DES MOINES TRANSPORTATION SAFETY COMMITTEE
JUNE 11, 2019

Agenda for the Des Moines Transportation Safety Committee scheduled for 7:30 a.m., Tuesday, June 11, 2019, in the MacRae Conference Room, at the Municipal Services Center, 1551 E Martin Luther King Jr. Parkway.

The teleconferencing option will not be available for this meeting.

Transportation Safety Committee Rules and Procedures
1. The Transportation Safety Committee is an advisory body to the City Council.
2. Staff will be given time to present the background on each item.
3. Guests are then allowed to speak, with each speaker allowed a maximum of 5 minutes.
4. All comments are to be germane to the issue under consideration and speakers are to maintain a courteous manner.

Approval of Agenda

OLD BUSINESS
1. Approval of May Minutes
2. Other Old Business

NEW BUSINESS
1. Euclid Avenue Lane Reduction Pilot Project
2. 2nd Avenue Reconstruction—University Avenue to Des Moines River
3. Neighborhood Sidewalk Three-Year Project
4. Other New Business

Jennifer L. Dakovich
Interim Secretary
Transportation Safety Committee

/ms
ITEM #1: Euclid Avenue Lane Reduction Pilot Project

BACKGROUND:

In response to a request from the Highland Park Neighborhood Association and the Ward Councilmember, City staff prepared a Proposal for a Pilot Project which converts Euclid Avenue between 12th Street to 2nd Avenue to a three-lane cross section (one westbound lane, one eastbound lane, and center continuous two-way, left-turn lane) and adds on-street parking along both sides of Euclid Avenue between 6th Avenue and 2nd Avenue. The parking provided by these modifications will be available all day with no peak hour time restrictions. The Pilot Project improvements would be accomplished with pavement markings and signage. Vertical delineators will be considered in the marked bumpout areas to shield on-street parking and shorten the pedestrian crossing distances. There would be no reconstruction of roadway, curb radii, and ADA-compliant curb ramps as part of the Pilot Project, but would be considered as a future permanent condition. The proposal will be presented to City Council at the June 24, 2019 Council meeting to direct staff to submit the proposal to the Iowa Department of Transportation for review and approval.

ADDITIONAL INFORMATION:

- Euclid Avenue between 12th Street and 6th Avenue is currently a four-lane cross section (two westbound lanes and two eastbound lanes). Euclid Avenue between 6th Avenue and 2nd Avenue is currently a five-lane cross section (two westbound lanes, two eastbound lanes, and center continuous two-way left-turn lane).

- The Highland Park Neighborhood Association requested that Euclid Avenue (U.S. Highway 6) from 12th Street to 2nd Avenue (State Highway 415) be converted to a three-lane cross section with the goals of improving vehicular and pedestrian safety by calming traffic, adding on-street parking between 6th Avenue and 2nd Avenue, and generating additional economic development along the corridor.

- A traffic engineering consultant completed a traffic operations and safety analysis in 2018.

- The analysis showed average speed for all classified vehicles was 34 mph with 78% vehicles exceeding the posted speed limit of 30 mph. The analysis also identified the calculated crash rate from crashes over the past five years is nearly double the statewide average, with 15% of those crashes resulting in known injuries.

- With the reduced number of travel lanes for pedestrians and side street vehicles to cross and expectation of traffic calming, pedestrian accommodation, and safety is anticipated to improve.
The operational analysis indicated that overall delay at the intersections would increase significantly and 95th percentile queue lengths would extend beyond the adjacent intersections with the lane reduction on Euclid Avenue during peak hours as shown in the graphics below.
• While City Engineering staff concurs that the conversion to a three-lane cross section will likely reduce speeds, resulting in a reduction in severe crashes, City Engineering staff has the following concerns for the conversion to a three-lane cross section:
  
  o Significant increase in delay could result in motorists taking alternate routes through neighborhood streets, as there are not many other alternate east-west routes across the north side of Des Moines. Significant traffic delays can also result in poor driving behaviors by motorists and increased potential for crashes.
  
  o A lack of parking demand and utilization could present a dangerous situation where traveling motorists do not recognize the on-street parking and use the lanes as travel lanes and create an increased potential for crashes. There is a significant amount of off-street parking along the corridor, along with a number of driveway and roadway access points along the corridor where parking wouldn’t be allowed. This could result in sporadically-occupied parking spaces.
  
  o The Iowa Department of Transportation may request the City be responsible for maintenance of all pavement markings and snow removal operations along this stretch of roadway, resulting in significant costs to the City.
  
  o In response to this request, along with the ongoing planning effort for the Douglas Avenue Corridor, the Iowa Department of Transportation may also request a jurisdictional transfer of roadway to the City requiring the City to be responsible for all maintenance of Highway 6 within the City’s corporate limits.

