



Agenda Item Summary

File #: ID 18-1042, **Version:** 1

Submitted By

Bill McKenna, Village Engineer

Agenda Item Title

Discussion of Madison Traffic Study and Motion to Direct Staff to Bring Forward a Discussion Regarding Transferring Jurisdiction of Washington Blvd in Early 2019

Overview

This item is a follow-up discussion on the Madison Street traffic study. In addition staff will briefly review the need for a discussion in early 2019 regarding whether to make a recommendation to transfer jurisdiction of Washington Boulevard from the State of Illinois to the Village of Oak Park in order to implement recommended traffic calming measures.

Anticipated Future Actions/Commitments

Staff will recommend including funds in the proposed FY2020 and future budgets for traffic data collection to verify the predicted traffic volumes and speeds in the Jackson to Washington corridor as well as funds for traffic calming measures identified in the Traffic Calming Study for Jackson Boulevard, Washington Boulevard, and side streets adjacent to Madison.

Staff will evaluate whether to make a recommendation to transfer jurisdiction of Washington Boulevard from the State of Illinois to the Village of Oak Park in order to implement recommended traffic calming measures.

Separate agenda items will already presented (earlier on this agenda) at this meeting for the construction contract with K-Five Construction Corp. and the construction management with Edwin Hancock Engineering for the Madison Street Improvement Project.

Report

Staff gave a presentation of the Madison Street Improvement project to the Village Board at the October 29, 2018 meeting which is attached for reference. This item is a follow-up discussion of the Madison Street road diet project to address questions from the October meeting and to provide more information regarding median island removals and results of the traffic studies.

The proposed construction project includes creating a road diet on Madison Street. The term road diet refers to the removal of a traffic lane in each direction. A road diet is being proposed on Madison Street as a result of a planning process and it is intended to improve the safety of pedestrians crossing Madison Street; to slow and calm traffic on Madison; to create space for dedicated bike lanes; to foster economic development; and to change the character of Madison Street to make it a more vibrant business district attractive to all users, not just automobiles.

Implementing a road diet on Madison does create some challenges from a traffic capacity standpoint since Madison currently carries between 20,000-25,000 vehicles per day and is at the upper range of Federal Highway's guidelines for road diets. To address traffic concerns associated with the road diet, the Village's consultants conducted two separate traffic studies.

Implementing a road diet on Madison does create some challenges from a traffic capacity standpoint since Madison currently carries between 20,000-25,000 vehicles per day and is at the upper range of Federal Highway's guidelines for road diets. To address traffic concerns associated with the road diet, the Village's consultants conducted two separate traffic studies.

Madison Street Road Diet Traffic Study:

The first traffic study focuses just on Madison Street to determine how Madison will operate under a road diet condition. Traffic data was collected in May/June and again in October of 2016 to verify the data. Traffic data from May/June of 2016 was about 10% higher than volumes from October of 2016. Traffic volumes collected in 2016 ranged from 21,150 vehicles per day in the eastern section to 24,900 vehicles per day in the western section. These 2016 volumes were about 32% higher than volumes provided by IDOT in 2015 and 36% higher than previous count volumes analyzed in 2010. To err on the conservative side the Village used the highest collected traffic data from May/June of 2016 for the traffic study.

These traffic volumes were provided to CMAP to predict how traffic would be redistributed or diverted to other east-west roads in the area. CMAP is projecting about 5-15% (which represents roughly 1,000-3,750 vehicles per day) of the current traffic on Madison gets redistributed to a number of primary east-west roadways located between and including North Avenue and Cermak Road. A significant portion of this diverted traffic would choose to remain on the Eisenhower.

Traffic data was also collected at the eight signalized intersections during the peak hours of 7-9am and 4-6pm which was used to determine the capacity and level of service (delay) for the intersections. As with the traffic volume counts, the highest single hour of traffic for am and pm peak times from the May/June 2016 data was used for the intersection capacity analysis to provide a worst case scenario. In general Madison Street in its current and future condition operates well except for during the peak rush hours, which are exacerbated during the 20-30 minute period during school drop-off in the am.

After reviewing the preliminary results of the traffic study simulating a road diet, staff worked with the consultants to modify the design of the road diet to include right turn lanes at several intersections, extend the left turn bay at Harlem for westbound traffic, keep existing number of traffic lanes at the Harlem and Austin intersections, determine signal timing changes to give Madison more green time, add dedicated left turn bays at Home and Wisconsin, and extend turn bays at several intersections.

