



Request for City Council Committee Action From the Departments of Public Works

Date: December 16, 2008

To: Honorable Sandra Colvin Roy, Chair Transportation & Public Works Committee

Subject: Hennepin Ave One-way to Two-way (PV050) and 1st Ave N One-way to Two-way (PV049), Project (1st St N to 12th St N) Layout

Recommendation:

Adoption of a Resolution Approving the recommended layout for Hennepin Ave One-way to Two-way (PV050) and 1st Ave N One-way to Two-way (PV049) between 1st St N and 12th St N, dated November, 2008.

Prepared by: Jenifer Loritz, P.E., Project Manager, Transp. Planning & Engineering, 673-3625
Don Elwood, P.E., Director, Transportation Planning & Engineering, 673-3622

Approved by:

Steven A. Kotke, P.E., City Engineer, Director of Public Works

Presenters: Jenifer Loritz, P.E., Project Manager, Transportation Planning & Engineering
Steve Mosing, P.E., PTOE, Project Manager, Traffic and Parking Services

Reviews:

Permanent Review Committee (PRC):	Not Applicable
Civil Rights Affirmative Action Plan:	Not Applicable
Policy review Group (PRG):	Not Applicable

Financial Impact (Check those that apply)

- No financial impact - or - Action is within current department budget (If checked, go directly to Background/Supporting Information)
- Action requires an appropriation increase to the Capital Budget
- Action requires an appropriation increase to the Operating Budget
- Action provides increased revenue for appropriation increase
- Action requires use of contingency or reserves
- Business Plan: Action is within the plan. Action requires a change to plan.
- Other financial impact (Explain):
- Request provided to department's Finance Dept. contact when provided to the Committee Coordinator

Background/Supporting Information

The Hennepin Ave and 1st Ave N One-way to Two-way Conversion projects were identified in the City's Five Year Capital Improvement Program for construction in 2009. The projects were recommended by and are consistent with the 10-Year Downtown Action Plan that was approved by the City Council in June of 2007. The projects will consist of the reconstruction of the signal systems, seal coat and striping along with geometric changes at the intersection of 1st Ave N and 12th St N and on 1st Ave N between 8th St N and 9th St N. These projects are being accomplished at the same time because they currently act as one-way pairs.

The unique and significant challenge in developing these recommended layouts was to fully incorporate the needs of all modes of travel along with understanding the goals of the Downtown Action Plan. The project team has conducted an extensive public participation process over the last couple of months in an effort to develop these layouts. The public participation process included three large public meetings, a series of 12 block meetings, individual presentations to the Bicycle Advisory Committee (BAC), Hennepin 2012 Partners, Downtown Transportation Management Organization (TMO), Downtown Council, the Warehouse District Association and the Downtown Bar Owner's Association. Public input was also gathered via a comment section on the project website. The most common values identified by external stakeholders include bicycle accommodations, left turns, and parking. The values for the project team include safety and operations. The key limiting factor when considering all these elements is roadway width on both Hennepin and 1st Avenues.

Safety was the primary driver as the project team evaluated all elements for the project. Bicycle operations and bike lane placement became a main focus for safety. It also generated the most comments through the public engagement process. The safety issues described here led to the staff recommendation with respect to bike lane placement:

- Bike lanes located along the center of Hennepin Ave combined with the introduction of southbound traffic created a significant safety concern. Conflicts between left turning vehicles and bicycles made up 84% of the recorded crashes over the last 4 years. The introduction of southbound traffic would result in an increase of this type of crash if a center running bike lane was incorporated.
- Dedicated bike lanes along the curb lines of Hennepin Ave would result in conflicts with the extensive curbside activity on Hennepin Ave including busses.

Traffic operations, although secondary to safety, was an important factor. Safety is directly linked to traffic operations; congestion and delay create safety risks. The traffic analysis led to the following conclusions:

- Hennepin Avenue requires left turn lanes. Without left turn lanes vehicle delay would more than double from what is currently observed.
- A three lane configuration (2 – thru lanes and 1-center left turn lane) would result in 17 of 26 intersections operating at a failed level of service in the PM peak period.

