VISION ZERO

CECIL B. MOORE

A transportation safety study and recommended improvements from Willington Street to 10th Street

January 2023

DELAWARE VALLEY dvrpc REGIONAL PLANNING COMMISSION

City of Philadelphia

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Executive Summary

Cecil B. Moore Avenue is an arterial roadway in North Philadelphia that has played a significant role in the history of Philadelphia and the neighborhoods it passes through. Originally named Columbia Avenue, the street's name was changed to honor the civil rights activist Cecil B. Moore who emerged as a leader of the movement to combat racial discrimination against Black Philadelphians in the 1960s. The road also borders Yorktown, a planned community built to support Black homeownership in Philadelphia, as well as Temple University.

The City of Philadelphia identified the study area for this project, which stretches from Willington Street to 10th Street along Cecil B. Moore Avenue, as part of the Vision Zero program. Philadelphia's Vision Zero program works to eliminate deaths and serious injuries from traffic crashes by 2030. The corridor was identified in the City's Vision Zero Capital Plan 2025 as part of the High Injury Network because of a history of crashes. Along this corridor, Cecil B. Moore Avenue serves a variety of purposes, including as a neighborhood commercial hub, a transit corridor, a key access point to Temple University, and an east-west route for people walking, driving, riding bicycles, and other forms of transportation. These overlapping needs create challenges and opportunities for eliminating severe crashes along the corridor.

The study team for this project conducted extensive neighborhood outreach, research on existing planning efforts, a road safety audit, and a crash and traffic analysis. The public outreach effort during the Fall of 2021 and Spring of 2022 included collecting nearly 200 surveys along with a range of other outreach methods. The road safety audit and crash and traffic analysis identified additional specific safety concerns. Key concerns identified through the community outreach included the need for safer pedestrian and bicyclist infrastructure, better maintenance of the roadway, slowing speeding drivers, addressing loading issues, and improving transit service. The crash and traffic data analysis also pointed to high rates of pedestrian crashes, red light running, and speeding.

The study team produced a series of recommendations aimed at improving safety, mobility, and community vitality for all users of the street. The recommendations include shortening pedestrian crossings, increasing loading areas for commercial and institutional uses, separating bicycle lanes from traffic, and calming traffic, among others. The recommendations were presented to a steering committee made up of City government and community members, as well as to the public during a pop-up event hosted at a local community center. The recommendations are presented in detail in this report and provide guidance to the City as it moves forward with improving safety along this corridor under the Vision Zero program.

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INTRODUCTION

Cecil B. Moore Avenue is an arterial roadway in North Philadelphia. The road is part of Philadelphia's High Injury Network.[1] The High Injury Network represents only 12 percent of Philadelphia streets, but accounts for 80 percent of severe crashes. By targeting safety improvements on streets that are part of the High Injury Network, the City of Philadelphia can make progress on reducing severe traffic injuries and fatalities. This study is part of the City's Vision Zero program. The City's Vision Zero Capital Plan 2025 has the stated goal of achieving zero traffic deaths in the City by 2030.[2] The Delaware Valley Regional Planning Commission (DVRPC) worked with the City of Philadelphia to produce this report.

Cecil B. Moore Avenue is an important commercial corridor that serves a variety of purposes. Cecil B. Moore Avenue is bifurcated by Broad Street, where the Southeastern Pennsylvania Transportation Authority (SEPTA) Broad Street Line subway station is located and generates heavy pedestrian traffic. The roadway is also home to the SEPTA Route 3 Bus, which serves a large swath of North Philadelphia and the Lower Northeast. Cecil B. Moore Avenue is also close to the Temple University SEPTA Regional Rail station, which brings riders from all over the region. The roadway serves many purposes, as it is a hub for shopping, community events, sporting events, academics, and more.

The High Injury Network represents only 12 percent of Philadelphia streets,

but accounts for 80 percent of severe crashes.

Source: City of Philadelphia

Cecil B. Moore Avenue & Broad Street
Source: DVRPC

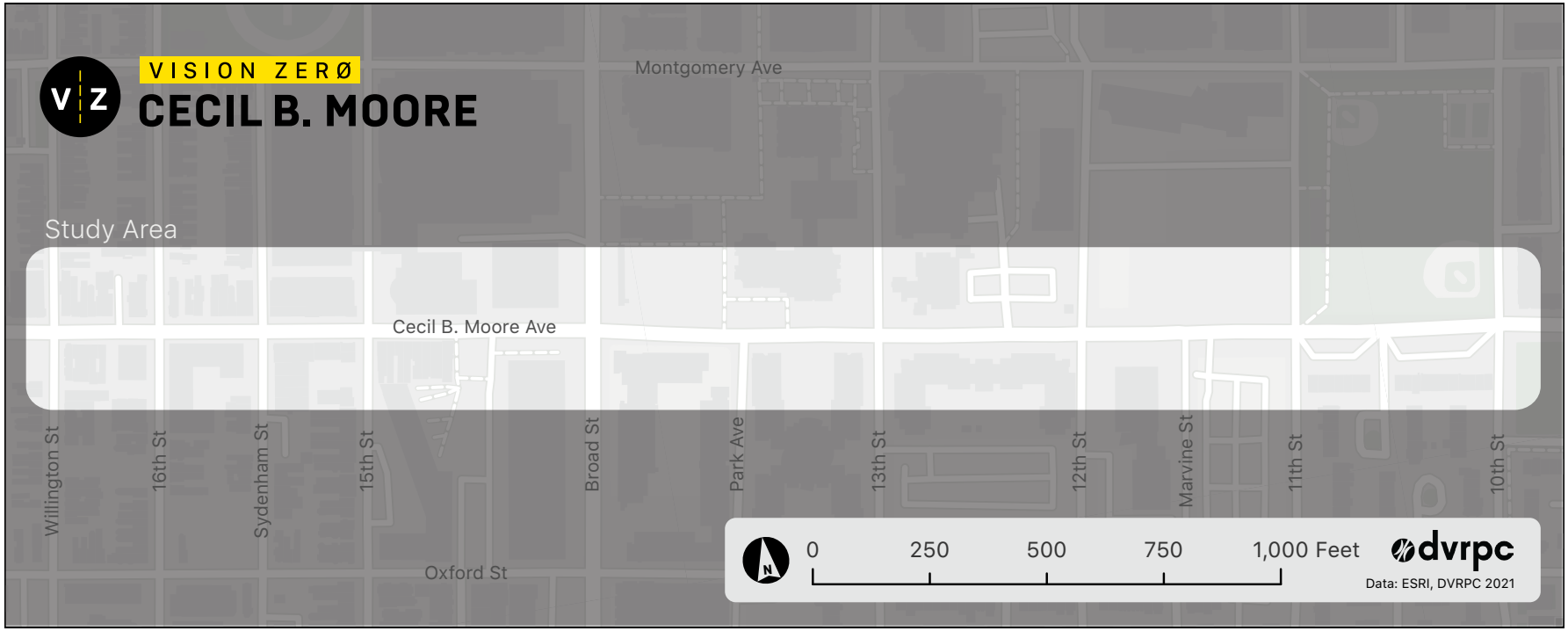
[1] High Injury Network, City of Philadelphia, 2020
[2] Vision Zero Action Plan, City of Philadelphia, 2020

Cecil B. Moore Avenue draws people to the area using all modes of travel. Subway riders arrive via the Broad Street Line, and many connect to the Route 3 Bus. Many people walk along the corridor, drawn by a variety of uses and destinations. People who ride bikes navigate the corridor's varying width, despite the lack of bike facilities west of Broad Street. Commuters in cars muddle through the often-congested blocks west of Broad Street. Delivery drivers search for space to unload their cargo.

This study aimed to solicit input and feedback from all users: long-time residents, transit riders, students, shoppers, bicyclists, pedestrians, drivers, store owners, and other individuals with a stake in the safety of the corridor. Public outreach was conducted through a variety of mediums throughout the duration of this project, with over 200 people providing input on the existing conditions and recommendations outlined in the report.

Safety was identified as the top priority during early outreach, which aligned with the goals and objectives of this study. The recommendations of this report aim to address the safety issues identified in the existing conditions section of this report, from both research and analysis by the study team, and from residents who use the corridor every day. Local knowledge and input was invaluable for this project, and helped guide the outreach, design, and recommendations from the study.

Figure 1: Study Area




SUBWAY

VISION ZERØ

CECIL B. MOORE

BACKGROUND

HISTORY • PREVIOUS STUDIES

Cecil B. Moore Avenue, and its surrounding neighborhoods, are rich in history and culture. The extended community has expressed a desire to create a more walkable and inclusive space for its diverse users. In order to better understand the neighborhood's values, the project team explored its history and existing community plans.

History

The study area, which was defined as Cecil B. Moore Avenue from Willington Street to 10th Street, is largely located within the Cecil B. Moore neighborhood. As an arterial road, the corridor has wider implications on nearby communities such as Yorktown located just south of the study area, Strawberry Mansion located to the west, and Sharswood located to the southwest. The following sections explore the history of each of these communities.

Cecil B. Moore

Cecil B. Moore Avenue was previously named Columbia Avenue. In 1987, the name was changed to honor the famed civil rights leader.

Cecil B. Moore Speaks at Protest
Source: Temple Libraries

Like cities across the country, North Philadelphia has been through a series of demographic shifts as one community gradually migrated away and another settled in their place. For Columbia Avenue and its neighboring communities, this pattern has repeated over the years. In the 1800s, Columbia Avenue transitioned from a German Jewish and Irish/English immigrant community into a Jewish European immigrant community.[3] Within the next half century, the immigrant community left for West Philadelphia. Many former community members decided to maintain their businesses within the corridor. It was also around this time that a combination of local African Americans and African Americans migrating from the American South began to resettle the area, some of whom found employment at Jewish-owned businesses.

With the influx of African American residents, the parts of Sharswood located near Columbia Avenue became known for its jazz music and nightlife, earning a particular stretch of the neighborhood the name, "The

[3] Columbia Avenue, Temple University.

Golden Strip."[4] As time passed, middle-income African American residents, like the Jewish residents before them, moved to other parts of the city. With primarily lower-income individuals remaining by the 1950s and a decaying infrastructure, the City conducted a series of urban renewal projects. While the projects rebuilt areas of the city, they did not take into account the effects on newly unhoused residents. As jobs began to leave the area and discriminatory real estate policies took hold, limiting African Americans' access to mortgages, unrest spread throughout community members as living in the area became more difficult. As unemployment in the area rose, many felt uncomfortable that much of the business ownership was neither locally-owned nor represented the demographics of the community. This came to a head during the civil rights era with what came to be known as the Columbia Avenue riots. During this time, Cecil B. Moore, a local lawyer and activist, served the community through his commitment to equity and fair representation in court, at times representing community members on little pay.[5]

Columbia Avenue Riots
Source: Temple Libraries

Cecil B. Moore pursued immediate societal and policy changes that addressed the discrimination Black community members faced on a daily basis. As an NAACP leader, he became known for his "confrontational style," organizing numerous civil rights protests throughout the city. One notable protest highlighted his efforts to desegregate Girard College. Moore's dedication to the community was later recognized by renaming the neighborhood and Columbia Avenue for him in 1987.

Cecil B. Moore pursued immediate societal and policy changes

that addressed the discrimination Black community members faced on a daily basis.

Source: Temple University Shorthand Stories

Yorktown

Yorktown began as part of the Southwest Temple Redevelopment Plan, Philadelphia's first urban renewal project in 1959, utilizing what were then innovative planning principles.[6] Over the course of a decade, the City razed the existing neighborhood, which was designated blighted by the Philadelphia Redevelopment Authority, and went through three design phases that evolved from a dense urban housing proposal to the residential row houses that exist to this day. Upon construction, properties were largely

[4] Redevelopment In Sharswood: Will It Come At The Expense Of Preservation?, Hidden City Philadelphia, Ryan Briggs
[5] Perseverance and grit: the life and legacy of Cecil B. Moore, Temple University Shorthand Stories
[6] Yorktown: A Historic Philadelphia Neighborhood

bought by middle-income African Americans seeking refuge from the effects of redlining, making it a unique instance of a Philadelphia community originally inhabited and owned by African Americans. Because of this historic significance, the neighborhood sought to become a historic district in 2014. Despite Yorktown's positive impact as an African American community, similar urban renewal projects began to fall out of favor, as the City faced the unintended consequences of ignoring the displacement of pre-existing residents and community services.

Strawberry Mansion

Strawberry Mansion, originally Summerville, shares its name with the nearby 18th Century Inn.[7] The mansion was once a choice restaurant spot for locals. In the first half of the 20th Century, the Strawberry Mansion Neighborhood was primarily a Jewish community. Similar to Cecil B. Moore and numerous city neighborhoods throughout the country, as the previous inhabitants moved out of the city, many African Americans made this neighborhood their home, in part due to discriminatory housing policies that left them with few alternatives.[8] To this day, Strawberry Mansion remains a diverse neighborhood.

Previous Studies

Prior to developing recommendations, the project team reviewed recent community plans conducted by the various stakeholders around the corridor. Starting with the City of Philadelphia's Lower North District Plan (2014) and 2025 Vision Zero Capital Plan the following section provides a summary of each plan's goals and overall recommendations. In addition to the City, reports conducted by Temple University and Yorktown CDC, are considered.

Vision Zero Capital Plan 2025

Vision Zero, an initiative originating in Sweden, is a policy founded on the goal of eliminating all roadway fatalities. Since its inception in 1997, the policy has spread internationally. Many major American cities have initiated their own version. Intended as a companion piece to Philadelphia's *Vision Zero Action Plan 2025*, Philadelphia's *Vision Zero Capital Plan 2025* prioritizes safety improvements for 10 sub-corridors and 10 intersections throughout the City's High Injury Network (HIN), which will be programmed for design and construction by 2025. The HIN is a set of Philadelphia streets, which account for merely 12 percent of the city's roadway network yet contribute 80 percent of serious injury crashes.[9] In the Vision Zero Capital Plan 10 corridors and intersections were identified by prioritizing areas with high levels of Killed or Seriously Injured (KSI) crashes that were then scored based on six additional criteria, as determined by the City:

1. **Bike Network**: bike lane located on the corridor;

When compared to citywide averages for major arterial streets,

these corridors are 4.5 times more likely to have a fatal or serious injury crash.

Source: Vision Zero Capital Plan 2025

[7] The Story of Historic Strawberry Mansion, Historic Strawberry Mansion
[8] Neighborhood History, Strawberry Mansion CDC
[9] Vision Zero Capital Plan 2025

2. **Competitive City**: locations on commercial corridors;
3. **Efficient Government**: location is in a Combined Sewer Service Area, a PennDOT priority corridor, or if preliminary design is complete;
4. **Equity**: location meets the Neighborhood Slow Zone methodology which considers crash history, vulnerable users, and community places;
5. **Schools**: corridor is within 750 feet of a school or within 1,000 feet of a community school; and
6. **Transit First**: corridor is on or adjacent to SEPTA's high-frequency network of buses, trolleys, Broad Street Line, or Market-Frankford Line.

Based on those parameters, Cecil B. Moore Avenue, an area which also has significant pedestrian traffic, was selected as one of ten priority sub-corridors. In the *Vision Zero Capital Plan*, each location summary offers a description of the area and why it was selected, a map detailing crashes throughout the area, a cost estimate, and a toolbox of recommended Federal Highway Administration (FHWA) Proven Safety Countermeasures. Cecil B. Moore Avenue's engineering toolbox includes potential treatments or consideration such as a road diet, road safety audit, medians/pedestrian refuges, reduced left-turn conflicts, and backplates with retro-reflective borders on traffic signals. This was the starting place for the *Vision Zero: Cecil B. Moore* study.

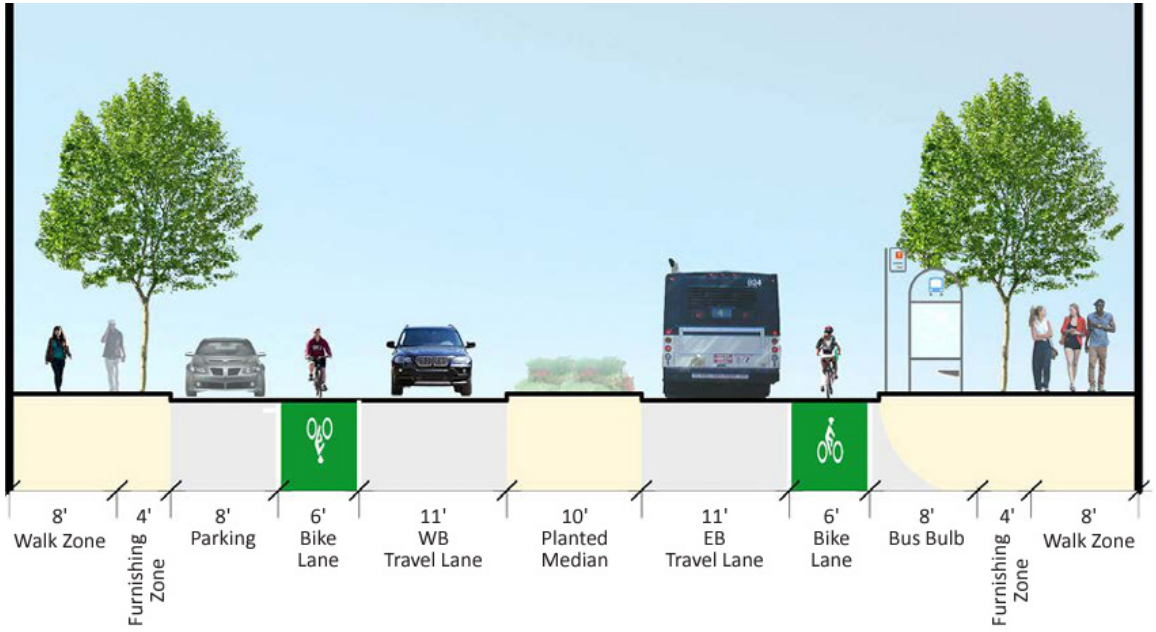
Lower North District Plan (2014)

Building on the *Philadelphia 2035 Citywide Master Plan*, the City develops individual plans for each of its 18 districts. Every plan provides its respective district with a focused approach to create healthy, sustainable and equitable communities. District plans, which are intended to be achieved within a decade, expand on universal objectives initially introduced in the City Vision; to thrive, connect, and renew.[10] Along with the Cecil B. Moore neighborhood, the Lower North District includes Brewerytown, Green Hills, Ludlow, Norris Square, Yorktown, Olde Kensington, South Kensington, West Kensington, Sharswood, and Strawberry Mansion.

Focus areas, or areas with potential for growth, serve as key locations that, when nurtured, have the capability to uplift the district. The focus areas along American Street and Ridge Avenue, the latter being seven blocks east of DVRPC's study area, identify disparities in housing, vacancy, and increased industrial land use. The Ridge Avenue focus area highlights a community desire to create well-connected, economically diverse neighborhoods in part through increased bicycle and pedestrian amenities, green space/infrastructure, and mixed-use infill. Leaning on the district's high transit ridership, the plan suggests a potential Bus Rapid Transit (BRT) or Transit Signal Prioritization (TSP) system. By connecting transit services to an improved bicycle network and bike-share system, residents gain multiple methods to travel to places of work and daily necessities. The report also recommends installing bike lanes on 13th and 15th Streets as well as on the Cecil B. Moore Avenue corridor itself.

Context-sensitive 'Corrective Zoning' and 'Zoning to Advance the Plan' recommendations are provided to support local business and align zoning with current development trends. Additionally, the plan provides guidance on the implementation of these recommendations rooted in community engagement and investments in the City's capital plan.

[10] Lower North District Plan (2014)



Cecil B. Moore Avenue - Proposed East of Broad Street
Source: Verdant Temple

Verdant Temple: Temple University Landscape Master Plan (2014)

Temple University, located at the center of the study corridor, represents a large portion of the study area's built environment and users. Acknowledging their place within the broader community, Temple hopes to "strengthen [their] identity within and connectivity to the North Philadelphia community."[11] The plan describes the institution's "achievable goals," a few of which include increasing green space, improving first impressions, improved connectivity, and maintaining campus-wide consistency of standards.

The intersection of Cecil B. Moore Avenue and Broad Street, a primary campus gateway, and Cecil B. Moore Avenue and Montgomery Avenue are recognized as areas that would benefit from safety improvements, due to their high pedestrian traffic and proximity to transit and student residential areas. Cecil B. Moore Avenue intersects or abuts with the priority project areas of Broad Street, 12th and 13th Streets; the plan recommends the conversion of 12th and 13th Streets into repaved shared streets and the addition of planted medians on Broad Street. In 2013, the Temple University Transportation Survey & Sustainability Audit Report reported sixty-five percent of Cecil B. Moore Avenue users primarily commute by walking, so the plan outlines measures to improve pedestrian and bicycle experience and de-emphasize vehicular access. Across the study area, Verdant Temple suggests a series of safety improvements, a complementary design guide and cross-sections for new wayfinding signage, trees, bike parking, bike lanes, and bioretention/regular curb extensions, the latter being recommended at nearly all intersections along Cecil B. Moore Avenue. The plan proposes a sharrow west of Broad Street and bike lanes on 15th, 13th, and 11th Streets.

Temple University Transportation Survey Sustainability Audit Report (2019)

In 2019, Temple University conducted a Transportation Survey Audit. This audit follows similar surveying efforts conducted

[11] Verdant Temple: Temple University Landscape Master Plan (2014)

in 2013 and 2016. This latest effort received 1,600 sufficiently completed surveys, with a response rate of 17.3 percent.[12] The report acknowledges that shifts in commuting modes may be due to an increase in off-campus unaffiliated student housing as the average mileage driven by car has increased since the last report. Nearly one-third of trips are made by walking, more than trips made by vehicle (23.2 percent), and only second to public transit (39.9 percent). Only 8.8 percent of on-campus students have a personal vehicle on-campus, and 47.1 percent of those students drive once a week. The audit found that 49.6 percent of students and 74.8 percent of faculty utilize Temple parking lots.

Only 4.5 percent of trips are taken by bike. Respondents were asked "what scenarios would encourage them to bike as a typical community or bike more often." The most common responses were dedicated lanes, better road conditions, and more secure bike parking.

Yorktown Master Plan (2015)

Yorktown, bordered by the eastern end of the Cecil B. Moore Avenue study area, Broad Street, Girard Avenue, and 10th Street, characterizes itself as a community built on its historic roots of perseverance. Commissioned by the Yorktown Community Development Corporation (CDC), Yorktown's master plan incorporates the input of a large stakeholder group—Yorktown Plan Coordinating Committee—and roughly 260 residents. The plan provides recommendations building on the community's five goals to

1. Invest in archiving shared history;
2. Enhance its public image and online presence;
3. Empower future and current generations;
4. Encourage preservation and equitable development; and
5. Reinvest in public/green spaces and infrastructure.[13]

Leaning into its historic roots as a unique model of African American homeownership and refuge from real estate segregation, the community hopes to preserve itself from the growing pressures of rising rental prices and higher density development. The plan seeks to encourage future community involvement, and enhance community pride through a historic preservation overlay and investments in infrastructure/building condition improvements. Connecting the community, particularly aging residents, to financial resources can assist in the maintenance of private property and community spaces.

In a residential survey of sidewalk conditions, ranging from 'excellent' to 'very poor,' Cecil B. Moore Avenue is described in resident surveys to have 'excellent' sidewalk conditions aside from a stretch between 11th and 12th Streets rated 'fair.' It should be noted that the community's sole 'very poor' sidewalk is adjacent to the eastern end of the study area on 10th Street. 10th Street and Cecil B. Moore Avenue is also listed among key neighborhood gateways to improve. Respondents also reported on their primary means of transportation: 61 percent reported driving by car and one-third split evenly between walking and using transit.

[12] Temple University Transportation Survey Sustainability Audit Report (2019)
[13] Yorktown Master Plan (2015)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3 FRANKFORD TRANSPORTATION CENTER
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CECIL B. MOORE

EXISTING CONDITIONS

LAND USE • COMMUNITY DEMOGRAPHICS • TRAFFIC COUNTS • TRAFFIC MODELING • TRANSIT ANALYSIS

An assortment of data was collected to develop an understanding of the existing conditions along Cecil B. Moore Avenue, including land use, community demographics, traffic counts, and traffic conditions.

Land Use

Cecil B. Moore Avenue is lined with a wide variety of land uses. Due to its proximity to Temple University the majority of the eastern portion of the corridor is institutional, especially closer to Broad Street, with some commercial and residential land use closer to 10th Street. A mixture of commercial and institutional land uses line Cecil B. Moore Avenue west of Broad Street. Beyond the concentration of institutional and commercial uses, the surrounding area is largely residential. The parcel shown as undeveloped on the north side of Cecil B. Moore Avenue east of 12th Street has been developed with a CVS and student housing since 2015.

Figure 2: Land Use

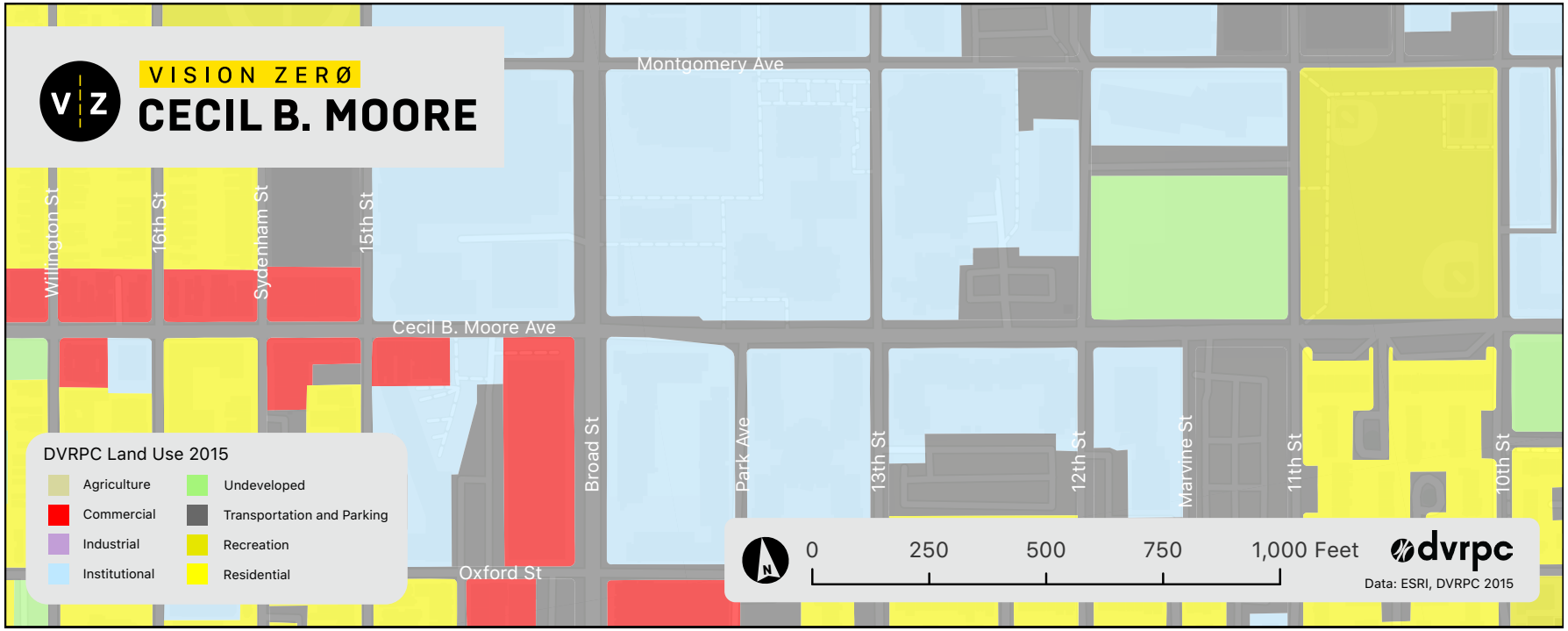


Figure 3: Indicators of Potential Disadvantage (IPD)

Community Demographics

While the center of the study area is largely institutional, it becomes increasingly residential and commercial at either end. Temple University's main campus, situated in the midst of the corridor, accommodates nearly 10,000 students. The extended study area shown in **Figure 4**, represents all census tracts located within a quarter-mile of the study area corridor. With over 22,000 residents (2019 ACS five-Year Estimates Data Profiles), the surrounding neighborhood is home to a blend of ages and racial backgrounds.

DVRPC's 2019 Indicators of Potential Disadvantage (IPD) generates an equity score to compare each demographic indicator against the city and region from Well Below Average (0) to Well Above Average (4). Racial Minority, Disabled Populations, Low Income, and Limited English Proficiency, listed in order of prevalence, were identified as indicators where at least one census tract scored above average or well above average compared to the region. Some of the IPD scores for the study area census tracts are shown in **Figure 3**. Seventy-three percent of residents identify as a racial minority, 48 percent of which identify as Black or African-American. Of residents that have stated they speak

Figure 4: Study Area Census Tracts

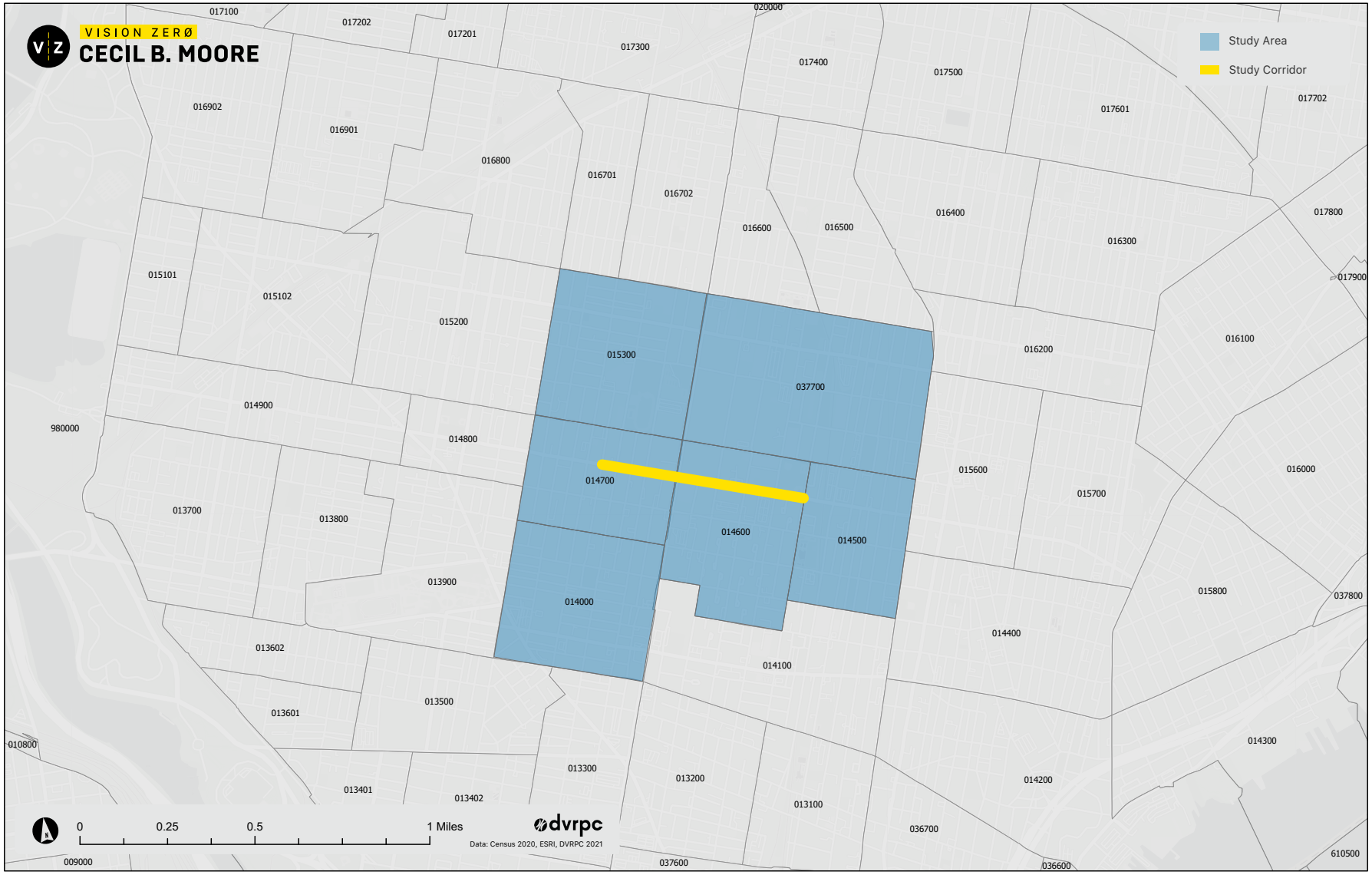
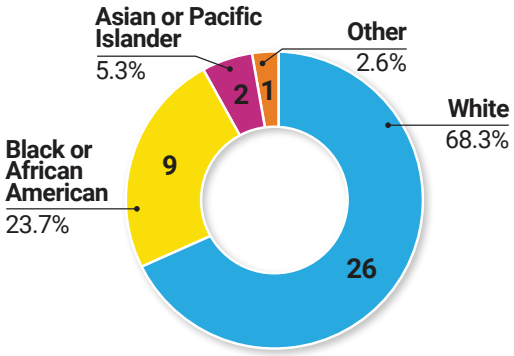


Figure 5: Survey Responses - Race



Source: DVRPC 2022

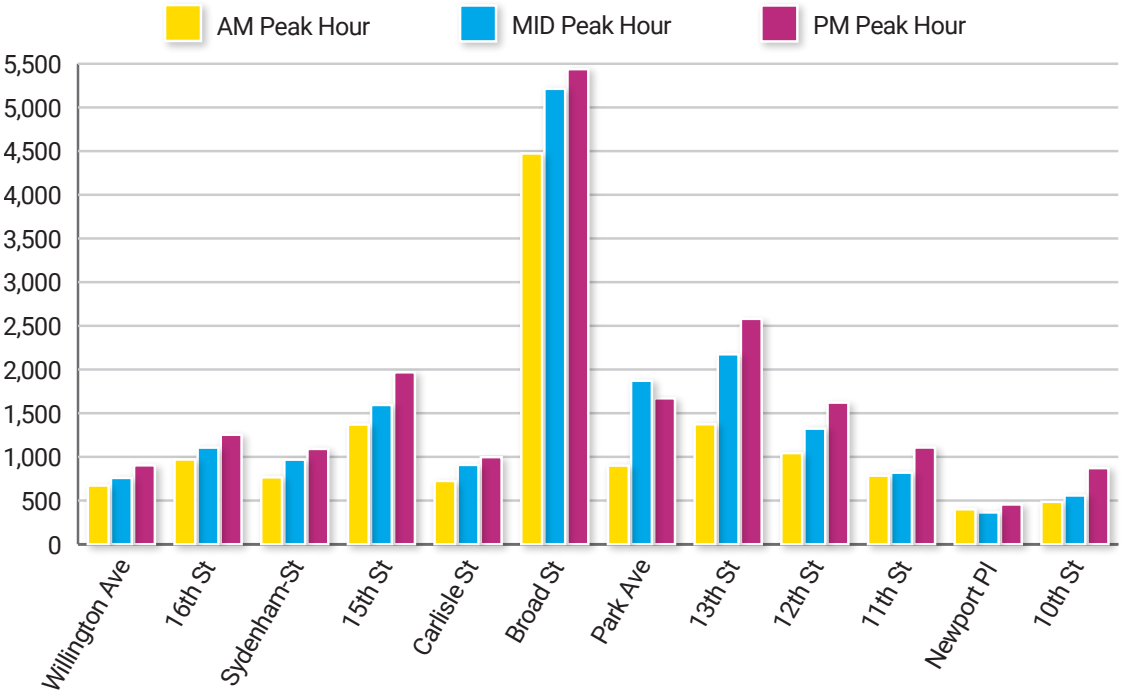
English less than "very well," 57 percent speak Spanish and 39 percent an Asian language (identified by the steering committee as being largely Chinese), accounting for 4 percent and 3 percent of the total population respectively. Compared to the City and the Region, census tract 145, located just east of 10th Street on Cecil B. Moore Avenue, has well above the average proportion of disabled residents, emphasizing a potential disparity.

