November 22, 2017

The Honorable Bernard C. "Jack" Young
Baltimore City Council
100 Holiday Streets, 4th Floor
Baltimore, MD 21202

RE: FY17 Complete Streets Report

Council President Young:

Attached is the Department of Transportation’s Complete Streets Report for FY2017.

If you have any questions, please feel free to contact me at 410-396-6802, or Valorie LaCour, Chief Transportation Planning Division, at Valorie.Lacour@baltimorecity.gov, or 443-984-4092.

Sincerely,

[Signature]

Michelle Pourciau
Director

MCP/vII

cc: The Baltimore City Council
    Mr. James T. Smith
Annual Complete Streets Report

July 1, 2016 to June 30, 2017
I am pleased to provide the attached “Annual Complete Streets Report” for Fiscal Year 2017. The report captures the efforts of the Baltimore City Department of Transportation for the previous year and provides comparative data in an effort to measure performance. As you will see, based on the items provided, although projects have progressed, performance in some area appears to be lagging.

This report will be used as a baseline for reinvigorating this initiative, in keeping with a more comprehensive approach to addressing citywide transportation and livability needs. We look forward to working with you to build a comprehensive transportation plan for the City of Baltimore that prioritizes complete streets and safety.

Director Michelle Pourciau
Baltimore City Department of Transportation
Baltimore City Department of Transportation
Complete Streets Report Fiscal Year 2017 period July 1, 2016 to June 30, 2017

Background

In 2009, the Baltimore City Council approved a Complete Streets Resolution (Council Bill 09-0433). Baltimore City Department of Transportation adopted a Complete Streets policy in 2013 to implement the Resolution and “to combine many ongoing efforts across BCDOT and strengthen the City’s efforts to enhance safety and mobility for all users of the City’s transportation system.

This includes:

- Prioritizing pedestrians, transit riders, and bicyclists, and thereby maximizing opportunities to activate streets as public spaces for their use and convenience;
- A multi-modal transportation network in Baltimore City that accommodates the safety, access, and mobility needs of transit riders, school children, bicyclists, and pedestrians within the public right-of-way;
- Balancing the needs and wants of all transportation system user though data-driven decision making; and
- Partnerships with State agencies, transit providers, businesses, stakeholders, and communities to plan, design, construct, operate and maintain the Complete Streets network in the City.

The planning and design of projects include:

- National Association of City Transportation Officials (NACTO) Urban Street Design Guide
- NACTO Urban Bikeway Design Guide
- BCDOT Bicycle Infrastructure Policy
- AASHTO LRFD Bridge Design Manual
- American Society of Civil Engineers (ASCE) Bridge Manual
- BCDOT Conduit Policy (July 8, 2009)
- BCDOT Landscaped Median Maintenance Manual
- Baltimore City Department of Planning Landscape Maryland Manual on Uniform Traffic Control Devices (MUTCD)
- Maryland State Highway Administration (SHA) Bridge Specification
- SHA Complete Streets Policy
- SHA Pavement Design Guide
- American Association of State Highway and Transportation Officials (AASHTO) Guidelines

Moving forward project planning and engineering will also include:

- BCDOT At-Grade Rail Crossing Safety Study
- BCDOT Port Communities Freight Management Plan
- BCDOT City-wide Traffic Safety Plan
- BCDOT Transportation Green Infrastructure Strategic Plan
- BCDOT Commercial Vehicle Management Plan
Annual Fiscal Year 2017 Complete Streets Report

The Baltimore City Department of Transportation (BCDOT) has completed the Complete Streets Report covering Fiscal year 2017 per Council Bill 09-0433. The Complete Streets report includes information on multimodal transportation project progress. The report includes data for pedestrian infrastructure, bicycle infrastructure, transit ridership data, and roadway infrastructure.
COMPLETE STREET DEFINITIONS

**Pedestrian Enhancements**
- New sidewalks
- Sidewalks Repaired
- Crosswalks Created or Refreshed
- ADA ramp upgrades
- Pedestrian Signals

**Bike Facilities**
- Bike lanes
- Sharrows
- Cycle Tracks
- Signed Bike Routes

**Transit Improvements**
- Accessible transit stops with curb ramps
- Designated bus pads for buses to pull out of the flow of traffic for drop-off and pick-up of passengers
**COMPLETE STREET DEFINITIONS**

**Roundabouts**
- Circular intersection with no stop signs or traffic signals

**Road Diets**
- Reclaimed spaced for other uses - pedestrian refuge and bike lanes.
- Results include decreased travel speeds, improved mobility, and enhanced quality of life

**Intersection Improvements**
- Curb Extensions to shorten the crossing distances at major crosswalks
- Defines distinct walking path for pedestrians
FY 2017: Measuring Performance

