Date: $\quad$ September 8, 2015
$\begin{array}{ll}\text { To: } & \text { Chair Adam Duininck } \\ & \text { METRO Blue Line Extension Corridor Management Committee }\end{array}$


Cc:
From: Nick Landwer, PE, Director of Transit Systems and Design Engineering

Subject: Response to August 13, 2015 BLRT CMC meeting Questions

This memorandum has been prepared to respond to questions and request that were presented at the August 13, 2015 Corridor Management Committee.

- Question 1 - Mayor Betsy Hodges: What is the actual crossing distance of OMH?
- Answer - Existing ( Minimum 117 ft., Maximum 154 ft.)

Proposed ( Minimum 120 ft., Maximum 173 ft.)

- Question 2 - Shauen Pearce - What is the crossing time of OMH ? Would there be a need to extend that time to one minute for wheelchair users?
- Answer - Proposed crossing times will vary from 34 to 49 seconds
- Question 3 - Shauen Pearce - What are the single phase crossing times at Humboldt Ave intersections? (Impacts park, school and homes in the area)
- Answer- Crossing times on both the east and west sides of the intersection will be approximately 34 seconds
- Question 4 - Shauen Pearce - Could you please supply a copy of the study on traffic flow and impacts on Glenwood Avenue?
- Answer - Included is a map of Existing and Future AADT which shows the existing daily traffic, year 2040 forecasted traffic and 2040 traffic with OMH in a 4 lane configuration.
- Question 5 - Shauen Pearce - Could you provide some clarification on median issues and safety, with specifics on exact time allotted to cross the street, north to south, whether boarding the light rail or just crossing the street? She feels the median will impact pedestrians.
- Answer - A Roadway Comparative Matrix is included that indicates crossing travel time at each intersection. At a signalized intersection it will typically take 11 seconds to cross the median. At mid-block pedestrian crossings it will typically take 24 seconds to cross the median.
- Question 6-George Selman - As a reference, the trail on Wirth Lake is actually a walking bridge, and there is a Luce Line trail that runs along north side of Highway 55. Would that bridge include an extension that would connect the Luce Line trail to trail on the north side of Highway 55?
- Answer - We are proposing to extend the trail just to the west of the new westbound OMH bridge, in order to connect to an existing access to the Luce Line trail.

|  | Description | Existing (Note 1) | 6 Lane with Cycle <br> Track (Note 2) |
| :--- | :--- | :--- | :--- |
|  | Maximum number of lanes at an <br> intersection | 7 lanes | 7 lanes |
|  | Pedestrian crossing length | Minimum 117' <br> Maximum 154' |  |
| Pedestrian crossing travel time <br> (3.5 ft/s) | Minimum 33s <br> Maximum 44s | Minimum 120' <br> Maximum 173' |  |
| Table 1 below <br> for intersection <br> details) | Pedestrian crossing locations | Minimum 34s <br> Maximum 49s |  |

Note 1: Existing = 3 Lanes EB, 3 Lanes WB, Left-Turn Lanes
Note 2: 6-Lane Alternative $=3$ Lanes EB, 3 Lanes WB, Left-Turn Lanes

Table 1. Intersection Pedestrian Crossing Detail Matrix (Center-Platform Alternative)