When considering survey respondents who participated in the initial public outreach efforts for this study (detailed in the Public Outreach Chapter), 37 percent of respondents identified as Black or African-American, 33 percent identified as white, 5 percent responded as multiracial, and 4 percent identified as Asian or Pacific Islander (**Figure 5**). In-person respondents more closely match the IPD characteristics of the neighborhood, with 47 percent of respondents being Black or African-American and 25 percent being white, with little change between other groups. Sixty-five percent of total responses were collected in person or distributed as paper surveys, with the rest being online. Ten percent of survey respondents indicated having a disability. Respondents to the second round of surveying on the recommendations were less representative of the community than the initial round of surveying.

Traffic Counts

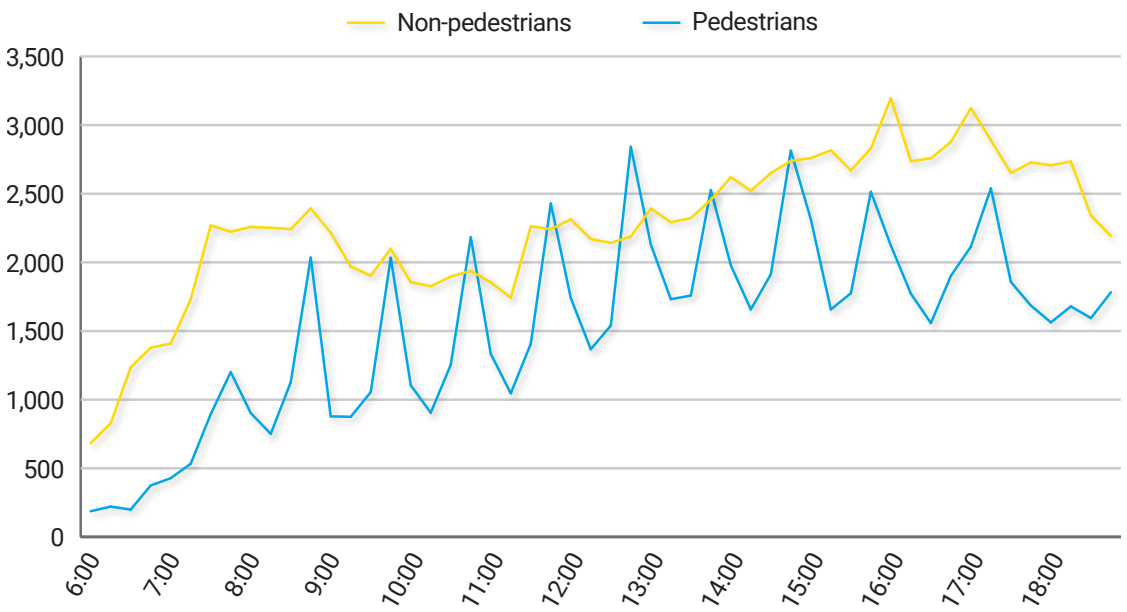
Manual turning movement counts (MTMCs) were conducted in September 2021 at 12 intersections along the study corridor on a typical weekday from 6:00 AM to 7:00 PM. These include vehicle, bicycle, and pedestrian volumes. Three peak hours (morning, midday, and evening) were determined to have the highest volume of users along the corridor:

Figure 6: Intersection Peak-Hour Volumes



Source: DVRPC 2022

Figure 7: Cecil B. Moore Avenue & Broad Street - Volumes by User



Source: DVRPC 2022

- Morning (AM) Peak Hour: 8:00 AM - 9:00 AM
- Midday (MID) Peak Hour: 12:45 PM - 1:45 PM
- Evening (PM) Peak Hour: 4:45 PM - 5:45 PM

Intersection Peak-Hour Volume

Figure 6 shows the intersection volumes including vehicles, bicycles, and pedestrians, at each of the peak hours. The busiest study intersection is Broad Street and Cecil B. Moore Avenue, with about three times the volume as the next busiest intersection during the AM peak hour and about twice the volume as the next busiest intersection during the MID and PM peak hours. Generally, every intersection was busier during the MID and PM peak hours than they were during the AM peak hours, with the exception of the Newport Place and Cecil B. Moore Avenue intersection, which saw similar volumes during all three peak hours.

Pedestrian Volumes

The Cecil B. Moore Avenue corridor has a high volume of pedestrians. Due to the location of Temple University, pedestrian volumes are highest during the MID peak hour at Broad Street, when the number of pedestrians exceeds other users. **Figure 7** shows the intersection volumes at Cecil B. Moore Avenue and Broad Street during a typical day in 15-minute intervals. The regular peaks in pedestrian volumes can be assumed to correspond with hourly class changes at Temple University.

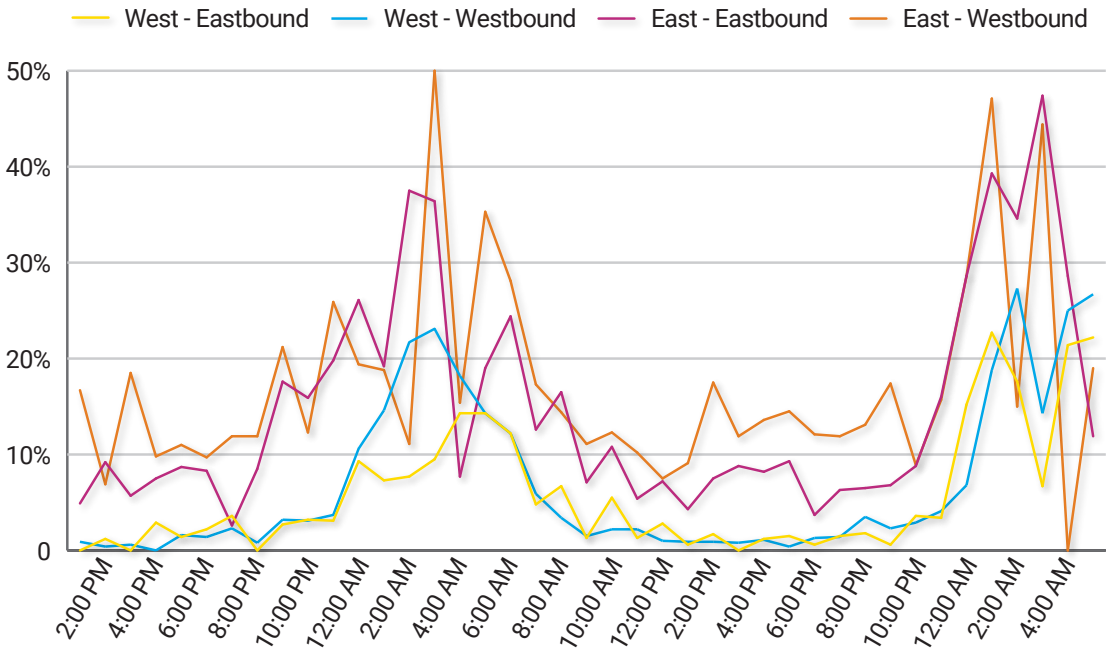
During some periods, pedestrian volumes exceed volumes of all other roadway users.

Vehicular Speeds

Automatic traffic recorders (ATRs) were placed along the corridor to record vehicular travel speeds on a typical weekday in September over a 24-hour period. One set of ATRs was placed on the west side of the corridor, between 16th Street and 15th Street, and one set of ATRs was placed on the east side of the corridor, between 12th Street and 11th Street. The project team identified when and where vehicles exceeded the 25 mph speed limit along the corridor. The team found that speeding was most frequent east of Broad Street, especially in the eastbound direction (although westbound was common as well). Speeding occurred throughout the day and night, including during peak hours. Travel speeds west of Broad Street were generally closer to the speed limit.

Speeding was most frequent east of Broad Street, especially in the eastbound direction.

Figure 8: Share of Vehicles Exceeding 25 mph West and East of Broad Street



Source: DVRPC 2022

Traffic Modeling

Trafficware's Synchro traffic analysis software was used to perform traffic analysis for all three peak hours. Synchro is a macroscopic analysis tool used to quantify traffic conditions, determine intersection capacity, and optimize signal timings. Synchro uses Highway Capacity Manual (HCM) procedures to evaluate intersection Level of Service (LOS) and delay. Analysis was performed at all 24 intersections along the study corridor. The study network was created using aerial photos and field measurement for geometric inputs, and traffic signal phasing for each intersection was based on traffic signal plans provided by the City of Philadelphia.

LOS

What LOS is: Level of Service (LOS) is a transportation engineering method used to quantify motor vehicle traffic conditions. The Highway Capacity Manual uses letter grades, "A" through "F," to describe vehicle congestion and average delay (in seconds) by turning movement, intersection approach, or entire intersections, as shown in **Table 1**.

Agencies often base transportation and development decisions on their impact on LOS, with the intention of maintaining or improving the quality of life for residents and users of the local road network. However, traditional LOS does not paint the entire picture of mobility.

What LOS is not: Although it uses letter grades, LOS results should not be read like a report card. The goal in traffic operations is not to achieve an LOS of A, but to create conditions that maintain stable traffic flow that is typically achieved within the LOS range of A to C. An entire network of intersections with LOS of A during peak hours often points to a system designed for more capacity than necessary. The customary LOS for urban collectors is D, according to the American Association of State Highway and Transportation Officials (AASHTO) Green Book.

The bigger picture: Focusing solely on LOS centers the conversation around vehicle congestion, without considering relationships and conflicts with other modes and skewing recommendations away from designs that create truly complete streets. Transportation improvement projects should prioritize the movement of people and goods, not just the movement of vehicles.

A variety of methods exist for calculating an LOS-like measure for other modes, such as bikes, pedestrians, and transit, and for calculating combined Multimodal LOS (MMLOS) measures. However, it is difficult to quantify the quality of service for non-motorized modes, since the comfort, convenience, and safety of walking, biking, and using transit is often more subjective. Many of these methods require copious amounts of data that may not be reliably available or are not trusted to result in an apples-to-apples comparison between modes.

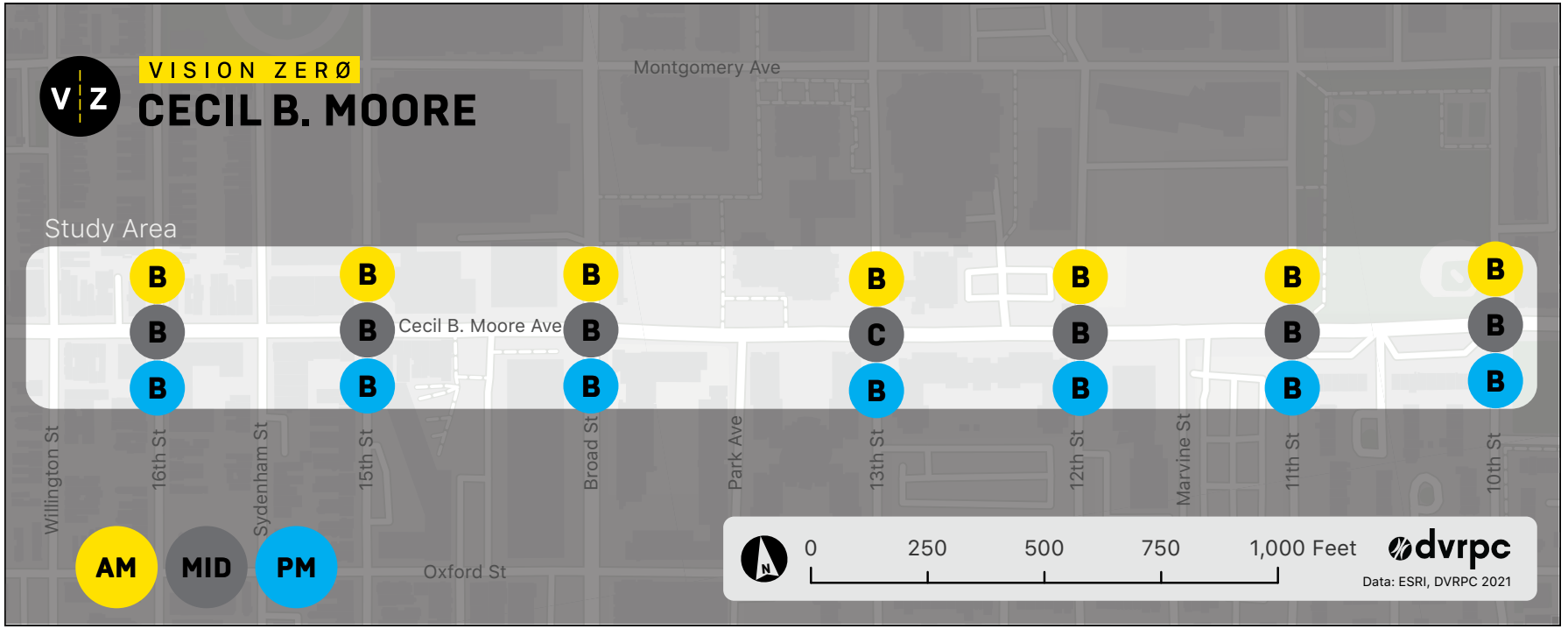
While this report will provide LOS results, it will also present ideas to support mobility for all road users. LOS should be considered as an important part of a larger picture of mobility.

Table 1: Levels of Service (LOS)

SIGNALIZED INTERSECTIONS		UNSIGNALIZED INTERSECTIONS		INTERPRETATION
LOS	DELAY (S)	LOS	DELAY (S)	
A	≤10	a	≤10	Free flow
B	>10-20	b	>10-15	Reasonably free flow
C	>20-35	c	>15-25	Stable flow
D	>35-55	d	>25-35	Approaching unstable flow
E	>`55-80	e	>35-50	Unstable flow
F	>80	f	>50	Forced or breakdown flow

Source: Highway Capacity Manual

Figure 9: Levels of Service (LOS): Existing Conditions



Existing Conditions

The MTMCs were entered into Synchro for the AM and PM peak hours to evaluate the existing conditions. LOS was used as the primary performance indicator at signalized intersections. Average delay per vehicle is the basis for LOS, with a letter grade of A through F assigned based on the traffic model output.

Results

The existing peak-hour performance of study intersections is largely stable and predictable, confirmed by traffic model results. The intersection LOS for each intersection in the study area under the existing conditions are shown in **Figure 9**. All synchro reports can be found in **Appendix A**.

The corridor directly served approximately

4,800 transit riders per day in 2019.

Source: City of Philadelphia

Transit Analysis

The Cecil B. Moore Avenue transit corridor runs along Cecil B Moore Avenue between 17th Street and 9th Street. The corridor serves Route 3. There are 17 total bus stops along the corridor. The corridor directly served approximately 4,800 riders per day in 2019. The peak hour for transit passenger movement on the corridor is 3 PM. At the peak hour, the corridor serves approximately 480 riders. At all times of day, Route 3 runs at slower speeds than the system average, and particularly at midday (at noon the system average is about 11.6 mph while Route 3 is about 7.5 mph).[14]

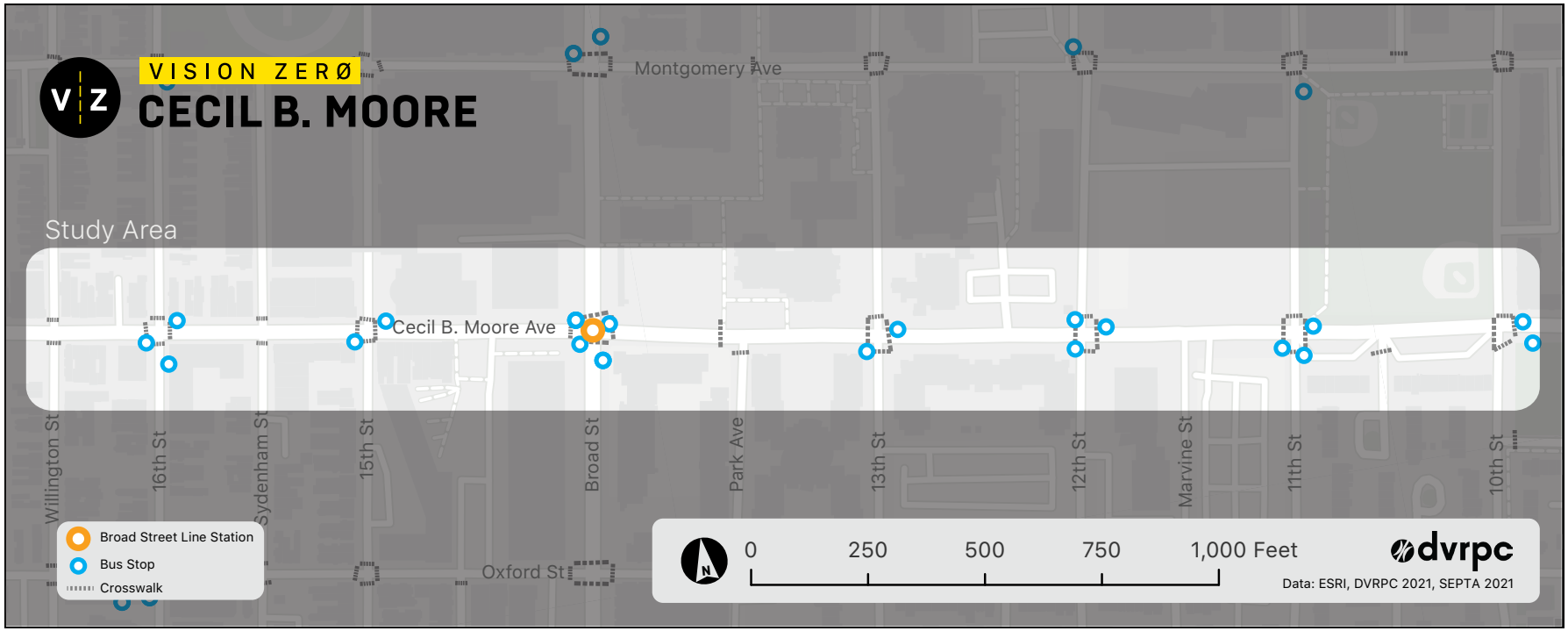
The subcorridor from 17th Street to Broad Street accounts for the lowest speeds along Route 3, with average speeds below 5 mph in the late afternoon. The subcorridor from 13th Street to 9th Street experiences average travel speeds that are higher than the corridor overall and are close to the system average. Route 3 passenger activity (boardings and alightings) is greatest at Broad Street, followed by 15th Street.

In addition to Route 3, the study area is crossed by Routes 16 (at Broad Street), Route 2 (at 16th and 17th Streets), Route 23 (at 11th and 12th Streets), and Route 4 (also at Broad Street). Taking into account these routes, Broad Street remains the location with the most bus passenger activity, but 12th and 11th Streets see more passenger activity than 15th Street. There is also a subway stop at Broad Street and Cecil B. Moore Avenue. While this was treated as an important pedestrian trip generator, transit service on the subway was not evaluated as a part of

SEPTA Route 3 Bus
Source: DVRPC

[14] SEPTA Automated Passenger Count Data (Spring 2019), City of Philadelphia.

Figure 10: Study Area Crosswalks and Transit Stops



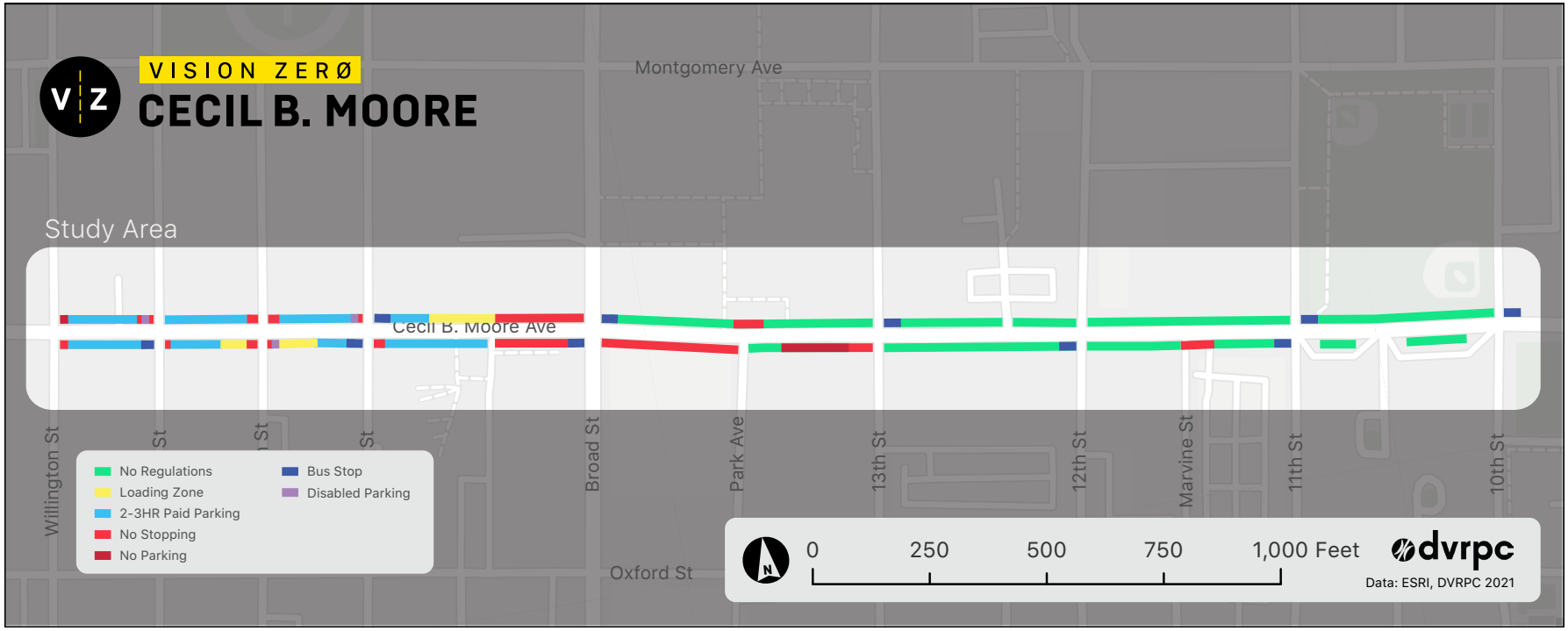
this project. A map of the study area transit stops is shown in **Figure 10**.

On-Street Parking

Cecil B. Moore Avenue currently provides parallel on-street parking on both sides throughout most of the study area. West of Broad Street, most of the parking is 2- or 3-hour paid parking, while there are fewer regulations along Cecil B. Moore east of Broad Street.

Illegal double-parking and parking within the median or center turn lane were observed regularly. While the main goal of the study was to improve safety for all users, it was a priority to stakeholders and the public to maintain as much on-street parking as possible. A map of the current on-street parking regulations is shown in **Figure 11**.

Figure 11: Current On-Street Parking Regulations



VISION ZERØ

CECIL B. MOORE

CRASH ANALYSIS

CRASH TRENDS • ROAD SAFETY AUDIT

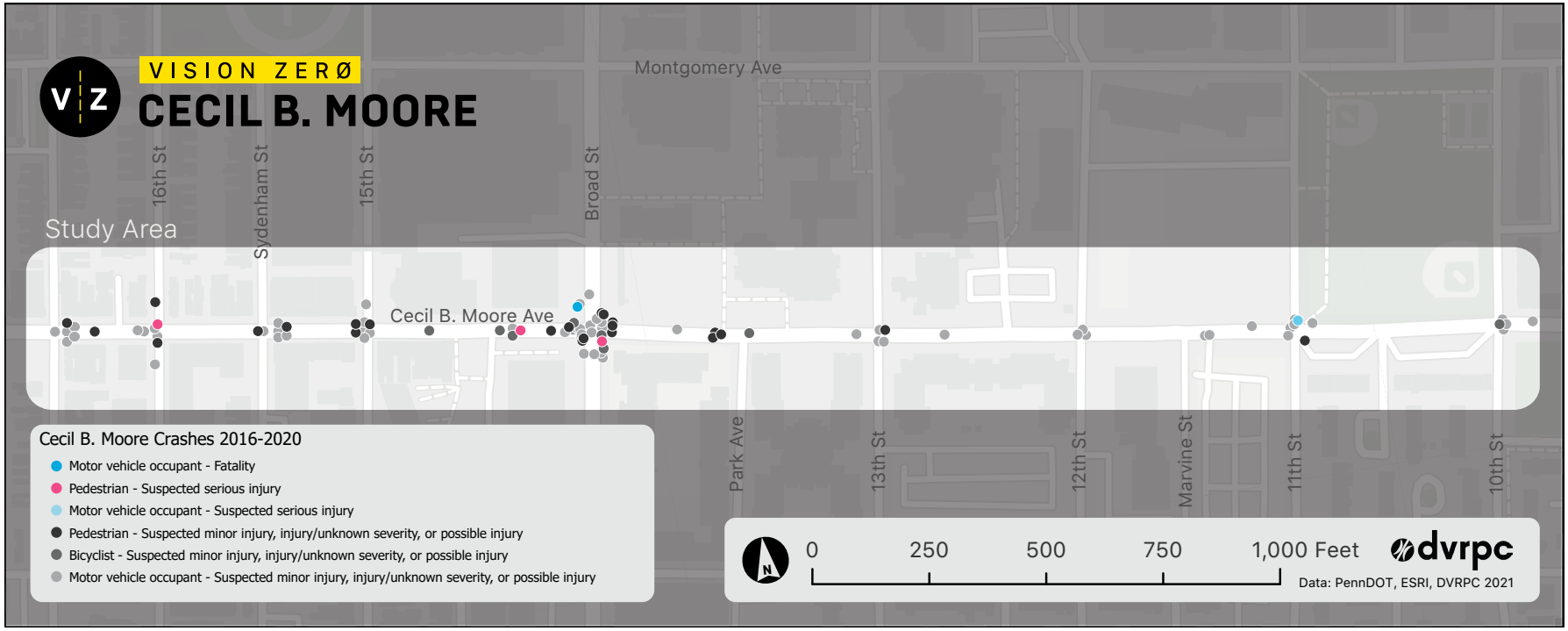
A robust crash analysis was central to developing the recommendations and concept design presented in this study. Studying crash data revealed a number of key concerns, including the high rate of hit pedestrian and hit bicyclist crashes west of Broad Street, red light running and higher speed crashes east of Broad Street, and the number and severity of crashes that occurred at the intersection of Broad Street and Cecil B. Moore Avenue.

Crash Trends

The crash analysis was limited to injury and fatal crashes along Cecil B. Moore Avenue between 10th Street and Willington Street, using PennDOT crash data. There were 96 reported injury and fatal crashes resulting in 118 injured people between 2016 and 2020, these are mapped as **Figure 12**.

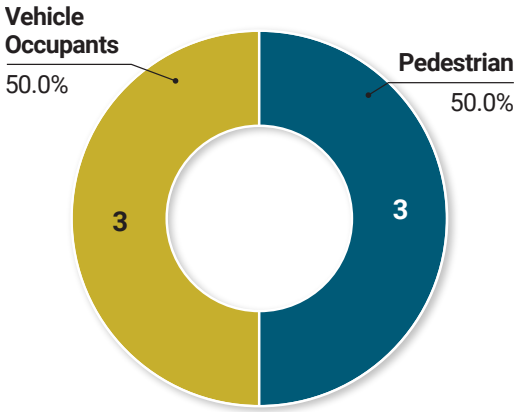
There were three pedestrian serious injuries, two vehicle occupant serious injuries, and one vehicle occupant fatality for a total

Figure 12: Study Area Crashes



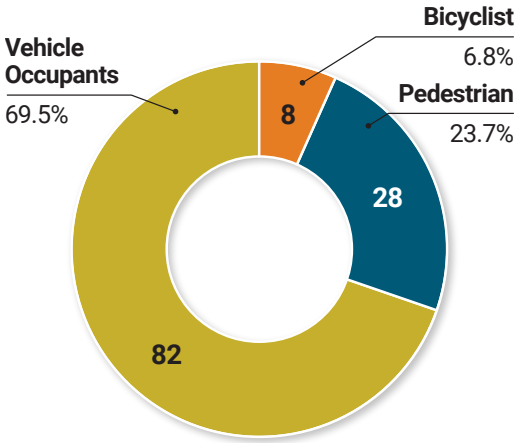
of six killed or severe injury (KSI) crashes. Pedestrians accounted for 50 percent of KSI crashes on the corridor (**Figure 13**), despite making up only 23 percent of all injury crashes (**Figure 14**).

Figure 13: KSI Crashes



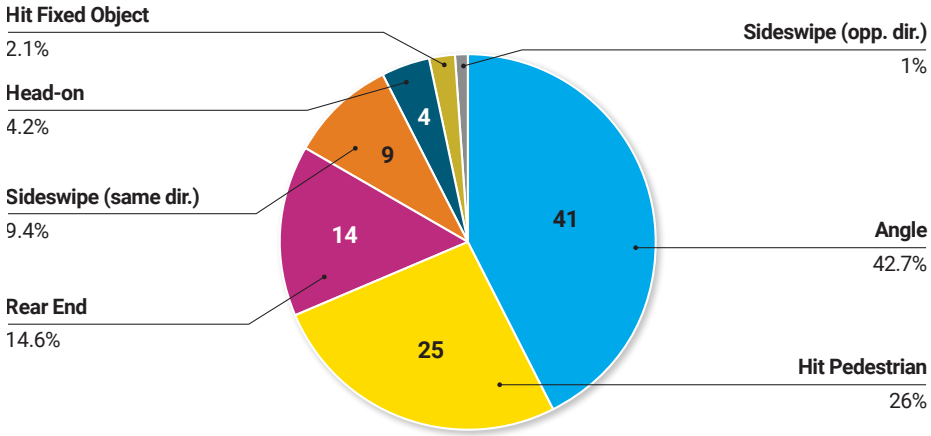
Source: DVRPC 2022

Figure 14: All Injury Crashes



Source: DVRPC 2022

Figure 15: Crash Types



Source: DVRPC 2022

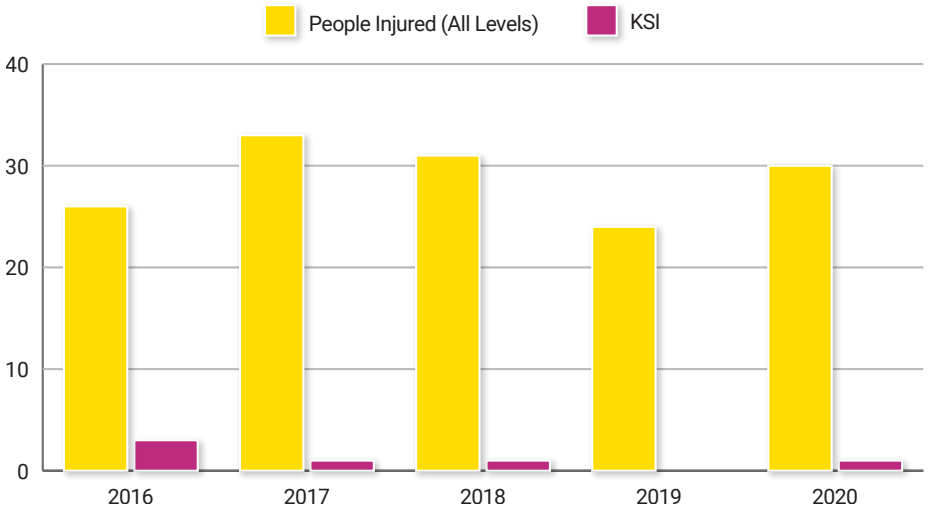
Angle crashes were the most common crash type, making up 43 percent of all injury crashes. Hit pedestrian (26 percent), rear-end (15 percent), and same direction sideswipe (9 percent) crashes were the next most common types (**Figure 15**). These crash trends differ on each side of Broad Street.

Pedestrians accounted for 50 percent of KSI crashes on the corridor.

The year-over-year crash trend has held relatively steady with approximately thirty injuries and one KSI per year. Citywide, 2020 tended to be an outlier with abnormally low volumes and elevated serious crashes. This corridor experienced a similar number of injuries to 2016–2018 in 2020 (but higher than 2019), which suggests that the crash rate (relative to traffic counts) was actually higher than normal. 2021 data is needed to see if this increasing crash rate trend continued. The annual crash trends are shown in **Figure 16**.

The study team also investigated factors like illumination level, time of day, and weather conditions to look for over-representations. Overall, injury crashes occurred at a relatively

Figure 16: Crash Trends



Source: DVRPC 2022

expected distribution among these factors. KSI crashes were slightly overrepresented at night, but with only six crashes in the dataset, there is not enough data to infer a pattern.

East of Broad Street

Crashes along the corridor east of Broad Street have a different pattern than crashes west of Broad Street. These crashes, which involve fewer pedestrians and cyclists than those west of Broad Street, mostly occur at the four-leg intersections, with few crashes at mid-block locations. The exception to this pattern is the three-leg intersection at Park Avenue, a one-way street heading south. This intersection, with an uncontrolled pedestrian crossing over Cecil B. Moore Avenue, had the most pedestrian crashes east of Broad Street.

Angle crashes between vehicles were most common at 10th, 11th, 12th, and 13th Streets, the four-leg signalized intersections along the corridor. The greatest number of injury crashes at the intersections east of Broad Street occurred at 11th Street, with nine injury crashes that include a KSI crash and hit pedestrian crash. The northbound Route 23 bus stop at 11th Street is the bus stop along the corridor east of Broad Street with the second-highest ridership, after the southbound Route 23 bus stop at 12th Street.