These design changes were then input into the traffic model which was used to provide data for the attached final Madison Street Road Diet Traffic Study. The study provides a detailed analysis of each signalized intersection. In general during am and pm peak times the delay at signalized intersection will increase particularly at the Oak Park Avenue and Ridgeland Avenue intersections. There will be longer queues and at several intersections motorists will not be able to clear a signalized intersection in one traffic signal cycle. The

study does include a recommendation to consider removing on-street parking along Oak Park Avenue and Ridgeland near the Madison Street intersections to improve operation of these streets as they can experience increased delays due to signal timing changes.

In general Madison Street is proposed to operate very similarly to Roosevelt Road during am and pm peaks with similar travel times through the corridor and similar delays and queues at signalized intersections.

While the travel times through the corridor will increase during peak hours with the proposed road diet, the road diet will result in a more uniform flow through the corridor which should result in safer operations due to less lane changing and weaving along with lower and more appropriate speeds. Further, several enhancements are proposed to improve pedestrian and bicycle safety including dedicated and protected bike lanes, bus stops, high visibility crosswalks, pedestrian refuge islands with flashing beacons and curb bump outs, as well as additional signage.

Traffic Calming Study for Jackson, Washington, and side streets adjacent to Madison:

The Village's consultants of Christopher Burke and KLOA performed a traffic study of Washington and Jackson Boulevards and the side streets along Madison Street and to develop any recommended improvements for traffic calming, safety, and traffic flow. Using traffic counts, projected travel diversion volumes from CMAP for Jackson and Washington as a result of the road diet, and results from the Madison Street Road Diet Traffic study, the consultants determined a number of traffic calming improvements to mitigate impacts from the road diet project.

As part of the study traffic counts were taken on Jackson Boulevard which show it currently has an average daily traffic of 7,000 to 7,800 vehicles with an average speed of about 25 mph and an 85% speed of 30 mph. Based upon CMAP's projections of traffic diverting from Madison, Jackson Boulevard is estimated to have an additional 400-600 vehicles per day due to the proposed road diet. The additional 400-600 cars per day represents an increase in traffic on Jackson of roughly 5 - 8%. In order to help ensure that drivers on Jackson drive in a calm and safe way and improve pedestrian safety the study is recommending some traffic calming improvements focused primarily in the middle 1/3 of Jackson between Oak Park Avenue and Ridgeland.

The study recommends installing additional speed limit signage and improving unprotected crosswalks in the western 1/3 of Jackson from Harlem to Oak Park Avenue since this section already includes bump outs at the corners, bike lanes sharing space at intersections, and the jogs at Harlem and Oak Park. In the middle 1/3 of Jackson the recommendations include the use of bump outs at 3 intersections, using green bike lane markings to highlight conflict areas, changing street pavements at the Euclid intersection adjacent to Fox Park, and the installation of additional speed limit signage. In the eastern 1/3 of Jackson from Ridgeland to Austin there are already median islands which limit the road width and opportunities for additional calming, so the study includes recommendations for additional speed limit signage, improving crosswalk visibility at Lombard, and bump outs and changing street pavements at Cuyler adjacent to Longfellow Park and Longfellow School.

Traffic counts were taken on Washington Boulevard which shows it has a current average daily traffic between 7,600 to 9,800 vehicles with an average speed of about 25 mph and an 85% speed of 30.7 mph. Based upon CMAP's projections of traffic diverting from Madison, Washington Boulevard is estimated to have an additional 400-1,300 vehicles per day due to the proposed road diet. The additional 400-1,300 cars per day represents

an increase in traffic on Washington of roughly 5 - 14%. In general the focus of the traffic study on Washington was to make improvements to address safety concerns at crossings near schools and ensure Washington can convey cars efficiently to minimize backups. Washington Boulevard is an unmarked State Highway so any recommendations for changes would have to be approved by IDOT prior to implementing.

Recommended improvements on Washington Boulevard include bump outs and enhanced crosswalks at the unprotected school crossings at Humphrey, Cuyler, Scoville, and Kenilworth, including pedestrian activated flashing beacons at the official crossings at Kenilworth and Humphrey. The study recommends geometric improvements to add dedicated left turn bays for Washington at Oak Park Avenue which will require acquiring right-of-way and loss of on-street parking in the immediate vicinity. The study also includes recommendations for improved pavement markings at the bicycle boulevard crossings at Kenilworth, Scoville, and Lombard Avenues as well as evaluating traffic signal timing at Wisconsin and Home Avenues.

Since Washington is an unmarked State Highway any change would need to be approved by IDOT. Based on past and recent experience with IDOT the majority of the improvements for bump outs, pavement markings, and pedestrian activated beacons would not be approved. IDOT has recently denied the Village's request to install pedestrian activated beacons at Kenilworth and Humphrey as part of the proposed Safe Routes to School Grant scope. One potential option would be for the Village to request to transfer jurisdiction of Washington from the State to the Village so that the Village can determine what treatments are used on the street. This jurisdictional transfer would need to be evaluated for long term budget impacts since the Village currently receives some minor maintenance funds for maintaining Washington and the State has been responsible for resurfacing the traffic lanes.

