



MEMORANDUM

TO: Mayor and Council Members

FROM: Howard S. Lazarus, City Administrator

DATE: January 8, 2018

SUBJECT: Staff Responses to Supporting Vision Zero Implementation; Including Near-and Long-Term Roadway Safety Measures at Huron High School and Citywide as Directed in Resolution R-17-422

PURPOSE: This memorandum provides staff responses to the requirements Council established in the subject resolution. Specifically, by January 15th, provide the following:

A preliminary outline of the approach and potential resources needed to accelerate implementation of Vision Zero as defined via council resolution.

Current and ongoing activities include reviewing each transportation project during the design process and including appropriate safety and speed adjustment elements consistent with Vision Zero. Examples of elements included in recent projects include lane narrowing, pedestrian crossing islands, curb bump outs, new and activated crosswalks, buffered bike lanes, new bike lanes, speed feedback signs among other improvements.

To accelerate and further inclusion and implementation of Vision Zero at a system wide level, Staff has initiated the process of drafting a preliminary Request for Proposals (RFP) to procure a qualified consultant for the 2018/2019 Transportation Plan Update (TPU) project. The TPU is to be based on Vision Zero Principles. The RFP will result in the identification of interested consultants and a preliminary budget for completion of the planning process. Subsequent steps will include completing the procurement process, contracting with the selected contractor, conducting the planning process including implementation recommendations. Once the planning is completed the TPU recommendations are forwarded in the Capital Improvement Plan development process for further refinement of the timing, funding and construction/implementation of projects.

Funding for the Transportation Plan update is partially included in the Fiscal Year (FY) 2018 budget. Additional resources will need to be allocated to the project as part of the FY2019 budget process. Budget estimates indicate a potential contractor budget in the \$500K to \$600K range with an additional \$50K to \$60K for staff involvement. Future project costs will be based on the improvement technique recommended and the costs associated with the specific treatment. Some cost such as lane narrowing

within existing roadways are achieved at nominal costs. Other improvements such as capital construction and adding devices will have conceptual cost estimates developed at a planning level in the TPU process with full costs identified during each projects' design and implementation process.

A preliminary plan for evaluation of all road signage near mid-block crosswalks to enhance visibility and driver awareness.

The preliminary plan consists of the following:

January 2018: Determine City standard design for active crossings in response to the termination of FHWA's interim approval of RRFBS.

February – April 2018: Complete review of existing crosswalk inventory at mid-block crossings as compared to current MMUTCD requirements and City crosswalk design guidelines; coordinate findings with countywide effort to develop consistent crosswalk design standards.

May – October 2018: Implement changes to mid-block crossing locations that do not require capital improvement programming.

Develop project scoping for projects that would require capital improvement programming.

A preliminary plan to evaluate restriping all incomplete road conversions recommended in the Non-Motorized Transportation Plan, in addition to any other road segments that in staffs' evaluation are not optimal for the safety of all road users.

The City's Non-Motorized Transportation Plan includes recommended lane conversions on the following 20+ road segments:

- **N. Main St – Depot to Huron River**
- Packard - Stadium to Stone School
- Packard – Stone School to Eisenhower
- **Stone School – Packard to Eisenhower**
- Green Road – Glazier to Gettysburg **Still to be considered: Plymouth to Burbank**
- **Earhart Road -north end of Blvd to south End of Blvd section**
- Glazier Way – Green Rd to Earhart Rd
- Huron Parkway - Plymouth to Nixon
- Jackson Rd - Maple to Ravenna Blvd
- **South Industrial – Stadium to 800 feet south of Stimson**
- South Seventh St - Stadium to Scio Church
- **Maple Road – N. Circle Drive to Carbeck Dr.**
- **William St – Division to Thompson, First to Main St.**
- N. University – Thayer to Washtenaw
- Catherine – State to Fifth Ave
- Platt Rd - Ellsworth to Packard
- **Platt Road - Packard to Canterbury Rd**
- **Oakbrook - Ann Arbor Saline to S. Main Street**
- Geddes Ave – Huron Parkway to Hickory

Long Term

- **S. Main St. - Madison to Stadium**

The nine (9) segments presented in bold-face type above have not been completed. Several of those road segments are currently undergoing project planning which will include consideration of implementation for proposed lane conversions as indicated below:

