285
5:15 PM	61	196	159	0	0	416	34	309	30	0	0	373	36	95	24	0	3	155	40	305	34	0	0	379	1323
5:30 PM	78	189	169	0	1	436	43	281	25	0	3	349	43	76	23	0	2	142	55	254	22	0	0	331	1258
5:45 PM	58	161	138	0	2	357	35	317	26	0	0	378	25	49	16	0	0	90	54	322	23	0	1	399	1224
Hourly Total	265	755	639	0	6	1659	154	1189	103	0	4	1446	135	308	86	0	5	529	208	1154	94	0	1	1456	5090
Grand Total	1114	2502	2320	0	28	5936	709	5711	534	0	13	6954	873	2253	529	0	5	3655	1788	6002	422	0	41	8212	24757
Approach %	18.8	42.1	39.1	0.0	-	-	10.2	82.1	7.7	0.0	-	-	23.9	61.6	14.5	0.0	-	-	21.8	73.1	5.1	0.0	-	-	-
Total %	4.5	10.1	9.4	0.0	-	24.0	2.9	23.1	2.2	0.0	-	28.1	3.5	9.1	2.1	0.0	-	14.8	7.2	24.2	1.7	0.0	-	33.2	-
Lights	1079	2442	2274	0	-	5795	703	5540	520	0	-	6763	852	2212	516	0	-	3580	1754	5857	404	0	-	8015	24153
% Lights	96.9	97.6	98.0	-	-	97.6	99.2	97.0	97.4	-	-	97.3	97.6	98.2	97.5	-	-	97.9	98.1	97.6	95.7	-	-	97.6	97.6
Mediums	29	51	41	0	-	121	5	129	13	0	-	147	17	38	8	0	-	63	32	111	15	0	-	158	489

% Mediums	2.6	2.0	1.8	-	-	2.0	0.7	2.3	2.4	-	-	2.1	1.9	1.7	1.5	-	-	1.7	1.8	1.8	3.6	-	-	1.9	2.0
Articulated Trucks	6	9	5	0	-	20	1	41	1	0	-	43	4	2	5	0	-	11	2	34	3	0	-	39	113
% Articulated Trucks	0.5	0.4	0.2	-	-	0.3	0.1	0.7	0.2	-	-	0.6	0.5	0.1	0.9	-	-	0.3	0.1	0.6	0.7	-	-	0.5	0.5
Bicycles on Road	0	0	0	0	-	0	0	1	0	0	-	1	0	1	0	0	-	1	0	0	0	0	-	0	2
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	-	3.6	-	-	-	-	-	7.7	-	-	-	-	-	20.0	-	-	-	-	-	7.3	-	-
Pedestrians	-	-	-	-	27	-	-	-	-	-	12	-	-	-	-	-	4	-	-	-	-	-	38	-	-
% Pedestrians	-	-	-	-	96.4	-	-	-	-	-	92.3	-	-	-	-	-	80.0	-	-	-	-	-	92.7	-	-



309-999-0123 ccoad@terraengineering.com

Count Name: Main St at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 3



Turning Movement Data Plot



Count Name: Main St at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 4

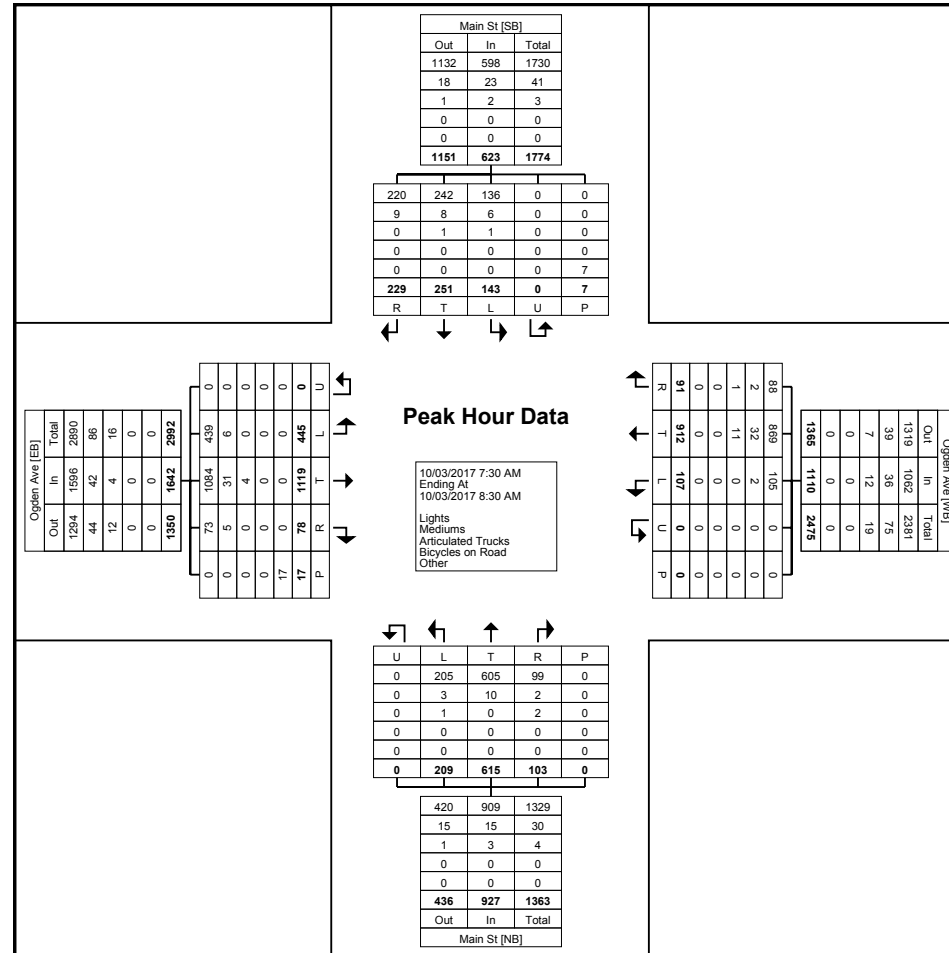
Turning Movement Peak Hour Data (7:30 AM)