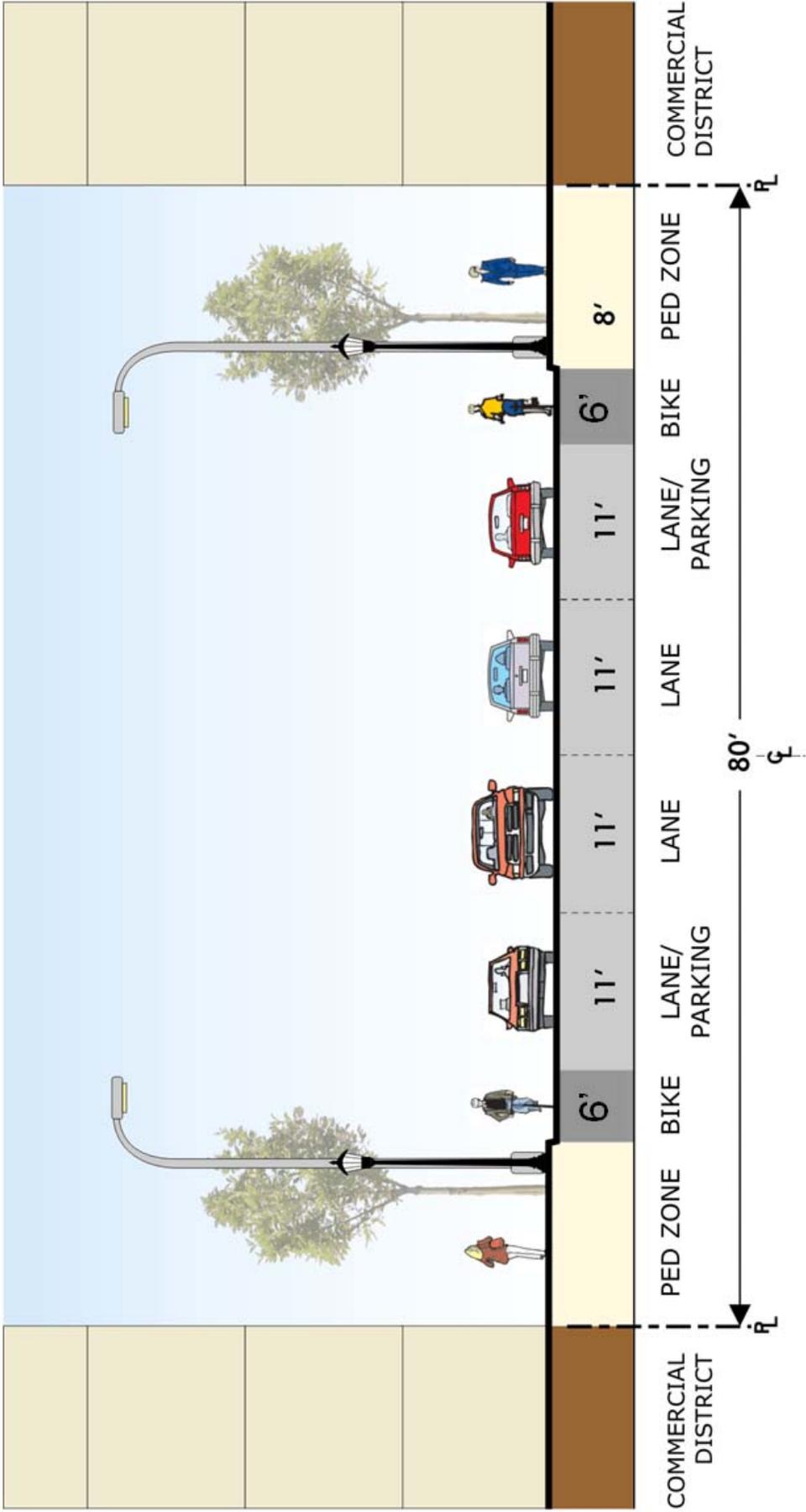
Considering safety, traffic operations, and stakeholder input, the project team recommends the attached layout as the one that best captures benefit for all modes of travel and attempts to balance these modes to create a safe and efficient operation.

