REPORT FROM

OFFICE OF THE CITY ADMINISTRATIVE OFFICER

Date: November 7, 2023

To: Transportation Committee

From: Matthew W. Szabo, City Administrative Officer

Reference: 2023 Budget Recommendation; referred for report pursuant to Council action of June 16, 2023

Subject: MOBILITY PLAN 2035 – COST OF IMPLEMENTING THE BICYCLE ENHANCED NETWORK, BICYCLE LANE NETWORK, AND SIDEWALKS IN THE PEDESTRIAN ENHANCED DISTRICT

RECOMMENDATION

That the City Council receive and file this report inasmuch as the City Council has previously approved the recommendations contained in the report by the Chief Legislative Analyst dated October 6, 2022 relative to Mobility Plan 2035 implementation (C.F. 15-0719-S26).

SUMMARY

On June 16, 2023, the City Council instructed this Office to report on the cost to implement the Mobility Plan 2035 (MP 2035) by 2035, with a focus on bicycle and pedestrian facilities, and implementing the Bicycle Enhanced Network (BEN), Bicycle Lane Network (BLN), and Pedestrian Enhanced Districts (PED) (C.F. 23-0600-S54). In a prior Council action relative to a report by the Chief Legislative Analyst (CLA) on the MP 2035 implementation (C.F.15-0719-S26), the City Council approved the recommendations as amended by the Transportation Committee which narrowed the focus of pedestrian facilities to sidewalks that needed be repaired to meet the Americans with Disabilities Act (ADA). Therefore, this report addresses the cost to implement the BEN, BLN, and the repair of sidewalks to comply with ADA requirements.

In accordance with a draft ordinance prepared by the City Attorney dated August 7, 2023 relative to implementing the MP 2035 Element of the Los Angeles General Plan, which is pending Council’s consideration, any public works improvements in the public right-of-way that are greater than one-fourth of one mile in length on a mobility corridor shall include specific elements to implement the MP 2035. Projects that are less than one-fourth of one mile in length or that constitute routine maintenance work, emergency repairs, or work of urgent necessity are exempted. The draft ordinance also allows City departments to establish or revise the mobility corridors and determine the specific elements that should be included in each project.
MOBILITY PLAN 2035

On August 11, 2015, the City Council adopted the Mobility Plan 2035, an update to the 1999 City of Los Angeles Transportation Element of the General Plan (C.F. 15-0719), which was later amended and adopted by the City Council on September 7, 2016. The MP 2035 establishes the policy foundation for the design and construction of a connected network of pedestrian and bicycle routes, transit routes, and vehicle routes to meet the mobility needs of all road and sidewalk users. The MP 2035 serves as a working document and a reference document to guide the City and other agencies in allocating limited resource dollars when determining future mobility improvements. It does not identify a list of specific mobility corridor projects that must be implemented.

The MP 2035 recognizes that continued investments are needed to maintain the roadways and establishes a network of enhanced complete streets that prioritize a certain mode of travel to provide safer and more comfortable streets to accommodate all roadway users. The focus of this report is on the following networks as defined in the MP 2035:

- Bicycle Enhanced Network – consists of protected bicycle lanes and bicycle paths to provide bikeways for a variety of users;
- Bicycle Lane Network – consists of bicycle lanes (Tier 2 and Tier 3) on arterial roadways with striped separation; Tier 2 bicycle lanes are those that are more likely to be implemented by 2035 than Tier 3 bicycle lanes; and
- Pedestrian Enhanced District – consists of pedestrian improvements on arterial streets to provide better walking connections to and from the major destinations within communities.