Start Time	Main St Southbound						Ogden Ave Westbound						Main St Northbound						Ogden Ave Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:30 AM	39	72	52	0	4	163	24	236	23	0	0	283	55	115	31	0	0	201	107	316	23	0	4	446	1093
7:45 AM	42	77	56	0	3	175	37	240	25	0	0	302	50	162	19	0	0	231	120	295	23	0	11	438	1146
8:00 AM	33	52	60	0	0	145	26	227	23	0	0	276	49	162	29	0	0	240	109	241	20	0	2	370	1031
8:15 AM	29	50	61	0	0	140	20	209	20	0	0	249	55	176	24	0	0	255	109	267	12	0	0	388	1032
Total	143	251	229	0	7	623	107	912	91	0	0	1110	209	615	103	0	0	927	445	1119	78	0	17	1642	4302
Approach %	23.0	40.3	36.8	0.0	-	-	9.6	82.2	8.2	0.0	-	-	22.5	66.3	11.1	0.0	-	-	27.1	68.1	4.8	0.0	-	-	-
Total %	3.3	5.8	5.3	0.0	-	14.5	2.5	21.2	2.1	0.0	-	25.8	4.9	14.3	2.4	0.0	-	21.5	10.3	26.0	1.8	0.0	-	38.2	-
PHF	0.851	0.815	0.939	0.000	-	0.890	0.723	0.950	0.910	0.000	-	0.919	0.950	0.874	0.831	0.000	-	0.909	0.927	0.885	0.848	0.000	-	0.920	0.938
Lights	136	242	220	0	-	598	105	869	88	0	-	1062	205	605	99	0	-	909	439	1084	73	0	-	1596	4165
% Lights	95.1	96.4	96.1	-	-	96.0	98.1	95.3	96.7	-	-	95.7	98.1	98.4	96.1	-	-	98.1	98.7	96.9	93.6	-	-	97.2	96.8
Mediums	6	8	9	0	-	23	2	32	2	0	-	36	3	10	2	0	-	15	6	31	5	0	-	42	116
% Mediums	4.2	3.2	3.9	-	-	3.7	1.9	3.5	2.2	-	-	3.2	1.4	1.6	1.9	-	-	1.6	1.3	2.8	6.4	-	-	2.6	2.7
Articulated Trucks	1	1	0	0	-	2	0	11	1	0	-	12	1	0	2	0	-	3	0	4	0	0	-	4	21
% Articulated Trucks	0.7	0.4	0.0	-	-	0.3	0.0	1.2	1.1	-	-	1.1	0.5	0.0	1.9	-	-	0.3	0.0	0.4	0.0	-	-	0.2	0.5
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.8	-	-
Pedestrians	-	-	-	-	7	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	15	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88.2	-	-



309-999-0123 ccoad@terraengineering.com

Count Name: Main St at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 5



Turning Movement Peak Hour Data Plot (7:30 AM)



309-999-0123 ccoad@terraengineering.com

Count Name: Main St at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 6

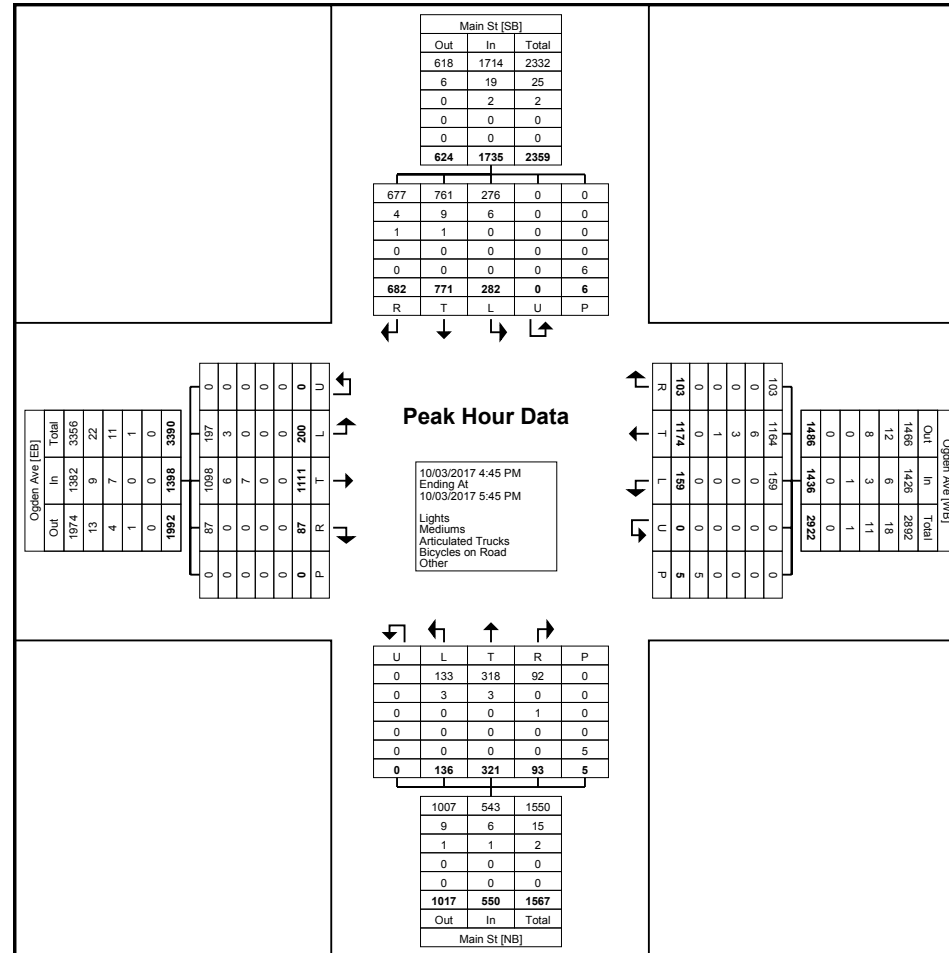
Turning Movement Peak Hour Data (4:45 PM)