| Intersection | Existing Pedestrian Crossing Length (ft) ${ }^{1}$ | 6-Lane with Cycle Track |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Proposed Pedestrian Crossing Length (ft) ${ }^{1}$ | Proposed Pedestrian Crossing Travel Time (based on $3.5 \mathrm{ft} / \mathrm{s}$ ) | Pedestrian Refuge Area |
| Thomas - East | $58+(27)+47=\underline{132}$ | $36+(68)+36=140$ | 40 | $10 \times 11$ (south) <br> $10 \times 14$ (north) |
| Russell | N/A | $36+(85)+36=157{ }^{2}$ | 45 | $28 \times 4$ (south) <br> $28 \times 4$ (north) |
| Penn - West | $57+(15)+67=139$ | $37+(53)+50=140$ | 40 | $10 \times 8$ (center) |
| Penn - East | $64+(17)+56=137$ | $51+(54)+37=142$ | 41 | $10 \times 10$ (center) |
| Oliver/Newton | N/A | $36+(101)+36=173{ }^{2}$ | 49 | $\begin{aligned} & 28 \times 4 \text { (south) } \\ & 28 \times 4 \text { (north) } \end{aligned}$ |
| Morgan - West | $63+(16)+63=142$ | $36+(38)+46=120$ | 34 | $10 \times 4$ (north) |
| Morgan - East | $62+(16)+54=132$ | $46+(38)+36=120$ | 34 | $10 \times 4$ (south) |
| James | $55+(28)+57=140$ | $38+(85)+36=\underline{159}{ }^{2}$ | 45 | $\begin{aligned} & 28 \times 4 \text { (south) } \\ & 28 \times 4 \text { (north) } \end{aligned}$ |
| Humboldt - West | $50+(11)+58=119$ | $36+(38)+46=120$ | 34 | $10 \times 4$ (north) |
| Humboldt - East | $59+(10)+52=121$ | $46+(38)+36=120$ | 34 | $10 \times 4$ (south) |
| Van White - West | $53+(10)+62=125$ | $38+(52)+46=136$ | 39 | $10 \times 7$ (center) |
| Van White - East | $61+(22)+46=\underline{129}$ | $52+(54)+36=\underline{142}$ | 41 | $10 \times 10$ (center) |
| Bryant - West | $54+(10)+53=\underline{117}$ | $36+(49)+46=131$ | 37 | $10 \times 4$ (center) |
| Bryant - East | $54+(30)+41=\underline{125}$ | $46+(42)+37=\underline{125}$ | 36 | $10 \times 4$ (south) |
| Lyndale - West ${ }^{3}$ | $53+(16)+52+(13)+20=154$ | $39+(45)+50+(19)+20=173$ | 49 | $10 \times 6$ (north) |

${ }^{1}$ Legend: WB Lanes + (Median) + EB Lanes = Total Roadway
2 Note: Length includes U-shaped track crossing segment
${ }^{3}$ Note: Lyndale - West crossing includes two pedestrian refuges

Table 2. Land Development Opportunities Matrix

| Street | Quadrant | Distance from face of curb to property line (ft) |  |  | Width of frontage road (ft) | Width of alley (ft) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Existing | 6 Lane | 6 Lane with Cycle Track |  |  |
| Thomas | NE | 112** | 96** | 96** | 32 | 12 |
|  | SE | 79* | 79* | 79* | 32 |  |
| Penn | NE | 56 | 40 | 50 |  |  |
|  | SE | 201 | 211 | 201 |  | 12 |
|  | SW | 213 | 224* | 216* |  |  |
|  | NW | 46 | 32* | 41* |  |  |
| Morgan | NE | 56 | 51* | 61* | 20 |  |
|  | SE | 132 | 146* | 135* | 32 |  |
|  | SW | 141 | 159 | 149 | 32 |  |
|  | NW | 56 | 50* | 60 | 18 |  |
| Humboldt | NE | 49 | 55 | 59 | 32 |  |
|  | SE | 63 | 55 | 51 | 32 |  |
|  | SW | 60 | 52 | 48 | 32 |  |
|  | NW | 62 | 68 | 72 | 30 |  |
| Van White | NE | 15* | 17 | 17 |  |  |
|  | SE | 64 | 43 | 43 | $32^{\dagger}$ |  |
|  | SW | 65 | 44* | 45* |  |  |
|  | NW | 33 | 37* | 38 |  |  |
| Bryant | NE | 24 | 25 | 25 |  |  |
|  | SE | 67 | 49* | 48* |  |  |
|  | SW | 67 | 46** | 46** | $32^{\dagger}$ |  |
|  | NW | 20 | 22** | 22** |  |  |
| Lyndale | SW | varies | varies | varies |  |  |
|  | NW | 25 | 26 | 26 |  |  |

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[^0]:    * Distance varies; minimum distance listed
    ** Distance varies; maximum distance listed
    $\dagger$ Frontage road would be removed in 6 lane option