The Planning Department, in coordination with the Department of Transportation (LADOT), provided the table below showing the breakdown of each network, including the approximate mileage within the network and the number of mileage implemented based on available data to date. Also included is data on the Neighborhood Enhanced Network (NEN), a network of local streets comfortable for biking and local neighborhood pedestrian activity, as these segments provide gap closures to the protected bicycle lane system within the BEN. It should be noted that the LADOT has already implemented the Tier 2 bicycle lanes that have no community impact and therefore, do not require community outreach and engagement. The remaining Tier 2 bicycle lanes that need to be implemented have a community impact and require community engagement and outreach.
## MP 2035 IMPLEMENTATION COST

The LADOT, in coordination with the Planning Department, Bureau of Street Services (BSS), Bureau of Engineering (BOE), and other impacted City departments, developed a high and low-end cost per mile for the BEN and BLN based on various cost assumptions including, but not limited to the following:

- The pavement condition must be upgraded to a Pavement Condition Index (PCI) of 80 or higher prior to the installation of bike facilities to ensure the safety of road users;
- Pavement preservation activities involving resurfacing or reconstruction require that the access ramps be ADA-compliant; and,
- Each public improvement project will include a community engagement and outreach process as recommended in the MP 2035.

See the attachment for the cost assumptions. The LADOT estimates that the community engagement cost can range from $96,000 to $462,000 per project.

### Notes: Data caveats are as follows:
1) Approx. Network Mileage Total numbers – Based on preliminary centerline mileages and are subject to refinement;
2) Approx. Mileage Implemented – The bicycle lane numbers are preliminary and calculated by the LADOT;
3) These calculations round down miles built and rounds up total Network miles;
4) These calculations do not include information for the Transit Enhanced Network, Vehicle Enhanced Network, and the Goods Movement Network.

*Mileage implemented will require an assessment of the street/sidewalk condition.
**Tier 3 BLN was envisioned to be less likely to be implemented.

### Table: Network Mileages, Types

<table>
<thead>
<tr>
<th>MP 2035 Networks</th>
<th>Network Subset</th>
<th>Approx. Network Mileage Total</th>
<th>% Implemented</th>
<th>Approx. Mileage Implemented</th>
<th>Approx. Mileage to be Implemented</th>
<th>Type of Infrastructure Envisioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycle Enhanced Network</td>
<td>Tier 1</td>
<td>260</td>
<td>8%</td>
<td>22</td>
<td>238</td>
<td>Class IV (separated bikeway)</td>
</tr>
<tr>
<td>Bicycle Lane Network *</td>
<td>Tier 2</td>
<td>470</td>
<td>58%</td>
<td>273</td>
<td>197</td>
<td>Class II (bike lane)</td>
</tr>
<tr>
<td></td>
<td>Tier 3 **</td>
<td>190</td>
<td>6%</td>
<td>11</td>
<td>179</td>
<td></td>
</tr>
<tr>
<td>Combined BLN:</td>
<td></td>
<td>660</td>
<td>43%</td>
<td>285</td>
<td>375</td>
<td></td>
</tr>
<tr>
<td>Pedestrian Enhanced Network</td>
<td>-</td>
<td>560</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>Pedestrian safety enhancements</td>
</tr>
<tr>
<td>Neighborhood Enhanced Network *</td>
<td>Tier 1 NEN (BEN from NEN)</td>
<td>60</td>
<td>2%</td>
<td>1</td>
<td>59</td>
<td>Class III (bike route/shared lane markings - &quot;sharrows&quot;); traffic calming and intersection improvements as needed</td>
</tr>
<tr>
<td></td>
<td>Tier 2 NEN</td>
<td>770</td>
<td>14%</td>
<td>107</td>
<td>663</td>
<td></td>
</tr>
<tr>
<td>Combined NEN:</td>
<td></td>
<td>830</td>
<td>13%</td>
<td>108</td>
<td>722</td>
<td></td>
</tr>
</tbody>
</table>
The LADOT reports that a certain percentage of the streets that comprise the BLN and BEN networks may be in good condition with a Pavement Condition Index of 80 or above at any given time. Based on data collected at the end of September 2023, the BSS reports that of the miles that have yet to be implemented, approximately 37 percent (or 70 centerline miles) of the BEN, 41 percent (or 122 centerline miles) of the Tier 2 BLN, and 37 percent (or 45 centerline miles) of Tier 3 BLN are currently in good condition. Depending on when staff is ready to implement the bicycle facilities, the condition of those pavements may have deteriorated and require upgrading.