The proposed layout for Hennepin Ave includes one through lane in each direction, designated left turn lanes where required and a shared bus, bike, right turn lane. The proposed layout for 1st Ave N includes two through lanes in each direction and a designated bike lane in each direction, the outer travel lanes will provide on-street parking during non-peak hours.

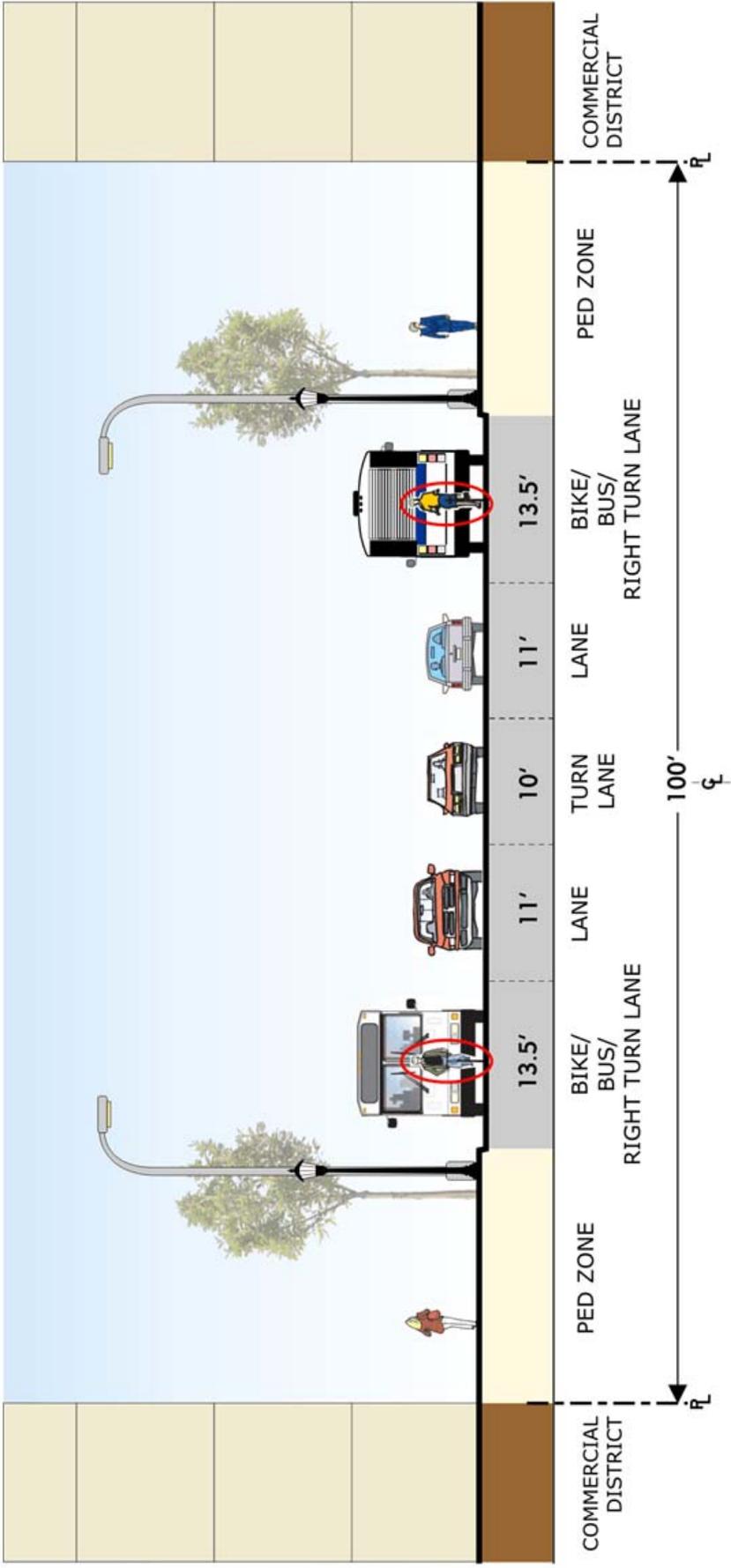
Both Hennepin Ave and 1st Ave N in the project area are Municipal State Aid Routes. The proposed layout meets minimum design guidelines as set forth by State Aid and the City's Design Guidelines for Streets and Sidewalks.