Start Time	Main St Southbound						Ogden Ave Westbound						Main St Northbound						Ogden Ave Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:45 PM	75	177	181	0	2	433	40	302	26	0	1	368	26	62	23	0	0	111	46	279	16	0	0	341	1253
5:00 PM	68	209	173	0	3	450	42	282	22	0	1	346	31	88	23	0	0	142	59	273	15	0	0	347	1285
5:15 PM	61	196	159	0	0	416	34	309	30	0	0	373	36	95	24	0	3	155	40	305	34	0	0	379	1323
5:30 PM	78	189	169	0	1	436	43	281	25	0	3	349	43	76	23	0	2	142	55	254	22	0	0	331	1258
Total	282	771	682	0	6	1735	159	1174	103	0	5	1436	136	321	93	0	5	550	200	1111	87	0	0	1398	5119
Approach %	16.3	44.4	39.3	0.0	-	-	11.1	81.8	7.2	0.0	-	-	24.7	58.4	16.9	0.0	-	-	14.3	79.5	6.2	0.0	-	-	-
Total %	5.5	15.1	13.3	0.0	-	33.9	3.1	22.9	2.0	0.0	-	28.1	2.7	6.3	1.8	0.0	-	10.7	3.9	21.7	1.7	0.0	-	27.3	-
PHF	0.904	0.922	0.942	0.000	-	0.964	0.924	0.950	0.858	0.000	-	0.962	0.791	0.845	0.969	0.000	-	0.887	0.847	0.911	0.640	0.000	-	0.922	0.967
Lights	276	761	677	0	-	1714	159	1164	103	0	-	1426	133	318	92	0	-	543	197	1098	87	0	-	1382	5065
% Lights	97.9	98.7	99.3	-	-	98.8	100.0	99.1	100.0	-	-	99.3	97.8	99.1	98.9	-	-	98.7	98.5	98.8	100.0	-	-	98.9	98.9
Mediums	6	9	4	0	-	19	0	6	0	0	-	6	3	3	0	0	-	6	3	6	0	0	-	9	40
% Mediums	2.1	1.2	0.6	-	-	1.1	0.0	0.5	0.0	-	-	0.4	2.2	0.9	0.0	-	-	1.1	1.5	0.5	0.0	-	-	0.6	0.8
Articulated Trucks	0	1	1	0	-	2	0	3	0	0	-	3	0	0	1	0	-	1	0	7	0	0	-	7	13
% Articulated Trucks	0.0	0.1	0.1	-	-	0.1	0.0	0.3	0.0	-	-	0.2	0.0	0.0	1.1	-	-	0.2	0.0	0.6	0.0	-	-	0.5	0.3
Bicycles on Road	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	16.7	-	-	-	-	-	0.0	-	-	-	-	-	20.0	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	5	-	-	-	-	-	5	-	-	-	-	-	4	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	83.3	-	-	-	-	-	100.0	-	-	-	-	-	80.0	-	-	-	-	-	-	-	-



309-999-0123 ccoad@terraengineering.com

Count Name: Main St at Ogden Ave
 Site Code:
 Start Date: 10/03/2017
 Page No: 7



Turning Movement Peak Hour Data Plot (4:45 PM)

Appendix D

Signalized Intersections Synchro Capacity Analysis – Existing Conditions

Intersection Capacity Analysis Summary				
Signalized Intersection	Existing Conditions			
	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Ogden Avenue/Main Street				
Northbound Approach	73.3	E	48.4	D
Southbound Approach	34.9	C	101.3	F
Eastbound Approach	39.4	D	12.7	B
Westbound Approach	45.7	D	37.9	D
Overall Intersection	47.7	D	53.6	D
Ogden Avenue/Fairview Avenue				
Northbound Approach	60.0	E	56.3	E
Southbound Approach	33.3	C	67.8	E
Eastbound Approach	26.6	C	47.6	D
Westbound Approach	37.9	D	30.1	C
Overall Intersection	39.0	D	48.0	D
39th Street/Fairview Avenue				
Northbound Approach	5.4	A	7.4	A
Southbound Approach	8.4	A	15.0	B
Eastbound Approach	12.8	B	19.4	B
Westbound Approach	14.4	B	23.3	C
Overall Intersection	7.6	A	14.8	B
39th Street/Main Street/Highland Avenue				
Northbound Approach	6.4	A	7.4	A
Southbound Approach	6.5	A	15.0	B
Eastbound Approach	14.5	B	19.4	B
Westbound Approach	18.6	B	23.3	C
Overall Intersection	8.2	A	14.8	B

Lanes, Volumes, Timings
3: Fairview Ave & 39th Street

Neighborhood 6 AM Existing File.syn
01/23/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	28	73	33	45	46	115	862	22	13	262	67
Future Volume (vph)	80	28	73	33	45	46	115	862	22	13	262	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	75		0	200		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	200			200			138			150		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.891			0.924			0.996			0.969	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1615	0	1805	1697	0	1736	3515	0	1467	3319	0
Flt Permitted	0.689			0.682			0.441			0.282		
Satd. Flow (perm)	1309	1615	0	1296	1697	0	806	3515	0	436	3319	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		84			53			6			61	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3980			2639			2643			411	
Travel Time (s)		90.5			60.0			60.1			9.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	7%	4%	0%	7%	0%	4%	2%	14%	23%	6%	3%
Adj. Flow (vph)	92	32	84	38	52	53	132	991	25	15	301	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	116	0	38	105	0	132	1016	0	15	378	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	

Lanes, Volumes, Timings
3: Fairview Ave & 39th Street

Neighborhood 6 AM Existing File.syn
01/23/2018

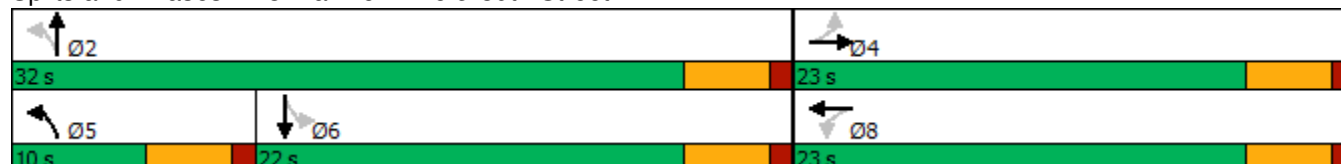


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		22.5	22.5	
Total Split (s)	23.0	23.0		23.0	23.0		10.0	32.0		22.0	22.0	
Total Split (%)	41.8%	41.8%		41.8%	41.8%		18.2%	58.2%		40.0%	40.0%	
Maximum Green (s)	18.5	18.5		18.5	18.5		5.5	27.5		17.5	17.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)	8.6	8.6		8.6	8.6		30.9	31.8		23.8	23.8	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.66	0.68		0.51	0.51	
v/c Ratio	0.38	0.32		0.16	0.29		0.20	0.42		0.07	0.22	
Control Delay	20.8	9.3		16.7	11.4		5.1	5.4		11.0	8.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.8	9.3		16.7	11.4		5.1	5.4		11.0	8.3	
LOS	C	A		B	B		A	A		B	A	
Approach Delay		14.4			12.8			5.4			8.4	
Approach LOS		B			B			A			A	

Intersection Summary























Area Type: Other
 Cycle Length: 55
 Actuated Cycle Length: 46.5
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.42
 Intersection Signal Delay: 7.6
 Intersection LOS: A
 Intersection Capacity Utilization 51.0%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 3: Fairview Ave & 39th Street