The table below shows the range of cost to implement the BEN and BLN, which is inclusive of street resurfacing, community engagement (cost is also provided below), and ADA-compliant curb ramps, etc. Also shown below is the marginal cost of implementing the BLN and BEN excluding the cost of street resurfacing and ADA-compliant curb ramps assuming that it will be funded by existing programs. The table reflects current costs, including a 10 percent escalation factor.

<table>
<thead>
<tr>
<th>Type</th>
<th>Mileage to be Implemented</th>
<th>Unit Cost to Implement/Mile (Low - High)*</th>
<th>Total Cost to Implement (Low - High)*</th>
<th>Community Engagement ** (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>BEN</td>
<td>Tier 1</td>
<td>238</td>
<td>$4.75 - $6.34 million</td>
<td>$1.13 - $1.51 billion</td>
</tr>
<tr>
<td>BLN</td>
<td>Tier 2</td>
<td>197</td>
<td>$4.70 million</td>
<td>$0.93 billion</td>
</tr>
<tr>
<td>BLN</td>
<td>Tier 3</td>
<td>179</td>
<td>$4.70 million</td>
<td>$0.84 billion</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td></td>
<td>$2.90 - $3.28 billion</td>
<td>$16.68</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Mileage to be Implemented</th>
<th>Unit Cost to Implement/Mile (Low - High)*</th>
<th>Total Cost to Implement (Low - High)*</th>
<th>Community Engagement ** (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>BEN</td>
<td>Tier 1</td>
<td>238</td>
<td>$1.76 - $2.62 million</td>
<td>$0.42 - $0.62 billion</td>
</tr>
<tr>
<td>BLN</td>
<td>Tier 2</td>
<td>197</td>
<td>$1.76 million</td>
<td>$0.35 billion</td>
</tr>
<tr>
<td>BLN</td>
<td>Tier 3</td>
<td>179</td>
<td>$1.76 million</td>
<td>$0.32 billion</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td></td>
<td>$1.08 - $1.28 billion</td>
<td>$16.68</td>
</tr>
</tbody>
</table>

The table does not account for staff costs to implement the project and additional cost escalation above the estimated 10% escalation.

*Assumes that 94% of the streets is asphalt and the remaining 6% is concrete.

**Accounted in Unit Cost and Total Cost

The BOE, which manages the Sidewalk Repair Program (SRP), reported that it has remediated 1.25 percent of sidewalks (3.8 million square feet) since the inception of the SRP. The City is obligated to remediate or repair pedestrian facilities to comply with the ADA requirements. The BOE reports that a vast majority of sidewalks are not in full compliance with ADA standards based on investigations of site-specific projects/access requests. The BOE reports that the estimated cost
to remediate the sidewalk (5’ width equivalent) to meet ADA standards is approximately $1.25 million per mile. Since the overall condition of the sidewalks is unknown, the total estimated cost to remediate the sidewalks is $1.4 billion assuming all 560 miles in the PED needs repair, as shown in the table below:

<table>
<thead>
<tr>
<th>Type</th>
<th>Approx. Network Mileage Total</th>
<th>Mileage Implemented</th>
<th>Mileage to be Implemented</th>
<th>Unit Cost to Implement/Mile</th>
<th>Total Cost to Implement</th>
</tr>
</thead>
<tbody>
<tr>
<td>PED – Sidewalks only</td>
<td>560</td>
<td>TBD</td>
<td>1120 (both sides of street)</td>
<td>$1.25 million</td>
<td>$1.4 billion</td>
</tr>
</tbody>
</table>

EXISTING FUNDED PROGRAMS

The Pavement Preservation Program

The BSS is responsible for maintaining the roadway as part of the Pavement Preservation Program (PPP). Pavement preservation activities such as slurry sealing, pothole repair, and crack sealing are exempted from the requirements of the MP 2035. Pavement preservation activities involving resurfacing or reconstruction require that the City upgrade or construct ADA-compliant access ramps. In 2023-24, funding is provided in the budget for both programs, the PPP and PPP-Access Ramp Program, to prevent further deterioration of the street and to ensure that the access ramps are ADA-compliant. Currently, the City has a backlog of access ramps that need to be upgraded or constructed as a result of prior resurfacing or reconstruction activities. Additionally, the City is obligated to upgrade or construct access ramp as a result of current resurfacing or construction activities.

