TO: Mayor Shaun Sipma  
Members of the City Council  
FROM: Stephen Joersz P.E. P.T.O.E., Traffic Engineer  
DATE: December 6, 2021  
SUBJECT: 4665 – 2023-2026 HIGHWAY SAFETY IMPROVEMENT PROGRAM APPLICATION  

I. RECOMMENDED ACTION  
Recommend approval of a cost participation with the North Dakota Department of Transportation (NDDOT) for city-wide signal improvements contingent upon project selection from the NDDOT.  

II. DEPARTMENT CONTACT PERSONS  
Lance Meyer, City Engineer  
Stephen Joersz, Traffic Engineer  

III. DESCRIPTION  
A. Background  
The NDDOT has requested applications for the 203-2026 Highway Safety Improvement Program (HSIP) grant. HSIP is a core federal-aid highway program with the purpose to achieve a significant reduction in fatalities and serious injuries on all public roadways.  

Staff is unsure on the implications of the recently passed federal transportation bill in which safety projects like this proposed project are said to be of priority. As of this memo, NDDOT Staff is in the process of reviewing all the aspects of the federal transportation bill.  

B. Proposed Project  
The proposed HSIP project would install the combination of:  
- Flashing Yellow Arrow  
- Accessible Pedestrian Signal pushbuttons (there are commonly known as the talking pushbuttons),  
- Pedestrian Countdown Walk/Don’t Walk Timers  
- Dynamic No Turn on Red signs  

All of these improvement types were identified and recommended as part of the Broadway Corridor Study. The Engineering Department is proposing on applying these improvements to all city signals, not just those on Broadway. With consideration given to not include intersections that are currently planned for replacement.  

C. Consultant Selection  
An engineering consultant will be solicited to complete project design, conduct construction engineering and perform contract administration. The consultant will be selected based upon their qualifications, through an interview process.
IV. IMPACT:

A. Strategic Impact:
A safer and more visible roadway for residents of the City of Minot. Several benefits can be seen with each of the four types of improvements:
- Flashing Yellow Arrow
  - Estimate a 16%-49% reduction in crashes
- Accessible Pedestrian Signal Pushbuttons
  - Increased safety for pedestrians with Hearing and Visual impairments
  - Contains verbal messages, audible tones and vibrating surfaces
- Pedestrian Countdown Walk/Don’t Walk Timers
  - Pedestrian-Vehicle crashes can be reduced by up to 70%
- Dynamic No Turn on Red signs
  - Protects bicyclists and pedestrians from right-turning vehicles

B. Service/Delivery Impact:
This project is anticipated to improve safety for all traveling public.

C. Fiscal Impact:
HSIP grants require matching Federal, State and Local funds. Depending on the intersection, the funding allocation can be one of the following:
- 90% Federal, 0% State and 10% Local
- 90% Federal, 5% State and 5% Local
- 90% Federal, 10% State and 0% Local
A detailed breakdown is shown in Attachment C – Project Cost Estimate

If awarded Sales Tax Infrastructure Funds will be used by the City to fund this project. The engineers estimate for the 2023-2026 Highway Safety Improvement Program project is $1,440,180. It is important to note that this is a high-level estimation and that costs will be further refined once the project goes into the design phase.

<table>
<thead>
<tr>
<th>Project Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineers Estimate</td>
<td>$1,440,180.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Funding</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>$1,080,135.00</td>
</tr>
<tr>
<td>State</td>
<td>$47,604.00</td>
</tr>
<tr>
<td>Local</td>
<td>$312,441.00</td>
</tr>
</tbody>
</table>

Funding Total $1,440,180.00

V. ALTERNATIVES

Alt 1. Council could amend, reduce or expand the HSIP 2023-2026 application. Engineering staff would still have time to make modifications to the HSIP application and return to the December 20, 2021 council meeting.

Alt 2. Council could deny the cost participation, essentially nixing this application and proposed project.

VI. TIME CONSTRAINTS
The NDDOT HSIP 2023-2026 solicitation has a deadline of December 31, 2021. Approval or Denial from Council is needed so that the Engineering Department can proceed with submitting or not submitting the 2023-2026 HSIP application with the NDDOT.

VII. LIST OF ATTACHMENTS

A. HSIP Application  
B. Project Location Map  
C. Project Cost Estimate