Council Bill 09-0433 required BCDOT to establish performance measures in order to monitor how streets are serving all users. The legislation provided suggestions for performance measures for DOT to consider in reporting progress on complete streets. BCDOT has developed performance measures using available data for each mode of transportation; walking, bicycling, transit, passenger and freight vehicles.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>FY 2016</th>
<th>FY 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Feet (SF) of Sidewalk repaired</td>
<td>341,537</td>
<td>224,725</td>
</tr>
<tr>
<td>Square Feet (SF) of New Sidewalk</td>
<td>7,847</td>
<td>8,027</td>
</tr>
<tr>
<td>New/Refreshed Crosswalks</td>
<td>192</td>
<td>188</td>
</tr>
<tr>
<td>New/Reconstructed curb ramps</td>
<td>1,734</td>
<td>642</td>
</tr>
<tr>
<td>Bike Racks Installed</td>
<td>78</td>
<td>97</td>
</tr>
<tr>
<td>Bike Lane Miles/Sharrow Miles</td>
<td>2.55</td>
<td>1</td>
</tr>
<tr>
<td>Linear Miles of resurfaced streets (lane miles)</td>
<td>122</td>
<td>61¹</td>
</tr>
<tr>
<td>High Lumen LED Street Light Fixtures Installed</td>
<td>4,839</td>
<td>1,488</td>
</tr>
<tr>
<td>Bus Pads Installations</td>
<td>168</td>
<td>32</td>
</tr>
<tr>
<td>Priority Bus Lanes (lane miles)</td>
<td>N/A</td>
<td>2.5</td>
</tr>
</tbody>
</table>

¹ The contracts submitted to Board of Estimates (BOE) were protested. The resolution process caused a delay in construction.
Mini Roundabouts:

This project was part of the West Baltimore Bike Boulevard Projects.

Mini Roundabouts were installed at the following locations:
- Baltimore Street at Smallwood Street
- Baltimore Street at Stricker Street
- Lombard Street at Stricker Street

Road Diets:

These projects were installed to accomplish the following goals:
1) Slow turning vehicles that conflict with pedestrian movements by reducing turning radius
2) Shorten crossing distances
3) Narrow the travel lanes to encourage drivers to pay attention and drive slower

Road diets were installed at the following locations:
- W. 41st Street
- 32nd Street
Intersection Improvements

These projects were installed to accomplish the following goals:
1) Slow turning vehicles that conflict with pedestrian movements by reducing turning radius
2) Shorten crossing distances
3) Narrow the travel lanes to encourage drivers to pay attention and drive slower

Flex Post Curb Extensions were installed at the following locations:
- 28th Street at Remington Ave
- 29th Street at Remington Ave
- Baltimore Street at Ann Street
- Bank Street at Wolfe Street
- Belair Road at Herring Run Crossing
- Carrolton Avenue and Fayette Street
- Highland Avenue at Pratt Street
- Highland Avenue at Gough Street
- Hillen Road at 32nd Street
- Lake Montebello at Whitman Street
- Moravia Road at Sinclair Lane
- North Ave at Warwick Street
- Smallwood Street and Fayette Street
- Stricket Street and Fayette Street
- Walther Avenue
- Wyndhurst Avenue at Winslow Road
Highlandtown Transit Stop Improvement Project
Highland Avenue to South Eaton Street

One of the flagship transportation projects for FY 2017, this project included the improvements of multimodal accessibility with accommodations for bus transit and pedestrian accessibility from Highland Avenue to South Eaton Street. The total construction cost of this project was $473,000.00.

The design and construction of this project started in September 2016 and was completed in March 2017. Project details included ADA ramp upgrades, new bus shelters, sidewalk reconstruction, signing and pavement marking.

Transit Improvements
Pedestrian Enhancements
East Baltimore Life Science Park Phase 1D

McDonough from Eager Street to Chase Street; Rutland Avenue from Eager Street to Chase Street

As part of Baltimore City’s revitalization efforts in East Baltimore, this project included the complete reconstruction of utility and roadway infrastructure from McDonogh Street from Eager Street to Chase Street; Rutland Avenue from Eager Street to Chase Street. The total construction cost of this project was $1.7 Million.

The construction of this project started in August 2016 and was completed in June 2017. Project details include roadway rehabilitation, two southbound lanes, provisions for bicycles, pedestrian amenities, conduit system enhancements, sanitary sewer upgrades, water utility restoration, storm drain enhancements, streetscape, roadways lighting, signing and pavement markings, and curb extensions.

Bike Facilities
Intersection Improvements
Pedestrian Enhancements
The reconstruction and rehabilitation of the Cherry Hill Light Rail Station included improvements from Giles Road to Waterview Avenue. The total construction cost of this project was $1.4 Million.

The construction of this project started in Spring of 2016 and was complete in Fall 2017. Project details include ADA sidewalk ramps, sidewalk repair, landscaping, transit improvements and bike facilities.

**Pedestrian Enhancements**  **Transit Improvements**  **Bike Facilities**
High crime zones were prioritized for street light upgrades using data from the Baltimore Police Department. The total cost of this project was $5 Million.