While there is existing funding for PPP and access ramps upgrades, those programs will be negatively impacted should funding be realigned to the MP 2035 implementation. Currently, community engagement is not conducted as part of the resurfacing work. Requiring bicycle facilities to be implemented with street resurfacing/reconstruction activities, will require the LADOT to conduct community outreach and engagement, which will delay the resurfacing work. Based on prior community engagement efforts on completed projects, the community engagement process can take multiple months to over a year depending on the level of engagement required for that specified project. The unintended consequence of realigning these funds is that the PPP could slow down to a point where the overall City street system deteriorates, resulting in less safe streets and higher costs to the PPP to maintain those streets.

Sidewalk Repair Program (SRP)

In 2023-24, total funding of $69 million is provided for the Sidewalk Repair Program ($35.7 million), and the Sidewalk Repair Access Request Acceleration Program ($33.3 million). In accordance with the Willits Settlement, the City is obligated to use the funding for access improvements and barrier
removal, excluding new construction and alterations. The City will need to conduct an assessment of the condition of the sidewalks throughout the city in order to estimate the cost of the repair. On August 30, 2023, the BOE and BSS released a joint report, dated August 30, 2023, relative to utilizing SRP funds for a sidewalk inventory and assessment pilot program which is pending final approval (C.F. 21-1469-S1). It should be noted that the BOE could prioritize the sidewalk assessments based on the networks in the Mobility Plan 2035. Additionally, the BOE released a separate report, dated August 30, 2023, relative to improvements and changes to the sidewalk repair program including recommendations for BOE to report back on the changes to the prioritization matrix to better implement the Willits Settlement and City priorities (C.F. 21-1469). Should SRP funds be realigned to MP 2035 implementation, it will need to be coordinated with BOE to ensure that the City continues to meets its obligations under the Willits Settlement.

Currently, the City departments report that they do not have dedicated resources to implement the MP 2035 and will need to conduct a separate resource analysis to support this effort. One of the recommendations contained in the CLA report is for the MP 2035 lead departments, bureaus, and agencies to prepare and submit budget packages for resources needed including, but not limited to achieving progress towards full build-out of multimodal transportation to support MP 2035 implementation infrastructure identified in MP2035, including the feasibility of a set-aside within the Bureau of Street Services resurfacing program dedicated for mobility corridors in partnership with the LADOT. Since the annual budget process is the appropriate place to address the resource needed to implement the MP 2035 relative to the BEN, BLN, and sidewalks, this Office is not recommending any actions at this time.

FISCAL IMPACT STATEMENT

This report is informational only. Therefore, the recommendation in this report has no fiscal impact.

FINANCIAL POLICIES STATEMENT

The recommendation in this report is in compliance with the City Financial Policies.

MWS:SMC:06240010

Attachment
Table represents City's full cost of MP 2035 implementation, including the City's committed obligations (pavement preservation and ADA)

<table>
<thead>
<tr>
<th>Type</th>
<th>Approx Network Mileage Total</th>
<th>Approx Centerline Mileage to be Implemented</th>
<th>Approx Centerline Mileage Implemented</th>
<th>Unit Cost To Implement / Mile (Low)*</th>
<th>Unit Cost To Implement / Mile (High)*</th>
<th>Total Cost (Low)</th>
<th>Total Cost (High)**</th>
<th>Community Engagement Cost Range **</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEN Tier 1</td>
<td>260</td>
<td>22</td>
<td>238</td>
<td>$4,747,943</td>
<td>$6,340,598</td>
<td>$1,130,010,527,02</td>
<td>$1,509,061,835</td>
<td>$7,636,071 $24,693,690 $36,694,047</td>
</tr>
<tr>
<td>BLN Tier 2</td>
<td>470</td>
<td>273</td>
<td>197</td>
<td>$4,702,943</td>
<td>$4,702,943</td>
<td>$926,479,848,00</td>
<td>$4,740,466  $15,329,801 $22,779,603</td>
<td></td>
</tr>
<tr>
<td>BLN Tier 3</td>
<td>190</td>
<td>11</td>
<td>179</td>
<td>$4,702,943</td>
<td>$4,702,943</td>
<td>$841,826,867</td>
<td>$4,307,322</td>
<td>$13,929,109 $20,698,218</td>
</tr>
</tbody>
</table>