Attachment: Proposed Layout (in cross-sectional view)

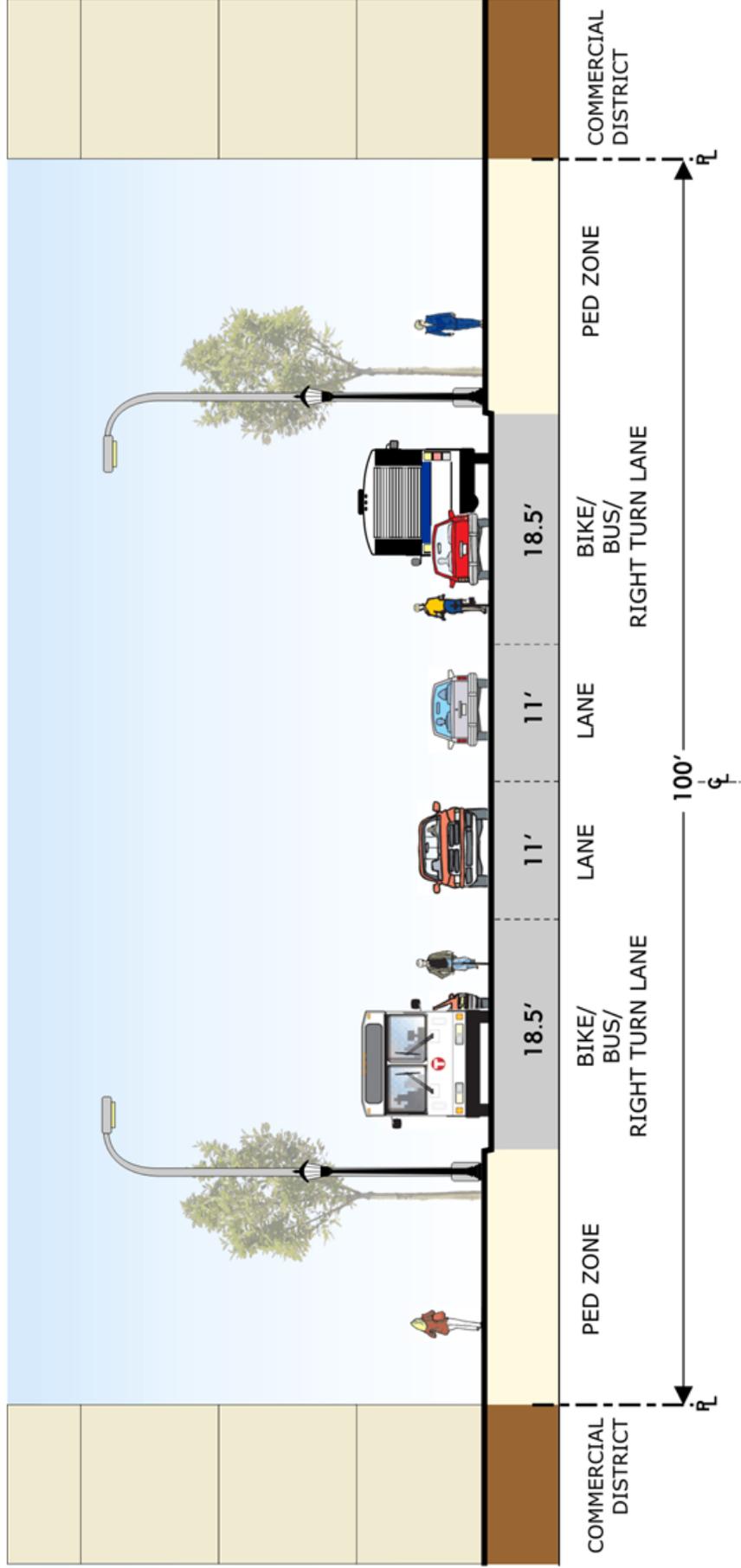
Cc: Council Member Lisa Goodman, Ward 7



1st Ave N (typical)



Hennepin Ave (Block 1 - typical)



Hennepin Ave (Block 2 - typical)