The traffic calming study also evaluated traffic on north-south streets that intersect Madison. Traffic data was collected on many of the north-south residential streets near Madison's signalized intersections. The study is focusing on side streets near the Madison traffic signals because this is where drivers may choose to divert from Madison if the queues are too long or they cannot clear an intersection in one signal cycle. The study evaluates a number of treatments to calm traffic, enhance pedestrian safety, and reduce the traffic volume on the north-south roads associated with cars trying to divert off Madison onto these side streets. These treatments include intersection curb extensions, signage, peak hour turning restrictions, pinch points or chockers at mid-block or at the alleys, and potentially diverters or cul de sacs.

Following construction of the proposed road diet project and after a 6 month time period to allow for drivers to settle into normal behaviors, staff is recommending conducting traffic data collection in the late spring/summer of 2020 to determine the actual traffic impacts from the road diet. Final recommendations for traffic calming on side streets would be based on these actual observed conditions to be potentially implemented in 2021.

MADISON STREET IMPROVEMENTS PLAN HISTORY:

In October 2010, the Village Board adopted a Resolution supporting the "Complete Streets" concept which recommends that a Village-wide policy be crafted. The Consultant has incorporated this concept into their streetscape recommendation for Madison Street. The complete streets concept is to provide equal opportunity to all modes of transportation which includes bicycling, vehicular, pedestrian, public transportation in order to reduce traffic congestion while improving air quality and in general quality of life.

On November 22, 2010, the Village Board approved a Resolution Authorizing the Execution of a Contract with Altamanu, Inc. to Prepare Streetscape Design Scenarios for Madison Street for Phase 1.

In December 2010, the Consultant began work on this project. In early December 2010 staff recommended, and the Board supported, a Committee that consisted of the Madison Street Coalition members as well as various staff for a total of seventeen (17) members. On the most part, this Committee met each month, sometimes twice a month throughout the process until such a time the Consultants had a final product.

In April 2011, the Consultants presented to the Madison Street Business Association. Their reaction was positive.

In May and June 2011, the Committee along with the Consultant held two public input meetings at Julian Middle School. Approximately 2,500 postcards were mailed to property and business owners along the corridor. Public reaction was mixed. Some concerns were; the project would create more traffic in adjacent neighborhoods, there is a need for a wider roadway for quick trips from one end of Madison Street to the other, and there is a need for more parking for businesses. Those in favor suggest the new street would improve safety for children as many cross Madison Street, safer street for bicyclists, more green space, reduced speeds, etc.

On November 28, 2011, the consultants, staff, and steering committee presented their findings and recommendations for street modifications. The modifications include the “complete streets” concept adopted by the Village Board, a road diet where five lanes (including a landscaped median strip and turn lanes) are reduced to three lanes (including a center turn lane) with bike lanes, as well as streetscape amenities. The streetscape amenities include new pedestrian street lighting, furniture, sidewalks and crosswalk enhancements. The Village Board had several questions for staff and the consultants from this meeting. The responses were provided in early December 2011.

On January 3, 2012 the Village Board adopted a Complete Streets Policy for Village Capital Improvement Projects and Public Improvement Design.

On April 4, 2012, another presentation was made to provide the Village Board with additional requested information and to solicit further direction. Staff recommended that the Village Board support the Committee’s recommendation and proceed with further discussion on streetscape development, whether full development or partial development of the corridor.

On July 29, 2013, Staff presented three street enhancement alternatives for Village Board consideration at a Study Session.

On April 13, 2015, staff gave a presentation to the Village Board on the Madison Street enhancement project along with an overview of the TIF District, zoning, and economic development.

On June 29, 2015, staff gave a presentation to the Village Board on the Madison Street enhancement project and phased implementation plan.

On September 8, 2015, the Village Board approved agreements with Christopher B. Burke Engineering, Ltd. for

Design Engineering, with Altamanu, Inc. for Landscape Architectural Services, and with V3 Companies of Illinois Ltd. for Surveying Services for the Madison Street Streetscape project.

On April 18, 2016, the Village Board approved an Amendment to the Professional Services Agreement with Christopher B. Burke Engineering, Ltd. for the design engineering for the Madison Street Streetscape and road diet project for an additional \$360,858

On June 13, 2016 staff presented a review of the Madison Street Streetscape Corridor Design to the Village Board.

On October 29, 2018 staff presented the Madison Street Improvement Project including the road diet to the Village Board for discussion.

Alternatives

Direct staff to provide the Board with any additional information requested.