Lanes, Volumes, Timings
4: Main St/Highland Ave & 39th Street

Neighborhood 6 AM Existing File.syn
01/23/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	42	41	103	5	105	7	1049	128	96	505	1
Future Volume (vph)	44	42	41	103	5	105	7	1049	128	96	505	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	100		0	115		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50			150			175			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.926			0.856			0.984				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1660	0	1703	1514	0	1805	3479	0	1736	3471	0
Flt Permitted	0.681			0.698			0.446			0.180		
Satd. Flow (perm)	1294	1660	0	1251	1514	0	847	3479	0	329	3471	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			66			34				
Link Speed (mph)		30			30			30				30
Link Distance (ft)		470			3980			624				1248
Travel Time (s)		10.7			90.5			14.2				28.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	5%	7%	6%	40%	6%	0%	2%	3%	4%	4%	0%
Adj. Flow (vph)	48	46	45	112	5	114	8	1140	139	104	549	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	91	0	112	119	0	8	1279	0	104	550	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	

Lanes, Volumes, Timings
4: Main St/Highland Ave & 39th Street

Neighborhood 6 AM Existing File.syn
01/23/2018

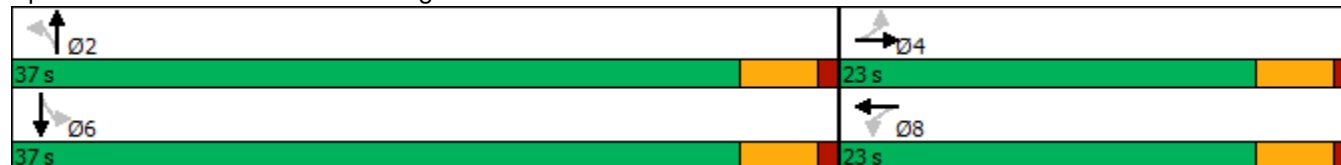


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		8				2		6			
Detector Phase	4	4	8		8		2	2	6		6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0		5.0		5.0	5.0	5.0		5.0	
Minimum Split (s)	22.5	22.5	22.5		22.5		22.5	22.5	22.5		22.5	
Total Split (s)	23.0	23.0	23.0		23.0		37.0	37.0	37.0		37.0	
Total Split (%)	38.3%	38.3%	38.3%		38.3%		61.7%	61.7%	61.7%		61.7%	
Maximum Green (s)	18.5	18.5	18.5		18.5		32.5	32.5	32.5		32.5	
Yellow Time (s)	3.5	3.5	3.5		3.5		3.5	3.5	3.5		3.5	
All-Red Time (s)	1.0	1.0	1.0		1.0		1.0	1.0	1.0		1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.5	4.5	4.5		4.5		4.5	4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		None		Max	Max	Max		Max	
Walk Time (s)	7.0	7.0	7.0		7.0		7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0	11.0		11.0		11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0	0		0		0	0	0		0	
Act Effct Green (s)	9.9	9.9	9.9		9.9		36.5	36.5	36.5		36.5	
Actuated g/C Ratio	0.19	0.19	0.19		0.19		0.70	0.70	0.70		0.70	
v/c Ratio	0.20	0.26	0.47		0.35		0.01	0.53	0.45		0.23	
Control Delay	18.9	12.1	25.2		12.3		4.7	6.5	16.4		4.6	
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0		0.0	
Total Delay	18.9	12.1	25.2		12.3		4.7	6.5	16.4		4.6	
LOS	B	B	C		B		A	A	B		A	
Approach Delay	14.5		18.6				6.4		6.5			
Approach LOS	B		B				A		A			

Intersection Summary






















Area Type: Other
 Cycle Length: 60
 Actuated Cycle Length: 52.4
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.53
 Intersection Signal Delay: 8.2 Intersection LOS: A
 Intersection Capacity Utilization 62.0% ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 4: Main St/Highland Ave & 39th Street























Lanes, Volumes, Timings
7: Main St & Ogden Ave

Neighborhood 6 AM Existing File.syn
01/23/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	445	1119	78	107	912	91	209	615	103	143	251	229
Future Volume (vph)	445	1119	78	107	912	91	209	615	103	143	251	229
Ideal Flow (vphpl)	1800	2000	1800	1800	2000	1800	1800	2000	1800	1800	2000	1800
Storage Length (ft)	230		0	230		0	310		0	230		230
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	100			100			125			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.990			0.986			0.978				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1693	3645	0	1676	3575	0	1676	3633	0	1629	3654	1471
Flt Permitted	0.093			0.149			0.515			0.147		
Satd. Flow (perm)	166	3645	0	263	3575	0	909	3633	0	252	3654	1471
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			8			13				82
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1003			4308			1042				2218
Travel Time (s)		19.5			83.9			23.7				50.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	3%	6%	2%	5%	3%	2%	2%	4%	5%	4%	4%
Adj. Flow (vph)	484	1216	85	116	991	99	227	668	112	155	273	249
Shared Lane Traffic (%)												
Lane Group Flow (vph)	484	1301	0	116	1090	0	227	780	0	155	273	249
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.07	0.94	1.07	1.07	0.94	1.07	1.07	0.94	1.07	1.07	0.94	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases	2			6			8			4		4
Detector Phase	5	2		1	6		3	8		7	4	5
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	10.0		3.0	10.0	3.0
Minimum Split (s)	6.0	24.0		6.0	24.0		6.0	24.0		6.0	24.0	6.0

Lanes, Volumes, Timings
8: Fairview Ave & Ogden Ave

Neighborhood 6 AM Existing File.syn
01/23/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	274	1061	79	69	779	133	203	633	172	113	167	137
Future Volume (vph)	274	1061	79	69	779	133	203	633	172	113	167	137
Ideal Flow (vphpl)	1800	2000	1800	1800	2000	1800	1800	2000	1800	1800	2000	1800
Storage Length (ft)	260		0	220		0	175		0	230		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	125			150			100			160		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.990			0.978			0.968			0.932	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1693	3613	0	1660	3549	0	1676	3591	0	1644	3396	0
Flt Permitted	0.145			0.128			0.396			0.154		
Satd. Flow (perm)	258	3613	0	224	3549	0	699	3591	0	267	3396	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			18			25			141	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		4308			1977			440			2643	
Travel Time (s)		83.9			38.5			10.0			60.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	3%	19%	3%	5%	3%	2%	2%	4%	4%	7%	1%
Adj. Flow (vph)	298	1153	86	75	847	145	221	688	187	123	182	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	298	1239	0	75	992	0	221	875	0	123	331	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.07	0.94	1.07	1.07	0.94	1.07	1.07	0.94	1.07	1.07	0.94	1.07
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	10.0		3.0	10.0	
Minimum Split (s)	6.0	24.0		6.0	24.0		6.0	24.0		6.0	24.0	