Most angle crashes at the four-leg signalized intersections east of Broad Street involved through-moving vehicles, not turning vehicles. This information suggests that many of these crashes involved red light running, whether they were coded as such or not. Of the nine (out of sixteen) angle crashes that were coded as red light running, five had the driver on Cecil B. Moore Avenue as the likely red light runner.

Many of the crashes east of Broad Street,
involved red light running.

West of Broad Street

Crashes along the corridor west of Broad Street involved more pedestrians and bicyclists, unlike crashes east of Broad Street. Also, these crashes were more likely to occur at mid-block or unsignalized locations than those east of Broad Street.

There were four bicyclist crashes and a serious injury pedestrian crash between 2016 and 2020 on the corridor between Broad Street and 15th Street, the longest

uninterrupted block west of Broad Street. Of the four bicyclist crashes, two involved a sideswiping driver and two involved drivers turning out of one of the two driveways along the block.

The intersections at 15th and 16th Streets are both signalized, with 15th Street experiencing greater vehicle volumes and hosting higher ridership bus stops. Hit pedestrian crashes at 15th Street typically involved through-movement vehicles on Cecil B. Moore Avenue. Angle crashes, including two crashes from red light running and two from conflicts between through and turning vehicles traveling south on 15th Street (including at least one example of overtaking), were also common at this intersection. Injury crashes at 16th Street mostly involved through-moving vehicles traveling north on 16th Street. There were three red light running crashes, including one that resulted in a serious pedestrian injury.

The intersections at Sydenham and Willington Streets are not signalized and only have stop signs on the minor streets. Almost all angle crashes, the most common collision type at these intersections, involved through-moving vehicles. Several hit pedestrian crashes that involved pedestrians crossing Cecil B. Moore Avenue occurred between 2016 and 2020.

Broad Street and Cecil B. Moore Avenue

The intersection of Broad Street and Cecil B. Moore had 31 injury crashes, the most along the corridor. This intersection, with the highest transit ridership, vehicle volumes, and pedestrian volumes, is the most active intersection along the corridor. Pedestrian volumes are notably high and even surpass vehicle volumes at midday.

Hit pedestrian and rear-end crashes were most common at this intersection, unlike the rest of the corridor where rear-end injury crashes are uncommon. Turning vehicles, including illegal left turns, are a significant factor in the hit pedestrian crashes at this location. The bus stop on the southwest corner of the intersection is a significant hit pedestrian hot spot.

Road Safety Audit

A Road Safety Audit (RSA) is the qualitative examination of a road that identifies potential safety issues and opportunities for improvement. RSAs are approached as a multidisciplinary effort and consider the safety and needs of all road users. The project team conducted an RSA with several members from the stakeholder group on November 5, 2021. Following Federal Highway Administration (FHWA) guidance, observations from the Cecil B. Moore

Turning vehicles, including illegal left turns, are a significant factor

in the hit pedestrian crashes at Cecil B. Moore Avenue and Broad Street.

Source: PennDOT

Avenue audit were grouped into one of three categories:

1. Operations, Interactions, and Behaviors;
2. Physical Environment and Infrastructure; and
3. Traffic Control Devices.

These categories are reflected in the sections below.

Operations, Interactions, and Behaviors

Most of the negative observed behaviors along the corridor east of Broad Street relate to driver parking behaviors. Illegal parking and loading between Broad Street and 13th Street, in front of the student residence at

1300 Cecil B. Moore Avenue, and at Morgan Hall disrupt the eastbound bike lane. Illegal and double-parking occurs in areas that block fire hydrants, center turn/median lanes, and crosswalks. The double-parking issue between Park Avenue and 13th Street is heightened during Temple University's student move-in days. During the RSA, a Temple police car was parked in the median near 13th Street and a Temple-branded vehicle was driving on the sidewalk at 13th Street during the audit. Further east, southbound right turning drivers at 12th Street make crossing dangerous for pedestrians by hugging the curb. 13th Street north of Cecil B. Moore Avenue closes periodically for student events, so an eastbound left turn lane may not be necessary at that intersection. A crossing guard is present in the morning for the elementary school at 12th Street.

Mid-block pedestrian crossings are more frequent along the corridor west of Broad Street. Cars sometimes block the crosswalk and bus facility at the southeast corner of 16th Street. There is also a "no parking on school days" sign that drivers frequently ignore, which further serves to block SEPTA's Route 2 bus.

Most observed behaviors at the Broad Street and Cecil B. Moore Avenue intersection were driver behaviors that disrupted traffic flow, such as illegally turning left or loading vehicles outside of loading zones, or had the potential to endanger pedestrians and cyclists, such as illegally parking at corners or hugging the curb when taking right turns into pedestrian crossing zones. Also, westbound SEPTA buses at the bus stop would sometimes "fight" with cars in the right turn lane to merge back into traffic. Pedestrians sometimes cross mid-block just west of Broad, and a loading vehicle on southbound

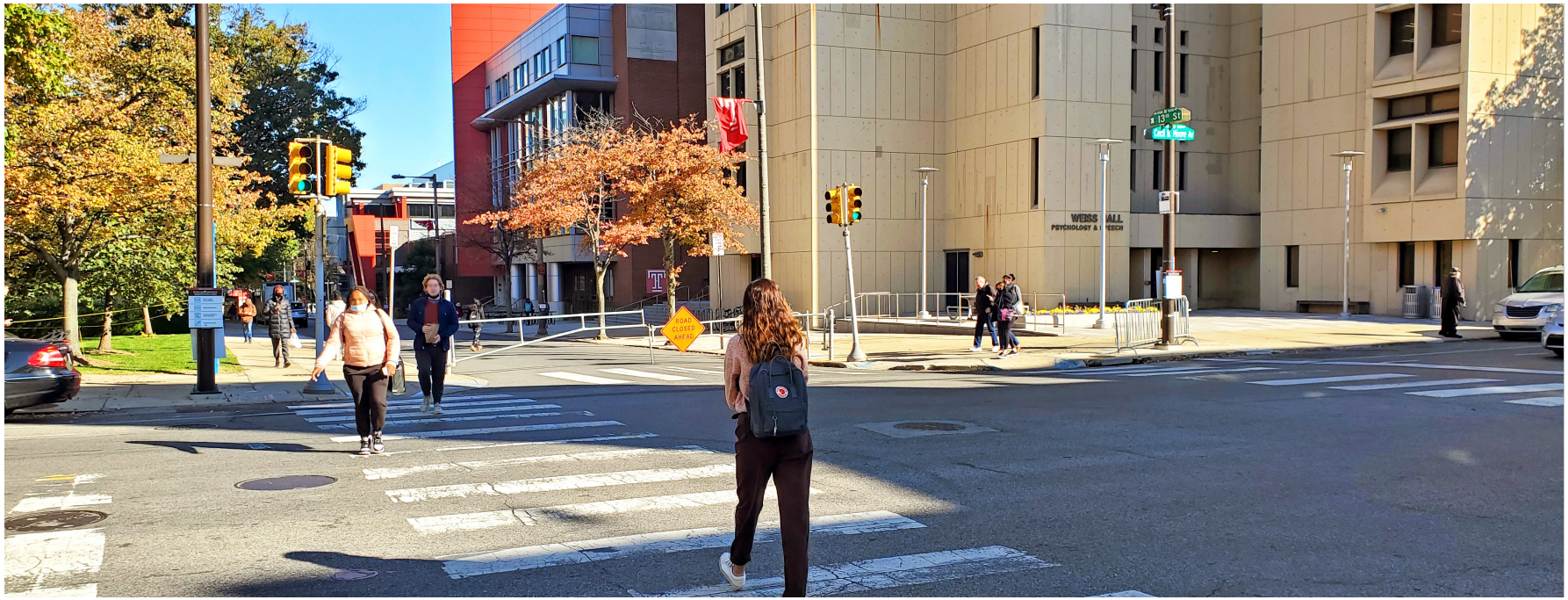
Road Safety Audit
Source: DVRPC

Broad caused queuing of pedestrians into the crosswalk.

Physical Environment and Infrastructure

Pedestrian conditions on Cecil B. Moore Avenue east of Broad Street are diminished by uneven sidewalks, worn crosswalks, and curb ramps that lead into intersections rather than crosswalks despite some parts of the corridor benefiting from newer sidewalks due to development. The street has-tree pitting issues, where overgrown roots have destroyed sidewalk, and signals obstructed by foliage at 11th Street, poor lighting conditions east of 11th Street, uncovered screws presenting a tripping hazard at the northeast corner of 13th Street, a sidewalk that is 8' instead of the Complete Streets Standard of 12' outside of the student residence Temple Towers on 12th Street, and worn out bike lanes at 13th Street. Pedestrians need to step into the street to see if the bus is coming at 11th Street due to the lack of a bus zone. Pedestrians crossing 10th Street on the south side of Cecil B. Moore Avenue must step into the road to get to the crosswalk due to poor crosswalk alignment and new green stormwater infrastructure (GSI). The GSI island at the southwest corner of Cecil B. Moore Avenue and 10th Street was constructed along the natural pedestrian path.

Cecil B. Moore Avenue narrows from 60 feet east of Broad Street to 34 feet west of Broad Street, which may contribute to traffic



Cecil B. Moore Avenue and 13th Street
Source: DVRPC

congestion and have impacts on the use of roadway space. Also, the Liacouras Parking Garage empties onto 15th Street, which directs heavy one-way traffic south onto Cecil B. Moore Avenue during rush hour and events. This creates stressful and dangerous conditions for pedestrians and cyclists. West of Broad Street, Cecil B. Moore Avenue also has faded or nonexistent crosswalks, nonexistent curb ramps or curb ramps that were not flush with the road or have no stop control, potholes, a lack of street lighting west of 16th Street, a stop sign obstructed by a light pole at Willington Street, and trash that narrows sidewalk space considerably along the southern side of the street around 15th Street.

The Broad Street and Cecil B. Moore Avenue intersection has faded crosswalks on its western side, loud noises that could impact the clarity of audible pedestrian countdowns, and a poorly-aligned westbound bus stop that needs to be improved. The temporary construction that narrowed the sidewalk just west of Broad Street disrupts pedestrian traffic flow.

Traffic Control Devices

There are no pedestrian signals despite heavy pedestrian volumes along the corridor east of Broad Street, especially around 13th Street. According to Philadelphia's Streets Department, the intersection at 11th Street is wide enough to include pedestrian signals. Loading vehicles blocked the pedestal-mounted rectangular rapid-flashing beacon (RRFB) at Park Avenue, which was also not operating during the observations.

There are no pedestrian signals along the corridor west of Broad Street. Also, there is no stop sign or other traffic control on the corridor at Sydenham Street, leading to concerns about traffic control at that intersection.

At Broad Street and Cecil B. Moore Avenue, the pedestrian crossing phase was too short for the distance to cross Broad Street despite the recent addition of a pedestrian island on the south side.

There are no pedestrian signals outside of Broad Street,

despite heavy pedestrian volumes along the corridor.

VISION ZERØ
CECIL B. MOORE

PUBLIC OUTREACH

COMMUNITY OUTREACH COMMITTEE • COMMUNITY ENGAGEMENT RESULTS • RECOMMENDATIONS SURVEYING

Gathering feedback from the public was a primary goal of the Vision Zero: Cecil B. Moore project. It was important to collect feedback on perceptions of safety and mobility prior to developing recommendations, and to collect reactions to the draft recommendations.

Community Outreach Committee

In order to best reach residents, business owners, students, and other members of the public with a stake in Cecil B. Moore Avenue, a special community outreach committee was formed to advise the project team on the public engagement strategy. Members of the community outreach committee included representatives from:

- Asociación Puertorriqueños en Marcha (APM);
- Beech Community Services;
- DVRPC Public Participation Task Force;
- North Central Empowerment Zone;
- Office of Council President Darrell Clarke;
- Temple Student Government;
- Temple, Office of Community Affairs;
- Temple, Office of Sustainability;
- Yorktown Community Development Corporation;
- Yorktown Community Organization;
- Local Business Owners; and
- Local Residents.

This group met twice during the study period. The first meeting was devoted to introducing the group to the project and gathering feedback on the best methods for performing community outreach in the study area. Suggestions included accessing local media outlets, locations for intercept surveying, and using both virtual and in-person flyering to get information to the community. This feedback was incorporated into the community outreach strategy for the project.

Following the initial survey period, the community outreach committee was reconvened to discuss the results and endorse the project priorities and goals that were derived from the survey. The group also assisted with promoting the final public open house event and the survey to gather feedback on the recommendations.

Community Engagement Results

The study team deployed a number of strategies to gather feedback from the community for this project. Additional feedback was gathered through focus group-type discussions with community leaders and informal conversations. Outreach materials can be found in **Appendix B**.

Over 190 surveys

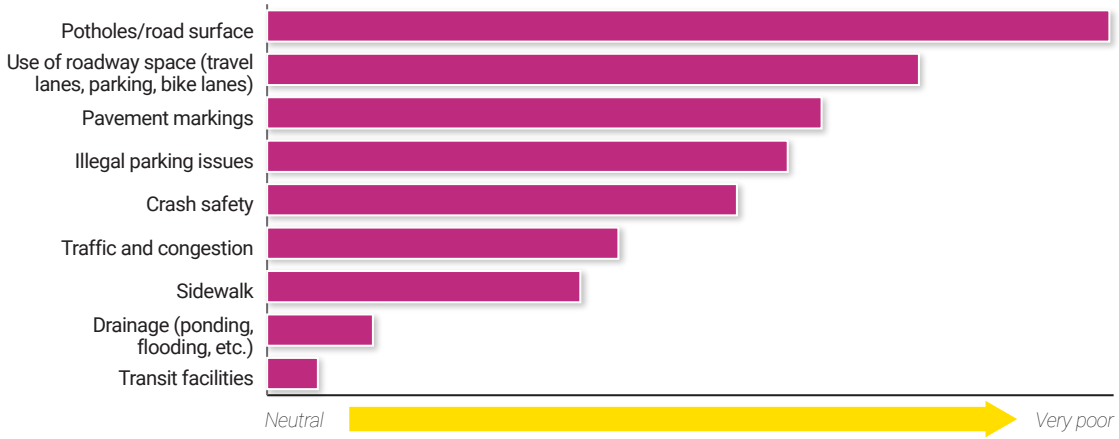
were collected from community members.

To reach a representative sample of the neighborhood, surveys were conducted and distributed through several different means. An online survey and web map was created, which was advertised for eight weeks through Facebook and Instagram ads targeted to residents of zip codes 19121 and 19122. In total, over 3,000 postcards were mailed to residents in the study area, which contained

Survey Poster
Source: DVRPC

project information and a link to the survey. Thirty posters with survey information were posted throughout the corridor. The study team identified and reached out to over 20 local organizations to share the survey, as well as offer paper surveys for drop off/ pick up. Face-to-face intercept surveys were conducted at two locations during a Wednesday in mid-November, one to the east of Broad Street, and one to the west. Each

Figure 17: Survey Responses - Conditions Rating



Source: DVRPC 2022

location was staffed by three volunteers over a five hour period.

In total, 196 surveys were collected. 128 of them were paper surveys, and 68 were received through the online survey. Additionally, there were 51 “pins” placed on the web map from 27 distinct users. Nearly 60 percent of respondents resided in the study area (defined as zip codes 19121 and 19122). Thirty-seven percent of respondents self-reported their race as Black or African-American, 33 percent reported White, and 17 percent did not report a race (the remainder was divided between multiracial, Asian or Pacific Islander, American Indian, Native American, or Alaska Native and Other). Seven percent of respondents identified as Hispanic or Latino. Other noteworthy demographics include 44 percent of respondents between the ages of 18 and 34, 10 percent reported having a disability that requires a mobility device such as a cane, walker, scooter, or wheelchair, and a skew toward more female respondents than male.

Walking was the most common way respondents reported traveling along the corridor, followed by driving alone and driving with others. One quarter of respondents use a bicycle and the same percentage use transit. Among respondents, the corridor is overwhelmingly used for shopping, socializing, and commuting to work or

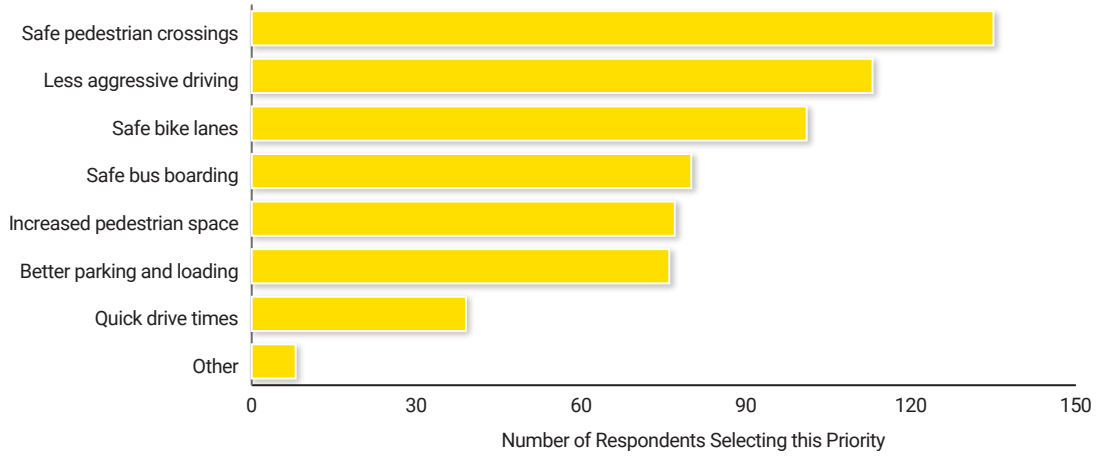
school. Complete results from the survey are provided in **Appendix B**.

Respondents rated conditions on the corridor negatively in the aggregate, with potholes being the most negative, and transit facilities being the closest to neutral. **Figure 17** shows the sum of all condition rankings across categories, but the major takeaway is that road conditions and use of the cartway are the areas that scored the lowest.

Respondents listed safe pedestrian crossings as a priority more than any other option on the survey, as shown in **Figure 18**. Less aggressive driving and safe bike lanes were the second and third most popular choices, respectively. Safe bus boardings, increased pedestrian space, and better parking and loading were also popular, gathering about the same number of responses. Quick drive times was the least popular option as a top priority for the project. People that selected "Other" were most commonly interested in addressing potholes, but street trees were also mentioned.

Survey respondents were also asked two questions with long form answers. The responses to those questions are summarized below.

Figure 18: Survey Responses - Priorities



Source: DVRPC 2022

How would you like to travel the corridor and what keeps you from traveling that way?

The most common factor limiting travel in the respondent's desired mode was traffic stress. Most of those who responded with a travel mode they wanted to do more of reported wanting to bike or skate more. The reasons reported for not doing so could be summarized by a fear of personal safety with

Intercept Surveying
Source: DVRPC

regard to other traffic. Narrow streets and a lack of adequate bike infrastructure force cyclists to share the road with vehicle traffic and aggressive drivers. Double-parking in dedicated bike lanes, such as between Broad Street and 11th Street, means that cyclists must again reckon with vehicle traffic outside the bike lane.

Respondents also reported personal safety concerns including a lack of lighting, poor waste management, and a fear of crime and gun violence. For pedestrians especially, poor quality sidewalks and crossings and aggressive driving made walking in the area feel unsafe. Respondents also commented on disruptive construction that often failed to provide adequate pedestrian alternatives.

The most common factor limiting travel in the respondent's desired mode was traffic stress.

Some respondents want to use public transportation more, but found that a lack of reliability, route access, and amenities (bus shelters, benches, etc.) limited their desire to use transit.

How do you think safety along Cecil B. Moore Avenue could be improved?

Many respondents identified a desire for the corridor to prioritize pedestrian, cyclist, and public transportation modes over cars. Comments identified the potential to remove lanes of traffic, unused center lanes, and/or some street parking to make room for bus loading zones and priority lanes, bike lanes, and wider sidewalks. Respondents had conflicting opinions about parking along Cecil B. Moore Avenue. Drivers often requested more parking, but others suggested removing parking and replacing them with other street amenities. Additionally, respondents had conflicting perceptions of the use of travel lanes and road space. Drivers and some cyclists reported that traffic lanes were too narrow, and others, primarily those with a pedestrian or safety focus, reported that travel lanes were too wide.

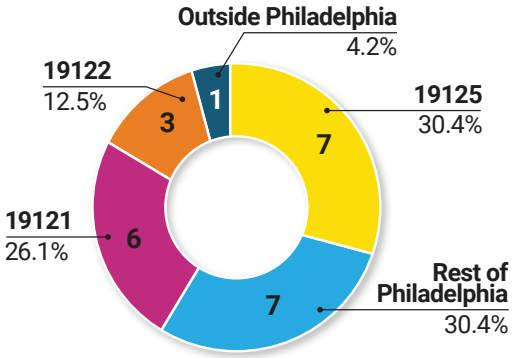
An overwhelming majority of responses cited street maintenance (fixing potholes, updated signage, clearer road markings, etc.) as a needed improvement. Policing was another frequently suggested improvement. This included traffic policing (illegal parking enforcement, red light and speeding cameras, etc.) and crime policing (of gun violence, drug crimes, loitering, and curfews). Related suggestions include enhanced lighting, improved waste management, and the desire to make the Cecil B. Moore Avenue corridor more family friendly.

Recommendations Surveying
Source: DVRPC

Recommendations Surveying

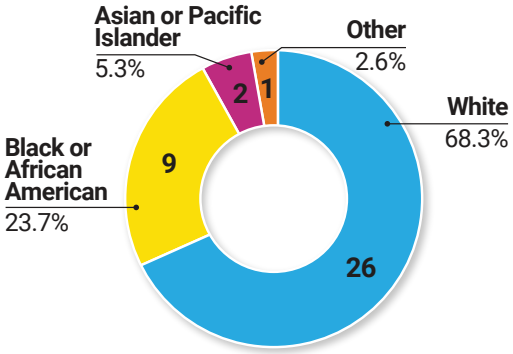
To receive feedback on the proposed recommendations, surveys were conducted and distributed through two different means. In-person surveys were conducted at a community engagement event on a Tuesday in mid-June outside Beech International Village at Cecil B. Moore Avenue

Figure 19: Survey Responses - Zip Code



Source: DVRPC 2022

Figure 20: Survey Responses - Race



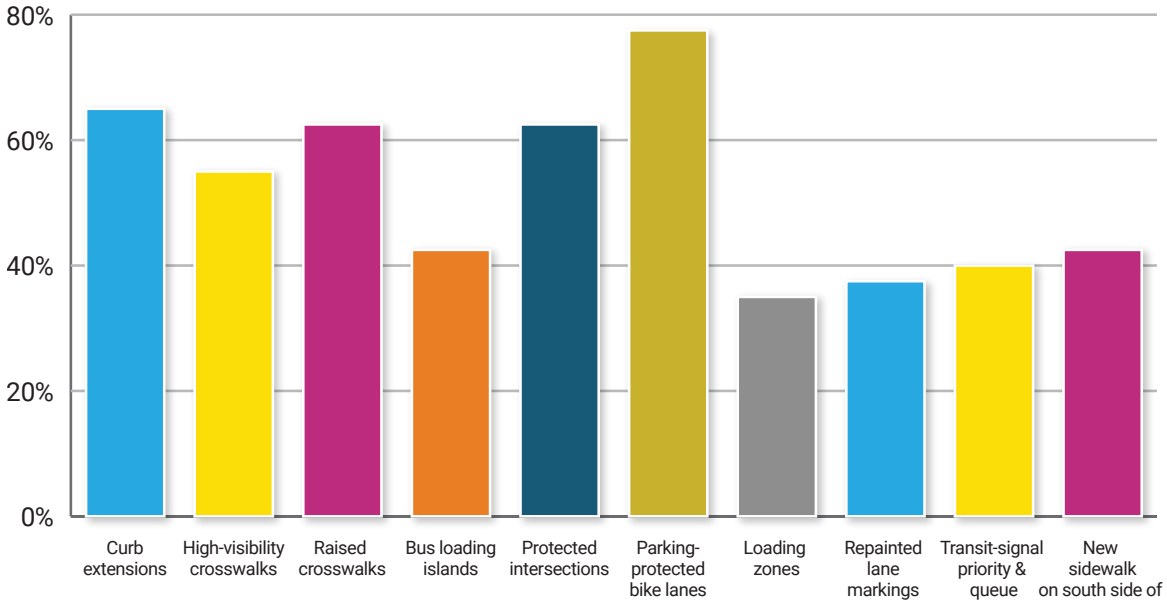
Source: DVRPC 2022

and Sydenham Street. To advertise the event, flyers were distributed to neighbors' homes and about 30 flyers were posted throughout the corridor the week before the event; advertisements were placed in local newspapers and on DVRPC's social media pages on Facebook, Instagram, and Twitter; and staff went on a local radio station to discuss the project, which also ran a spot advertising the event. The event was staffed by ten people and hosted information about the project, proposed recommendations, and included members from other city agencies such as the Free Library, the Office of Transportation Infrastructure and Sustainability (OTIS), and SEPTA. Online surveys were available for about two weeks, opening the day after the community engagement event and closing at the end of June. Thirteen respondents completed in-person surveys and 27 respondents completed online surveys for a total of 40 respondents.

Respondents to the recommendations survey were significantly less representative of the study area than the initial community engagement survey. While just 60 percent of respondents reported a zip code, among those that did, only 40 percent reported 19121 and 19122, the remainder were from other parts of Philadelphia (few lived outside of Philadelphia), as shown in **Figure 19**. Nearly all (95 percent) respondents identified their race, with 68 percent of respondents identifying as White, 24 percent as Black, 5.3 percent as Asian or Pacific Islander, and 2.6 percent as some other race (**Figure 20**). Most respondents (93 percent) identified an ethnicity; of these, only 3 percent identified as being of Spanish/Hispanic/Latino origin.

The survey results were also skewed toward younger respondents: half were between 18 and 34 years only and another third between 35 and 44 years old. Respondents were disproportionately male, the reverse of the initial community engagement survey. Ten percent of respondents reported a disability that required mobile assistance.

Figure 21: Survey Responses - Favorite Recommendations



Source: DVRPC 2022

Respondents cited parking-protected bike lanes, curb extensions, raised crosswalks, protected intersections, and high-visibility crosswalks as their favorite elements of the recommendations (**Figure 21**). All of these were selected by more than half of respondents.

What would you change about the recommendations?

When asked what they would change about the recommendations, half of respondents commented on bicycle infrastructure, suggesting bike lanes should be extended, especially west of Broad Street, and for the Cecil B. Moore Avenue bike lanes to be better connected to the rest of the bike network in the City. Respondents argued that the disappearance of a bike lane forces cyclists to merge into traffic, which can be dangerous and frightening. To address the lack of bike safety at the intersection of Broad Street and Cecil B. Moore Avenue, one commenter suggested implementing a bike lane behind a curb where the right-turning lane currently exists.

One-third of respondents discussed improvements to alter driver behavior, such as more policing of illegal turns and moving violations, installing additional pedestrian crossing signals, and posting signage that reminds drivers to heed pedestrian right-of-way at intersections with flashing pedestrian crossing signals. The intersection of Broad Street and Cecil B. Moore Avenue is especially problematic, according to respondents, because drivers tend to not wait for pedestrians to cross before making right turns, blocking the crosswalk and forcing pedestrians into the intersection, or even encouraging pedestrians to cross illegally.

Other suggestions included more changes to the street design to accommodate the many road users along the corridor, the

Broad Street and Cecil B. Moore Avenue is especially problematic,

according to survey respondents.

need to improve transit service, and parking. Respondents' suggestions included:

- More traffic calming measures on both Cecil B. Moore Avenue and its adjacent side streets;
- Raising the intersection at Broad Street;
- Pairing the queue jump for buses with a bike lane behind an island to replace the existing right-turn lane at the intersection at Broad Street; and
- Redesign of the street to address uniformity inconsistencies with pavement, traffic signs, and placement of street lights.

All respondents who commented on parking conditions indicated that they would like to see reduced parking on Cecil B. Moore Avenue. One argument for this is that side streets have enough parking to accommodate any spaces that are removed from Cecil B. Moore Avenue. Multiple respondents also indicated that they would like to see increased parking regulation and enforcement, especially with regard to illegally-parked vehicles.

What other comments do you have for the project team?

Multiple respondents indicated that they would like to see more protected bike lanes. Comments also included extending bike lanes to connect to other bike facilities, prioritizing bicycle mobility, educating drivers that bicyclists have the same right to the street as drivers in areas without bike lanes, and narrowing bike lanes so that dirtbike and ATV riders are not able to use bike lanes to weave in and out of traffic. Sidewalks were also a major topic, with comments that addressed environmental and aesthetics concerns, such as a desire for better waste management and more street tree planting. More street trees along Cecil B. Moore Avenue would address health and environmental concerns, as well as encouraging a reduction to travel speeds. The presence of power lines along the south side of Cecil B. Moore Avenue makes it difficult to plant street trees in this location. A possible solution could be planting trees within curb extensions and bus loading islands. Sidewalks along Cecil B. Moore Avenue also need improved ADA accessibility.

Another topic of concern is road behavior, including speeding and red light running on side streets along Cecil B. Moore Avenue. One commenter noted that the recommendations do not address the street's poor vehicular flow, and stated that if the traffic system is not balanced, then undesirable traffic patterns such as speeding, turning against traffic, and cutting off pedestrians will continue to occur.

Road behavior is a topic of concern,

including speeding and red light running on side street along Cecil B. Moore Avenue.

Other comments include the implementation of safer crosswalks, the installation of cameras, and using durable materials that do not need constant maintenance. On a broader scale, comments suggested connecting the Cecil B. Moore corridor from Broad Street to Fishtown, creating recommendations for Black-owned businesses, and requiring mixed-income housing along the corridor. Importantly, one comment requested that DVRPC continues to include community members in planning efforts in their neighborhood, especially by connecting with local block captains who can share information with local residents.

VISION ZERØ

CECIL B. MOORE

STUDY APPROACH

OBJECTIVES AND PRIORITIES • RECOMMENDATION TOOLKIT

This section outlines the goals and objectives that factored significantly into the recommendations presented in the next chapter. This approach was the result of the analysis of existing conditions, including the traffic and crash analyses, as well as the public outreach, outlined in the previous chapters.

Objectives and Priorities

The vision for this project includes three key objectives.

1. **Safety** is approached through the framework of Vision Zero; the ultimate goal of Vision Zero is to achieve zero traffic fatalities through targeted and proven safety strategies.
2. **Mobility** is sought for all road users, and the project aims to provide efficient travel and operations for everyone.
3. **Community vitality** is an acknowledgment that local residents and businesses are most affected by transportation decisions on the corridor. The project aims to support local businesses and residents while providing well-maintained roads and planning for future growth in a way that benefits all residents and business owners.

Informed by community input, the project team devised goals that should be pursued throughout the study corridor. Goals for the entire corridor include:

- High-visibility crossings that support pedestrian desire lines;
- A continuous and protected bicycle network;
- Traffic calming for both through and turning vehicles
- Well-supported transit; and
- Parking policy that supports businesses, residents, and anticipates future growth.

In recognizing the unique nature of both ends of the corridor, stakeholders and the study team identified priorities specific to the east and west sections of the study corridor on either side of Broad Street. On the west side of Broad Street, priorities were identified as:

- Addressing pedestrian safety at existing crossings and mid-block locations;
- Considering alternate bicycle routes on parallel facilities;
- Easing transit congestion;
- Calming traffic, potentially with a gateway treatment; and
- Addressing double-parking/loading issues.

On the east side of Broad Street, priorities were identified as:

- Providing separated bike lanes;
- A road diet/lane reduction;
- Protected intersection designs;
- Raising the existing mid-block crossing; and
- Addressing loading/pick-up/drop-off issues.

Safety, mobility, and community vitality

are the three key objectives for the vision for this project.

Recommendation Toolkit

The proposed recommendations for the Cecil B. Moore Avenue corridor were chosen from a recommendation toolkit, developed by the project team and stakeholders. The toolkit elements were chosen to prioritize the project vision (safety, mobility, and community vitality). Each element is listed under a particular project vision objective, but many elements benefit multiple project vision objectives.

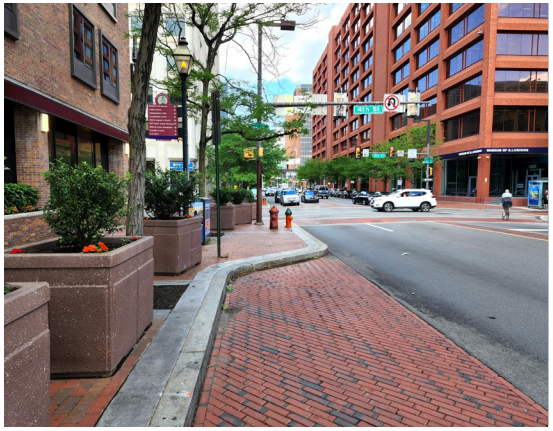
Safety Recommendations

The recommendation toolkit included many elements to improve safety along Cecil B. Moore Avenue. These include safety improvements for pedestrians, bicyclists, and motorists.

Safety improvements included in the proposed recommendations are listed below.

Pedestrian Safety Improvements:

- **High-visibility crosswalks** are recommended at current high-traffic crossing locations where crosswalks don't currently exist.



Curb Extension
Source: DVRPC

- **Curb extensions** narrow the crossing distance for pedestrians and increase visibility and safety for pedestrians.
- **Rectangular Rapid-Flashing Beacons (RRFBs)** are used in combination with crossing warning signs to improve safety at uncontrolled crosswalks.
- **Pedestrian countdown timers** are recommended at existing signalized intersections and will provide adequate time for pedestrians to cross safely.

Bicyclist Safety Improvements:

- **Parking-separated bike lanes** have been shown to reduce crash rates for motorists, bicyclists, and pedestrians.[15]
- **Bike turning boxes** are recommended areas at the head of traffic lanes at signalized intersections that provide enhanced visibility and safety for bicyclists.
- **Protected intersection treatments** like turning wedges with modular speed bumps increase the predictability of vehicular turning movements to increase bicyclist and pedestrian safety.

Vehicular Safety Improvements:

- **Curb extensions** increase visibility and reduce travel speeds for motorists to improve safety for all users.
- A **road diet**, where the existing lane configuration is converted to reduce the number of vehicular lanes. Road

Curb Extension
Source: DVRPC

[15] Philadelphia PSBL Study

diets right-size roads to properly reflect vehicular capacity needs, while reducing vehicular speeds and enhancing driver safety.

Mobility Recommendations

Several mobility recommendations were included in the toolkit to provide efficient travel and operations for all users of the road.