Table represents City's full cost of MP 2035 implementation, and excludes the City's committed obligations (pavement preservation and ADA)

<table>
<thead>
<tr>
<th>Type</th>
<th>Approx Network Mileage Total</th>
<th>Approx Centerline Mileage to be Implemented</th>
<th>Approx Centerline Mileage Implemented</th>
<th>Unit Cost To Implement / Mile (Low)*</th>
<th>Unit Cost To Implement / Mile (High)*</th>
<th>Total Cost (Low)</th>
<th>Total Cost (High)**</th>
<th>Community Engagement Cost Range **</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEN</td>
<td>260</td>
<td>22</td>
<td>238</td>
<td>$1,760,550</td>
<td>$2,616,626</td>
<td>$419,010,900</td>
<td>$622,804,529</td>
<td>$7,636,071 $24,693,690 $36,694,047</td>
</tr>
<tr>
<td>BLN Tier 2</td>
<td>470</td>
<td>273</td>
<td>197</td>
<td>$1,760,550</td>
<td>$1,760,550</td>
<td>$4,740,466</td>
<td>$15,329,801</td>
<td>$22,779,603</td>
</tr>
<tr>
<td>BLN Tier 3</td>
<td>190</td>
<td>11</td>
<td>179</td>
<td>$1,760,550</td>
<td>$1,760,550</td>
<td>$315,138,450</td>
<td>$4,307,322</td>
<td>$13,929,109 $20,698,218</td>
</tr>
</tbody>
</table>

Notes/Assumptions for MB 2035 Cost Assessment Exercise

BLN Tier 2 Tier 2 BLN was envisioned by the Mobility Plan to be more likely to be implemented by 2035
BLN Tier 3 Tier 3 BLN was envisioned by the Mobility Plan to be less likely to be implemented by 2035

Pre-Design Assumptions

- **Source**
  - Transportation Assessments VZ Studies
  - Parking Studies VZ Studies
  - Concept Design ATD Studies
  - Resurfacing Planning Costs Percentage of Construction Costs
  - Includes 10% Contingency

Design Assumptions

- **Signal Design** Included in Low and High Unit Costs
- **BSL Design** Included in Low and High Unit Costs
- **Mid-Block ADA ramps** Included in Low and High Unit Costs
- **Includes 10% Contingency** Included in Low and High Unit Costs
- **Geo Design** Included in Low and High Unit Costs
- **Curb Ramp design costs** Included in Low and High Unit Costs
- **Bus Island design** Included in High Unit Costs
- **Added 5% Factor for Utility** Included in High Unit Costs

Construction Assumptions

- **Bollards** Included in Low and High Unit Costs
- **Pavement Costs - Pavement** Included in Low and High Unit Costs
- **Ramp Installation** Included in Low and High Unit Costs
- **Signal work** Included in Low and High Unit Costs
- **BSL Work** Included in Low and High Unit Costs
- **Bike Signals** Included in Low and High Unit Costs
- **Striping** Included in Low and High Unit Costs
- **Green Treatment** Included in Low and High Unit Costs
- **Bus Lane (red) Treatments** Included in Low and High Unit Costs
- **Tree Repair/Replant (no tree** Included in High Unit Costs
- **Bus Island Const** Included in High Unit Costs
- **Transit Lighting** Included in High Unit Costs
- **Transit Shelters** Included in High Unit Costs
- **Bus Pad Const/Repair** Included in High Unit Costs
- **Hardening** Included in High Unit Costs
- **Added 5% Factor for Utility** Included in High Unit Costs
- **Added 10% Contingency** Included in High Unit Costs
- **Added 15% Construction Management/Inspection**

* Takes into account 94/6 split between asphalt streets and concrete streets

High - Scenario A
Low = Scenation B