• During initial meetings with Iowa Department of Transportation (IDOT) staff about the Pilot Project, IDOT staff requested the City provide Pilot Project Evaluation Criteria to determine whether or not the Pilot Project was a success (and permanent improvements should be further considered) or not a success (and Euclid Avenue should be restored to the current cross section).

• The evaluation criteria include:

  1. **Speed** – comparison of speeds during one year of pilot project to current speeds collected. The posted speed limit is 30 mph. The measured 85th percentile speed is 41 mph. Considered effective if the 85th percentile speed is reduced by more than 3 mph.

  2. **Parking utilization** – determine ratio of on-street parking spaces used versus parking spaces available. Considered effective if parking is more than 25% occupied during three consecutive hours during the peak business hours in the area.
3. **Travel time** – comparison of travel time through project area with proposed configuration versus existing configuration. Considered effective if travel times increase by no more than 15% during peak hours.

4. **Demand** – comparison of peak hour volumes during one year of pilot project to current collected traffic volumes. Considered effective if volumes decrease by no more than 15%.

5. **Crashes** – comparison of crash rate during one year of pilot project to the crash rate from the previous five years. Considered effective if the crash rate and injuries are reduced.

6. **Economics** - before/after survey of businesses. Considered effective if positive responses are received from 67% of the businesses along the corridor.

- Should any one of the above six Pilot Project Evaluation Criteria not be considered effective as defined above, the City will reevaluate the project and consider restriping Euclid Avenue in the Fall of 2021 back to its cross section prior to the Pilot Project.

- Should all six of the Pilot Project Evaluation Criteria be considered effective as defined above, the City will refresh the pavement markings as marked for the Pilot Project in the Fall 2021, and the City will begin design of permanent improvements, including concrete bumpouts at the intersections between 6th Avenue and 2nd Avenue to shield parking and shorten the pedestrian crossing distances. The design of the permanent improvements would be submitted to the IDOT for review and approval prior to anticipated construction in 2022 or 2023.

- The anticipated schedule for the Pilot Project includes:
  - Fall 2019/Winter 2019-2020 Preparation of Construction Bid Documents and Bidding
  - June 2020 Installation (after 2019-2020 school year)
  - Summer 2020 - Summer 2021 Pilot Project Evaluation (minimum one-year evaluation)

- Estimated cost for construction is $200,000. This does not include maintenance and operational costs. Should this project be approved by City Council and the Iowa DOT, the funding of this project will be reviewed by the City's Budget Review Committee during the development of the Fiscal Year 2020-2021 Capital Improvement Program.

**STAFF RECOMMENDATION:**

Staff recommends the committee members provide a recommendation on whether or not they support the proposed Pilot Project for the June 24, 2019 Council Meeting.
ITEM #2: 2nd Avenue Reconstruction--University Avenue to the Des Moines River

BACKGROUND:

In May 2017, the River Bend and King Irving Sewer Separation Concept Report was completed. As part of the report, a new storm sewer was proposed to be constructed on the west side of 2nd Avenue from College Avenue north to the Des Moines River. Additionally, the 2nd Avenue pavement between University Avenue and the Des Moines River needs reconstruction. The pavement reconstruction and sewer project provides an opportunity to make geometric changes to the roadway. As a result, City staff hired a consultant to complete a traffic study of the 2nd Avenue corridor from University Avenue to the Des Moines River to determine if traffic improvements were needed.

ADDITIONAL INFORMATION:

- 2nd Avenue from University Avenue to the Des Moines River is currently a 40’ wide, four-lane cross section (lane width ~9.5’ to 10’) with disconnected 4’ sidewalks on either side.

- A traffic engineering consultant completed the traffic study in February 2018. The study looked at crash trends, existing and future traffic operations, and multi-modal accommodations. Three cross-section alternatives were analyzed: 3-lanes, 4-lane with select turn lanes, and 5-lanes.

- The analysis showed that 2nd Avenue had a higher than average corridor crash rate and several intersections were above the average statewide crash rate for similar intersections. Safety issues were due to no turn lanes being provided at intersections, narrow lanes and the proximity of utility poles to the road, and no access management.

- Due to the volume of vehicles on the corridor, a three-lane cross-section would not operate at acceptable levels (some intersections would operate at a level of service F). Both the 4-lane with turn lanes and 5-lane alternatives provide adequate capacity for existing and future (2040) traffic volumes.