- **Pedestrian countdown timers** are recommended at existing signalized intersections to reduce crossings near the end of a signal phase.
- **Transit Signal Priority (TSP)** a queue jump and a bus-only lane are recommended at the westbound approach of Cecil B. Moore Avenue at Broad Street to reduce transit interaction with motorists and decrease transit delay caused by turning vehicles.
- **Bus Stop Consolidation** is recommended to extend the average distance between bus stops and improve trip time.
- Some bus stops were moved to the **far-side** of intersections to improve mobility for buses and motorists by allowing buses to stop after passing through signalized intersections.
- **Sidewalk connections** are recommended where the existing path is long or confusing.

Community Vitality Recommendations

Recommendations were also made

Gateway Treatment
Source: DVRPC

for community vitality to support local businesses and residents while providing well-maintained roads and planning for future growth in a way that benefits all residents.

- **Additional loading zones** are recommended in locations where double-parking and frequent loading were observed.
- A **gateway treatment** is recommended at the start of the corridor for placemaking to welcome roadway users to the area.
- Upon repavement, it's recommended to address known pavement issues such as **potholes**.
- With the new curb space at recommended curb extensions comes an opportunity for more **street furniture** such as benches or planters.

Loading Zone
Source: DVRPC

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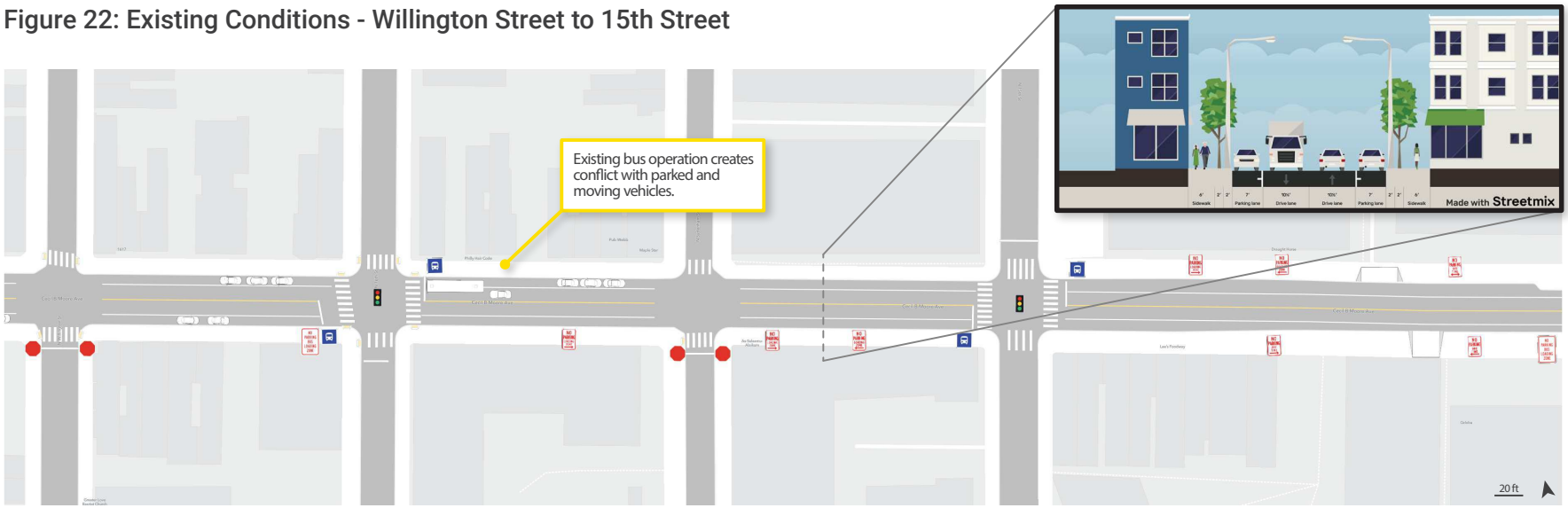
CECIL B. MOORE

RECOMMENDATIONS

WILLINGTON STREET TO 15TH STREET • BROAD STREET TO 13TH STREET • 12TH STREET TO 10TH STREET

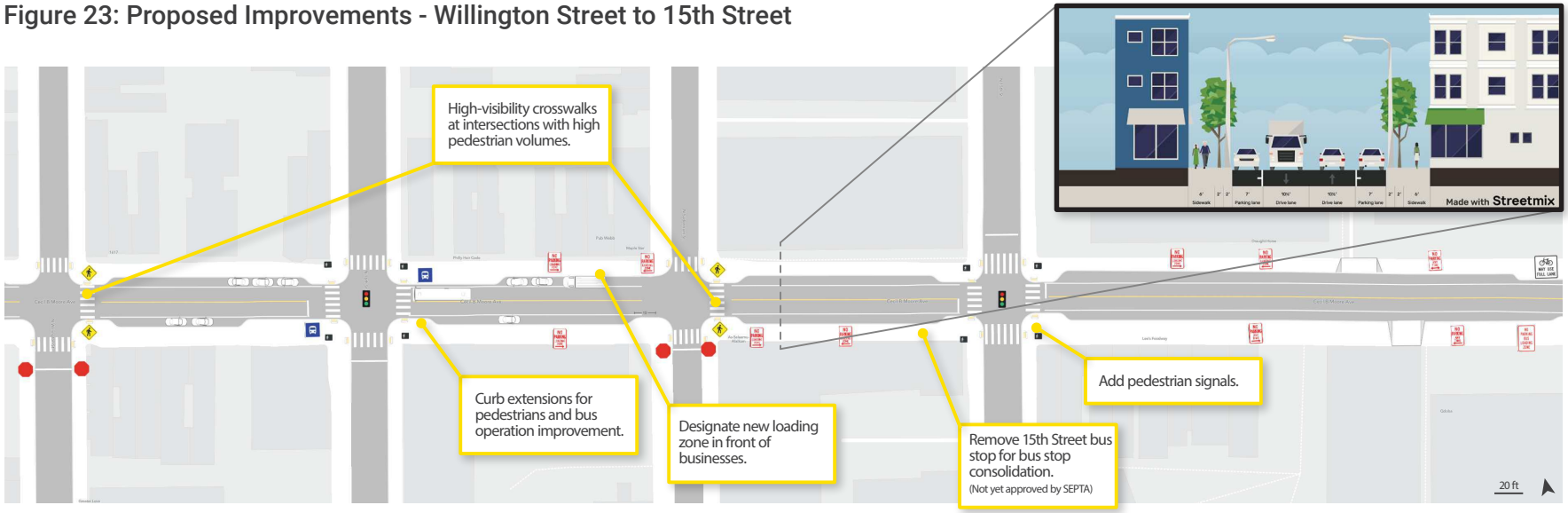
The following pages include maps of the existing conditions and proposed recommendations along segments of the Cecil B. Moore Avenue corridor. Recommendations were chosen from the toolkit using the project vision, corridor-wide goals, and sub-corridor priorities.

Figure 22: Existing Conditions - Willington Street to 15th Street



Concept created in Remix, 2022

Figure 23: Proposed Improvements - Willington Street to 15th Street



Concept created in Remix, 2022

Willington Street to 15th Street

On the west side of Broad Street on Cecil B. Moore Avenue, the existing roadway width does not allow for substantial changes within the existing right-of-way. Future studies could investigate the potential for converting this portion of the roadway to one-way in order to accommodate a bike lane or two-way cycle track.

The narrow cartway creates conflicts between buses and both moving and parked vehicles. Curb extensions for bus loading would allow the bus to load passengers in lane and ease congestion in the opposite direction at intersections, while stopping traffic in the same direction. Curb extensions also shorten the length of crosswalks, enhancing safety for pedestrians. An additional benefit is increasing sight distance for vehicles.

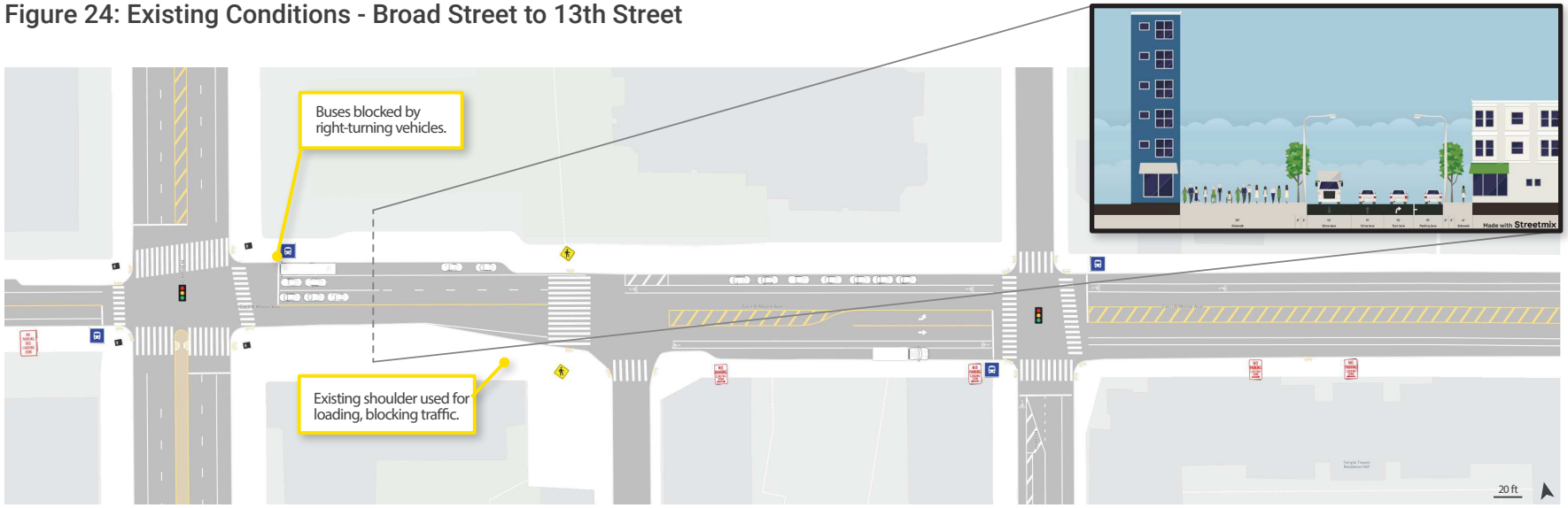
High-visibility crosswalks are proposed at two uncontrolled intersections: Willington Street and Sydenham Street. These unmarked intersections have high pedestrian crossing volumes. Creating high-visibility crosswalks would provide a safer crossing for pedestrians by increasing visibility.

None of the signalized intersections on the west side of Broad Street currently include pedestrian signals. Installing pedestrian countdown timers would provide a safer experience for people walking the corridor by increasing visibility and identifying the appropriate time to walk or wait.

If approved by SEPTA, the 15th Street Route 3 bus stop is recommended to be consolidated. Under this scenario, there would still be bus stops at Broad Street and 16th Street, approximately 900’ apart.

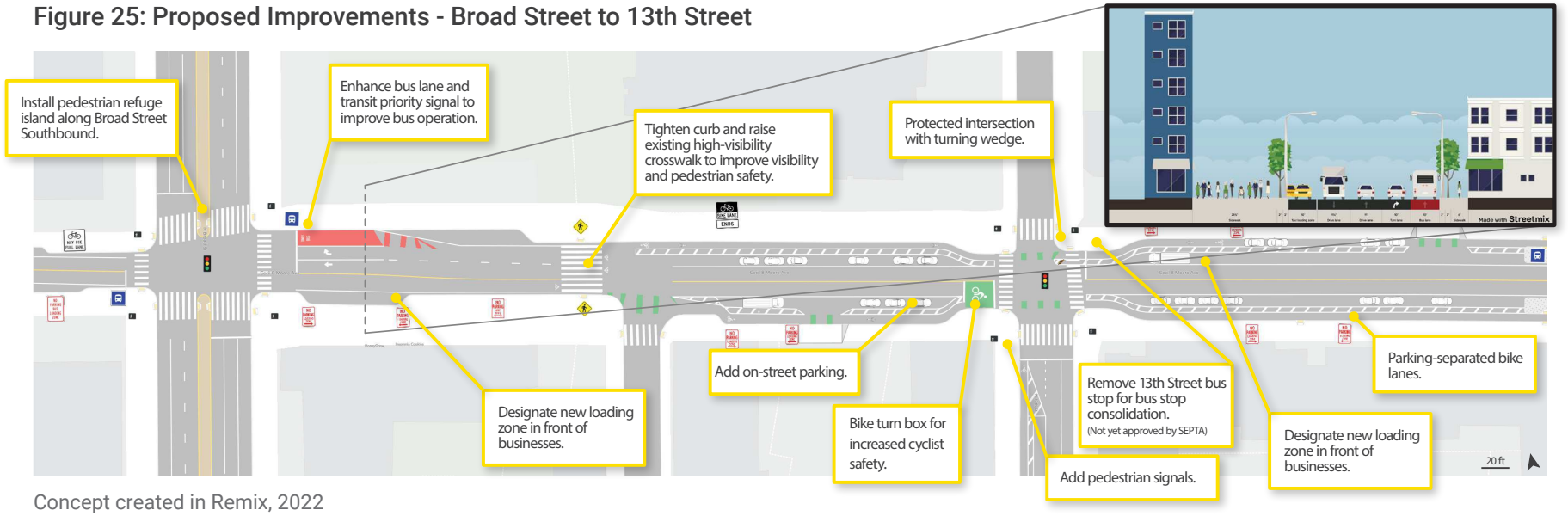
The existing conditions and proposed improvements for the western portion of Cecil B. Moore Avenue are shown in **Figure 22** and **Figure 23**, respectively.

Figure 24: Existing Conditions - Broad Street to 13th Street



Concept created in Remix, 2022

Figure 25: Proposed Improvements - Broad Street to 13th Street



Concept created in Remix, 2022

Broad Street to 13th Street

The existing cross section on the westbound approach of Cecil B. Moore Avenue at its intersection with Broad Street requires the SEPTA Route 3 bus to pull over to the curb. When the bus then pulls back into traffic, it encounters conflicts with the vehicles turning right onto Broad Street and is sometimes forced to wait a full cycle length to reenter traffic.

Installing Transit Signal Priority (TSP) for this approach would allow the westbound buses to travel through the intersection ahead of the through and right-turning vehicles. There is already an existing Leading Pedestrian Interval (LPI) for the crosswalks across Broad Street, so the TSP would not impact green time for any vehicles, as it can coincide with the LPI.

A pedestrian refuge island is recommended on the southbound approach of Broad Street to mirror the one installed recently on the northbound approach.

The existing shoulder on the south side of Cecil B. Moore Avenue east of Broad Street is currently used for illegal loading. Tightening the curb and creating a designated loading space will enhance safety for all users by encouraging vehicles to load out of the travel lane. This also helps to shorten the uncontrolled crossing at Park Avenue. This crossing is also a potential candidate for a raised crossing.

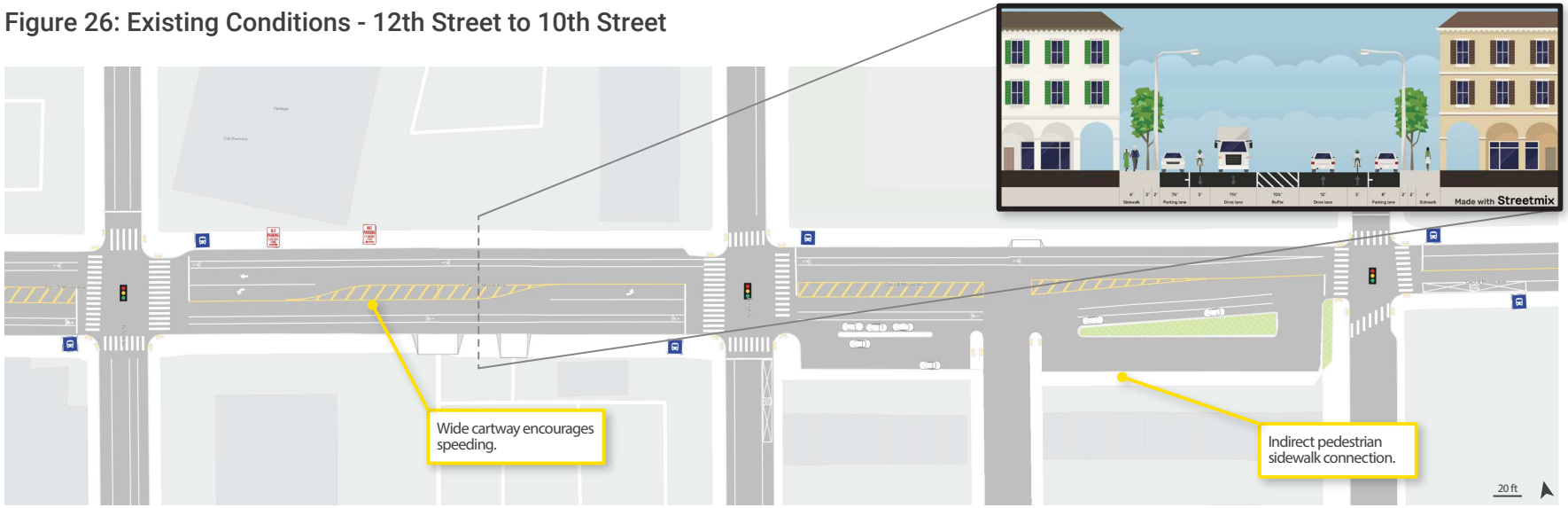
Changing the existing cross-section east of Broad Street to place the bike lanes closest to the curb, separated from traffic by the on-street parking lane, will enhance safety for cyclists, as well as reduce travel speeds on Cecil B. Moore Avenue. Delineators for the curbside bicycle lane should be placed at a sufficient distance to allow the lane to be converted to a loading area during student move-in/move-out days on blocks with student housing.

Additionally, bike turn boxes will provide designated space for bicyclists at intersections to increase visibility. A turn wedge at the northeast corner of 13th Street will slow turning drivers and further separate bicyclists from vehicles at the intersection.

If approved by SEPTA, the 13th Street Route 3 bus stop is recommended to be consolidated. Under this scenario, there would still be bus stops at Broad Street and 12th Street, approximately 1,000’ apart.

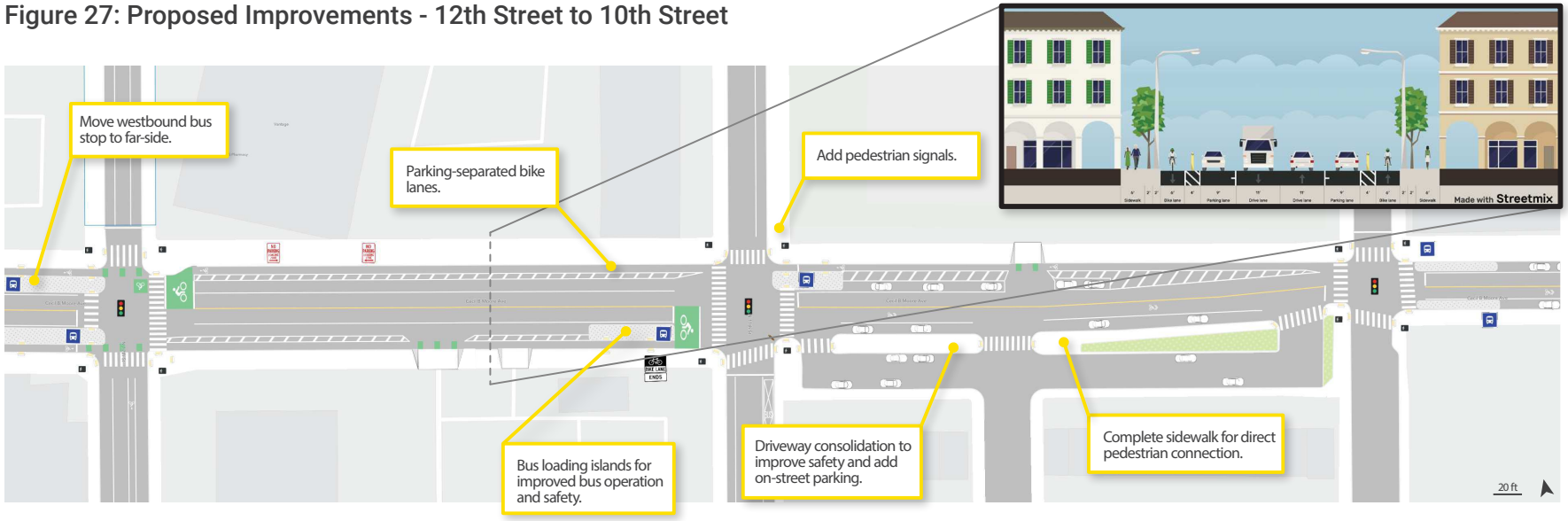
The existing conditions and proposed improvements for the portion of Cecil B. Moore Avenue between Broad Street and 13th Street are shown in **Figure 24** and **Figure 25**, respectively.

Figure 26: Existing Conditions - 12th Street to 10th Street



Concept created in Remix, 2022

Figure 27: Proposed Improvements - 12th Street to 10th Street



Concept created in Remix, 2022

12th Street to 10th Street

The proposed parking-separated bike lanes are continued between 12th Street and 10th Street. Bus loading islands are recommended to improve bus operation and safety by allowing loading to take place in lane. These islands will also discourage speeding by narrowing the roadway.

The existing driveways along the south side of Cecil B. Moore Avenue between 10th and 11th streets create more breaks in the sidewalk than necessary. Consolidating some of these driveways provides more room for on-street parking, which is an issue in this area when the athletic field on the north side of the street is in use.

The current pedestrian pathway requires pedestrians to walk indirectly around the residential parking lots. Observed behavior shows many pedestrians walk in the street as it is the direct connection. Providing sidewalk in the direct sight-line will enhance safety for pedestrians. This will require coordination with the Philadelphia Water Department to ensure that inlets to the green stormwater infrastructure are maintained.

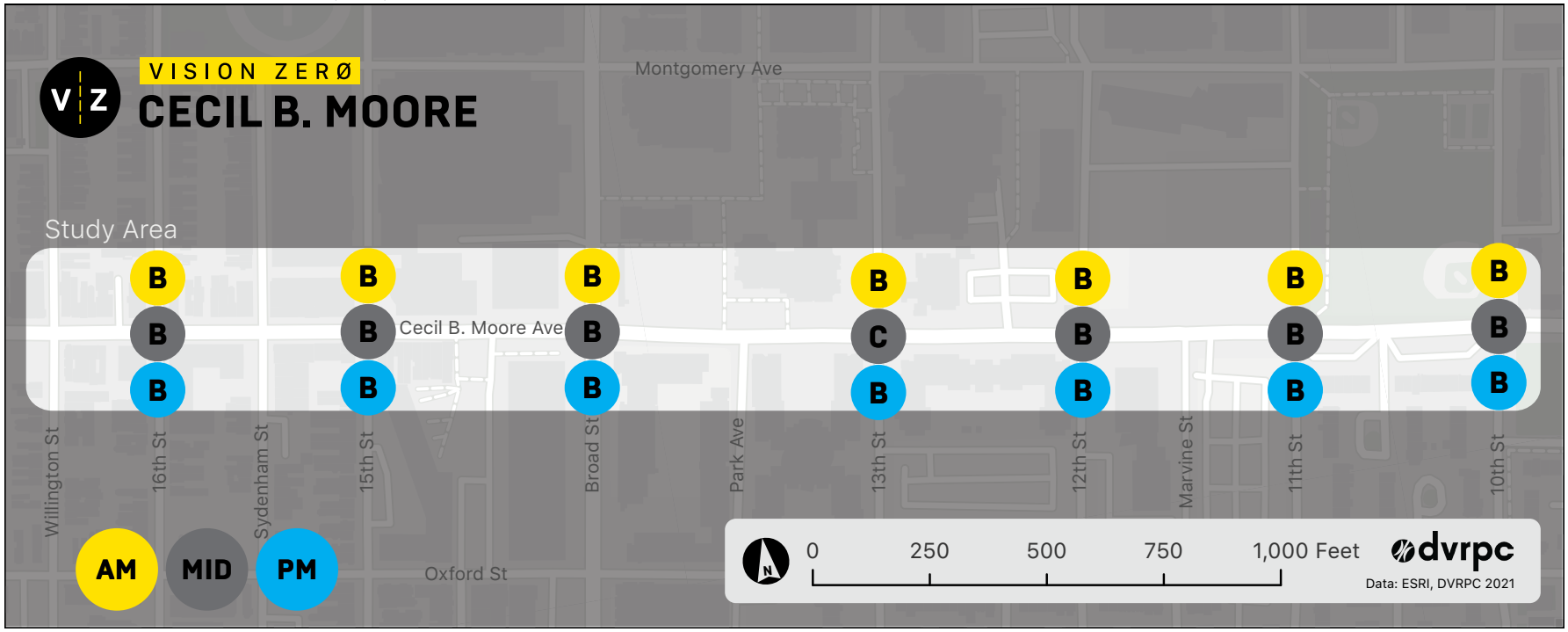
The existing conditions and proposed improvements for the portion of Cecil B. Moore Avenue between 12th Street and 10th Street are shown in **Figure 26** and **Figure 27**, respectively.

Proposed Recommendations Levels of Service (LOS)

The recommendations were simulated in a traffic modeling software and the delay and Levels of Service (LOS) were analyzed. The most impactful element proposed is the road diet east of Broad Street, While the recommendations include this reduction of travel lanes, the proposed conditions reflect similar delay and LOS at all study intersections.

The proposed recommendations intersection LOS are shown in **Figure 28**. All Synchro reports can be found in **Appendix A**.

Figure 28: Levels of Service (LOS): Proposed Recommendations



Next Steps

The recommendations identified in this report will help the City of Philadelphia to advance safety improvements on Cecil B. Moore Avenue. The next steps for this project include securing funding for implementation, translating the concept designs into engineering documents, and construction. Throughout each subsequent stage of the project, community engagement will continue to be an integral component.

Funding for this project would ideally come from the Infrastructure Investment and Jobs Act's Safe Streets and Roads for All grant program. This program is designed to support the Federal Department of Transportation's National Roadway Safety Strategy by funding projects, like the Cecil B. Moore Vision Zero project, that advance a jurisdiction's transportation safety action plan (like Philadelphia's Vision Zero Action Plan). If funding is not provided through that project, there are several other sources of funding that the City will pursue.

Philadelphia's Office of Transportation, Infrastructure, and Sustainability (OTIS) will lead continuing public engagement around the planned improvements for Cecil B. Moore Avenue. OTIS expects to create a website for this project as it moves toward implementation and will seek continued input from the community groups in the area.

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CECIL B. MOORE

APPENDICES

APPENDIX A: SYNCHRO REPORTS
APPENDIX B: PUBLIC OUTREACH MATERIALS
APPENDIX C: SURVEY RESULTS

Appendix A: Synchro Reports

Figure A-1: Existing Conditions - AM Peak Hour

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	163	0	0	198	9	22	6	7	0	0	0
Future Vol, veh/h	2	163	0	0	198	9	22	6	7	0	0	0
Conflicting Peds, #/hr	79	0	147	147	0	79	11	0	23	23	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	7	2	2	4	0	0	0	0	0	0	0
Mvmt Flow	2	190	0	0	230	10	26	7	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	319	0	-	-	-	0	440	513	213
Stage 1	-	-	-	-	-	-	194	194	-
Stage 2	-	-	-	-	-	-	246	319	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1252	-	0	0	-	-	578	468	832
Stage 1	-	-	0	0	-	-	844	744	-
Stage 2	-	-	0	0	-	-	800	657	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1252	-	-	-	-	-	572	0	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	572	0	-
Stage 1	-	-	-	-	-	-	842	0	-
Stage 2	-	-	-	-	-	-	793	0	-

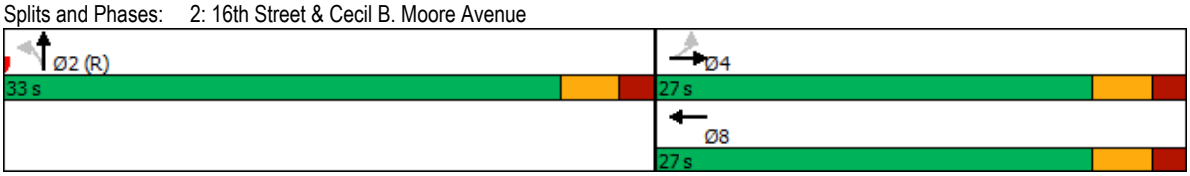
Approach	EB	WB	NB
HCM Control Delay, s	0.1	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	617	1252	-	-	-
HCM Lane V/C Ratio	0.066	0.002	-	-	-
HCM Control Delay (s)	11.2	7.9	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	0	-	-	-

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	32	137	171	170
Future Volume (vph)	32	137	171	170
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

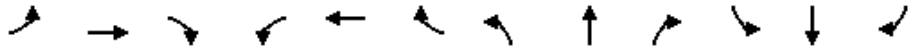
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 2: 16th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
2: 16th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	137	0	0	171	37	39	170	33	0	0	0
Future Volume (veh/h)	32	137	0	0	171	37	39	170	33	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.91		1.00	1.00		0.83	1.00		0.92			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	0.86	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1985	1985	0	0	2034	2034	2100	2018	2100			
Adj Flow Rate, veh/h	39	167	0	0	209	45	48	207	40			
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82			
Percent Heavy Veh, %	7	7	0	0	4	4	0	5	0			
Cap, veh/h	147	581	0	0	510	110	126	545	105			
Arrive On Green	0.37	0.37	0.00	0.00	0.37	0.37	0.47	0.47	0.47			
Sat Flow, veh/h	205	1570	0	0	1378	297	269	1160	224			
Grp Volume(v), veh/h	206	0	0	0	0	254	295	0	0			
Grp Sat Flow(s),veh/h/ln	1776	0	0	0	0	1675	1653	0	0			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.8	6.9	0.0	0.0			
Cycle Q Clear(g_c), s	4.4	0.0	0.0	0.0	0.0	6.8	6.9	0.0	0.0			
Prop In Lane	0.19		0.00	0.00		0.18	0.16		0.14			
Lane Grp Cap(c), veh/h	728	0	0	0	0	620	777	0	0			
V/C Ratio(X)	0.28	0.00	0.00	0.00	0.00	0.41	0.38	0.00	0.00			
Avail Cap(c_a), veh/h	728	0	0	0	0	620	777	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	13.3	0.0	0.0	0.0	0.0	14.0	10.3	0.0	0.0			
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.0	0.0	2.0	1.4	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	3.6	0.0	0.0	0.0	0.0	4.8	4.5	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	0.0	0.0	0.0	16.0	11.7	0.0	0.0			
LnGrp LOS	B	A	A	A	A	B	B	A	A			
Approach Vol, veh/h		206			254			295				
Approach Delay, s/veh		14.3			16.0			11.7				
Approach LOS		B			B			B				

Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 28		* 22				* 22				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	144	0	0	198	45	11	34	19	0	0	0
Future Vol, veh/h	25	144	0	0	198	45	11	34	19	0	0	0
Conflicting Peds, #/hr	86	0	173	173	0	86	11	0	17	17	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	4	7	0	0	4	0	9	3	11	0	0	0
Mvmt Flow	29	169	0	0	233	53	13	40	22	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	372	0	-	-	-	0	498	599	186
Stage 1	-	-	-	-	-	-	227	227	-
Stage 2	-	-	-	-	-	-	271	372	-
Critical Hdwy	4.14	-	-	-	-	-	6.49	6.53	6.31
Critical Hdwy Stg 1	-	-	-	-	-	-	5.49	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.49	5.53	-
Follow-up Hdwy	2.236	-	-	-	-	-	3.581	4.027	3.399
Pot Cap-1 Maneuver	1176	-	0	0	-	-	519	414	834
Stage 1	-	-	0	0	-	-	794	714	-
Stage 2	-	-	0	0	-	-	759	617	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1176	-	-	-	-	-	500	0	823
Mov Cap-2 Maneuver	-	-	-	-	-	-	500	0	-
Stage 1	-	-	-	-	-	-	773	0	-
Stage 2	-	-	-	-	-	-	752	0	-

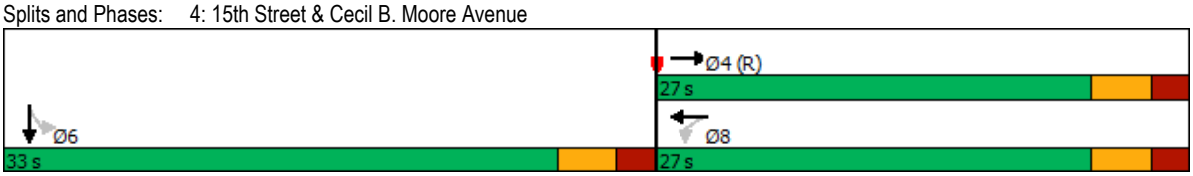
Approach	EB	WB	NB
HCM Control Delay, s	1.2	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	665	1176	-	-	-
HCM Lane V/C Ratio	0.113	0.025	-	-	-
HCM Control Delay (s)	11.1	8.1	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0.1	-	-	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	142	25	183	200
Future Volume (vph)	142	25	183	200
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 48 (80%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 4: 15th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	142	20	25	183	0	0	0	0	27	200	55
Future Volume (veh/h)	0	142	20	25	183	0	0	0	0	27	200	55
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.70	0.81		1.00				1.00		0.81
Parking Bus, Adj	1.00	1.00	0.89	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1985	1985	2034	2034	0				2100	2067	2100
Adj Flow Rate, veh/h	0	169	24	30	218	0				32	238	65
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	7	7	4	4	0				0	2	0
Cap, veh/h	0	520	74	108	658	0				76	565	154
Arrive On Green	0.00	0.37	0.37	0.37	0.37	0.00				0.47	0.47	0.47
Sat Flow, veh/h	0	1417	201	112	1795	0				163	1210	330
Grp Volume(v), veh/h	0	0	193	248	0	0				335	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1619	1907	0	0				1703	0	0
Q Serve(g_s), s	0.0	0.0	5.1	0.0	0.0	0.0				7.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	5.1	5.3	0.0	0.0				7.8	0.0	0.0
Prop In Lane	0.00		0.12	0.12		0.00				0.10		0.19
Lane Grp Cap(c), veh/h	0	0	593	766	0	0				795	0	0
V/C Ratio(X)	0.00	0.00	0.33	0.32	0.00	0.00				0.42	0.00	0.00
Avail Cap(c_a), veh/h	0	0	593	766	0	0				795	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	13.7	13.7	0.0	0.0				10.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.5	1.1	0.0	0.0				1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	3.5	4.4	0.0	0.0				5.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	15.1	14.8	0.0	0.0				12.3	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				B	A	A
Approach Vol, veh/h		193			248						335	
Approach Delay, s/veh		15.1			14.8						12.3	
Approach LOS		B			B						B	

Timer - Assigned Phs		4		6		8						
Phs Duration (G+Y+Rc), s		27.0		33.0		27.0						
Change Period (Y+Rc), s		5.0		5.0		5.0						
Max Green Setting (Gmax), s		22.0		28.0		22.0						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay		13.8										
HCM 6th LOS		B										

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	167	190	2	2	1
Future Vol, veh/h	1	167	190	2	2	1
Conflicting Peds, #/hr	314	0	0	314	11	34
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	7	0	4	0	0
Mvmt Flow	1	184	209	2	2	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	525	0	-	0	721	558
Stage 1	-	-	-	-	524	-
Stage 2	-	-	-	-	197	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1052	-	-	-	397	533
Stage 1	-	-	-	-	598	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	790	-	-	-	224	389
Mov Cap-2 Maneuver	-	-	-	-	224	-
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	632	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	19
HCM LOS			C

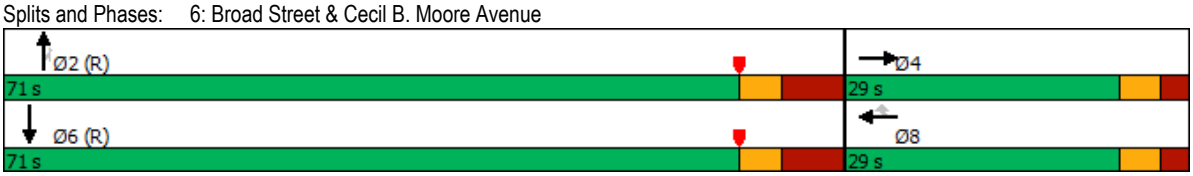
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	790	-	-	-	261
HCM Lane V/C Ratio	0.001	-	-	-	0.013
HCM Control Delay (s)	9.6	0	-	-	19
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	EBT	WBT	WBR	NBT	NBR	SBT
Lane Configurations						
Traffic Volume (vph)	109	139	79	1120	57	1583
Future Volume (vph)	109	139	79	1120	57	1583
Turn Type	NA	NA	Perm	NA	Perm	NA
Protected Phases	4	8		2		6
Permitted Phases			8		2	
Minimum Split (s)	29.0	29.0	29.0	71.0	71.0	71.0
Total Split (s)	29.0	29.0	29.0	71.0	71.0	71.0
Total Split (%)	29.0%	29.0%	29.0%	71.0%	71.0%	71.0%
Yellow Time (s)	3.4	3.4	3.4	3.6	3.6	3.6
All-Red Time (s)	2.6	2.6	2.6	5.4	5.4	5.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	9.0	9.0	9.0
Lead/Lag						
Lead-Lag Optimize?						