Lanes, Volumes, Timings
8: Fairview Ave & Ogden Ave

Neighborhood 6 AM Existing File.syn
01/23/2018

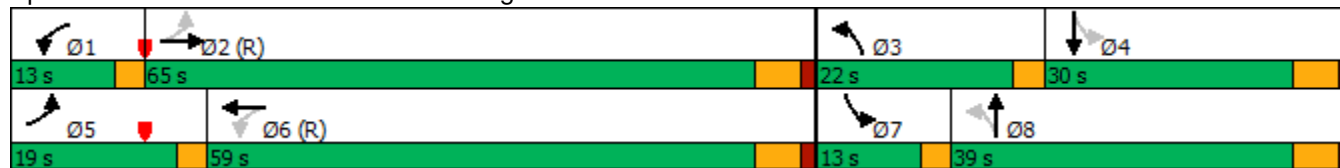


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	19.0	65.0		13.0	59.0		22.0	39.0		13.0	30.0	
Total Split (%)	14.6%	50.0%		10.0%	45.4%		16.9%	30.0%		10.0%	23.1%	
Maximum Green (s)	16.0	59.0		10.0	53.0		19.0	33.0		10.0	24.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	4.5		3.0	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		3.0	6.0		3.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	75.5	63.3		64.6	53.6		48.5	32.7		38.6	25.9	
Actuated g/C Ratio	0.58	0.49		0.50	0.41		0.37	0.25		0.30	0.20	
v/c Ratio	0.92	0.70		0.38	0.67		0.57	0.95		0.68	0.42	
Control Delay	68.8	16.4		18.8	39.4		35.9	66.1		48.0	27.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	68.8	16.4		18.8	39.4		35.9	66.1		48.0	27.8	
LOS	E	B		B	D		D	E		D	C	
Approach Delay		26.6			37.9			60.0			33.3	
Approach LOS		C			D			E			C	

Intersection Summary





















Area Type:	Other
Cycle Length:	130
Actuated Cycle Length:	130
Offset:	69 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green
Natural Cycle:	75
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.95
Intersection Signal Delay:	39.0
Intersection LOS:	D
Intersection Capacity Utilization:	85.6%
ICU Level of Service:	E
Analysis Period (min):	15

Splits and Phases: 8: Fairview Ave & Ogden Ave



Lanes, Volumes, Timings
14: Saratoga Ave & Ogden Ave

Neighborhood 6 AM Existing File.syn
01/23/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	1764	28	16	988	36	52	40	12	40	12	16
Future Volume (vph)	152	1764	28	16	988	36	52	40	12	40	12	16
Ideal Flow (vphpl)	1800	2000	1900	1800	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	200		0	300		0	75		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.995			0.965			0.915	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1676	3718	0	1676	3707	0	1770	1892	0	1770	1794	0
Flt Permitted	0.224			0.082			0.738			0.720		
Satd. Flow (perm)	395	3718	0	145	3707	0	1375	1892	0	1341	1794	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			5			10			17	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		939			1003			602			902	
Travel Time (s)		18.3			19.5			13.7			20.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	165	1917	30	17	1074	39	57	43	13	43	13	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	165	1947	0	17	1113	0	57	56	0	43	30	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		Yes			Yes							
Headway Factor	1.07	0.94	1.00	1.07	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	13.0	29.5		6.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	19.0	87.0		13.0	81.0		30.0	30.0		30.0	30.0	

Lanes, Volumes, Timings
 14: Saratoga Ave & Ogden Ave

Neighborhood 6 AM Existing File.syn
 01/23/2018

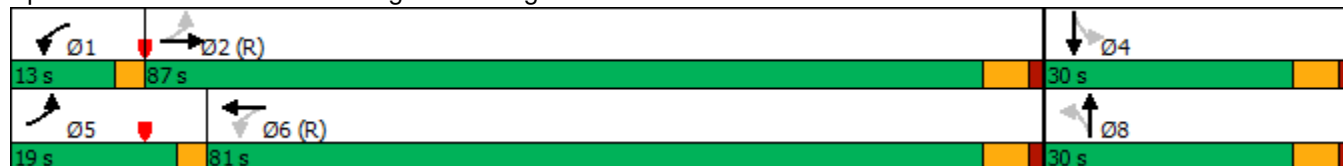


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.6%	66.9%		10.0%	62.3%		23.1%	23.1%		23.1%	23.1%	
Maximum Green (s)	16.0	81.0		10.0	75.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.0	4.5		3.0	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	6.0		3.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	112.6	107.3		107.7	99.0		11.1	11.1		11.1	11.1	
Actuated g/C Ratio	0.87	0.83		0.83	0.76		0.09	0.09		0.09	0.09	
v/c Ratio	0.40	0.63		0.09	0.39		0.49	0.33		0.38	0.18	
Control Delay	4.7	7.5		2.1	4.3		69.7	50.7		64.5	33.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	4.7	7.5		2.1	4.3		69.7	50.7		64.5	33.0	
LOS	A	A		A	A		E	D		E	C	
Approach Delay		7.3			4.3			60.3			51.5	
Approach LOS		A			A			E			D	

Intersection Summary

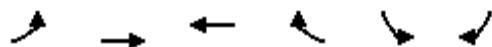
Area Type: Other
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green, Master Intersection
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 9.0 Intersection LOS: A
 Intersection Capacity Utilization 73.4% ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 14: Saratoga Ave & Ogden Ave



Lanes, Volumes, Timings
17: Ogden Ave & Downers Plaza

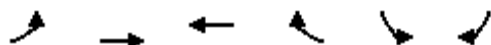
Neighborhood 6 AM Existing File.syn
01/23/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗↗	↗↗	↖	↖	↖
Traffic Volume (vph)	72	1796	1008	100	148	76
Future Volume (vph)	72	1796	1008	100	148	76
Ideal Flow (vphpl)	1800	2000	2000	1800	1900	1900
Storage Length (ft)	120			150	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	150				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Fr _t				0.850		0.850
Fl _t Protected	0.950				0.950	
Satd. Flow (prot)	1676	3725	3725	1500	1770	1583
Fl _t Permitted	0.218				0.950	
Satd. Flow (perm)	385	3725	3725	1500	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				93		83
Link Speed (mph)		35	35		30	
Link Distance (ft)		1977	957		416	
Travel Time (s)		38.5	18.6		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	78	1952	1096	109	161	83
Shared Lane Traffic (%)						
Lane Group Flow (vph)	78	1952	1096	109	161	83
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	1.07	0.94	0.94	1.07	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (ft)	20	100	100	20	20	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	6	20	20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	5	2	6		4	5
Permitted Phases	2			6		4