The construction of this project was completed in January 2017. Project details include a total of 1,488 LED street light upgrades for FY 2017 in 73 neighborhoods. From the start of this project in 2013 to FY 2017 there have been a total of 6,244 LED street light upgrades.
Baltimore Bike Share

City Wide

Launched in 2016 Baltimore is the largest Pedelec (electric assist) bicycle fleet in North America and is a leader in active transportation by offering both Pedelec and traditional options for residents and visitors to explore the City. For Fiscal Year 2017 there have been a total of 25 Bike Share Stations installed in Baltimore City.

Although the program was temporarily halted due to vandalism, with technological enhancements, it has been reinstated and additional stations and bikes will be added in 2018.

**Bike Share Statistics**

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total distance (mi)</td>
<td>58,732</td>
</tr>
<tr>
<td>Total Trips</td>
<td>39,228</td>
</tr>
<tr>
<td>Active Annual and Quarterly member</td>
<td>1,682</td>
</tr>
<tr>
<td>2017 occasional members</td>
<td>7,864</td>
</tr>
<tr>
<td>All- time Occasional members</td>
<td>9,994</td>
</tr>
</tbody>
</table>
TowardZero Baltimore

City Wide

TowardZero program goals include making streets safer for all users and modes with an emphasis on pedestrian safety, reducing and ultimately eliminating traffic fatalities and serious injuries, and prevent dangerous roadway user behaviors by implementing the “E’s” of Safety: 1) Evaluation and Data 2) Engineering 3) Education 4) Enforcement

As part of the Evaluation and data process crash data are evaluated to monitor Baltimore City’s progress toward zero traffic related deaths. Overall, total crashes in Baltimore City have consistently increased year by year over the 5 year period (2012-2016), with a five year average of 22,634 total crashes. The majority of crashes, 77.9 %, are property damage only crashes. A very small portion of crashes result in fatalities at 0.2%. The city averages about 35 fatal crashes each year.

<table>
<thead>
<tr>
<th>Category</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>5 Year Average</th>
<th>% of Total Crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total of All Fatal Crashes</td>
<td>28</td>
<td>31</td>
<td>29</td>
<td>40</td>
<td>46</td>
<td>35</td>
<td>0.2</td>
</tr>
<tr>
<td>Injury Crashes</td>
<td>4,814</td>
<td>4,602</td>
<td>4,709</td>
<td>4761</td>
<td>5980</td>
<td>4973</td>
<td>22.0</td>
</tr>
<tr>
<td>Property Damage Crashes</td>
<td>15,900</td>
<td>16,397</td>
<td>16,877</td>
<td>18,500</td>
<td>20,455</td>
<td>17,626</td>
<td>77.9</td>
</tr>
<tr>
<td>Total Crashes</td>
<td>20,742</td>
<td>21,030</td>
<td>21,615</td>
<td>23,301</td>
<td>26,481</td>
<td>22,634</td>
<td>100.00</td>
</tr>
<tr>
<td>Total of All Fatalities</td>
<td>28</td>
<td>31</td>
<td>29</td>
<td>43</td>
<td>53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number Injured</td>
<td>7408</td>
<td>7055</td>
<td>7415</td>
<td>7677</td>
<td>9645</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Baltimore City data from 2012 to 2014
2 Data was provided by the Maryland Department of Transportation Highway Safety Office for 2015 & 2016.
Performance measures for city owned transit (Charm City Circulator [CCC] and Harbor Connector [HC]) include ridership. The Charm City Circulator consists of four separate routes: The Green Route which runs from City Hall to Fells Point to Johns Hopkins Hospital, the Purple Route runs from Johns Hopkins Homewood campus to Federal Hill, the Orange Route runs from Hollins Market to Harbor East and the Banner Route runs from the Inner Harbor to Fort McHenry. The Harbor Connector has five landings that connect Canton, Harbor Point, Tide Point and Harbor East.
Project Highlights

Safe Routes to School:
In Fall of 2017 Safe Routes to School was awarded a grant for $321,971.25. The project is for education and improvements around the newly renovated Pimlico Elementary School. Project improvements include ADA ramps, new sidewalks, pavement markings, raised crosswalk and audible pedestrian signals.

Big Jump Project:
This is a six-year effort to achieve a big jump in biking by building a network of safe and comfortable places to ride and engage the community. This project is focused on connecting Remington to Reservoir Hill through improved connections on Druid Park Lake Drive and the 28th Street Bridge.

South Baltimore Gateway Complete Streets:
The Baltimore City Department of Transportation, at the request of the Baltimore Casino Local Development Council (LDC) and the Mayor’s Office of Economic and Neighborhood Development, developed a Complete Streets Plan for the geographic area known as the South Baltimore Gateway. Projects have been constructed to as outlined in the Complete Streets Plan including:

Otterbein – Three cobblestone alleys regrutued
Pigtown – West Ostend Street– Fence installation at the Pigtown Community Garden

Pedestrian Enhancements
Bike Facilities
Pedestrian Enhancements
Pedestrian Enhancements
Intersection Improvements