- Recommendations from the report included:
  - Realigning Forest Avenue (currently Forest Avenue is offset causing site distance issues).
  - Left turn lanes at the following intersections:
    - Franklin Avenue (NB)
    - College Avenue (NB and SB)
    - Forest Avenue (NB and SB)
  - Redundant Driveway Closures/Modifications/Consolidation to address safety concerns along corridor.
  - 5’ sidewalks on both sides of the street along the entire corridor.
Both the 4-lane with turn lanes and 5-lane alternatives require Right-of-Way acquisitions. Below is a summary of the Right-of-Way needs:

<table>
<thead>
<tr>
<th></th>
<th>4-Lane w/Turn Lanes</th>
<th>5-Lane</th>
</tr>
</thead>
<tbody>
<tr>
<td>West ROW Required</td>
<td>4’</td>
<td>9.5’</td>
</tr>
<tr>
<td>East ROW Required</td>
<td>4’</td>
<td>9.5’</td>
</tr>
<tr>
<td>Full Acquisition Required</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Full Acquisition Possible</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Property with Parking Affected</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Properties with “Full Acquisition Possible” means this alternative will drastically impact site parking and/or access due to roadway widen. If traffic flow on these properties cannot be altered to fit the existing properties’ needs, a full acquisition may be necessary. Properties with “Parking Affected” means they will lose on-site parking spaces but will not be impacted to the degree of needing a full acquisition.

Total project costs are estimated below. Capital Improvement Program 2019-2020/2024-2025 has $10.00 Million for Construction Budget between the Roadway Reconstruction – Second Avenue and River Bend and King Irving Sewer Separation. Additional funds will need to be allocated for this project in the next Capital Improvement Program 2020-2021/2025-2026.

<table>
<thead>
<tr>
<th></th>
<th>4-Lane</th>
<th>5-Lane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway Construction</td>
<td>$5.50 Million</td>
<td>$6.05 Million</td>
</tr>
<tr>
<td>Storm Sewer Construction</td>
<td>$3.00 Million</td>
<td>$3.00 Million</td>
</tr>
<tr>
<td>Construction Contingency (~20%)</td>
<td>$1.50 Million</td>
<td>$1.75 Million</td>
</tr>
<tr>
<td>Right-of-Way</td>
<td>$1.50 Million</td>
<td>$5.20 Million</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$11.50 Million</td>
<td>$16.0 Million</td>
</tr>
</tbody>
</table>

The traffic engineering consultant recommends the 4-lane roadway section with turn lanes at select intersections and access control measures along the corridor because it addresses most of the safety concerns, maintains traffic operations, and minimizes property impacts.

**STAFF RECOMMENDATION:**

City staff recommends approving the 2nd Avenue Reconstruction from University Avenue to the Des Moines River Concept Plan for a 4-lane roadway section with turn lanes at select intersections and access control measures along the corridor.
ITEM #3: Neighborhood Sidewalk Three-Year Program

BACKGROUND:

MoveDSM identified 667 miles of sidewalk gaps in the City. City staff presented at the January 30, 2019 City Council Quarterly Planning Session on the City's existing sidewalk programs, a proposed approach to filling sidewalk gaps, and on various City policies regarding sidewalks.

City Council gave direction to allocate Capital Improvement Program Funding in the amounts of $1.5 Million in Fiscal Year 2019-2020 and $3 Million per year starting in Fiscal Year 2020-2021 and beyond with the focus on filling sidewalk gaps on recommended school walk routes; routes close to schools, bus stops, and commercial nodes; and routes that provide connectivity for long sections of existing sidewalks. City Council directed staff to draft an initial three-year plan for filling sidewalk gaps.

City staff presented a draft three-year plan for filling sidewalk gaps at the April 24, 2019 City Council Quarterly Planning Session. City Council concurred with the first two years of the plan and directed staff to move forward with the first two years of the plan.

At the June 24, 2019 City Council Meeting, there will be a hearing approving plans, specifications, form of contract documents, engineer’s estimate, and designating lowest responsible bidder for the 2019 Neighborhood Sidewalk Program, which is the first project of the three-year plan.

At the City Council Planning Sessions, staff also received direction on the following items regarding sidewalks:

- Waivers will no longer be issued by staff for the installation of sidewalks adjacent to developments as part of site development process. Waivers can be taken to the Planning and Zoning Commission as an appeal and, ultimately, appealed to the Council.

- Sidewalk gaps will be filled on both sides of the street where:
  - The speed limit on the street is 35 mph or greater
  - The road is a multi-lane roadway
  - Locations have been approved by the Ward Council Member as part of a street reconstruction project.

- The City's long-term goal is to provide sidewalks on both sides of every street. However, in locations that do not meet the criteria listed above, sidewalks will be constructed initially on one side of the street in the following manner:
  - Placed on the side with on-street parking.
o Placed cn the side of a school, bus stop, or in a manner to minimize street crossings.
o Placed cn the side where topography more easily accommodates construction.

- The minimum sidewalk width will be 5 feet.
- The current Sidewalk Assessment Policy will be rescinded.
- The current Sidewalk Removal Policy will be rescinded.

**STAFF RECOMMENDATION:**

This item is for information only. No action is required.