Lanes, Volumes, Timings
17: Ogden Ave & Downers Plaza

Neighborhood 6 AM Existing File.syn
01/23/2018

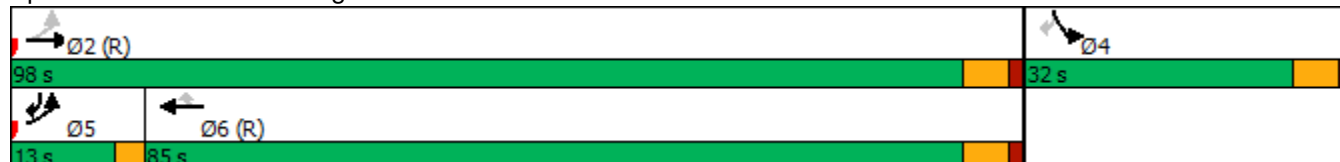


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Detector Phase	5	2	6	6	4	5
Switch Phase						
Minimum Initial (s)	3.0	15.0	15.0	15.0	8.0	3.0
Minimum Split (s)	6.0	24.0	24.0	24.0	24.0	6.0
Total Split (s)	13.0	98.0	85.0	85.0	32.0	13.0
Total Split (%)	10.0%	75.4%	65.4%	65.4%	24.6%	10.0%
Maximum Green (s)	10.0	92.0	79.0	79.0	26.0	10.0
Yellow Time (s)	3.0	4.5	4.5	4.5	4.5	3.0
All-Red Time (s)	0.0	1.5	1.5	1.5	1.5	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0	6.0	6.0	6.0	3.0
Lead/Lag	Lead		Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	C-Max	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)		0	0	0	0	
Act Effct Green (s)	103.9	100.9	91.1	91.1	17.1	29.9
Actuated g/C Ratio	0.80	0.78	0.70	0.70	0.13	0.23
v/c Ratio	0.21	0.68	0.42	0.10	0.69	0.19
Control Delay	3.0	6.4	9.4	2.3	68.9	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.0	6.4	9.4	2.3	68.9	8.3
LOS	A	A	A	A	E	A
Approach Delay		6.3	8.8		48.3	
Approach LOS		A	A		D	

Intersection Summary

Area Type: Other
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 110 (85%), Referenced to phase 2:EBTL and 6:WBT, Start of 1st Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 10.1
 Intersection LOS: B
 Intersection Capacity Utilization 65.4%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 17: Ogden Ave & Downers Plaza



HCM 6th Signalized Intersection Summary
3: Fairview Ave & 39th Street

Neighborhood 6 PM Existing File.syn
01/26/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↗	
Traffic Volume (veh/h)	78	93	194	22	68	23	72	340	24	57	929	150
Future Volume (veh/h)	78	93	194	22	68	23	72	340	24	57	929	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1900	1900	1900	1900	1900	1885	1885	1841	1885	1885
Adj Flow Rate, veh/h	84	100	209	24	73	25	77	366	26	61	999	161
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	0	0	0	0	0	0	1	1	4	1	1
Cap, veh/h	379	128	267	199	315	108	343	2044	145	578	1411	227
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.06	0.60	0.60	0.46	0.46	0.46
Sat Flow, veh/h	1308	548	1146	1087	1353	463	1810	3393	240	976	3089	497
Grp Volume(v), veh/h	84	0	309	24	0	98	77	192	200	61	579	581
Grp Sat Flow(s),veh/h/ln	1308	0	1694	1087	0	1817	1810	1791	1842	976	1791	1796
Q Serve(g_s), s	3.0	0.0	9.3	1.2	0.0	2.4	1.1	2.6	2.6	2.0	14.2	14.2
Cycle Q Clear(g_c), s	5.4	0.0	9.3	10.5	0.0	2.4	1.1	2.6	2.6	2.0	14.2	14.2
Prop In Lane	1.00		0.68	1.00		0.26	1.00		0.13	1.00		0.28
Lane Grp Cap(c), veh/h	379	0	395	199	0	423	343	1079	1109	578	818	820
V/C Ratio(X)	0.22	0.00	0.78	0.12	0.00	0.23	0.22	0.18	0.18	0.11	0.71	0.71
Avail Cap(c_a), veh/h	508	0	561	306	0	602	398	1079	1109	578	818	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	19.7	24.6	0.0	17.0	8.5	4.8	4.8	8.6	11.9	11.9
Incr Delay (d2), s/veh	0.3	0.0	4.6	0.3	0.0	0.3	0.3	0.4	0.4	0.4	5.1	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	3.8	0.3	0.0	0.9	0.3	0.8	0.8	0.4	5.7	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	0.0	24.3	24.9	0.0	17.3	8.8	5.2	5.2	9.0	17.0	17.0
LnGrp LOS	B	A	C	C	A	B	A	A	A	A	B	B
Approach Vol, veh/h		393			122			469			1221	
Approach Delay, s/veh		23.3			18.8			5.8			16.6	
Approach LOS		C			B			A			B	
Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		37.4		17.2	7.9	29.5		17.2				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		32.9		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+l1), s		4.6		11.3	3.1	16.2		12.5				
Green Ext Time (p_c), s		2.4		1.2	0.0	4.3		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				15.6								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
4: Main St/Highland Ave & 39th Street