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 91 (91%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Pretimed

Splits and Phases: 6: Broad Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
6: Broad Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	109	61	0	139	79	0	1120	57	0	1583	67
Future Volume (veh/h)	0	109	61	0	139	79	0	1120	57	0	1583	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.76	1.00		0.62	1.00		0.78	1.00		0.74
Parking Bus, Adj	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.97
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1936	1936	0	2002	2084	0	2051	2018	0	2051	2051
Adj Flow Rate, veh/h	0	127	71	0	162	92	0	1302	66	0	1841	78
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	10	10	0	6	1	0	3	5	0	3	3
Cap, veh/h	0	234	131	0	460	248	0	2416	803	0	3321	140
Arrive On Green	0.00	0.23	0.23	0.00	0.23	0.23	0.00	0.62	0.62	0.00	0.62	0.62
Sat Flow, veh/h	0	1019	570	0	2002	1077	0	3999	1295	0	5541	226
Grp Volume(v), veh/h	0	0	198	0	162	92	0	1302	66	0	1280	639
Grp Sat Flow(s),veh/h/ln	0	0	1589	0	2002	1077	0	1948	1295	0	1866	1849
Q Serve(g_s), s	0.0	0.0	11.0	0.0	6.8	7.2	0.0	19.1	2.0	0.0	19.8	20.0
Cycle Q Clear(g_c), s	0.0	0.0	11.0	0.0	6.8	7.2	0.0	19.1	2.0	0.0	19.8	20.0
Prop In Lane	0.00		0.36	0.00		1.00	0.00		1.00	0.00		0.12
Lane Grp Cap(c), veh/h	0	0	365	0	460	248	0	2416	803	0	2314	1147
V/C Ratio(X)	0.00	0.00	0.54	0.00	0.35	0.37	0.00	0.54	0.08	0.00	0.55	0.56
Avail Cap(c_a), veh/h	0	0	365	0	460	248	0	2416	803	0	2314	1147
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	33.9	0.0	32.3	32.4	0.0	10.8	7.6	0.0	11.0	11.0
Incr Delay (d2), s/veh	0.0	0.0	5.7	0.0	2.1	4.2	0.0	0.9	0.2	0.0	1.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	8.4	0.0	6.4	3.9	0.0	12.6	1.1	0.0	12.6	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	39.5	0.0	34.4	36.6	0.0	11.7	7.8	0.0	11.9	13.0
LnGrp LOS	A	A	D	A	C	D	A	B	A	A	B	B
Approach Vol, veh/h		198			254			1368			1919	
Approach Delay, s/veh		39.5			35.2			11.5			12.3	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		71.0		29.0		71.0		29.0				
Change Period (Y+Rc), s		9.0		6.0		9.0		6.0				
Max Green Setting (Gmax), s		62.0		23.0		62.0		23.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	25	115	203	45	141
Future Volume (vph)	25	115	203	45	141
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		2	6		4
Permitted Phases	2			4	
Minimum Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	45.0%	45.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8
Lead/Lag					
Lead-Lag Optimize?					

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 8: 13th Street & Cecil B. Moore Avenue

Cecil B. Moore Vision Zero
8: 13th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	115	0	0	203	29	45	141	62	0	0	0
Future Volume (veh/h)	25	115	0	0	203	29	45	141	62	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.91		1.00	1.00		0.78	1.00		0.62			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1903	1953	0	0	2002	2002	2100	2100	2100			
Adj Flow Rate, veh/h	42	195	0	0	344	49	76	239	105			
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59			
Percent Heavy Veh, %	12	9	0	0	6	6	0	0	0			
Cap, veh/h	330	918	0	0	685	98	740	425	187			
Arrive On Green	0.47	0.47	0.00	0.00	0.16	0.16	0.37	0.37	0.37			
Sat Flow, veh/h	829	1953	0	0	1458	208	2000	1148	504			
Grp Volume(v), veh/h	42	195	0	0	0	393	76	0	344			
Grp Sat Flow(s),veh/h/ln	829	1953	0	0	0	1665	2000	0	1652			
Q Serve(g_s), s	2.4	3.5	0.0	0.0	0.0	13.0	1.5	0.0	9.9			
Cycle Q Clear(g_c), s	15.4	3.5	0.0	0.0	0.0	13.0	1.5	0.0	9.9			
Prop In Lane	1.00		0.00	0.00		0.12	1.00		0.31			
Lane Grp Cap(c), veh/h	330	918	0	0	0	783	740	0	611			
V/C Ratio(X)	0.13	0.21	0.00	0.00	0.00	0.50	0.10	0.00	0.56			
Avail Cap(c_a), veh/h	330	918	0	0	0	783	740	0	611			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	17.6	9.4	0.0	0.0	0.0	18.9	12.4	0.0	15.0			
Incr Delay (d2), s/veh	0.8	0.5	0.0	0.0	0.0	2.3	0.3	0.0	3.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	0.9	2.6	0.0	0.0	0.0	10.2	1.2	0.0	7.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	9.9	0.0	0.0	0.0	21.2	12.7	0.0	18.8			
LnGrp LOS	B	A	A	A	A	C	B	A	B			
Approach Vol, veh/h		237			393			420				
Approach Delay, s/veh		11.4			21.2			17.7				
Approach LOS		B			C			B				

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 28		* 22		* 28						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

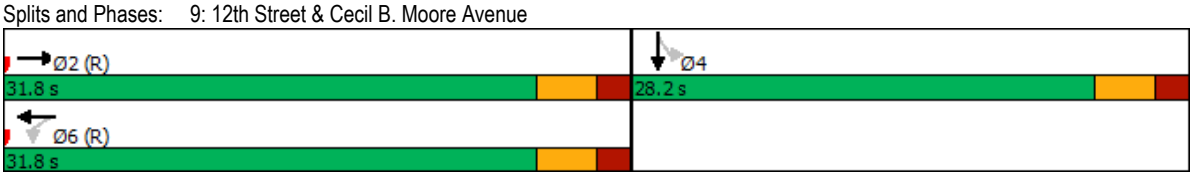
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	125	38	179	278
Future Volume (vph)	125	38	179	278
Turn Type	NA	Perm	NA	NA
Protected Phases	2		6	4
Permitted Phases		6		
Minimum Split (s)	31.8	31.8	31.8	28.2
Total Split (s)	31.8	31.8	31.8	28.2
Total Split (%)	53.0%	53.0%	53.0%	47.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28.2 (47%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 9: 12th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
9: 12th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	125	43	38	179	0	0	0	0	25	278	69
Future Volume (veh/h)	0	125	43	38	179	0	0	0	0	25	278	69
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.97		1.00				1.00		0.86
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1985	1985	2018	2002	0				2100	2018	2100
Adj Flow Rate, veh/h	0	160	55	49	229	0				32	356	88
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78				0.78	0.78	0.78
Percent Heavy Veh, %	0	7	7	5	6	0				0	5	0
Cap, veh/h	0	559	192	489	901	0				44	494	122
Arrive On Green	0.00	0.15	0.15	0.45	0.45	0.00				0.39	0.39	0.39
Sat Flow, veh/h	0	1243	427	1100	2002	0				114	1266	313
Grp Volume(v), veh/h	0	0	215	49	229	0				476	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1670	1100	2002	0				1693	0	0
Q Serve(g_s), s	0.0	0.0	6.9	1.9	4.3	0.0				14.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	6.9	8.7	4.3	0.0				14.3	0.0	0.0
Prop In Lane	0.00		0.26	1.00		0.00				0.07		0.18
Lane Grp Cap(c), veh/h	0	0	752	489	901	0				660	0	0
V/C Ratio(X)	0.00	0.00	0.29	0.10	0.25	0.00				0.72	0.00	0.00
Avail Cap(c_a), veh/h	0	0	752	489	901	0				660	0	0
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.0	13.9	10.2	0.0				15.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.0	0.4	0.7	0.0				6.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	5.2	0.9	3.3	0.0				10.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	17.9	14.3	10.9	0.0				22.2	0.0	0.0
LnGrp LOS	A	A	B	B	B	A				C	A	A
Approach Vol, veh/h		215			278						476	
Approach Delay, s/veh		17.9			11.5						22.2	
Approach LOS		B			B						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		31.8		28.2		31.8						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 27		* 23		* 27						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			18.2									
HCM 6th LOS			B									

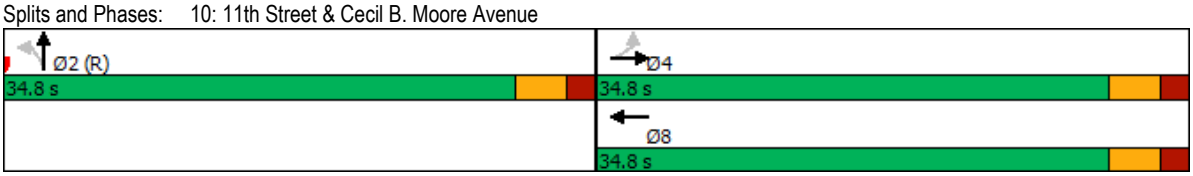
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	49	104	184	259
Future Volume (vph)	49	104	184	259
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	34.8	34.8	34.8	34.8
Total Split (s)	34.8	34.8	34.8	34.8
Total Split (%)	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 69.6
Actuated Cycle Length: 69.6
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 70
Control Type: Pretimed

Splits and Phases: 10: 11th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
10: 11th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	104	0	0	184	58	35	259	28	0	0	0
Future Volume (veh/h)	49	104	0	0	184	58	35	259	28	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.98		1.00	1.00		0.93	1.00		0.97			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	0.90	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2067	1887	0	0	2002	2002	2100	2018	2100			
Adj Flow Rate, veh/h	58	124	0	0	219	69	42	308	33			
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84			
Percent Heavy Veh, %	2	13	0	0	6	6	0	5	0			
Cap, veh/h	439	813	0	0	555	175	84	615	66			
Arrive On Green	0.43	0.43	0.00	0.00	0.43	0.43	0.43	0.43	0.43			
Sat Flow, veh/h	1066	1887	0	0	1288	406	194	1426	153			
Grp Volume(v), veh/h	58	124	0	0	0	288	383	0	0			
Grp Sat Flow(s),veh/h/ln	1066	1887	0	0	0	1694	1773	0	0			
Q Serve(g_s), s	2.7	2.8	0.0	0.0	0.0	8.1	10.9	0.0	0.0			
Cycle Q Clear(g_c), s	10.9	2.8	0.0	0.0	0.0	8.1	10.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.24	0.11		0.09			
Lane Grp Cap(c), veh/h	439	813	0	0	0	730	764	0	0			
V/C Ratio(X)	0.13	0.15	0.00	0.00	0.00	0.39	0.50	0.00	0.00			
Avail Cap(c_a), veh/h	439	813	0	0	0	730	764	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	17.3	12.1	0.0	0.0	0.0	13.6	14.4	0.0	0.0			
Incr Delay (d2), s/veh	0.6	0.4	0.0	0.0	0.0	1.6	2.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	1.3	2.2	0.0	0.0	0.0	5.8	8.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.9	12.5	0.0	0.0	0.0	15.2	16.7	0.0	0.0			
LnGrp LOS	B	B	A	A	A	B	B	A	A			
Approach Vol, veh/h		182			288			383				
Approach Delay, s/veh		14.2			15.2			16.7				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		34.8		34.8				34.8				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 30		* 30				* 30				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			15.7									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	131	5	1	245	2	2
Future Vol, veh/h	131	5	1	245	2	2
Conflicting Peds, #/hr	0	7	7	0	5	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	12	0	0	5	0	0
Mvmt Flow	152	6	1	285	2	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	165	0	454	164
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	292	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1426	-	568	886
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	762	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1418	-	562	880
Mov Cap-2 Maneuver	-	-	-	-	562	-
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	758	-

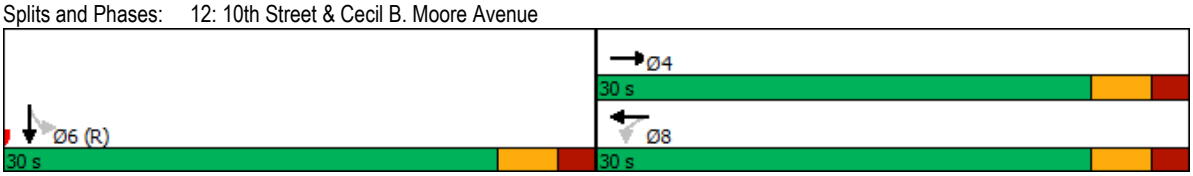
Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	686	-	-	1418	-
HCM Lane V/C Ratio	0.007	-	-	0.001	-
HCM Control Delay (s)	10.3	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	90	43	231	31
Future Volume (vph)	90	43	231	31
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	30.0	30.0	30.0	30.0
Total Split (s)	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 12: 10th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	90	39	43	231	0	0	0	0	2	31	19
Future Volume (veh/h)	0	90	39	43	231	0	0	0	0	2	31	19
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1822	1822	2002	2002	0				2100	2051	2100
Adj Flow Rate, veh/h	0	108	47	52	278	0				2	37	23
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83				0.83	0.83	0.83
Percent Heavy Veh, %	0	17	17	6	6	0				0	3	0
Cap, veh/h	0	447	195	144	709	0				23	424	263
Arrive On Green	0.00	0.42	0.42	0.42	0.42	0.00				0.42	0.42	0.42
Sat Flow, veh/h	0	1074	467	178	1703	0				55	1017	632
Grp Volume(v), veh/h	0	0	155	330	0	0				62	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1541	1881	0	0				1704	0	0
Q Serve(g_s), s	0.0	0.0	3.9	0.0	0.0	0.0				1.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.9	6.9	0.0	0.0				1.3	0.0	0.0
Prop In Lane	0.00		0.30	0.16		0.00				0.03		0.37
Lane Grp Cap(c), veh/h	0	0	642	853	0	0				710	0	0
V/C Ratio(X)	0.00	0.00	0.24	0.39	0.00	0.00				0.09	0.00	0.00
Avail Cap(c_a), veh/h	0	0	642	853	0	0				710	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.3	12.2	0.0	0.0				10.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	1.3	0.0	0.0				0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	2.5	5.6	0.0	0.0				0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	12.2	13.5	0.0	0.0				10.8	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				B	A	A
Approach Vol, veh/h		155			330						62	
Approach Delay, s/veh		12.2			13.5						10.8	
Approach LOS		B			B						B	

Timer - Assigned Phs		4		6		8						
Phs Duration (G+Y+Rc), s		30.0		30.0		30.0						
Change Period (Y+Rc), s		5.0		5.0		5.0						
Max Green Setting (Gmax), s		25.0		25.0		25.0						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay		12.9										
HCM 6th LOS		B										

Figure A-2: Existing Conditions - MID Peak Hour

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	155	0	0	204	12	9	9	12	0	0	0
Future Vol, veh/h	8	155	0	0	204	12	9	9	12	0	0	0
Conflicting Peds, #/hr	79	0	193	193	0	79	21	0	45	45	0	21
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	3	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	9	176	0	0	232	14	10	10	14	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	325	0	-	-	-	0	454	519	221
Stage 1	-	-	-	-	-	-	194	194	-
Stage 2	-	-	-	-	-	-	260	325	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1246	-	0	0	-	-	568	464	824
Stage 1	-	-	0	0	-	-	844	744	-
Stage 2	-	-	0	0	-	-	788	653	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1246	-	-	-	-	-	554	0	795
Mov Cap-2 Maneuver	-	-	-	-	-	-	554	0	-
Stage 1	-	-	-	-	-	-	837	0	-
Stage 2	-	-	-	-	-	-	775	0	-

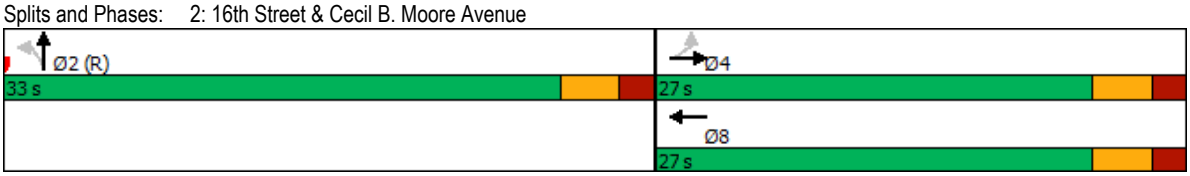
Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	670	1246	-	-	-
HCM Lane V/C Ratio	0.051	0.007	-	-	-
HCM Control Delay (s)	10.7	7.9	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	0	-	-	-

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	27	139	170	173
Future Volume (vph)	27	139	170	173
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

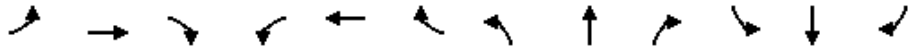
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 2: 16th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
2: 16th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: MID Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	139	0	0	170	61	42	173	33	0	0	0
Future Volume (veh/h)	27	139	0	0	170	61	42	173	33	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.92		1.00	1.00		0.83	1.00		0.92			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	0.86	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2051	2051	0	0	2034	2034	2100	2018	2100			
Adj Flow Rate, veh/h	31	158	0	0	193	69	48	197	38			
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
Percent Heavy Veh, %	3	3	0	0	4	4	0	5	0			
Cap, veh/h	134	629	0	0	442	158	132	541	104			
Arrive On Green	0.37	0.37	0.00	0.00	0.37	0.37	0.47	0.47	0.47			
Sat Flow, veh/h	174	1699	0	0	1195	427	280	1151	222			
Grp Volume(v), veh/h	189	0	0	0	0	262	283	0	0			
Grp Sat Flow(s),veh/h/ln	1873	0	0	0	0	1623	1653	0	0			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	7.3	6.6	0.0	0.0			
Cycle Q Clear(g_c), s	3.8	0.0	0.0	0.0	0.0	7.3	6.6	0.0	0.0			
Prop In Lane	0.16		0.00	0.00		0.26	0.17		0.13			
Lane Grp Cap(c), veh/h	763	0	0	0	0	600	777	0	0			
V/C Ratio(X)	0.25	0.00	0.00	0.00	0.00	0.44	0.36	0.00	0.00			
Avail Cap(c_a), veh/h	763	0	0	0	0	600	777	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	13.1	0.0	0.0	0.0	0.0	14.2	10.2	0.0	0.0			
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.0	2.3	1.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	3.2	0.0	0.0	0.0	0.0	5.1	4.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	0.0	0.0	0.0	0.0	16.5	11.5	0.0	0.0			
LnGrp LOS	B	A	A	A	A	B	B	A	A			
Approach Vol, veh/h		189			262			283				
Approach Delay, s/veh		13.9			16.5			11.5				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 28		* 22				* 22				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			13.9									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	162	0	0	219	40	12	24	37	0	0	0
Future Vol, veh/h	9	162	0	0	219	40	12	24	37	0	0	0
Conflicting Peds, #/hr	140	0	257	257	0	140	18	0	40	40	0	18
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	3	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	10	178	0	0	241	44	13	26	41	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	425	0	-	-	-	0	479	623	218
Stage 1	-	-	-	-	-	-	198	198	-
Stage 2	-	-	-	-	-	-	281	425	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1145	-	0	0	-	-	549	405	827
Stage 1	-	-	0	0	-	-	840	741	-
Stage 2	-	-	0	0	-	-	771	590	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1145	-	-	-	-	-	536	0	801
Mov Cap-2 Maneuver	-	-	-	-	-	-	536	0	-
Stage 1	-	-	-	-	-	-	832	0	-
Stage 2	-	-	-	-	-	-	760	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	10.7
HCM LOS			B

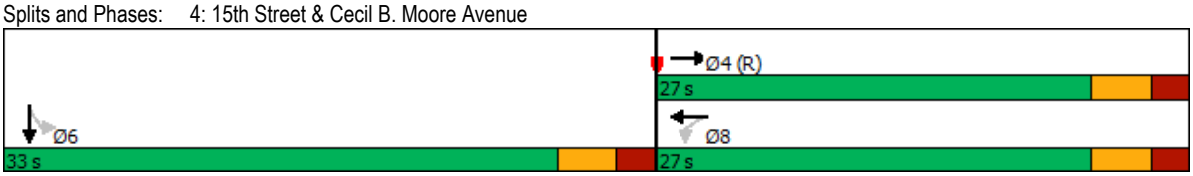
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	714	1145	-	-	-
HCM Lane V/C Ratio	0.112	0.009	-	-	-
HCM Control Delay (s)	10.7	8.2	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	171	34	183	113
Future Volume (vph)	171	34	183	113
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 48 (80%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 4: 15th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	171	26	34	183	0	0	0	0	48	113	74
Future Volume (veh/h)	0	171	26	34	183	0	0	0	0	48	113	74
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.57	0.75		1.00				1.00		0.80
Parking Bus, Adj	1.00	1.00	0.89	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2067	2067	2034	2034	0				2100	2100	2100
Adj Flow Rate, veh/h	0	199	30	40	213	0				56	131	86
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86				0.86	0.86	0.86
Percent Heavy Veh, %	0	2	2	4	4	0				0	0	0
Cap, veh/h	0	512	77	126	609	0				156	366	240
Arrive On Green	0.00	0.37	0.37	0.37	0.37	0.00				0.47	0.47	0.47
Sat Flow, veh/h	0	1396	211	155	1661	0				335	783	514
Grp Volume(v), veh/h	0	0	229	253	0	0				273	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1607	1816	0	0				1633	0	0
Q Serve(g_s), s	0.0	0.0	6.3	0.0	0.0	0.0				6.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	6.3	5.4	0.0	0.0				6.4	0.0	0.0
Prop In Lane	0.00		0.13	0.16		0.00				0.21		0.32
Lane Grp Cap(c), veh/h	0	0	589	735	0	0				762	0	0
V/C Ratio(X)	0.00	0.00	0.39	0.34	0.00	0.00				0.36	0.00	0.00
Avail Cap(c_a), veh/h	0	0	589	735	0	0				762	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	14.0	13.7	0.0	0.0				10.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.9	1.3	0.0	0.0				1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	4.4	4.6	0.0	0.0				4.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	16.0	15.0	0.0	0.0				11.6	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				B	A	A
Approach Vol, veh/h		229			253						273	
Approach Delay, s/veh		16.0			15.0						11.6	
Approach LOS		B			B						B	

Timer - Assigned Phs		4		6		8						
Phs Duration (G+Y+Rc), s		27.0		33.0		27.0						
Change Period (Y+Rc), s		5.0		5.0		5.0						
Max Green Setting (Gmax), s		22.0		28.0		22.0						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			14.1									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	212	212	1	3	1
Future Vol, veh/h	1	212	212	1	3	1
Conflicting Peds, #/hr	392	0	0	392	15	50
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	1	252	252	1	4	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	645	0	-	0	914	695
Stage 1	-	-	-	-	645	-
Stage 2	-	-	-	-	269	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	950	-	-	-	306	446
Stage 1	-	-	-	-	526	-
Stage 2	-	-	-	-	781	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	654	-	-	-	145	295
Mov Cap-2 Maneuver	-	-	-	-	145	-
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	538	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	27.3
HCM LOS			D

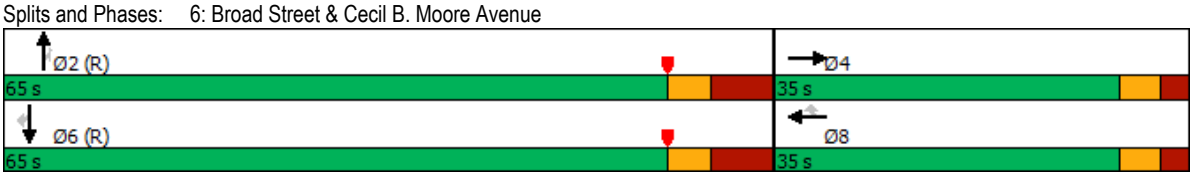
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	654	-	-	-	166
HCM Lane V/C Ratio	0.002	-	-	-	0.029
HCM Control Delay (s)	10.5	0	-	-	27.3
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBT	WBT	WBR	NBT	NBR	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	110	120	126	1124	93	1109	96
Future Volume (vph)	110	120	126	1124	93	1109	96
Turn Type	NA	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	8		2		6	
Permitted Phases			8		2		6
Minimum Split (s)	35.0	35.0	35.0	65.0	65.0	65.0	65.0
Total Split (s)	35.0	35.0	35.0	65.0	65.0	65.0	65.0
Total Split (%)	35.0%	35.0%	35.0%	65.0%	65.0%	65.0%	65.0%
Yellow Time (s)	3.4	3.4	3.4	3.6	3.6	3.6	3.6
All-Red Time (s)	2.6	2.6	2.6	5.4	5.4	5.4	5.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	9.0	9.0	9.0	9.0
Lead/Lag							
Lead-Lag Optimize?							

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 91 (91%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Pretimed

Splits and Phases: 6: Broad Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
6: Broad Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: MID Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	110	99	0	120	126	0	1124	93	0	1109	96
Future Volume (veh/h)	0	110	99	0	120	126	0	1124	93	0	1109	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.65	1.00		0.61	1.00		0.47	1.00		0.59
Parking Bus, Adj	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.97
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	2034	2034	0	2034	2034	0	2067	2051	0	2067	2067
Adj Flow Rate, veh/h	0	120	108	0	130	137	0	1222	101	0	1205	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	4	0	4	4	0	2	3	0	2	2
Cap, veh/h	0	220	198	0	590	300	0	2200	446	0	2200	557
Arrive On Green	0.00	0.29	0.29	0.00	0.29	0.29	0.00	0.56	0.56	0.00	0.56	0.56
Sat Flow, veh/h	0	757	682	0	2034	1034	0	4031	796	0	4031	994
Grp Volume(v), veh/h	0	0	228	0	130	137	0	1222	101	0	1205	104
Grp Sat Flow(s),veh/h/ln	0	0	1439	0	2034	1034	0	1964	796	0	1964	994
Q Serve(g_s), s	0.0	0.0	13.4	0.0	4.8	10.8	0.0	19.9	6.4	0.0	19.5	5.1
Cycle Q Clear(g_c), s	0.0	0.0	13.4	0.0	4.8	10.8	0.0	19.9	6.4	0.0	19.5	5.1
Prop In Lane	0.00		0.47	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	0	0	417	0	590	300	0	2200	446	0	2200	557
V/C Ratio(X)	0.00	0.00	0.55	0.00	0.22	0.46	0.00	0.56	0.23	0.00	0.55	0.19
Avail Cap(c_a), veh/h	0	0	417	0	590	300	0	2200	446	0	2200	557
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	29.9	0.0	26.9	29.1	0.0	14.1	11.1	0.0	14.0	10.8
Incr Delay (d2), s/veh	0.0	0.0	5.1	0.0	0.9	4.9	0.0	1.0	1.2	0.0	1.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	8.9	0.0	4.5	5.6	0.0	13.6	2.2	0.0	13.4	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	35.0	0.0	27.8	34.0	0.0	15.1	12.3	0.0	15.0	11.6
LnGrp LOS	A	A	D	A	C	C	A	B	B	A	B	B
Approach Vol, veh/h		228			267			1323			1309	
Approach Delay, s/veh		35.0			31.0			14.9			14.7	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	65.0	35.0	65.0	35.0
Change Period (Y+Rc), s	9.0	6.0	9.0	6.0
Max Green Setting (Gmax), s	56.0	29.0	56.0	29.0
Max Q Clear Time (g_c+I1), s	0.0	0.0	7.1	0.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	36	128	248	51	110
Future Volume (vph)	36	128	248	51	110
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		2	6		4
Permitted Phases	2			4	
Minimum Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	45.0%	45.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8
Lead/Lag					
Lead-Lag Optimize?					