- N. Main Street is currently in MDOT's Five Year program for 2022 construction
- Earhart Road is under consideration for road resurfacing in 2022- 2023
- Green Road Plymouth to Burbank is currently in planning for resurfacing in 2018/9
- Maple Road is in planning for resurfacing during 2018
- William Street in planning for possible two way protected bike lane
- Platt Rd is in planning for resurfacing in 2022
- Stone School – Packard to Eisenhower – 2018 Project
- S. Main Street – in planning for a surface treatment in 2018

For the remaining two segments (listed below), staff will review the need for road surface treatments, evaluate the segment for road conversion and determine how to proceed with roadway conversion either as a separate lane marking project or as part of a yet to be planned, future road surface treatment.

- S. Industrial
- Oakbrook

A summary of known local and national safety outcomes of lane reductions, including a summary chart of state and national best practices of traffic models and traffic count thresholds related to lane reductions.

Staff understands this resolution clause to be asking for an evaluation of the safety outcomes, summary of case studies, and summary of best practices of the removal of shared use through lanes in order to develop other facilities such as two-way left turn lanes and on street bicycle facilities. Projects using this type of through lane reduction are commonly referred to as road diets and normally occur on multilane undivided highways or streets.

Road diet projects across the country have successfully enabled communities to reach a variety of project goals. The broad range of goals communities have achieved sometimes makes comparative analysis of these projects difficult, and the broad range of considerations a community takes into account makes it difficult to develop a rigid set of standards for the implementation of these projects. While every road project is always unique, the expression holds particularly true for road diet projects.

A frequent driving force behind road diet projects is typically safety. Safety concerns are normally identified through a crash analysis that has shown a pattern of crashes that may be corrected by reassigning lanes within the existing road or street. Correctable crash patterns that are normally targeted by this type of project include rear end – left turn crashes, sideswipe – same side crashes that occur from motorists trying to “get around” left turning vehicles, or head-on crashes that occur at driveways or minor side streets. Local examples of these projects include Jackson Avenue, between Miller Street and Maple Street, and Platt Road, south of Packard Street.

Another primary project concern may be creating a complete street on a facility designed for a volume of traffic that far exceeds the demand by vehicular transportation users. These types of projects seek to improve the safety of all transportation users by rebalancing the street to provide better accommodation for non-motorized transportation users and may include dedicated public transportation facilities. A regional example of this type of project is the Grand River buffered bike lane project in Detroit.

Regardless of the interest in pursuing, a road diet project broad consensus across local, state, and federal agencies is that projects of this nature have pros and cons, will involve a community tradeoff discussion, and will target project outcomes specific to the project. The following chart contains the areas for consideration of the three most important documents considered in the development of this summary. Those documents are:

- City of Ann Arbor’s Non-motorized Plan, and the analysis (2005) that went into the plan update recommendations;
- SPR-1555 - Safety and Operational Analysis of 4-lane to 3-lane Conversions (Road Diets) in Michigan, research conducted by MDOT and published in 2012; and
- FHWA Road Diet Informational Guide, published in 2014

The NACTO Urban Streets Guidelines do not have a specific section on road diets, but the elements that go into designing a road diet are consistent with many NACTO strategies for multimodal design.

Consideration Areas for Implementation of Road Diets		
City of Ann Arbor	MDOT	FHWA
<ul style="list-style-type: none"> • Traffic data • Crash data • Driveway density 	<ul style="list-style-type: none"> • General Items • Complete Streets Items • Geometric, Operations and Safety Items 	<ul style="list-style-type: none"> • Crash data • Complete streets items • Geometrics, operations, and safety items • Community desires

The methodology implemented by City staff in the development of the Non-motorized plan update predates both the MDOT and FHWA guidelines documents. However, it is important to note that the analysis is not in conflict with either of the above referenced documents. Both of these documents stress the importance of crash analyses, geometric review and design, and traffic analysis to support the reconfiguration of the street; place emphasis on the need to develop designs that consider and meet the needs of all transportation users; and indicate the vital importance of community outreach in project development.

Web links for the guidelines are as follows:

http://www.michigan.gov/mdot/0,4616,7-151-9622_11045_24249-270908--,00.html

https://safety.fhwa.dot.gov/road_diets/guidance/info_guide/

CONTACT: Mr. Craig Hupy, Public Services Administrator, is the primary point of contact on this action. Please contact him directly if you have any questions or if you need additional information.