Neighborhood 6 PM Existing File.syn
01/26/2018
























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕	↗	↖	↗	
Traffic Volume (veh/h)	33	29	34	261	29	131	26	504	63	185	1663	4
Future Volume (veh/h)	33	29	34	261	29	131	26	504	63	185	1663	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1900	1900	1900	1856	1856	1900	1885	1885	1885	1870	1870
Adj Flow Rate, veh/h	34	30	35	269	30	135	27	520	65	191	1714	4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	0	0	0	3	3	0	1	1	1	2	2
Cap, veh/h	322	207	242	428	76	343	183	1914	238	549	2172	5
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1182	799	933	1358	294	1323	288	3205	399	837	3637	8
Grp Volume(v), veh/h	34	0	65	269	0	165	27	290	295	191	837	881
Grp Sat Flow(s),veh/h/ln	1182	0	1732	1358	0	1617	288	1791	1813	837	1777	1869
Q Serve(g_s), s	1.5	0.0	1.8	11.9	0.0	5.3	4.9	4.9	4.9	8.9	22.5	22.5
Cycle Q Clear(g_c), s	6.8	0.0	1.8	13.7	0.0	5.3	27.5	4.9	4.9	13.9	22.5	22.5
Prop In Lane	1.00		0.54	1.00		0.82	1.00		0.22	1.00		0.00
Lane Grp Cap(c), veh/h	322	0	449	428	0	420	183	1070	1083	549	1061	1116
V/C Ratio(X)	0.11	0.00	0.14	0.63	0.00	0.39	0.15	0.27	0.27	0.35	0.79	0.79
Avail Cap(c_a), veh/h	363	0	510	476	0	477	183	1070	1083	549	1061	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	0.0	17.9	23.2	0.0	19.2	20.1	6.1	6.1	9.4	9.6	9.6
Incr Delay (d2), s/veh	0.1	0.0	0.1	2.2	0.0	0.6	1.7	0.6	0.6	1.7	6.0	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	3.8	0.0	1.9	0.4	1.6	1.6	1.6	8.3	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.1	0.0	18.0	25.4	0.0	19.8	21.8	6.7	6.7	11.2	15.6	15.3
LnGrp LOS	C	A	B	C	A	B	C	A	A	B	B	B
Approach Vol, veh/h		99			434			612			1909	
Approach Delay, s/veh		19.4			23.3			7.4			15.0	
Approach LOS		B			C			A			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.0		20.8		42.0		20.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		37.5		18.5		37.5		18.5				
Max Q Clear Time (g_c+l1), s		29.5		8.8		24.5		15.7				
Green Ext Time (p_c), s		2.6		0.2		10.0		0.5				

Intersection Summary

HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
7: Main St & Ogden Ave

Neighborhood 6 PM Existing File.syn
01/26/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1111	87	159	1174	103	136	321	93	282	771	682
Future Volume (veh/h)	200	1111	87	159	1174	103	136	321	93	282	771	682
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1984	1786	1800	1984	1786	1772	1984	1786	1772	1984	1772
Adj Flow Rate, veh/h	206	1145	90	164	1210	106	140	331	96	291	795	703
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	1	1	0	1	1	2	1	1	2	1	2
Cap, veh/h	248	1576	124	321	1502	131	211	639	182	388	1050	549
Arrive On Green	0.17	0.89	0.89	0.07	0.43	0.43	0.08	0.22	0.22	0.14	0.28	0.28
Sat Flow, veh/h	1688	3541	278	1714	3508	307	1688	2894	827	1688	3770	1502
Grp Volume(v), veh/h	206	609	626	164	649	667	140	214	213	291	795	703
Grp Sat Flow(s),veh/h/ln	1688	1885	1934	1714	1885	1929	1688	1885	1836	1688	1885	1502
Q Serve(g_s), s	9.7	14.0	14.1	7.4	42.1	42.3	8.9	14.0	14.3	18.4	27.0	39.0
Cycle Q Clear(g_c), s	9.7	14.0	14.1	7.4	42.1	42.3	8.9	14.0	14.3	18.4	27.0	39.0
Prop In Lane	1.00		0.14	1.00		0.16	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	248	839	861	321	807	826	211	416	405	388	1050	549
V/C Ratio(X)	0.83	0.73	0.73	0.51	0.80	0.81	0.66	0.51	0.53	0.75	0.76	1.28
Avail Cap(c_a), veh/h	342	839	861	446	807	826	225	431	420	388	1050	549
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.72	0.72	0.72	0.58	0.58	0.58	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	5.0	5.0	20.3	34.9	35.0	39.8	48.0	48.1	34.9	46.2	44.4
Incr Delay (d2), s/veh	8.6	4.0	3.9	0.7	5.0	5.0	6.6	1.0	1.1	7.9	3.2	139.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.3	3.4	3.0	20.1	20.6	4.1	6.7	6.7	8.4	13.1	40.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	9.0	8.9	21.0	39.9	40.0	46.3	48.9	49.2	42.8	49.4	184.4
LnGrp LOS	D	A	A	C	D	D	D	D	D	D	D	F
Approach Vol, veh/h		1441			1480			567			1789	
Approach Delay, s/veh		12.7			37.9			48.4			101.3	
Approach LOS		B			D			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.8	68.3	13.9	45.0	15.2	65.9	22.0	36.9				
Change Period (Y+Rc), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0				
Max Green Setting (Gmax),s	20.0	51.0	12.0	39.0	20.0	51.0	19.0	32.0				
Max Q Clear Time (g_c+l1),s	9.4	16.1	10.9	41.0	11.7	44.3	20.4	16.3				
Green Ext Time (p_c), s	0.4	6.4	0.0	0.0	0.5	3.4	0.0	1.5				
Intersection Summary												
HCM 6th Ctrl Delay				53.6								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary
8: Fairview Ave & Ogden Ave

Neighborhood 6 PM Existing File.syn
01/26/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↖↗		↖	↖↗	
Traffic Volume (veh/h)	132	1129	145	199	1239	115	140	214	142	284	655	167
Future Volume (veh/h)	132	1129	145	199	1239	115	140	214	142	284	655	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1984	1786	1800	1984	1786	1786	1984	1786	1800	2000	1800
Adj Flow Rate, veh/h	135	1152	148	203	1264	117	143	218	145	290	668	170
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	0	1	1	1	1	1	0	0	0
Cap, veh/h	207	1649	211	269	1782	164	190	395	251	354	686	174
Arrive On Green	0.05	0.49	0.49	0.02	0.17	0.17	0.08	0.18	0.18	0.13	0.23	0.23
Sat Flow, veh/h	1714	3361	431	1714	3489	322	1701	2210	1407	1714	3000	763
Grp Volume(v), veh/h	135	645	655	203	681	700	143	185	178	290	423	415
Grp Sat Flow(s),veh/h/ln	1714	1885	1907	1714	1885	1926	1701	1885	1731	1714	1900	1863
Q Serve(g_s), s	5.5	37.1	37.3	7.7	47.8	48.0	9.5	12.5	13.2	18.0	30.9	31.0
Cycle Q Clear(g_c), s	5.5	37.1	37.3	7.7	47.8	48.0	9.5	12.5	13.2	18.0	30.9	31.0
Prop In Lane	1.00		0.23	1.00		0.17	1.00		0.81	1.00		0.41
Lane Grp Cap(c), veh/h	207	925	936	269	963	984	190	337	309	354	434	426
V/C Ratio(X)	0.65	0.70	0.70	0.75	0.71	0.71	0.75	0.55	0.58	0.82	0.97	0.98
Avail Cap(c_a), veh/h	237	925	936	449	963	984	190	337	309	354	434	426
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.55	0.55	0.55	0.45	0.45	0.45	1.00	1.00	1.00	0.76	0.76	0.76
Uniform Delay (d), s/veh	27.1	27.6	27.7	26.5	48.3	48.5	44.4	52.4	52.7	41.0	53.6	53.6
Incr Delay (d2), s/veh	2.9	2.4	2.4	2.0	2.0	2.0	15.6	1.9	2.6	11.0	30.9	31.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	17.0	17.3	3.6	24.8	25.5	4.9	6.1	6.0	9.3	18.5	18.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.0	30.0	30.1	28.5	50.3	50.5	60.0	54.2	55.3	52.0	84.5	85.2
LnGrp LOS	C	C	C	C	D	D	E	D	E	D	F	F
Approach Vol, veh/h		1435			1584			506			1128	
Approach Delay, s/veh		30.1			47.6			56.3			76.4	
Approach LOS		C			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.3	74.7	14.0	38.0	10.5	77.5	21.0	31.0				
Change Period (Y+Rc), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0				
Max Green Setting (Gmax),s	25.0	54.0	11.0	32.0	10.0	69.0	18.0	25.0				
Max Q Clear Time (g_c+I),s	9.7	39.3	11.5	33.0	7.5	50.0	20.0	15.2				
Green Ext Time (p_c), s	0.6	5.4	0.0	0.0	0.1	6.5	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			50.1									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary
14: Saratoga Ave & Ogden Ave