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 8: 13th Street & Cecil B. Moore Avenue

Cecil B. Moore Vision Zero
8: 13th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: MID Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	128	0	0	248	49	51	110	82	0	0	0
Future Volume (veh/h)	36	128	0	0	248	49	51	110	82	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.80		1.00	1.00		0.48	1.00		0.45			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2100	2018	0	0	2018	2018	2100	2018	2100			
Adj Flow Rate, veh/h	51	183	0	0	354	70	73	157	117			
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70			
Percent Heavy Veh, %	0	5	0	0	5	5	0	5	0			
Cap, veh/h	272	949	0	0	565	112	740	252	188			
Arrive On Green	0.47	0.47	0.00	0.00	0.16	0.16	0.37	0.37	0.37			
Sat Flow, veh/h	784	2018	0	0	1202	238	2000	682	508			
Grp Volume(v), veh/h	51	183	0	0	0	424	73	0	274			
Grp Sat Flow(s),veh/h/ln	784	2018	0	0	0	1440	2000	0	1190			
Q Serve(g_s), s	3.4	3.2	0.0	0.0	0.0	16.5	1.4	0.0	11.3			
Cycle Q Clear(g_c), s	19.9	3.2	0.0	0.0	0.0	16.5	1.4	0.0	11.3			
Prop In Lane	1.00		0.00	0.00		0.17	1.00		0.43			
Lane Grp Cap(c), veh/h	272	949	0	0	0	677	740	0	440			
V/C Ratio(X)	0.19	0.19	0.00	0.00	0.00	0.63	0.10	0.00	0.62			
Avail Cap(c_a), veh/h	272	949	0	0	0	677	740	0	440			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	20.8	9.3	0.0	0.0	0.0	20.4	12.4	0.0	15.5			
Incr Delay (d2), s/veh	1.5	0.5	0.0	0.0	0.0	4.3	0.3	0.0	6.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	1.3	2.4	0.0	0.0	0.0	11.4	1.2	0.0	6.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	9.7	0.0	0.0	0.0	24.8	12.6	0.0	22.0			
LnGrp LOS	C	A	A	A	A	C	B	A	C			
Approach Vol, veh/h		234			424			347				
Approach Delay, s/veh		12.5			24.8			20.0				
Approach LOS		B			C			B				

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 28		* 22		* 28						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			20.3									
HCM 6th LOS			C									

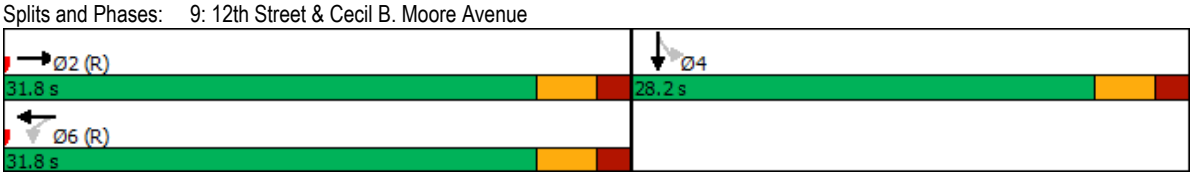
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	160	27	193	219
Future Volume (vph)	160	27	193	219
Turn Type	NA	Perm	NA	NA
Protected Phases	2		6	4
Permitted Phases		6		
Minimum Split (s)	31.8	31.8	31.8	28.2
Total Split (s)	31.8	31.8	31.8	28.2
Total Split (%)	53.0%	53.0%	53.0%	47.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

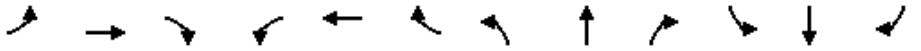
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28.2 (47%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 9: 12th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
9: 12th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: MID Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	160	55	27	193	0	0	0	0	36	219	104
Future Volume (veh/h)	0	160	55	27	193	0	0	0	0	36	219	104
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	0.96		1.00				1.00		0.80
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2051	2051	2034	2018	0				2100	2051	2100
Adj Flow Rate, veh/h	0	188	65	32	227	0				42	258	122
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	3	3	4	5	0				0	3	0
Cap, veh/h	0	574	198	459	908	0				63	386	182
Arrive On Green	0.00	0.15	0.15	0.45	0.45	0.00				0.39	0.39	0.39
Sat Flow, veh/h	0	1276	441	1066	2018	0				161	989	468
Grp Volume(v), veh/h	0	0	253	32	227	0				422	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1717	1066	2018	0				1618	0	0
Q Serve(g_s), s	0.0	0.0	7.9	1.3	4.2	0.0				12.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	7.9	9.2	4.2	0.0				12.9	0.0	0.0
Prop In Lane	0.00		0.26	1.00		0.00				0.10		0.29
Lane Grp Cap(c), veh/h	0	0	773	459	908	0				631	0	0
V/C Ratio(X)	0.00	0.00	0.33	0.07	0.25	0.00				0.67	0.00	0.00
Avail Cap(c_a), veh/h	0	0	773	459	908	0				631	0	0
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.4	14.4	10.2	0.0				15.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.1	0.3	0.7	0.0				5.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	6.4	0.6	3.3	0.0				9.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	18.5	14.7	10.9	0.0				20.7	0.0	0.0
LnGrp LOS	A	A	B	B	B	A				C	A	A
Approach Vol, veh/h		253			259						422	
Approach Delay, s/veh		18.5			11.4						20.7	
Approach LOS		B			B						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		31.8		28.2		31.8						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 27		* 23		* 27						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			17.5									
HCM 6th LOS			B									

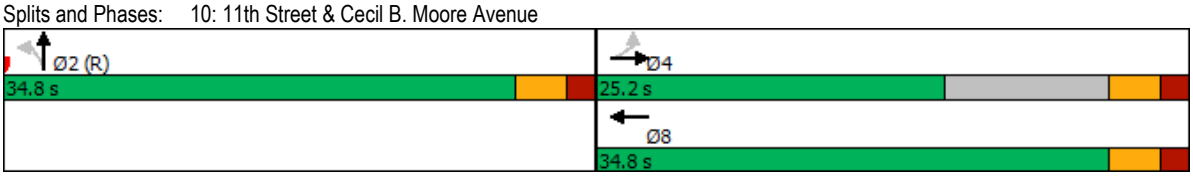
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	85	107	171	228
Future Volume (vph)	85	107	171	228
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	25.2	25.2	34.8	34.8
Total Split (s)	25.2	25.2	34.8	34.8
Total Split (%)	36.2%	36.2%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 69.6
Actuated Cycle Length: 69.6
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 70
Control Type: Pretimed

Splits and Phases: 10: 11th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
10: 11th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: MID Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	107	0	0	171	53	42	228	26	0	0	0
Future Volume (veh/h)	85	107	0	0	171	53	42	228	26	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.95		1.00	1.00		0.89	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	0.90	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2100	1985	0	0	2002	2002	2100	2018	2100			
Adj Flow Rate, veh/h	92	116	0	0	186	58	46	248	28			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	0	7	0	0	6	6	0	5	0			
Cap, veh/h	467	856	0	0	549	171	109	589	66			
Arrive On Green	0.43	0.43	0.00	0.00	0.43	0.43	0.43	0.43	0.43			
Sat Flow, veh/h	1090	1985	0	0	1274	397	253	1365	154			
Grp Volume(v), veh/h	92	116	0	0	0	244	322	0	0			
Grp Sat Flow(s),veh/h/ln	1090	1985	0	0	0	1672	1773	0	0			
Q Serve(g_s), s	4.3	2.5	0.0	0.0	0.0	6.8	8.8	0.0	0.0			
Cycle Q Clear(g_c), s	11.0	2.5	0.0	0.0	0.0	6.8	8.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.24	0.14		0.09			
Lane Grp Cap(c), veh/h	467	856	0	0	0	721	764	0	0			
V/C Ratio(X)	0.20	0.14	0.00	0.00	0.00	0.34	0.42	0.00	0.00			
Avail Cap(c_a), veh/h	467	856	0	0	0	721	764	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	16.9	12.0	0.0	0.0	0.0	13.2	13.8	0.0	0.0			
Incr Delay (d2), s/veh	0.9	0.3	0.0	0.0	0.0	1.3	1.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	2.1	2.0	0.0	0.0	0.0	4.7	6.5	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	12.3	0.0	0.0	0.0	14.5	15.5	0.0	0.0			
LnGrp LOS	B	B	A	A	A	B	B	A	A			
Approach Vol, veh/h		208			244			322				
Approach Delay, s/veh		14.7			14.5			15.5				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		34.8		34.8				34.8				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 30		* 20				* 30				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	130	3	1	220	1	1
Future Vol, veh/h	130	3	1	220	1	1
Conflicting Peds, #/hr	0	6	6	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	0	0	6	0	0
Mvmt Flow	151	3	1	256	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	160	0	419	159
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	260	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1432	-	595	892
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	788	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1425	-	590	888
Mov Cap-2 Maneuver	-	-	-	-	590	-
Stage 1	-	-	-	-	871	-
Stage 2	-	-	-	-	786	-

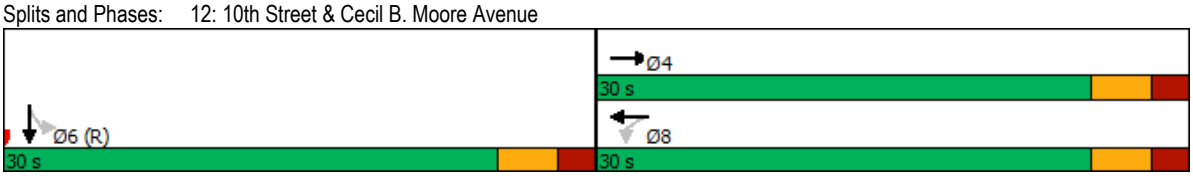
Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	709	-	-	1425	-
HCM Lane V/C Ratio	0.003	-	-	0.001	-
HCM Control Delay (s)	10.1	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	98	29	162	112
Future Volume (vph)	98	29	162	112
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	30.0	30.0	30.0	30.0
Total Split (s)	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 12: 10th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	98	34	29	162	0	0	0	0	1	112	52
Future Volume (veh/h)	0	98	34	29	162	0	0	0	0	1	112	52
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1969	1969	1985	1985	0				2100	2034	2100
Adj Flow Rate, veh/h	0	118	41	35	195	0				1	135	63
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83				0.83	0.83	0.83
Percent Heavy Veh, %	0	8	8	7	7	0				0	4	0
Cap, veh/h	0	519	180	139	709	0				4	487	227
Arrive On Green	0.00	0.42	0.42	0.42	0.42	0.00				0.42	0.42	0.42
Sat Flow, veh/h	0	1246	433	167	1703	0				9	1170	546
Grp Volume(v), veh/h	0	0	159	230	0	0				199	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1679	1870	0	0				1725	0	0
Q Serve(g_s), s	0.0	0.0	3.7	0.0	0.0	0.0				4.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.7	4.6	0.0	0.0				4.6	0.0	0.0
Prop In Lane	0.00		0.26	0.15		0.00				0.01		0.32
Lane Grp Cap(c), veh/h	0	0	699	848	0	0				719	0	0
V/C Ratio(X)	0.00	0.00	0.23	0.27	0.00	0.00				0.28	0.00	0.00
Avail Cap(c_a), veh/h	0	0	699	848	0	0				719	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.3	11.5	0.0	0.0				11.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.8	0.8	0.0	0.0				1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	2.5	3.6	0.0	0.0				3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	12.0	12.3	0.0	0.0				12.5	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				B	A	A
Approach Vol, veh/h		159			230						199	
Approach Delay, s/veh		12.0			12.3						12.5	
Approach LOS		B			B						B	

Timer - Assigned Phs		4		6		8						
Phs Duration (G+Y+Rc), s		30.0		30.0		30.0						
Change Period (Y+Rc), s		5.0		5.0		5.0						
Max Green Setting (Gmax), s		25.0		25.0		25.0						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay		12.3										
HCM 6th LOS		B										

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	178	0	0	277	28	12	13	18	0	0	0
Future Vol, veh/h	10	178	0	0	277	28	12	13	18	0	0	0
Conflicting Peds, #/hr	136	0	160	160	0	136	15	0	43	43	0	15
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	4	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	11	200	0	0	311	31	13	15	20	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	478	0	-	-	-	0	564	700	243
Stage 1	-	-	-	-	-	-	222	222	-
Stage 2	-	-	-	-	-	-	342	478	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1095	-	0	0	-	-	490	366	801
Stage 1	-	-	0	0	-	-	820	723	-
Stage 2	-	-	0	0	-	-	724	559	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1095	-	-	-	-	-	479	0	774
Mov Cap-2 Maneuver	-	-	-	-	-	-	479	0	-
Stage 1	-	-	-	-	-	-	811	0	-
Stage 2	-	-	-	-	-	-	715	0	-

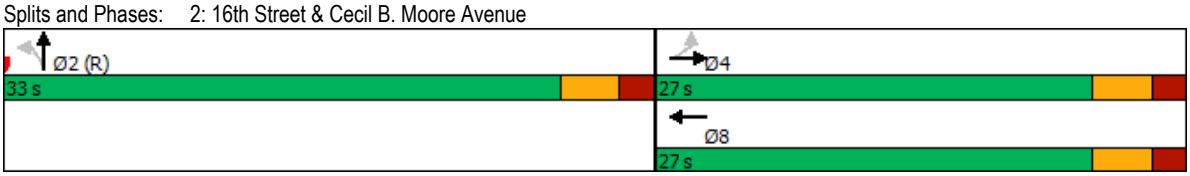
Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	621	1095	-	-	-
HCM Lane V/C Ratio	0.078	0.01	-	-	-
HCM Control Delay (s)	11.3	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-	-

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	29	168	263	213
Future Volume (vph)	29	168	263	213
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 2: 16th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
2: 16th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	168	0	0	263	76	36	213	47	0	0	0
Future Volume (veh/h)	29	168	0	0	263	76	36	213	47	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.90		1.00	1.00		0.75	1.00		0.93			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	0.86	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2034	2034	0	0	2051	2051	2100	2051	2100			
Adj Flow Rate, veh/h	33	191	0	0	299	86	41	242	53			
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
Percent Heavy Veh, %	4	4	0	0	3	3	0	3	0			
Cap, veh/h	112	576	0	0	463	133	96	567	124			
Arrive On Green	0.37	0.37	0.00	0.00	0.37	0.37	0.47	0.47	0.47			
Sat Flow, veh/h	117	1558	0	0	1251	360	204	1206	264			
Grp Volume(v), veh/h	224	0	0	0	0	385	336	0	0			
Grp Sat Flow(s),veh/h/ln	1675	0	0	0	0	1610	1675	0	0			
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	11.9	8.0	0.0	0.0			
Cycle Q Clear(g_c), s	12.2	0.0	0.0	0.0	0.0	11.9	8.0	0.0	0.0			
Prop In Lane	0.15		0.00	0.00		0.22	0.12		0.16			
Lane Grp Cap(c), veh/h	689	0	0	0	0	596	787	0	0			
V/C Ratio(X)	0.33	0.00	0.00	0.00	0.00	0.65	0.43	0.00	0.00			
Avail Cap(c_a), veh/h	689	0	0	0	0	596	787	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	13.4	0.0	0.0	0.0	0.0	15.6	10.5	0.0	0.0			
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	0.0	5.3	1.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	4.0	0.0	0.0	0.0	0.0	8.4	5.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	0.0	0.0	0.0	0.0	21.0	12.2	0.0	0.0			
LnGrp LOS	B	A	A	A	A	C	B	A	A			
Approach Vol, veh/h		224			385			336				
Approach Delay, s/veh		14.7			21.0			12.2				
Approach LOS		B			C			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 28		* 22				* 22				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			16.4									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	195	0	0	323	36	17	25	32	0	0	0
Future Vol, veh/h	19	195	0	0	323	36	17	25	32	0	0	0
Conflicting Peds, #/hr	180	0	198	198	0	180	19	0	39	39	0	19
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	4	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	23	235	0	0	389	43	20	30	39	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	612	0	-	-	-	0	711	893	274
Stage 1	-	-	-	-	-	-	281	281	-
Stage 2	-	-	-	-	-	-	430	612	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	977	-	0	0	-	-	403	283	770
Stage 1	-	-	0	0	-	-	771	682	-
Stage 2	-	-	0	0	-	-	660	487	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	977	-	-	-	-	-	386	0	746
Mov Cap-2 Maneuver	-	-	-	-	-	-	386	0	-
Stage 1	-	-	-	-	-	-	750	0	-
Stage 2	-	-	-	-	-	-	650	0	-

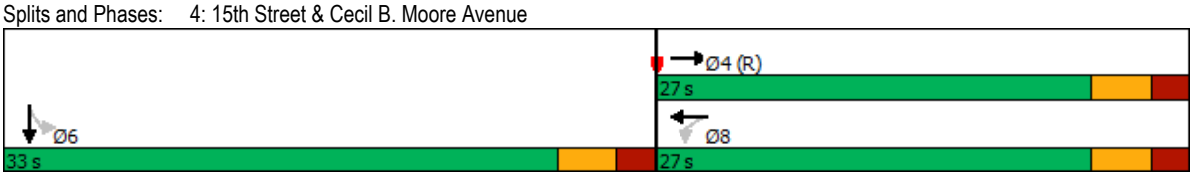
Approach	EB	WB	NB
HCM Control Delay, s	0.8	0	12.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	564	977	-	-	-
HCM Lane V/C Ratio	0.158	0.023	-	-	-
HCM Control Delay (s)	12.6	8.8	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.6	0.1	-	-	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	173	30	196	292
Future Volume (vph)	173	30	196	292
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 48 (80%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 4: 15th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	173	56	30	196	0	0	0	0	84	292	162
Future Volume (veh/h)	0	173	56	30	196	0	0	0	0	84	292	162
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.64	0.79		1.00				1.00		0.78
Parking Bus, Adj	1.00	1.00	0.89	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2034	2034	2018	2018	0				2100	2100	2100
Adj Flow Rate, veh/h	0	184	60	32	209	0				89	311	172
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	4	4	5	5	0				0	0	0
Cap, veh/h	0	412	134	112	638	0				118	412	228
Arrive On Green	0.00	0.37	0.37	0.37	0.37	0.00				0.47	0.47	0.47
Sat Flow, veh/h	0	1123	366	121	1740	0				253	883	488
Grp Volume(v), veh/h	0	0	244	241	0	0				572	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1489	1862	0	0				1624	0	0
Q Serve(g_s), s	0.0	0.0	7.4	0.0	0.0	0.0				17.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	7.4	5.2	0.0	0.0				17.4	0.0	0.0
Prop In Lane	0.00		0.25	0.13		0.00				0.16		0.30
Lane Grp Cap(c), veh/h	0	0	546	751	0	0				758	0	0
V/C Ratio(X)	0.00	0.00	0.45	0.32	0.00	0.00				0.75	0.00	0.00
Avail Cap(c_a), veh/h	0	0	546	751	0	0				758	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	14.4	13.7	0.0	0.0				13.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.6	1.1	0.0	0.0				6.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	4.9	4.3	0.0	0.0				11.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	17.0	14.8	0.0	0.0				20.0	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				C	A	A
Approach Vol, veh/h		244			241						572	
Approach Delay, s/veh		17.0			14.8						20.0	
Approach LOS		B			B						C	

Timer - Assigned Phs		4		6		8						
Phs Duration (G+Y+Rc), s		27.0		33.0		27.0						
Change Period (Y+Rc), s		5.0		5.0		5.0						
Max Green Setting (Gmax), s		22.0		28.0		22.0						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay		18.2										
HCM 6th LOS		B										

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	258	220	1	1	2
Future Vol, veh/h	2	258	220	1	1	2
Conflicting Peds, #/hr	461	0	0	461	16	29
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	3	4	0	0	0
Mvmt Flow	2	300	256	1	1	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	718	0	-	0	1038	747
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	320	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	892	-	-	-	258	416
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	741	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	566	-	-	-	103	258
Mov Cap-2 Maneuver	-	-	-	-	103	-
Stage 1	-	-	-	-	307	-
Stage 2	-	-	-	-	470	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	26.4
HCM LOS			D

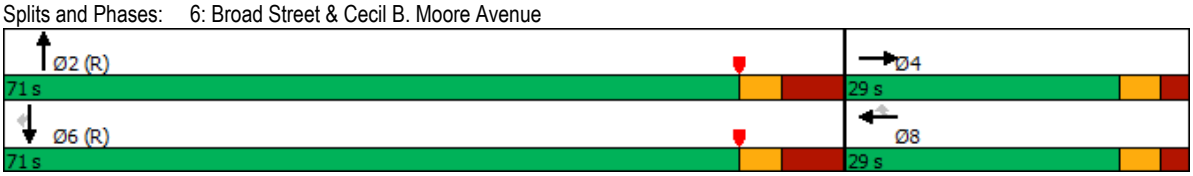
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	566	-	-	-	172
HCM Lane V/C Ratio	0.004	-	-	-	0.02
HCM Control Delay (s)	11.4	0	-	-	26.4
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBT	WBT	WBR	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	161	157	101	1384	1358	69
Future Volume (vph)	161	157	101	1384	1358	69
Turn Type	NA	NA	Perm	NA	NA	Perm
Protected Phases	4	8		2	6	
Permitted Phases			8			6
Minimum Split (s)	29.0	29.0	29.0	71.0	71.0	71.0
Total Split (s)	29.0	29.0	29.0	71.0	71.0	71.0
Total Split (%)	29.0%	29.0%	29.0%	71.0%	71.0%	71.0%
Yellow Time (s)	3.4	3.4	3.4	3.6	3.6	3.6
All-Red Time (s)	2.6	2.6	2.6	5.4	5.4	5.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	9.0	9.0	9.0
Lead/Lag						
Lead-Lag Optimize?						

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 91 (91%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Pretimed

Splits and Phases: 6: Broad Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
6: Broad Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	161	92	0	157	101	0	1384	90	0	1358	69
Future Volume (veh/h)	0	161	92	0	157	101	0	1384	90	0	1358	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.65	1.00		0.58	1.00		0.50	1.00		0.72
Parking Bus, Adj	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.97
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	2034	2034	0	2018	2051	0	2067	2067	0	2067	2084
Adj Flow Rate, veh/h	0	169	97	0	165	106	0	1457	95	0	1429	73
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	4	4	0	5	3	0	2	2	0	2	1
Cap, veh/h	0	225	129	0	464	228	0	3097	202	0	2435	759
Arrive On Green	0.00	0.23	0.23	0.00	0.23	0.23	0.00	0.62	0.62	0.00	0.62	0.62
Sat Flow, veh/h	0	980	563	0	2018	991	0	5181	325	0	4031	1223
Grp Volume(v), veh/h	0	0	266	0	165	106	0	1097	455	0	1429	73
Grp Sat Flow(s),veh/h/ln	0	0	1543	0	2018	991	0	1881	1558	0	1964	1223
Q Serve(g_s), s	0.0	0.0	16.0	0.0	6.9	9.2	0.0	15.6	15.7	0.0	21.7	2.4
Cycle Q Clear(g_c), s	0.0	0.0	16.0	0.0	6.9	9.2	0.0	15.6	15.7	0.0	21.7	2.4
Prop In Lane	0.00		0.36	0.00		1.00	0.00		0.21	0.00		1.00
Lane Grp Cap(c), veh/h	0	0	355	0	464	228	0	2333	966	0	2435	759
V/C Ratio(X)	0.00	0.00	0.75	0.00	0.36	0.47	0.00	0.47	0.47	0.00	0.59	0.10
Avail Cap(c_a), veh/h	0	0	355	0	464	228	0	2333	966	0	2435	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	35.8	0.0	32.3	33.2	0.0	10.2	10.2	0.0	11.3	7.7
Incr Delay (d2), s/veh	0.0	0.0	13.6	0.0	2.1	6.7	0.0	0.7	1.6	0.0	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	11.8	0.0	6.5	4.8	0.0	10.4	9.4	0.0	14.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	49.4	0.0	34.4	39.9	0.0	10.9	11.8	0.0	12.4	7.9
LnGrp LOS	A	A	D	A	C	D	A	B	B	A	B	A
Approach Vol, veh/h		266			271			1552			1502	
Approach Delay, s/veh		49.4			36.6			11.2			12.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		71.0		29.0		71.0		29.0				
Change Period (Y+Rc), s		9.0		6.0		9.0		6.0				
Max Green Setting (Gmax), s		62.0		23.0		62.0		23.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		4.4		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			16.3									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	62	169	270	57	193
Future Volume (vph)	62	169	270	57	193
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		2	6		4
Permitted Phases	2			4	
Minimum Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	45.0%	45.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8
Lead/Lag					
Lead-Lag Optimize?					

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 8: 13th Street & Cecil B. Moore Avenue

Cecil B. Moore Vision Zero
8: 13th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	169	0	0	270	56	57	193	102	0	0	0
Future Volume (veh/h)	62	169	0	0	270	56	57	193	102	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.77		1.00	1.00		0.48	1.00		0.46			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2100	2034	0	0	2051	2051	2067	2084	2067			
Adj Flow Rate, veh/h	71	194	0	0	310	64	66	222	117			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	0	4	0	0	3	3	2	1	2			
Cap, veh/h	304	956	0	0	566	117	728	327	172			
Arrive On Green	0.47	0.47	0.00	0.00	0.16	0.16	0.37	0.37	0.37			
Sat Flow, veh/h	792	2034	0	0	1204	249	1969	884	466			
Grp Volume(v), veh/h	71	194	0	0	0	374	66	0	339			
Grp Sat Flow(s),veh/h/ln	792	2034	0	0	0	1453	1969	0	1349			
Q Serve(g_s), s	4.5	3.4	0.0	0.0	0.0	14.3	1.3	0.0	12.7			
Cycle Q Clear(g_c), s	18.8	3.4	0.0	0.0	0.0	14.3	1.3	0.0	12.7			
Prop In Lane	1.00		0.00	0.00		0.17	1.00		0.35			
Lane Grp Cap(c), veh/h	304	956	0	0	0	683	728	0	499			
V/C Ratio(X)	0.23	0.20	0.00	0.00	0.00	0.55	0.09	0.00	0.68			
Avail Cap(c_a), veh/h	304	956	0	0	0	683	728	0	499			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.4	9.3	0.0	0.0	0.0	19.5	12.3	0.0	15.9			
Incr Delay (d2), s/veh	1.8	0.5	0.0	0.0	0.0	3.1	0.2	0.0	7.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	1.7	2.6	0.0	0.0	0.0	10.0	1.0	0.0	8.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	9.8	0.0	0.0	0.0	22.6	12.6	0.0	23.2			
LnGrp LOS	C	A	A	A	A	C	B	A	C			
Approach Vol, veh/h		265			374			405				
Approach Delay, s/veh		12.9			22.6			21.4				
Approach LOS		B			C			C				

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 28		* 22		* 28						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			19.7									
HCM 6th LOS			B									

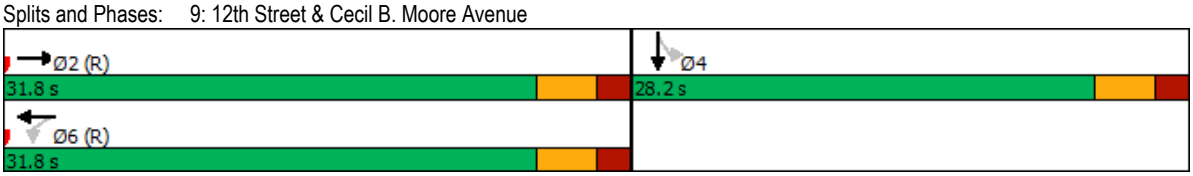
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	193	41	222	250
Future Volume (vph)	193	41	222	250
Turn Type	NA	Perm	NA	NA
Protected Phases	2		6	4
Permitted Phases		6		
Minimum Split (s)	31.8	31.8	31.8	28.2
Total Split (s)	31.8	31.8	31.8	28.2
Total Split (%)	53.0%	53.0%	53.0%	47.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

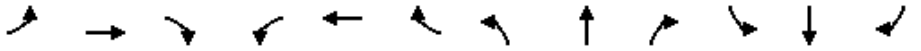
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28.2 (47%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 9: 12th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
9: 12th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	193	80	41	222	0	0	0	0	42	250	100
Future Volume (veh/h)	0	193	80	41	222	0	0	0	0	42	250	100
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.84	0.92		1.00				1.00		0.80
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2051	2051	2067	2034	0				2100	2034	2100
Adj Flow Rate, veh/h	0	203	84	43	234	0				44	263	105
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	3	3	2	4	0				0	4	0
Cap, veh/h	0	524	217	414	916	0				68	404	161
Arrive On Green	0.00	0.15	0.15	0.45	0.45	0.00				0.39	0.39	0.39
Sat Flow, veh/h	0	1165	482	1006	2034	0				173	1037	414
Grp Volume(v), veh/h	0	0	287	43	234	0				412	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1648	1006	2034	0				1624	0	0
Q Serve(g_s), s	0.0	0.0	9.4	1.9	4.3	0.0				12.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	9.4	11.3	4.3	0.0				12.4	0.0	0.0
Prop In Lane	0.00		0.29	1.00		0.00				0.11		0.25
Lane Grp Cap(c), veh/h	0	0	741	414	916	0				634	0	0
V/C Ratio(X)	0.00	0.00	0.39	0.10	0.26	0.00				0.65	0.00	0.00
Avail Cap(c_a), veh/h	0	0	741	414	916	0				634	0	0
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	18.1	15.7	10.3	0.0				15.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.5	0.5	0.7	0.0				5.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	7.6	0.8	3.4	0.0				8.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	19.6	16.2	10.9	0.0				20.1	0.0	0.0
LnGrp LOS	A	A	B	B	B	A				C	A	A
Approach Vol, veh/h		287			277						412	
Approach Delay, s/veh		19.6			11.7						20.1	
Approach LOS		B			B						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		31.8		28.2		31.8						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 27		* 23		* 27						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			17.6									
HCM 6th LOS			B									

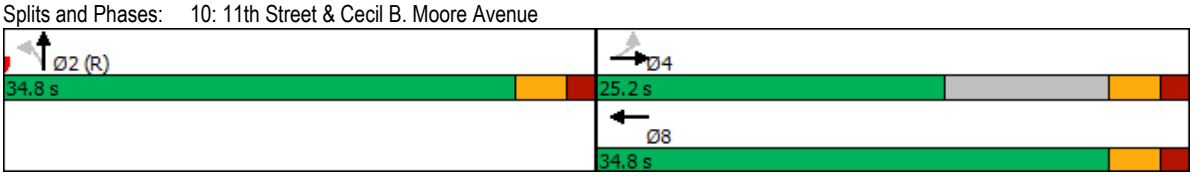
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	85	146	202	363
Future Volume (vph)	85	146	202	363
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	25.2	25.2	34.8	34.8
Total Split (s)	25.2	25.2	34.8	34.8
Total Split (%)	36.2%	36.2%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

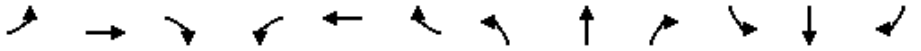
Intersection Summary
Cycle Length: 69.6
Actuated Cycle Length: 69.6
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 70
Control Type: Pretimed

Splits and Phases: 10: 11th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
10: 11th Street & Cecil B. Moore Avenue

2021 Existing Conditions
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	146	0	0	202	45	54	363	38	0	0	0
Future Volume (veh/h)	85	146	0	0	202	45	54	363	38	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.93		1.00	1.00		0.86	1.00		0.95			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	0.90	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2100	2034	0	0	2034	2034	2100	2067	2100			
Adj Flow Rate, veh/h	93	160	0	0	222	49	59	399	42			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	0	4	0	0	4	4	0	2	0			
Cap, veh/h	443	877	0	0	606	134	92	623	66			
Arrive On Green	0.43	0.43	0.00	0.00	0.43	0.43	0.43	0.43	0.43			
Sat Flow, veh/h	1047	2034	0	0	1405	310	214	1446	152			
Grp Volume(v), veh/h	93	160	0	0	0	271	500	0	0			
Grp Sat Flow(s),veh/h/ln	1047	2034	0	0	0	1715	1813	0	0			
Q Serve(g_s), s	4.6	3.4	0.0	0.0	0.0	7.4	15.1	0.0	0.0			
Cycle Q Clear(g_c), s	12.0	3.4	0.0	0.0	0.0	7.4	15.1	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.18	0.12		0.08			
Lane Grp Cap(c), veh/h	443	877	0	0	0	739	781	0	0			
V/C Ratio(X)	0.21	0.18	0.00	0.00	0.00	0.37	0.64	0.00	0.00			
Avail Cap(c_a), veh/h	443	877	0	0	0	739	781	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	17.4	12.2	0.0	0.0	0.0	13.4	15.6	0.0	0.0			
Incr Delay (d2), s/veh	1.1	0.5	0.0	0.0	0.0	1.4	4.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	2.1	2.8	0.0	0.0	0.0	5.3	10.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	12.7	0.0	0.0	0.0	14.8	19.6	0.0	0.0			
LnGrp LOS	B	B	A	A	A	B	B	A	A			
Approach Vol, veh/h		253			271			500				
Approach Delay, s/veh		14.8			14.8			19.6				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		34.8		34.8				34.8				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 30		* 20				* 30				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			17.1									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	174	5	1	248	1	3
Future Vol, veh/h	174	5	1	248	1	3
Conflicting Peds, #/hr	0	21	21	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	0	0	4	0	0
Mvmt Flow	198	6	1	282	1	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	225	0	507	223
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	285	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1356	-	529	822
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	768	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1333	-	519	808
Mov Cap-2 Maneuver	-	-	-	-	519	-
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	766	-

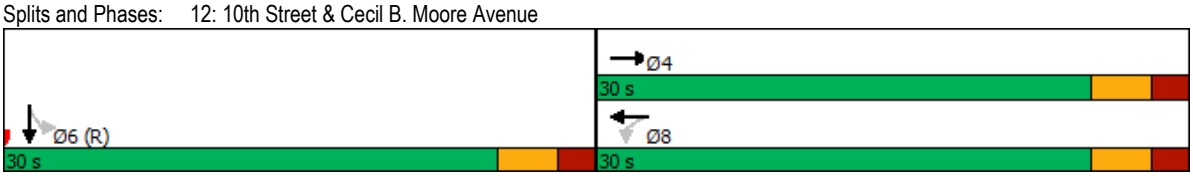
Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	709	-	-	1333	-
HCM Lane V/C Ratio	0.006	-	-	0.001	-
HCM Control Delay (s)	10.1	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	122	36	172	310
Future Volume (vph)	122	36	172	310
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	30.0	30.0	30.0	30.0
Total Split (s)	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 12: 10th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	122	47	36	172	0	0	0	0	5	310	78
Future Volume (veh/h)	0	122	47	36	172	0	0	0	0	5	310	78
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.99		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2018	2018	2034	2034	0				2100	2084	2100
Adj Flow Rate, veh/h	0	144	55	42	202	0				6	365	92
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	5	5	4	4	0				0	1	0
Cap, veh/h	0	514	196	154	699	0				10	589	149
Arrive On Green	0.00	0.42	0.42	0.42	0.42	0.00				0.42	0.42	0.42
Sat Flow, veh/h	0	1233	471	201	1678	0				23	1415	357
Grp Volume(v), veh/h	0	0	199	244	0	0				463	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1705	1879	0	0				1795	0	0
Q Serve(g_s), s	0.0	0.0	4.6	0.0	0.0	0.0				12.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	4.6	4.8	0.0	0.0				12.2	0.0	0.0
Prop In Lane	0.00		0.28	0.17		0.00				0.01		0.20
Lane Grp Cap(c), veh/h	0	0	710	853	0	0				748	0	0
V/C Ratio(X)	0.00	0.00	0.28	0.29	0.00	0.00				0.62	0.00	0.00
Avail Cap(c_a), veh/h	0	0	710	853	0	0				748	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.6	11.6	0.0	0.0				13.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.0	0.8	0.0	0.0				3.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	3.2	3.9	0.0	0.0				8.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	12.5	12.4	0.0	0.0				17.6	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				B	A	A
Approach Vol, veh/h		199			244						463	
Approach Delay, s/veh		12.5			12.4						17.6	
Approach LOS		B			B						B	

Timer - Assigned Phs		4		6		8						
Phs Duration (G+Y+Rc), s		30.0		30.0		30.0						
Change Period (Y+Rc), s		5.0		5.0		5.0						
Max Green Setting (Gmax), s		25.0		25.0		25.0						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay		15.1										
HCM 6th LOS		B										

Figure A-4: Proposed Improvements - AM Peak Hour

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	163	0	0	198	9	22	6	7	0	0	0
Future Vol, veh/h	2	163	0	0	198	9	22	6	7	0	0	0
Conflicting Peds, #/hr	79	0	147	147	0	79	11	0	23	23	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	7	2	2	4	0	0	0	0	0	0	0
Mvmt Flow	2	190	0	0	230	10	26	7	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	319	0	-	-	-	0	440	513	213
Stage 1	-	-	-	-	-	-	194	194	-
Stage 2	-	-	-	-	-	-	246	319	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1252	-	0	0	-	-	578	468	832
Stage 1	-	-	0	0	-	-	844	744	-
Stage 2	-	-	0	0	-	-	800	657	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1252	-	-	-	-	-	572	0	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	572	0	-
Stage 1	-	-	-	-	-	-	842	0	-
Stage 2	-	-	-	-	-	-	793	0	-

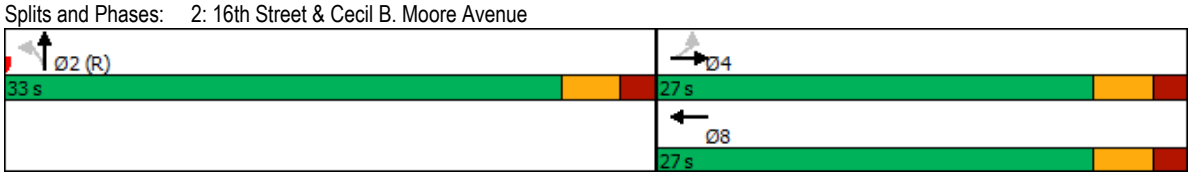
Approach	EB	WB	NB
HCM Control Delay, s	0.1	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	617	1252	-	-	-
HCM Lane V/C Ratio	0.066	0.002	-	-	-
HCM Control Delay (s)	11.2	7.9	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	0	-	-	-

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	32	137	171	170
Future Volume (vph)	32	137	171	170
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