Neighborhood 6 PM Existing File.syn
01/26/2018



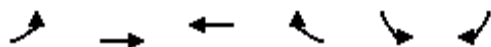
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	84	1452	40	20	1684	72	10	84	24	120	132	196
Future Volume (veh/h)	84	1452	40	20	1684	72	10	84	24	120	132	196
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1969	1870	1772	1969	1870	1870	1969	1870	1870	1969	1870
Adj Flow Rate, veh/h	91	1578	43	22	1830	78	11	91	26	130	143	213
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	2453	67	192	2339	99	78	326	93	268	158	235
Arrive On Green	0.03	0.66	0.66	0.02	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1688	3720	101	1688	3656	155	1025	1472	421	1275	714	1063
Grp Volume(v), veh/h	91	792	829	22	930	978	11	0	117	130	0	356
Grp Sat Flow(s),veh/h/ln	1688	1870	1951	1688	1870	1941	1025	0	1893	1275	0	1777
Q Serve(g_s), s	2.5	35.0	35.3	0.6	0.0	0.0	1.5	0.0	7.2	13.2	0.0	27.3
Cycle Q Clear(g_c), s	2.5	35.0	35.3	0.6	0.0	0.0	28.8	0.0	7.2	20.4	0.0	27.3
Prop In Lane	1.00		0.05	1.00		0.08	1.00		0.22	1.00		0.60
Lane Grp Cap(c), veh/h	248	1233	1286	192	1196	1242	78	0	419	268	0	393
V/C Ratio(X)	0.37	0.64	0.64	0.11	0.78	0.79	0.14	0.00	0.28	0.49	0.00	0.91
Avail Cap(c_a), veh/h	315	1233	1286	292	1196	1242	115	0	487	314	0	457
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.23	0.23	0.23	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.4	14.1	14.1	12.5	0.0	0.0	67.1	0.0	45.3	53.7	0.0	53.1
Incr Delay (d2), s/veh	0.9	2.6	2.5	0.1	1.2	1.2	0.8	0.0	0.4	1.4	0.0	19.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	14.8	15.5	0.2	0.4	0.4	0.4	0.0	3.5	4.4	0.0	14.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.3	16.7	16.6	12.6	1.2	1.2	67.9	0.0	45.6	55.1	0.0	72.7
LnGrp LOS	A	B	B	B	A	A	E	A	D	E	A	E
Approach Vol, veh/h		1712			1930			128			486	
Approach Delay, s/veh		16.2			1.3			47.5			68.0	
Approach LOS		B			A			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	98.3		37.0	7.5	95.6		37.0				
Change Period (Y+Rc), s	3.0	6.0		6.0	3.0	6.0		6.0				
Max Green Setting (Gmax),s	79.0			36.0	10.0	79.0		36.0				
Max Q Clear Time (g_c+l1),s	37.3			29.3	4.5	2.0		30.8				
Green Ext Time (p_c), s	0.0	10.4		1.3	0.1	16.3		0.2				

Intersection Summary

HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
17: Ogden Ave & Downers Plaza

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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↗	↗↗	↗↗	↗	↘	↘
Traffic Volume (veh/h)	144	1364	1592	112	424	304
Future Volume (veh/h)	144	1364	1592	112	424	304
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1772	1969	1969	1772	1870	1870
Adj Flow Rate, veh/h	157	1483	1730	122	461	330
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	188	2382	2094	841	494	528
Arrive On Green	0.11	1.00	0.56	0.56	0.28	0.28
Sat Flow, veh/h	1688	3839	3839	1502	1781	1585
Grp Volume(v), veh/h	157	1483	1730	122	461	330
Grp Sat Flow(s),veh/h/ln	1688	1870	1870	1502	1781	1585
Q Serve(g_s), s	5.6	0.0	53.0	5.4	35.3	24.6
Cycle Q Clear(g_c), s	5.6	0.0	53.0	5.4	35.3	24.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	188	2382	2094	841	494	528
V/C Ratio(X)	0.84	0.62	0.83	0.15	0.93	0.63
Avail Cap(c_a), veh/h	263	2382	2094	841	547	575
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.51	0.51	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	25.2	14.8	49.3	39.3
Incr Delay (d2), s/veh	8.3	0.6	3.9	0.4	22.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.2	23.7	1.9	18.7	21.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.6	0.6	29.1	15.1	71.3	41.2
LnGrp LOS	D	A	C	B	E	D
Approach Vol, veh/h		1640	1852		791	
Approach Delay, s/veh		4.1	28.2		58.7	
Approach LOS		A	C		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		95.1		44.9	10.8	84.4
Change Period (Y+Rc), s		6.0		6.0	3.0	6.0
Max Green Setting (Gmax), s		85.0		43.0	14.0	68.0
Max Q Clear Time (g_c+l1), s		2.0		37.3	7.6	55.0
Green Ext Time (p_c), s		18.3		1.5	0.2	9.7
Intersection Summary						
HCM 6th Ctrl Delay			24.6			
HCM 6th LOS			C			