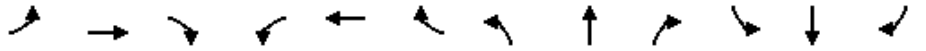
Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 2: 16th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
2: 16th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	137	0	0	171	37	39	170	33	0	0	0
Future Volume (veh/h)	32	137	0	0	171	37	39	170	33	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.91		1.00	1.00		0.83	1.00		0.92			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	0.86	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1985	1985	0	0	2034	2034	2100	2018	2100			
Adj Flow Rate, veh/h	39	167	0	0	209	45	48	207	40			
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82			
Percent Heavy Veh, %	7	7	0	0	4	4	0	5	0			
Cap, veh/h	147	581	0	0	510	110	126	545	105			
Arrive On Green	0.37	0.37	0.00	0.00	0.37	0.37	0.47	0.47	0.47			
Sat Flow, veh/h	205	1570	0	0	1378	297	269	1160	224			
Grp Volume(v), veh/h	206	0	0	0	0	254	295	0	0			
Grp Sat Flow(s),veh/h/ln	1776	0	0	0	0	1675	1653	0	0			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.8	6.9	0.0	0.0			
Cycle Q Clear(g_c), s	4.4	0.0	0.0	0.0	0.0	6.8	6.9	0.0	0.0			
Prop In Lane	0.19		0.00	0.00		0.18	0.16		0.14			
Lane Grp Cap(c), veh/h	728	0	0	0	0	620	777	0	0			
V/C Ratio(X)	0.28	0.00	0.00	0.00	0.00	0.41	0.38	0.00	0.00			
Avail Cap(c_a), veh/h	728	0	0	0	0	620	777	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	13.3	0.0	0.0	0.0	0.0	14.0	10.3	0.0	0.0			
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.0	0.0	2.0	1.4	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	3.6	0.0	0.0	0.0	0.0	4.8	4.5	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	0.0	0.0	0.0	16.0	11.7	0.0	0.0			
LnGrp LOS	B	A	A	A	A	B	B	A	A			
Approach Vol, veh/h		206			254			295				
Approach Delay, s/veh		14.3			16.0			11.7				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 28		* 22				* 22				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			13.8									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	144	0	0	198	45	11	34	19	0	0	0
Future Vol, veh/h	25	144	0	0	198	45	11	34	19	0	0	0
Conflicting Peds, #/hr	86	0	173	173	0	86	11	0	17	17	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	4	7	0	0	4	0	9	3	11	0	0	0
Mvmt Flow	29	169	0	0	233	53	13	40	22	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	372	0	-	-	-	0	498	599	186
Stage 1	-	-	-	-	-	-	227	227	-
Stage 2	-	-	-	-	-	-	271	372	-
Critical Hdwy	4.14	-	-	-	-	-	6.49	6.53	6.31
Critical Hdwy Stg 1	-	-	-	-	-	-	5.49	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.49	5.53	-
Follow-up Hdwy	2.236	-	-	-	-	-	3.581	4.027	3.399
Pot Cap-1 Maneuver	1176	-	0	0	-	-	519	414	834
Stage 1	-	-	0	0	-	-	794	714	-
Stage 2	-	-	0	0	-	-	759	617	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1176	-	-	-	-	-	500	0	823
Mov Cap-2 Maneuver	-	-	-	-	-	-	500	0	-
Stage 1	-	-	-	-	-	-	773	0	-
Stage 2	-	-	-	-	-	-	752	0	-

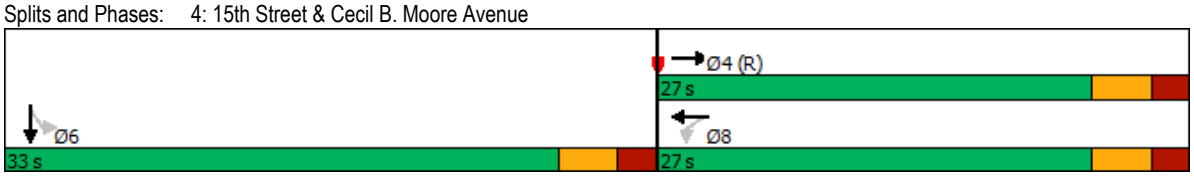
Approach	EB	WB	NB
HCM Control Delay, s	1.2	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	665	1176	-	-	-
HCM Lane V/C Ratio	0.113	0.025	-	-	-
HCM Control Delay (s)	11.1	8.1	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0.1	-	-	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	142	25	183	200
Future Volume (vph)	142	25	183	200
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 48 (80%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 4: 15th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	142	20	25	183	0	0	0	0	27	200	55
Future Volume (veh/h)	0	142	20	25	183	0	0	0	0	27	200	55
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.70	0.81		1.00				1.00		0.81
Parking Bus, Adj	1.00	1.00	0.89	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1985	1985	2034	2034	0				2100	2067	2100
Adj Flow Rate, veh/h	0	169	24	30	218	0				32	238	65
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84				0.84	0.84	0.84
Percent Heavy Veh, %	0	7	7	4	4	0				0	2	0
Cap, veh/h	0	520	74	108	658	0				76	565	154
Arrive On Green	0.00	0.37	0.37	0.37	0.37	0.00				0.47	0.47	0.47
Sat Flow, veh/h	0	1417	201	112	1795	0				163	1210	330
Grp Volume(v), veh/h	0	0	193	248	0	0				335	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1619	1907	0	0				1703	0	0
Q Serve(g_s), s	0.0	0.0	5.1	0.0	0.0	0.0				7.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	5.1	5.3	0.0	0.0				7.8	0.0	0.0
Prop In Lane	0.00		0.12	0.12		0.00				0.10		0.19
Lane Grp Cap(c), veh/h	0	0	593	766	0	0				795	0	0
V/C Ratio(X)	0.00	0.00	0.33	0.32	0.00	0.00				0.42	0.00	0.00
Avail Cap(c_a), veh/h	0	0	593	766	0	0				795	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	13.7	13.7	0.0	0.0				10.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.5	1.1	0.0	0.0				1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	3.5	4.4	0.0	0.0				5.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	15.1	14.8	0.0	0.0				12.3	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				B	A	A
Approach Vol, veh/h		193			248						335	
Approach Delay, s/veh		15.1			14.8						12.3	
Approach LOS		B			B						B	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				27.0		33.0		27.0				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				22.0		28.0		22.0				
Max Q Clear Time (g_c+I1), s				0.0		0.0		0.0				
Green Ext Time (p_c), s				0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			13.8									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	167	190	2	2	1
Future Vol, veh/h	1	167	190	2	2	1
Conflicting Peds, #/hr	314	0	0	314	11	34
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	7	0	4	0	0
Mvmt Flow	1	184	209	2	2	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	525	0	-	0	721	558
Stage 1	-	-	-	-	524	-
Stage 2	-	-	-	-	197	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1052	-	-	-	397	533
Stage 1	-	-	-	-	598	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	790	-	-	-	224	389
Mov Cap-2 Maneuver	-	-	-	-	224	-
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	632	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	19
HCM LOS			C

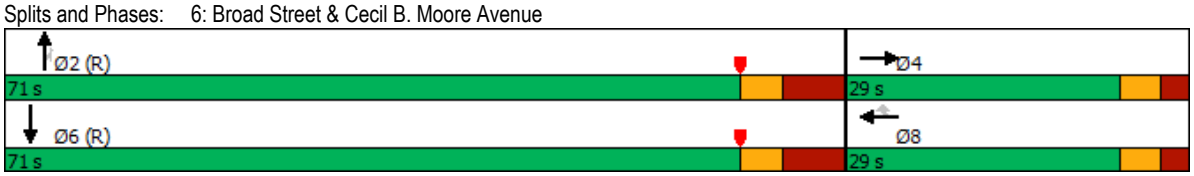
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	790	-	-	-	261
HCM Lane V/C Ratio	0.001	-	-	-	0.013
HCM Control Delay (s)	9.6	0	-	-	19
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

Lane Group	EBT	WBT	WBR	NBT	NBR	SBT
Lane Configurations						
Traffic Volume (vph)	109	139	79	1120	57	1583
Future Volume (vph)	109	139	79	1120	57	1583
Turn Type	NA	NA	Perm	NA	Perm	NA
Protected Phases	4	8		2		6
Permitted Phases			8		2	
Minimum Split (s)	29.0	29.0	29.0	71.0	71.0	71.0
Total Split (s)	29.0	29.0	29.0	71.0	71.0	71.0
Total Split (%)	29.0%	29.0%	29.0%	71.0%	71.0%	71.0%
Yellow Time (s)	3.4	3.4	3.4	3.6	3.6	3.6
All-Red Time (s)	2.6	2.6	2.6	5.4	5.4	5.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	9.0	9.0	9.0
Lead/Lag						
Lead-Lag Optimize?						

Intersection Summary

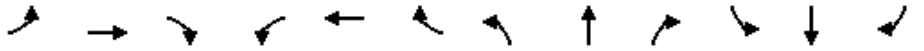
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 91 (91%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Pretimed

Splits and Phases: 6: Broad Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
6: Broad Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	109	61	0	139	79	0	1120	57	0	1583	67
Future Volume (veh/h)	0	109	61	0	139	79	0	1120	57	0	1583	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.76	1.00		0.62	1.00		0.78	1.00		0.74
Parking Bus, Adj	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.97
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1936	1936	0	2002	2084	0	2051	2018	0	2051	2051
Adj Flow Rate, veh/h	0	127	71	0	162	92	0	1302	66	0	1841	78
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	10	10	0	6	1	0	3	5	0	3	3
Cap, veh/h	0	234	131	0	460	248	0	2416	803	0	3321	140
Arrive On Green	0.00	0.23	0.23	0.00	0.23	0.23	0.00	0.62	0.62	0.00	0.62	0.62
Sat Flow, veh/h	0	1019	570	0	2002	1077	0	3999	1295	0	5541	226
Grp Volume(v), veh/h	0	0	198	0	162	92	0	1302	66	0	1280	639
Grp Sat Flow(s),veh/h/ln	0	0	1589	0	2002	1077	0	1948	1295	0	1866	1849
Q Serve(g_s), s	0.0	0.0	11.0	0.0	6.8	7.2	0.0	19.1	2.0	0.0	19.8	20.0
Cycle Q Clear(g_c), s	0.0	0.0	11.0	0.0	6.8	7.2	0.0	19.1	2.0	0.0	19.8	20.0
Prop In Lane	0.00		0.36	0.00		1.00	0.00		1.00	0.00		0.12
Lane Grp Cap(c), veh/h	0	0	365	0	460	248	0	2416	803	0	2314	1147
V/C Ratio(X)	0.00	0.00	0.54	0.00	0.35	0.37	0.00	0.54	0.08	0.00	0.55	0.56
Avail Cap(c_a), veh/h	0	0	365	0	460	248	0	2416	803	0	2314	1147
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	33.9	0.0	32.3	32.4	0.0	10.8	7.6	0.0	11.0	11.0
Incr Delay (d2), s/veh	0.0	0.0	5.7	0.0	2.1	4.2	0.0	0.9	0.2	0.0	1.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	8.4	0.0	6.4	3.9	0.0	12.6	1.1	0.0	12.6	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	39.5	0.0	34.4	36.6	0.0	11.7	7.8	0.0	11.9	13.0
LnGrp LOS	A	A	D	A	C	D	A	B	A	A	B	B
Approach Vol, veh/h		198			254			1368			1919	
Approach Delay, s/veh		39.5			35.2			11.5			12.3	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		71.0		29.0		71.0		29.0				
Change Period (Y+Rc), s		9.0		6.0		9.0		6.0				
Max Green Setting (Gmax), s		62.0		23.0		62.0		23.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

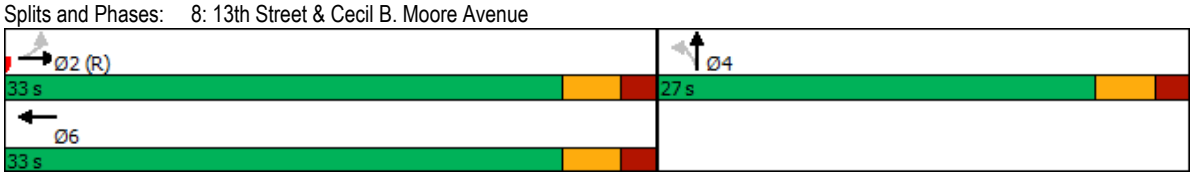
Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	25	115	203	45	141
Future Volume (vph)	25	115	203	45	141
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		2	6		4
Permitted Phases	2			4	
Minimum Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	45.0%	45.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8	4.8
Lead/Lag					
Lead-Lag Optimize?					

Intersection Summary

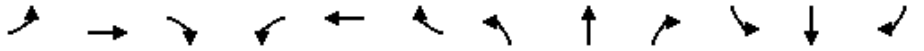
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 8: 13th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
8: 13th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	115	0	0	203	29	45	141	62	0	0	0
Future Volume (veh/h)	25	115	0	0	203	29	45	141	62	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.91		1.00	1.00		0.78	1.00		0.62			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1953	1953	0	0	2002	2002	2100	2100	2100			
Adj Flow Rate, veh/h	42	195	0	0	344	49	76	239	105			
Peak Hour Factor	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59			
Percent Heavy Veh, %	9	9	0	0	6	6	0	0	0			
Cap, veh/h	142	614	0	0	685	98	740	425	187			
Arrive On Green	0.47	0.47	0.00	0.00	0.16	0.16	0.37	0.37	0.37			
Sat Flow, veh/h	152	1307	0	0	1458	208	2000	1148	504			
Grp Volume(v), veh/h	237	0	0	0	0	393	76	0	344			
Grp Sat Flow(s),veh/h/ln	1459	0	0	0	0	1665	2000	0	1652			
Q Serve(g_s), s	0.8	0.0	0.0	0.0	0.0	13.0	1.5	0.0	9.9			
Cycle Q Clear(g_c), s	13.7	0.0	0.0	0.0	0.0	13.0	1.5	0.0	9.9			
Prop In Lane	0.18		0.00	0.00		0.12	1.00		0.31			
Lane Grp Cap(c), veh/h	757	0	0	0	0	783	740	0	611			
V/C Ratio(X)	0.31	0.00	0.00	0.00	0.00	0.50	0.10	0.00	0.56			
Avail Cap(c_a), veh/h	757	0	0	0	0	783	740	0	611			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	9.8	0.0	0.0	0.0	0.0	18.9	12.4	0.0	15.0			
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.0	2.3	0.3	0.0	3.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	3.4	0.0	0.0	0.0	0.0	10.2	1.2	0.0	7.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.9	0.0	0.0	0.0	0.0	21.2	12.7	0.0	18.8			
LnGrp LOS	B	A	A	A	A	C	B	A	B			
Approach Vol, veh/h		237			393			420				
Approach Delay, s/veh		10.9			21.2			17.7				
Approach LOS		B			C			B				

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 28		* 22		* 28						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			17.5									
HCM 6th LOS			B									

Notes

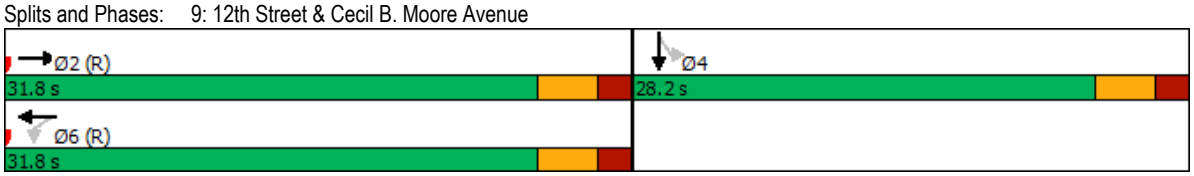
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	125	38	179	278
Future Volume (vph)	125	38	179	278
Turn Type	NA	Perm	NA	NA
Protected Phases	2		6	4
Permitted Phases		6		
Minimum Split (s)	31.8	31.8	31.8	28.2
Total Split (s)	31.8	31.8	31.8	28.2
Total Split (%)	53.0%	53.0%	53.0%	47.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	4.8		4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28.2 (47%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 9: 12th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
9: 12th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	125	43	38	179	0	0	0	0	25	278	69
Future Volume (veh/h)	0	125	43	38	179	0	0	0	0	25	278	69
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.97		1.00				1.00		0.86
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1985	1985	2002	2002	0				2100	2018	2100
Adj Flow Rate, veh/h	0	160	55	49	229	0				32	356	88
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78				0.78	0.78	0.78
Percent Heavy Veh, %	0	7	7	6	6	0				0	5	0
Cap, veh/h	0	559	192	165	728	0				44	494	122
Arrive On Green	0.00	0.15	0.15	0.45	0.45	0.00				0.39	0.39	0.39
Sat Flow, veh/h	0	1243	427	209	1619	0				114	1266	313
Grp Volume(v), veh/h	0	0	215	278	0	0				476	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1670	1827	0	0				1693	0	0
Q Serve(g_s), s	0.0	0.0	6.9	0.0	0.0	0.0				14.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	6.9	5.3	0.0	0.0				14.3	0.0	0.0
Prop In Lane	0.00		0.26	0.18		0.00				0.07		0.18
Lane Grp Cap(c), veh/h	0	0	752	893	0	0				660	0	0
V/C Ratio(X)	0.00	0.00	0.29	0.31	0.00	0.00				0.72	0.00	0.00
Avail Cap(c_a), veh/h	0	0	752	893	0	0				660	0	0
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.0	10.5	0.0	0.0				15.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.0	0.9	0.0	0.0				6.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	5.2	4.2	0.0	0.0				10.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	17.9	11.4	0.0	0.0				22.2	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				C	A	A
Approach Vol, veh/h		215			278						476	
Approach Delay, s/veh		17.9			11.4						22.2	
Approach LOS		B			B						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		31.8		28.2		31.8						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 27		* 23		* 27						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary	
HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

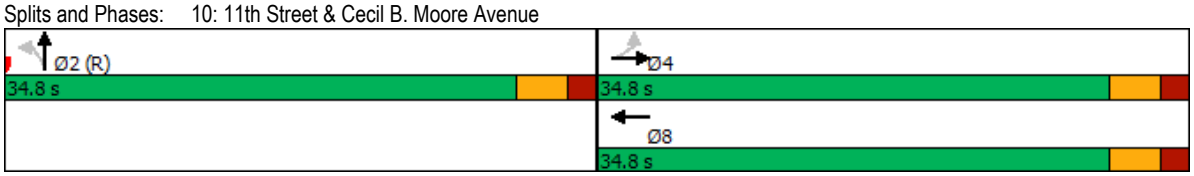
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	49	104	184	259
Future Volume (vph)	49	104	184	259
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	34.8	34.8	34.8	34.8
Total Split (s)	34.8	34.8	34.8	34.8
Total Split (%)	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

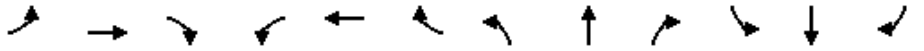
Intersection Summary
Cycle Length: 69.6
Actuated Cycle Length: 69.6
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 70
Control Type: Pretimed

Splits and Phases: 10: 11th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
10: 11th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	104	0	0	184	58	35	259	28	0	0	0
Future Volume (veh/h)	49	104	0	0	184	58	35	259	28	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.98		1.00	1.00		0.93	1.00		0.97			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	0.90	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1887	1887	0	0	2002	2002	2100	2018	2100			
Adj Flow Rate, veh/h	58	124	0	0	219	69	42	308	33			
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84			
Percent Heavy Veh, %	13	13	0	0	6	6	0	5	0			
Cap, veh/h	214	427	0	0	555	175	84	615	66			
Arrive On Green	0.43	0.43	0.00	0.00	0.43	0.43	0.43	0.43	0.43			
Sat Flow, veh/h	338	990	0	0	1288	406	194	1426	153			
Grp Volume(v), veh/h	182	0	0	0	0	288	383	0	0			
Grp Sat Flow(s),veh/h/ln	1328	0	0	0	0	1694	1773	0	0			
Q Serve(g_s), s	0.6	0.0	0.0	0.0	0.0	8.1	10.9	0.0	0.0			
Cycle Q Clear(g_c), s	8.7	0.0	0.0	0.0	0.0	8.1	10.9	0.0	0.0			
Prop In Lane	0.32		0.00	0.00		0.24	0.11		0.09			
Lane Grp Cap(c), veh/h	641	0	0	0	0	730	764	0	0			
V/C Ratio(X)	0.28	0.00	0.00	0.00	0.00	0.39	0.50	0.00	0.00			
Avail Cap(c_a), veh/h	641	0	0	0	0	730	764	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	12.6	0.0	0.0	0.0	0.0	13.6	14.4	0.0	0.0			
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.0	1.6	2.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	3.4	0.0	0.0	0.0	0.0	5.8	8.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	0.0	0.0	0.0	15.2	16.7	0.0	0.0			
LnGrp LOS	B	A	A	A	A	B	B	A	A			
Approach Vol, veh/h		182			288			383				
Approach Delay, s/veh		13.7			15.2			16.7				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		34.8		34.8				34.8				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 30		* 30				* 30				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			15.5									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	131	5	1	245	2	2
Future Vol, veh/h	131	5	1	245	2	2
Conflicting Peds, #/hr	0	7	7	0	5	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	12	0	0	5	0	0
Mvmt Flow	152	6	1	285	2	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	165	0	454	164
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	292	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1426	-	568	886
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	762	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1418	-	562	880
Mov Cap-2 Maneuver	-	-	-	-	562	-
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	758	-

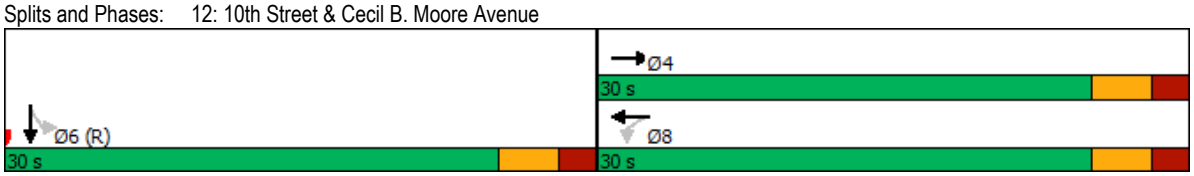
Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	686	-	-	1418	-
HCM Lane V/C Ratio	0.007	-	-	0.001	-
HCM Control Delay (s)	10.3	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	90	43	231	31
Future Volume (vph)	90	43	231	31
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	30.0	30.0	30.0	30.0
Total Split (s)	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 12: 10th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	90	39	43	231	0	0	0	0	2	31	19
Future Volume (veh/h)	0	90	39	43	231	0	0	0	0	2	31	19
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1822	1822	2002	2002	0				2100	2051	2100
Adj Flow Rate, veh/h	0	108	47	52	278	0				2	37	23
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83				0.83	0.83	0.83
Percent Heavy Veh, %	0	17	17	6	6	0				0	3	0
Cap, veh/h	0	447	195	144	709	0				23	424	263
Arrive On Green	0.00	0.42	0.42	0.42	0.42	0.00				0.42	0.42	0.42
Sat Flow, veh/h	0	1074	467	178	1703	0				55	1017	632
Grp Volume(v), veh/h	0	0	155	330	0	0				62	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1541	1881	0	0				1704	0	0
Q Serve(g_s), s	0.0	0.0	3.9	0.0	0.0	0.0				1.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.9	6.9	0.0	0.0				1.3	0.0	0.0
Prop In Lane	0.00		0.30	0.16		0.00				0.03		0.37
Lane Grp Cap(c), veh/h	0	0	642	853	0	0				710	0	0
V/C Ratio(X)	0.00	0.00	0.24	0.39	0.00	0.00				0.09	0.00	0.00
Avail Cap(c_a), veh/h	0	0	642	853	0	0				710	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.3	12.2	0.0	0.0				10.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	1.3	0.0	0.0				0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	2.5	5.6	0.0	0.0				0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	12.2	13.5	0.0	0.0				10.8	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				B	A	A
Approach Vol, veh/h		155			330						62	
Approach Delay, s/veh		12.2			13.5						10.8	
Approach LOS		B			B						B	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				30.0		30.0		30.0				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				25.0		25.0		25.0				
Max Q Clear Time (g_c+I1), s				0.0		0.0		0.0				
Green Ext Time (p_c), s				0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			12.9									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	155	0	0	204	12	9	9	12	0	0	0
Future Vol, veh/h	8	155	0	0	204	12	9	9	12	0	0	0
Conflicting Peds, #/hr	79	0	193	193	0	79	21	0	45	45	0	21
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	3	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	9	176	0	0	232	14	10	10	14	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	325	0	-	-	-	0	454	519	221
Stage 1	-	-	-	-	-	-	194	194	-
Stage 2	-	-	-	-	-	-	260	325	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1246	-	0	0	-	-	568	464	824
Stage 1	-	-	0	0	-	-	844	744	-
Stage 2	-	-	0	0	-	-	788	653	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1246	-	-	-	-	-	554	0	795
Mov Cap-2 Maneuver	-	-	-	-	-	-	554	0	-
Stage 1	-	-	-	-	-	-	837	0	-
Stage 2	-	-	-	-	-	-	775	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	10.7
HCM LOS			B

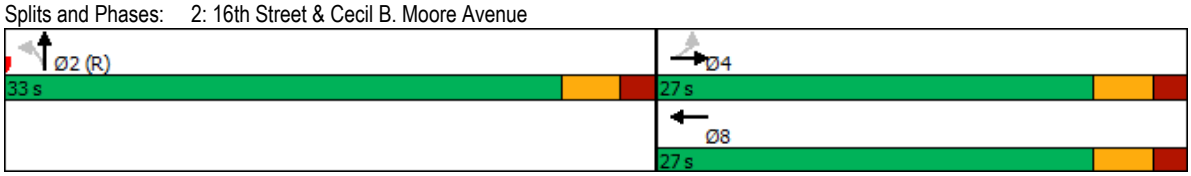
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	670	1246	-	-	-
HCM Lane V/C Ratio	0.051	0.007	-	-	-
HCM Control Delay (s)	10.7	7.9	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	0	-	-	-

Figure A-5: Proposed Improvements - MID Peak Hour

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	27	139	170	173
Future Volume (vph)	27	139	170	173
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 2: 16th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
2: 16th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: MID Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	139	0	0	170	61	42	173	33	0	0	0
Future Volume (veh/h)	27	139	0	0	170	61	42	173	33	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.92		1.00	1.00		0.83	1.00		0.92			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	0.86	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2051	2051	0	0	2034	2034	2100	2018	2100			
Adj Flow Rate, veh/h	31	158	0	0	193	69	48	197	38			
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
Percent Heavy Veh, %	3	3	0	0	4	4	0	5	0			
Cap, veh/h	134	629	0	0	442	158	132	541	104			
Arrive On Green	0.37	0.37	0.00	0.00	0.37	0.37	0.47	0.47	0.47			
Sat Flow, veh/h	174	1699	0	0	1195	427	280	1151	222			
Grp Volume(v), veh/h	189	0	0	0	0	262	283	0	0			
Grp Sat Flow(s),veh/h/ln	1873	0	0	0	0	1623	1653	0	0			
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	7.3	6.6	0.0	0.0			
Cycle Q Clear(g_c), s	3.8	0.0	0.0	0.0	0.0	7.3	6.6	0.0	0.0			
Prop In Lane	0.16		0.00	0.00		0.26	0.17		0.13			
Lane Grp Cap(c), veh/h	763	0	0	0	0	600	777	0	0			
V/C Ratio(X)	0.25	0.00	0.00	0.00	0.00	0.44	0.36	0.00	0.00			
Avail Cap(c_a), veh/h	763	0	0	0	0	600	777	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	13.1	0.0	0.0	0.0	0.0	14.2	10.2	0.0	0.0			
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.0	2.3	1.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	3.2	0.0	0.0	0.0	0.0	5.1	4.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	0.0	0.0	0.0	0.0	16.5	11.5	0.0	0.0			
LnGrp LOS	B	A	A	A	A	B	B	A	A			
Approach Vol, veh/h		189			262			283				
Approach Delay, s/veh		13.9			16.5			11.5				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 28		* 22				* 22				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			13.9									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	162	0	0	219	40	12	24	37	0	0	0
Future Vol, veh/h	9	162	0	0	219	40	12	24	37	0	0	0
Conflicting Peds, #/hr	140	0	257	257	0	140	18	0	40	40	0	18
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	3	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	10	178	0	0	241	44	13	26	41	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	425	0	-	-	-	0	479	623	218
Stage 1	-	-	-	-	-	-	198	198	-
Stage 2	-	-	-	-	-	-	281	425	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1145	-	0	0	-	-	549	405	827
Stage 1	-	-	0	0	-	-	840	741	-
Stage 2	-	-	0	0	-	-	771	590	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1145	-	-	-	-	-	536	0	801
Mov Cap-2 Maneuver	-	-	-	-	-	-	536	0	-
Stage 1	-	-	-	-	-	-	832	0	-
Stage 2	-	-	-	-	-	-	760	0	-

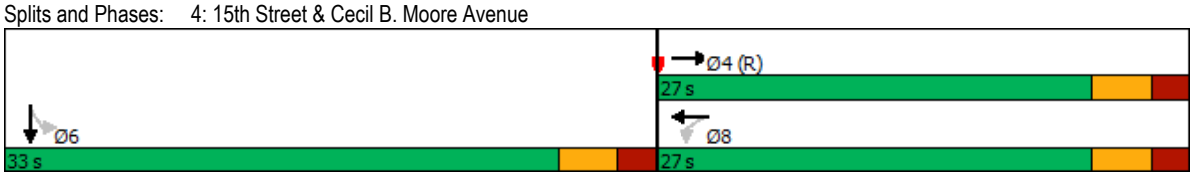
Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	714	1145	-	-	-
HCM Lane V/C Ratio	0.112	0.009	-	-	-
HCM Control Delay (s)	10.7	8.2	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	171	34	183	113
Future Volume (vph)	171	34	183	113
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 48 (80%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 4: 15th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	171	26	34	183	0	0	0	0	48	113	74
Future Volume (veh/h)	0	171	26	34	183	0	0	0	0	48	113	74
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.57	0.75		1.00				1.00		0.80
Parking Bus, Adj	1.00	1.00	0.89	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2067	2067	2034	2034	0				2100	2100	2100
Adj Flow Rate, veh/h	0	199	30	40	213	0				56	131	86
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86				0.86	0.86	0.86
Percent Heavy Veh, %	0	2	2	4	4	0				0	0	0
Cap, veh/h	0	512	77	126	609	0				156	366	240
Arrive On Green	0.00	0.37	0.37	0.37	0.37	0.00				0.47	0.47	0.47
Sat Flow, veh/h	0	1396	211	155	1661	0				335	783	514
Grp Volume(v), veh/h	0	0	229	253	0	0				273	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1607	1816	0	0				1633	0	0
Q Serve(g_s), s	0.0	0.0	6.3	0.0	0.0	0.0				6.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	6.3	5.4	0.0	0.0				6.4	0.0	0.0
Prop In Lane	0.00		0.13	0.16		0.00				0.21		0.32
Lane Grp Cap(c), veh/h	0	0	589	735	0	0				762	0	0
V/C Ratio(X)	0.00	0.00	0.39	0.34	0.00	0.00				0.36	0.00	0.00
Avail Cap(c_a), veh/h	0	0	589	735	0	0				762	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	14.0	13.7	0.0	0.0				10.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.9	1.3	0.0	0.0				1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	4.4	4.6	0.0	0.0				4.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	16.0	15.0	0.0	0.0				11.6	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				B	A	A
Approach Vol, veh/h		229			253						273	
Approach Delay, s/veh		16.0			15.0						11.6	
Approach LOS		B			B						B	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				27.0		33.0		27.0				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				22.0		28.0		22.0				
Max Q Clear Time (g_c+I1), s				0.0		0.0		0.0				
Green Ext Time (p_c), s				0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			14.1									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	212	212	1	3	1
Future Vol, veh/h	1	212	212	1	3	1
Conflicting Peds, #/hr	392	0	0	392	15	50
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	2	3	0	0	0
Mvmt Flow	1	252	252	1	4	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	645	0	-	0	914	695
Stage 1	-	-	-	-	645	-
Stage 2	-	-	-	-	269	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	950	-	-	-	306	446
Stage 1	-	-	-	-	526	-
Stage 2	-	-	-	-	781	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	654	-	-	-	145	295
Mov Cap-2 Maneuver	-	-	-	-	145	-
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	538	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	27.3
HCM LOS			D

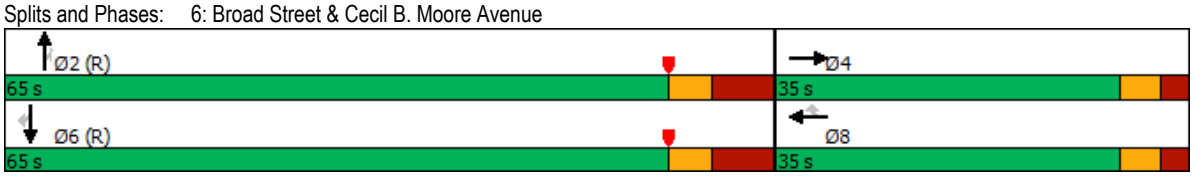
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	654	-	-	-	166
HCM Lane V/C Ratio	0.002	-	-	-	0.029
HCM Control Delay (s)	10.5	0	-	-	27.3
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBT	WBT	WBR	NBT	NBR	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	110	120	126	1124	93	1109	96
Future Volume (vph)	110	120	126	1124	93	1109	96
Turn Type	NA	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	8		2		6	
Permitted Phases			8		2		6
Minimum Split (s)	35.0	35.0	35.0	65.0	65.0	65.0	65.0
Total Split (s)	35.0	35.0	35.0	65.0	65.0	65.0	65.0
Total Split (%)	35.0%	35.0%	35.0%	65.0%	65.0%	65.0%	65.0%
Yellow Time (s)	3.4	3.4	3.4	3.6	3.6	3.6	3.6
All-Red Time (s)	2.6	2.6	2.6	5.4	5.4	5.4	5.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	9.0	9.0	9.0	9.0
Lead/Lag							
Lead-Lag Optimize?							

Intersection Summary

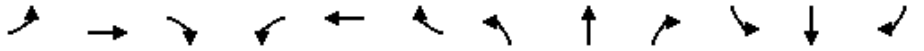
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 91 (91%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Pretimed

Splits and Phases: 6: Broad Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
6: Broad Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: MID Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	110	99	0	120	126	0	1124	93	0	1109	96
Future Volume (veh/h)	0	110	99	0	120	126	0	1124	93	0	1109	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.65	1.00		0.61	1.00		0.47	1.00		0.59
Parking Bus, Adj	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.97
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	2034	2034	0	2034	2034	0	2067	2051	0	2067	2067
Adj Flow Rate, veh/h	0	120	108	0	130	137	0	1222	101	0	1205	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	4	0	4	4	0	2	3	0	2	2
Cap, veh/h	0	220	198	0	590	300	0	2200	446	0	2200	557
Arrive On Green	0.00	0.29	0.29	0.00	0.29	0.29	0.00	0.56	0.56	0.00	0.56	0.56
Sat Flow, veh/h	0	757	682	0	2034	1034	0	4031	796	0	4031	994
Grp Volume(v), veh/h	0	0	228	0	130	137	0	1222	101	0	1205	104
Grp Sat Flow(s),veh/h/ln	0	0	1439	0	2034	1034	0	1964	796	0	1964	994
Q Serve(g_s), s	0.0	0.0	13.4	0.0	4.8	10.8	0.0	19.9	6.4	0.0	19.5	5.1
Cycle Q Clear(g_c), s	0.0	0.0	13.4	0.0	4.8	10.8	0.0	19.9	6.4	0.0	19.5	5.1
Prop In Lane	0.00		0.47	0.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	0	0	417	0	590	300	0	2200	446	0	2200	557
V/C Ratio(X)	0.00	0.00	0.55	0.00	0.22	0.46	0.00	0.56	0.23	0.00	0.55	0.19
Avail Cap(c_a), veh/h	0	0	417	0	590	300	0	2200	446	0	2200	557
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	29.9	0.0	26.9	29.1	0.0	14.1	11.1	0.0	14.0	10.8
Incr Delay (d2), s/veh	0.0	0.0	5.1	0.0	0.9	4.9	0.0	1.0	1.2	0.0	1.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	8.9	0.0	4.5	5.6	0.0	13.6	2.2	0.0	13.4	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	35.0	0.0	27.8	34.0	0.0	15.1	12.3	0.0	15.0	11.6
LnGrp LOS	A	A	D	A	C	C	A	B	B	A	B	B
Approach Vol, veh/h		228			267			1323			1309	
Approach Delay, s/veh		35.0			31.0			14.9			14.7	
Approach LOS		D			C			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		35.0		65.0		35.0				
Change Period (Y+Rc), s		9.0		6.0		9.0		6.0				
Max Green Setting (Gmax), s		56.0		29.0		56.0		29.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		7.1		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

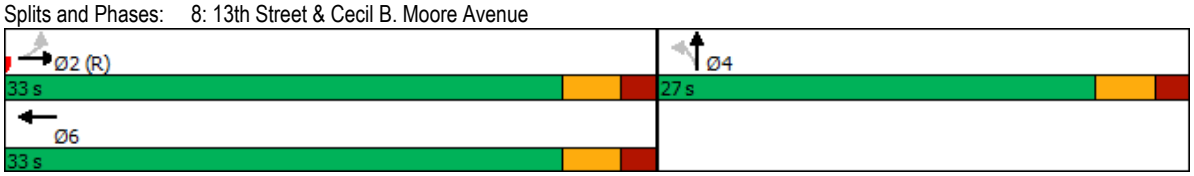
Intersection Summary												
HCM 6th Ctrl Delay			17.6									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	36	128	248	51	110
Future Volume (vph)	36	128	248	51	110
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		2	6		4
Permitted Phases	2			4	
Minimum Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	45.0%	45.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8	4.8
Lead/Lag					
Lead-Lag Optimize?					

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 8: 13th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
8: 13th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: MID Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	128	0	0	248	49	51	110	82	0	0	0
Future Volume (veh/h)	36	128	0	0	248	49	51	110	82	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.80		1.00	1.00		0.48	1.00		0.45			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2018	2018	0	0	2018	2018	2100	2018	2100			
Adj Flow Rate, veh/h	51	183	0	0	354	70	73	157	117			
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70			
Percent Heavy Veh, %	5	5	0	0	5	5	0	5	0			
Cap, veh/h	136	459	0	0	565	112	740	252	188			
Arrive On Green	0.47	0.47	0.00	0.00	0.16	0.16	0.37	0.37	0.37			
Sat Flow, veh/h	133	976	0	0	1202	238	2000	682	508			
Grp Volume(v), veh/h	234	0	0	0	0	424	73	0	274			
Grp Sat Flow(s),veh/h/ln	1109	0	0	0	0	1440	2000	0	1190			
Q Serve(g_s), s	1.8	0.0	0.0	0.0	0.0	16.5	1.4	0.0	11.3			
Cycle Q Clear(g_c), s	18.3	0.0	0.0	0.0	0.0	16.5	1.4	0.0	11.3			
Prop In Lane	0.22		0.00	0.00		0.17	1.00		0.43			
Lane Grp Cap(c), veh/h	594	0	0	0	0	677	740	0	440			
V/C Ratio(X)	0.39	0.00	0.00	0.00	0.00	0.63	0.10	0.00	0.62			
Avail Cap(c_a), veh/h	594	0	0	0	0	677	740	0	440			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	10.4	0.0	0.0	0.0	0.0	20.4	12.4	0.0	15.5			
Incr Delay (d2), s/veh	2.0	0.0	0.0	0.0	0.0	4.3	0.3	0.0	6.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	3.5	0.0	0.0	0.0	0.0	11.4	1.2	0.0	6.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	0.0	0.0	0.0	0.0	24.8	12.6	0.0	22.0			
LnGrp LOS	B	A	A	A	A	C	B	A	C			
Approach Vol, veh/h		234			424			347				
Approach Delay, s/veh		12.4			24.8			20.0				
Approach LOS		B			C			B				

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 28		* 22		* 28						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			20.2									
HCM 6th LOS			C									

Notes

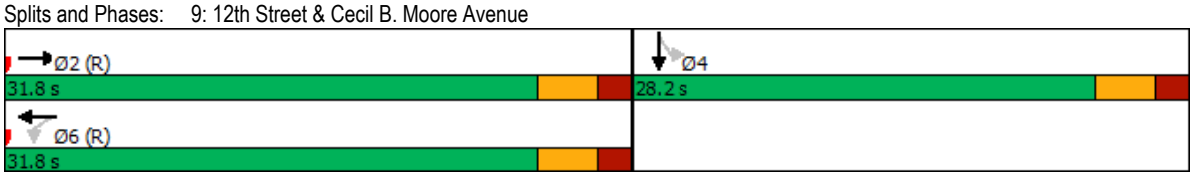
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	160	27	193	219
Future Volume (vph)	160	27	193	219
Turn Type	NA	Perm	NA	NA
Protected Phases	2		6	4
Permitted Phases		6		
Minimum Split (s)	31.8	31.8	31.8	28.2
Total Split (s)	31.8	31.8	31.8	28.2
Total Split (%)	53.0%	53.0%	53.0%	47.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	4.8		4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary

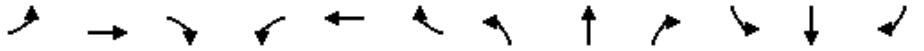
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28.2 (47%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 9: 12th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
9: 12th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: MID Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	160	55	27	193	0	0	0	0	36	219	104
Future Volume (veh/h)	0	160	55	27	193	0	0	0	0	36	219	104
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	0.96		1.00				1.00		0.80
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2051	2051	2018	2018	0				2100	2051	2100
Adj Flow Rate, veh/h	0	188	65	32	227	0				42	258	122
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	3	3	5	5	0				0	3	0
Cap, veh/h	0	574	198	124	800	0				63	386	182
Arrive On Green	0.00	0.15	0.15	0.45	0.45	0.00				0.39	0.39	0.39
Sat Flow, veh/h	0	1276	441	126	1777	0				161	989	468
Grp Volume(v), veh/h	0	0	253	259	0	0				422	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1717	1903	0	0				1618	0	0
Q Serve(g_s), s	0.0	0.0	7.9	0.0	0.0	0.0				12.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	7.9	4.9	0.0	0.0				12.9	0.0	0.0
Prop In Lane	0.00		0.26	0.12		0.00				0.10		0.29
Lane Grp Cap(c), veh/h	0	0	773	924	0	0				631	0	0
V/C Ratio(X)	0.00	0.00	0.33	0.28	0.00	0.00				0.67	0.00	0.00
Avail Cap(c_a), veh/h	0	0	773	924	0	0				631	0	0
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.4	10.4	0.0	0.0				15.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.1	0.8	0.0	0.0				5.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	6.4	3.8	0.0	0.0				9.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	18.5	11.2	0.0	0.0				20.7	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				C	A	A
Approach Vol, veh/h		253			259						422	
Approach Delay, s/veh		18.5			11.2						20.7	
Approach LOS		B			B						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		31.8		28.2		31.8						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 27		* 23		* 27						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

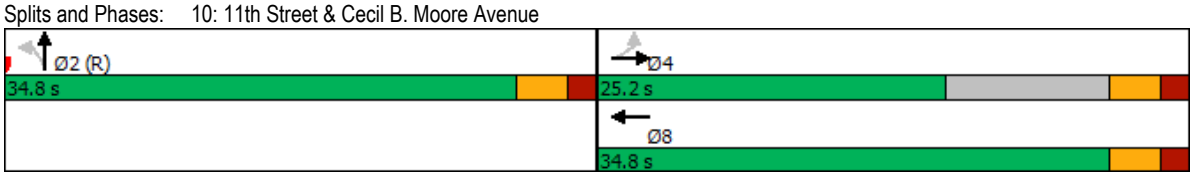
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	85	107	171	228
Future Volume (vph)	85	107	171	228
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	25.2	25.2	34.8	34.8
Total Split (s)	25.2	25.2	34.8	34.8
Total Split (%)	36.2%	36.2%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

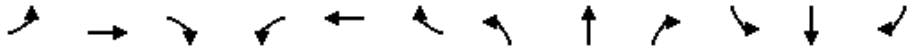
Intersection Summary
Cycle Length: 69.6
Actuated Cycle Length: 69.6
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 70
Control Type: Pretimed

Splits and Phases: 10: 11th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
10: 11th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: MID Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	107	0	0	171	53	42	228	26	0	0	0
Future Volume (veh/h)	85	107	0	0	171	53	42	228	26	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.95		1.00	1.00		0.89	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	0.90	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1985	1985	0	0	2002	2002	2100	2018	2100			
Adj Flow Rate, veh/h	92	116	0	0	186	58	46	248	28			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	7	7	0	0	6	6	0	5	0			
Cap, veh/h	283	334	0	0	549	171	109	589	66			
Arrive On Green	0.43	0.43	0.00	0.00	0.43	0.43	0.43	0.43	0.43			
Sat Flow, veh/h	482	775	0	0	1274	397	253	1365	154			
Grp Volume(v), veh/h	208	0	0	0	0	244	322	0	0			
Grp Sat Flow(s),veh/h/ln	1258	0	0	0	0	1672	1773	0	0			
Q Serve(g_s), s	3.9	0.0	0.0	0.0	0.0	6.8	8.8	0.0	0.0			
Cycle Q Clear(g_c), s	10.6	0.0	0.0	0.0	0.0	6.8	8.8	0.0	0.0			
Prop In Lane	0.44		0.00	0.00		0.24	0.14		0.09			
Lane Grp Cap(c), veh/h	617	0	0	0	0	721	764	0	0			
V/C Ratio(X)	0.34	0.00	0.00	0.00	0.00	0.34	0.42	0.00	0.00			
Avail Cap(c_a), veh/h	617	0	0	0	0	721	764	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.2	0.0	0.0	0.0	0.0	13.2	13.8	0.0	0.0			
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.0	0.0	1.3	1.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	4.5	0.0	0.0	0.0	0.0	4.7	6.5	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	0.0	0.0	0.0	0.0	14.5	15.5	0.0	0.0			
LnGrp LOS	B	A	A	A	A	B	B	A	A			
Approach Vol, veh/h		208			244			322				
Approach Delay, s/veh		15.6			14.5			15.5				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		34.8		34.8				34.8				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 30		* 20				* 30				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			15.2									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	130	3	1	220	1	1
Future Vol, veh/h	130	3	1	220	1	1
Conflicting Peds, #/hr	0	6	6	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	6	0	0	6	0	0
Mvmt Flow	151	3	1	256	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	160	0	419	159
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	260	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1432	-	595	892
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	788	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1425	-	590	888
Mov Cap-2 Maneuver	-	-	-	-	590	-
Stage 1	-	-	-	-	871	-
Stage 2	-	-	-	-	786	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.1
HCM LOS			B

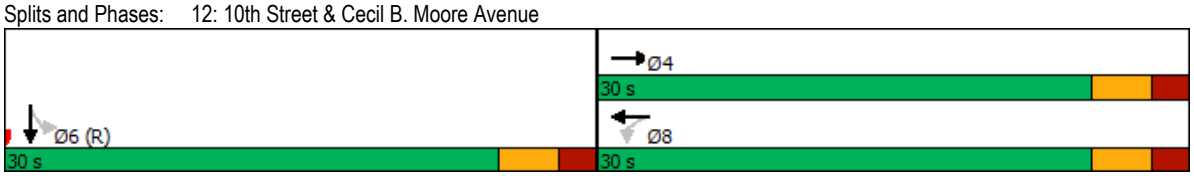
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	709	-	-	1425	-
HCM Lane V/C Ratio	0.003	-	-	0.001	-
HCM Control Delay (s)	10.1	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	98	29	162	112
Future Volume (vph)	98	29	162	112
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	30.0	30.0	30.0	30.0
Total Split (s)	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 12: 10th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	98	34	29	162	0	0	0	0	1	112	52
Future Volume (veh/h)	0	98	34	29	162	0	0	0	0	1	112	52
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1969	1969	1985	1985	0				2100	2034	2100
Adj Flow Rate, veh/h	0	118	41	35	195	0				1	135	63
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83				0.83	0.83	0.83
Percent Heavy Veh, %	0	8	8	7	7	0				0	4	0
Cap, veh/h	0	519	180	139	709	0				4	487	227
Arrive On Green	0.00	0.42	0.42	0.42	0.42	0.00				0.42	0.42	0.42
Sat Flow, veh/h	0	1246	433	167	1703	0				9	1170	546
Grp Volume(v), veh/h	0	0	159	230	0	0				199	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1679	1870	0	0				1725	0	0
Q Serve(g_s), s	0.0	0.0	3.7	0.0	0.0	0.0				4.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.7	4.6	0.0	0.0				4.6	0.0	0.0
Prop In Lane	0.00		0.26	0.15		0.00				0.01		0.32
Lane Grp Cap(c), veh/h	0	0	699	848	0	0				719	0	0
V/C Ratio(X)	0.00	0.00	0.23	0.27	0.00	0.00				0.28	0.00	0.00
Avail Cap(c_a), veh/h	0	0	699	848	0	0				719	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.3	11.5	0.0	0.0				11.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.8	0.8	0.0	0.0				1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	2.5	3.6	0.0	0.0				3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	12.0	12.3	0.0	0.0				12.5	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				B	A	A
Approach Vol, veh/h		159			230						199	
Approach Delay, s/veh		12.0			12.3						12.5	
Approach LOS		B			B						B	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				30.0		30.0		30.0				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				25.0		25.0		25.0				
Max Q Clear Time (g_c+I1), s				0.0		0.0		0.0				
Green Ext Time (p_c), s				0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			12.3									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	178	0	0	277	28	12	13	18	0	0	0
Future Vol, veh/h	10	178	0	0	277	28	12	13	18	0	0	0
Conflicting Peds, #/hr	136	0	160	160	0	136	15	0	43	43	0	15
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	4	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	11	200	0	0	311	31	13	15	20	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	478	0	-	-	-	0	564	700	243
Stage 1	-	-	-	-	-	-	222	222	-
Stage 2	-	-	-	-	-	-	342	478	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1095	-	0	0	-	-	490	366	801
Stage 1	-	-	0	0	-	-	820	723	-
Stage 2	-	-	0	0	-	-	724	559	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1095	-	-	-	-	-	479	0	774
Mov Cap-2 Maneuver	-	-	-	-	-	-	479	0	-
Stage 1	-	-	-	-	-	-	811	0	-
Stage 2	-	-	-	-	-	-	715	0	-

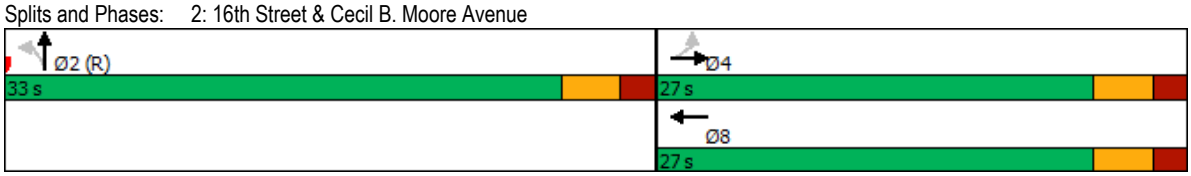
Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	621	1095	-	-	-
HCM Lane V/C Ratio	0.078	0.01	-	-	-
HCM Control Delay (s)	11.3	8.3	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-	-

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	29	168	263	213
Future Volume (vph)	29	168	263	213
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 2: 16th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
2: 16th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	168	0	0	263	76	36	213	47	0	0	0
Future Volume (veh/h)	29	168	0	0	263	76	36	213	47	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.90		1.00	1.00		0.75	1.00		0.93			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	0.86	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2034	2034	0	0	2051	2051	2100	2051	2100			
Adj Flow Rate, veh/h	33	191	0	0	299	86	41	242	53			
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
Percent Heavy Veh, %	4	4	0	0	3	3	0	3	0			
Cap, veh/h	112	576	0	0	463	133	96	567	124			
Arrive On Green	0.37	0.37	0.00	0.00	0.37	0.37	0.47	0.47	0.47			
Sat Flow, veh/h	117	1558	0	0	1251	360	204	1206	264			
Grp Volume(v), veh/h	224	0	0	0	0	385	336	0	0			
Grp Sat Flow(s),veh/h/ln	1675	0	0	0	0	1610	1675	0	0			
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	11.9	8.0	0.0	0.0			
Cycle Q Clear(g_c), s	12.2	0.0	0.0	0.0	0.0	11.9	8.0	0.0	0.0			
Prop In Lane	0.15		0.00	0.00		0.22	0.12		0.16			
Lane Grp Cap(c), veh/h	689	0	0	0	0	596	787	0	0			
V/C Ratio(X)	0.33	0.00	0.00	0.00	0.00	0.65	0.43	0.00	0.00			
Avail Cap(c_a), veh/h	689	0	0	0	0	596	787	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	13.4	0.0	0.0	0.0	0.0	15.6	10.5	0.0	0.0			
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	0.0	5.3	1.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	4.0	0.0	0.0	0.0	0.0	8.4	5.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	0.0	0.0	0.0	0.0	21.0	12.2	0.0	0.0			
LnGrp LOS	B	A	A	A	A	C	B	A	A			
Approach Vol, veh/h		224			385			336				
Approach Delay, s/veh		14.7			21.0			12.2				
Approach LOS		B			C			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		33.0		27.0				27.0				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 28		* 22				* 22				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			16.4									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	195	0	0	323	36	17	25	32	0	0	0
Future Vol, veh/h	19	195	0	0	323	36	17	25	32	0	0	0
Conflicting Peds, #/hr	180	0	198	198	0	180	19	0	39	39	0	19
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	0	4	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	23	235	0	0	389	43	20	30	39	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	612	0	-	-	-	0	711	893	274
Stage 1	-	-	-	-	-	-	281	281	-
Stage 2	-	-	-	-	-	-	430	612	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	977	-	0	0	-	-	403	283	770
Stage 1	-	-	0	0	-	-	771	682	-
Stage 2	-	-	0	0	-	-	660	487	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	977	-	-	-	-	-	386	0	746
Mov Cap-2 Maneuver	-	-	-	-	-	-	386	0	-
Stage 1	-	-	-	-	-	-	750	0	-
Stage 2	-	-	-	-	-	-	650	0	-

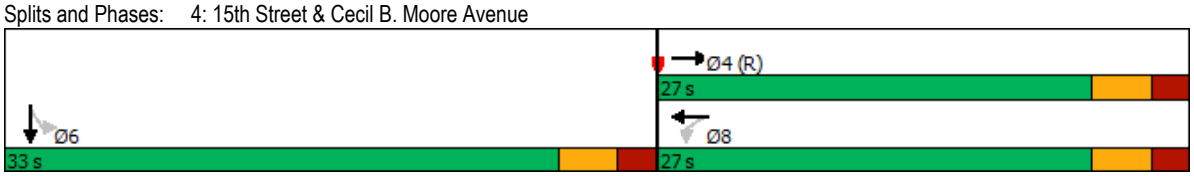
Approach	EB	WB	NB
HCM Control Delay, s	0.8	0	12.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	564	977	-	-	-
HCM Lane V/C Ratio	0.158	0.023	-	-	-
HCM Control Delay (s)	12.6	8.8	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.6	0.1	-	-	-

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	173	30	196	292
Future Volume (vph)	173	30	196	292
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	27.0	27.0	27.0	33.0
Total Split (s)	27.0	27.0	27.0	33.0
Total Split (%)	45.0%	45.0%	45.0%	55.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 48 (80%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 4: 15th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	173	56	30	196	0	0	0	0	84	292	162
Future Volume (veh/h)	0	173	56	30	196	0	0	0	0	84	292	162
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.64	0.79		1.00				1.00		0.78
Parking Bus, Adj	1.00	1.00	0.89	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2034	2034	2018	2018	0				2100	2100	2100
Adj Flow Rate, veh/h	0	184	60	32	209	0				89	311	172
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	4	4	5	5	0				0	0	0
Cap, veh/h	0	412	134	112	638	0				118	412	228
Arrive On Green	0.00	0.37	0.37	0.37	0.37	0.00				0.47	0.47	0.47
Sat Flow, veh/h	0	1123	366	121	1740	0				253	883	488
Grp Volume(v), veh/h	0	0	244	241	0	0				572	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1489	1862	0	0				1624	0	0
Q Serve(g_s), s	0.0	0.0	7.4	0.0	0.0	0.0				17.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	7.4	5.2	0.0	0.0				17.4	0.0	0.0
Prop In Lane	0.00		0.25	0.13		0.00				0.16		0.30
Lane Grp Cap(c), veh/h	0	0	546	751	0	0				758	0	0
V/C Ratio(X)	0.00	0.00	0.45	0.32	0.00	0.00				0.75	0.00	0.00
Avail Cap(c_a), veh/h	0	0	546	751	0	0				758	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	14.4	13.7	0.0	0.0				13.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.6	1.1	0.0	0.0				6.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	4.9	4.3	0.0	0.0				11.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	17.0	14.8	0.0	0.0				20.0	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				C	A	A
Approach Vol, veh/h		244			241						572	
Approach Delay, s/veh		17.0			14.8						20.0	
Approach LOS		B			B						C	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				27.0		33.0		27.0				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				22.0		28.0		22.0				
Max Q Clear Time (g_c+I1), s				0.0		0.0		0.0				
Green Ext Time (p_c), s				0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			18.2									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	258	220	1	1	2
Future Vol, veh/h	2	258	220	1	1	2
Conflicting Peds, #/hr	461	0	0	461	16	29
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	3	4	0	0	0
Mvmt Flow	2	300	256	1	1	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	718	0	-	0	1038	747
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	320	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	892	-	-	-	258	416
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	741	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	566	-	-	-	103	258
Mov Cap-2 Maneuver	-	-	-	-	103	-
Stage 1	-	-	-	-	307	-
Stage 2	-	-	-	-	470	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	26.4
HCM LOS			D

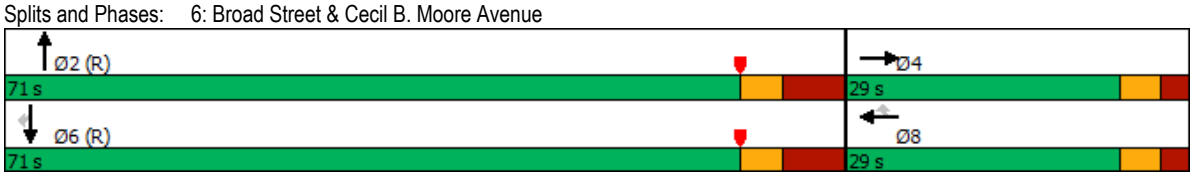
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	566	-	-	-	172
HCM Lane V/C Ratio	0.004	-	-	-	0.02
HCM Control Delay (s)	11.4	0	-	-	26.4
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBT	WBT	WBR	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	161	157	101	1384	1358	69
Future Volume (vph)	161	157	101	1384	1358	69
Turn Type	NA	NA	Perm	NA	NA	Perm
Protected Phases	4	8		2	6	
Permitted Phases			8			6
Minimum Split (s)	29.0	29.0	29.0	71.0	71.0	71.0
Total Split (s)	29.0	29.0	29.0	71.0	71.0	71.0
Total Split (%)	29.0%	29.0%	29.0%	71.0%	71.0%	71.0%
Yellow Time (s)	3.4	3.4	3.4	3.6	3.6	3.6
All-Red Time (s)	2.6	2.6	2.6	5.4	5.4	5.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	9.0	9.0	9.0
Lead/Lag						
Lead-Lag Optimize?						

Intersection Summary

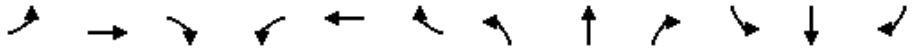
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 91 (91%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Pretimed

Splits and Phases: 6: Broad Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
6: Broad Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	161	92	0	157	101	0	1384	90	0	1358	69
Future Volume (veh/h)	0	161	92	0	157	101	0	1384	90	0	1358	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.65	1.00		0.58	1.00		0.50	1.00		0.72
Parking Bus, Adj	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.97
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	2034	2034	0	2018	2051	0	2067	2067	0	2067	2084
Adj Flow Rate, veh/h	0	169	97	0	165	106	0	1457	95	0	1429	73
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	4	4	0	5	3	0	2	2	0	2	1
Cap, veh/h	0	225	129	0	464	228	0	3097	202	0	2435	759
Arrive On Green	0.00	0.23	0.23	0.00	0.23	0.23	0.00	0.62	0.62	0.00	0.62	0.62
Sat Flow, veh/h	0	980	563	0	2018	991	0	5181	325	0	4031	1223
Grp Volume(v), veh/h	0	0	266	0	165	106	0	1097	455	0	1429	73
Grp Sat Flow(s),veh/h/ln	0	0	1543	0	2018	991	0	1881	1558	0	1964	1223
Q Serve(g_s), s	0.0	0.0	16.0	0.0	6.9	9.2	0.0	15.6	15.7	0.0	21.7	2.4
Cycle Q Clear(g_c), s	0.0	0.0	16.0	0.0	6.9	9.2	0.0	15.6	15.7	0.0	21.7	2.4
Prop In Lane	0.00		0.36	0.00		1.00	0.00		0.21	0.00		1.00
Lane Grp Cap(c), veh/h	0	0	355	0	464	228	0	2333	966	0	2435	759
V/C Ratio(X)	0.00	0.00	0.75	0.00	0.36	0.47	0.00	0.47	0.47	0.00	0.59	0.10
Avail Cap(c_a), veh/h	0	0	355	0	464	228	0	2333	966	0	2435	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	35.8	0.0	32.3	33.2	0.0	10.2	10.2	0.0	11.3	7.7
Incr Delay (d2), s/veh	0.0	0.0	13.6	0.0	2.1	6.7	0.0	0.7	1.6	0.0	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	11.8	0.0	6.5	4.8	0.0	10.4	9.4	0.0	14.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	49.4	0.0	34.4	39.9	0.0	10.9	11.8	0.0	12.4	7.9
LnGrp LOS	A	A	D	A	C	D	A	B	B	A	B	A
Approach Vol, veh/h		266			271			1552			1502	
Approach Delay, s/veh		49.4			36.6			11.2			12.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		71.0		29.0		71.0		29.0				
Change Period (Y+Rc), s		9.0		6.0		9.0		6.0				
Max Green Setting (Gmax), s		62.0		23.0		62.0		23.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0		4.4		0.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0				

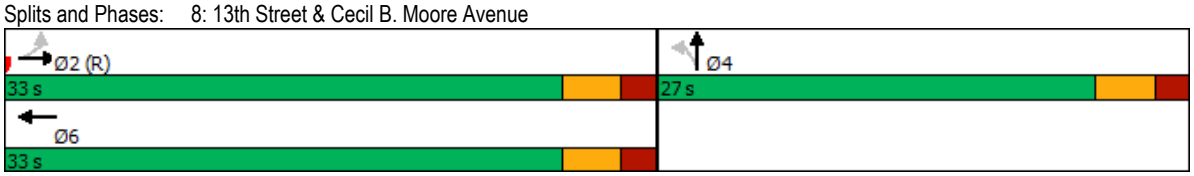
Intersection Summary												
HCM 6th Ctrl Delay			16.3									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	62	169	270	57	193
Future Volume (vph)	62	169	270	57	193
Turn Type	Perm	NA	NA	Perm	NA
Protected Phases		2	6		4
Permitted Phases	2			4	
Minimum Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (s)	33.0	33.0	33.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	45.0%	45.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8	4.8
Lead/Lag					
Lead-Lag Optimize?					

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 8: 13th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
8: 13th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	169	0	0	270	56	57	193	102	0	0	0
Future Volume (veh/h)	62	169	0	0	270	56	57	193	102	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.77		1.00	1.00		0.48	1.00		0.46			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.89	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2034	2034	0	0	2051	2051	2067	2084	2067			
Adj Flow Rate, veh/h	71	194	0	0	310	64	66	222	117			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	4	4	0	0	3	3	2	1	2			
Cap, veh/h	164	423	0	0	566	117	728	327	172			
Arrive On Green	0.47	0.47	0.00	0.00	0.16	0.16	0.37	0.37	0.37			
Sat Flow, veh/h	187	900	0	0	1204	249	1969	884	466			
Grp Volume(v), veh/h	265	0	0	0	0	374	66	0	339			
Grp Sat Flow(s),veh/h/ln	1087	0	0	0	0	1453	1969	0	1349			
Q Serve(g_s), s	2.1	0.0	0.0	0.0	0.0	14.3	1.3	0.0	12.7			
Cycle Q Clear(g_c), s	16.3	0.0	0.0	0.0	0.0	14.3	1.3	0.0	12.7			
Prop In Lane	0.27		0.00	0.00		0.17	1.00		0.35			
Lane Grp Cap(c), veh/h	587	0	0	0	0	683	728	0	499			
V/C Ratio(X)	0.45	0.00	0.00	0.00	0.00	0.55	0.09	0.00	0.68			
Avail Cap(c_a), veh/h	587	0	0	0	0	683	728	0	499			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	10.5	0.0	0.0	0.0	0.0	19.5	12.3	0.0	15.9			
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.0	0.0	3.1	0.2	0.0	7.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	4.1	0.0	0.0	0.0	0.0	10.0	1.0	0.0	8.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	0.0	0.0	0.0	0.0	22.6	12.6	0.0	23.2			
LnGrp LOS	B	A	A	A	A	C	B	A	C			
Approach Vol, veh/h		265			374			405				
Approach Delay, s/veh		13.0			22.6			21.4				
Approach LOS		B			C			C				

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		33.0		27.0		33.0						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 28		* 22		* 28						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			19.7									
HCM 6th LOS			B									

Notes

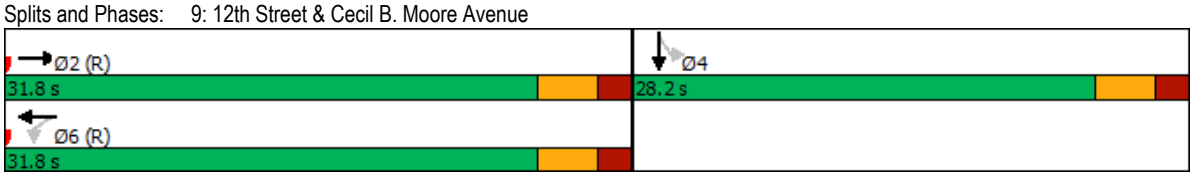
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	193	41	222	250
Future Volume (vph)	193	41	222	250
Turn Type	NA	Perm	NA	NA
Protected Phases	2		6	4
Permitted Phases		6		
Minimum Split (s)	31.8	31.8	31.8	28.2
Total Split (s)	31.8	31.8	31.8	28.2
Total Split (%)	53.0%	53.0%	53.0%	47.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	4.8		4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary

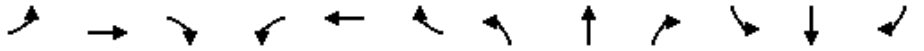
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28.2 (47%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 9: 12th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
9: 12th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	193	80	41	222	0	0	0	0	42	250	100
Future Volume (veh/h)	0	193	80	41	222	0	0	0	0	42	250	100
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.84	0.92		1.00				1.00		0.80
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2051	2051	2034	2034	0				2100	2034	2100
Adj Flow Rate, veh/h	0	203	84	43	234	0				44	263	105
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	3	3	4	4	0				0	4	0
Cap, veh/h	0	524	217	147	755	0				68	404	161
Arrive On Green	0.00	0.15	0.15	0.45	0.45	0.00				0.39	0.39	0.39
Sat Flow, veh/h	0	1165	482	173	1679	0				173	1037	414
Grp Volume(v), veh/h	0	0	287	277	0	0				412	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1648	1852	0	0				1624	0	0
Q Serve(g_s), s	0.0	0.0	9.4	0.0	0.0	0.0				12.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	9.4	5.2	0.0	0.0				12.4	0.0	0.0
Prop In Lane	0.00		0.29	0.16		0.00				0.11		0.25
Lane Grp Cap(c), veh/h	0	0	741	903	0	0				634	0	0
V/C Ratio(X)	0.00	0.00	0.39	0.31	0.00	0.00				0.65	0.00	0.00
Avail Cap(c_a), veh/h	0	0	741	903	0	0				634	0	0
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	18.1	10.5	0.0	0.0				15.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.5	0.9	0.0	0.0				5.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	7.6	4.1	0.0	0.0				8.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	19.6	11.4	0.0	0.0				20.1	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				C	A	A
Approach Vol, veh/h		287			277						412	
Approach Delay, s/veh		19.6			11.4						20.1	
Approach LOS		B			B						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		31.8		28.2		31.8						
Change Period (Y+Rc), s		* 4.8		* 4.8		* 4.8						
Max Green Setting (Gmax), s		* 27		* 23		* 27						
Max Q Clear Time (g_c+I1), s		0.0		0.0		0.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

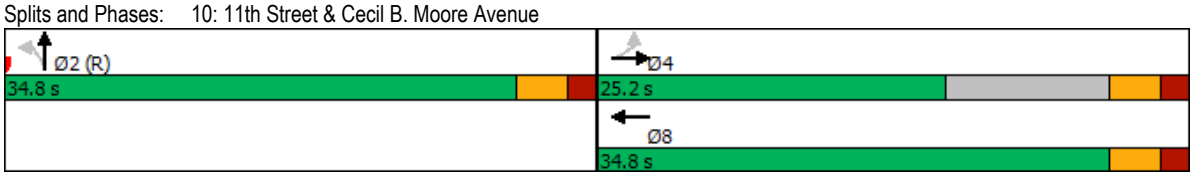
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBT
Lane Configurations				
Traffic Volume (vph)	85	146	202	363
Future Volume (vph)	85	146	202	363
Turn Type	Perm	NA	NA	NA
Protected Phases		4	8	2
Permitted Phases	4			
Minimum Split (s)	25.2	25.2	34.8	34.8
Total Split (s)	25.2	25.2	34.8	34.8
Total Split (%)	36.2%	36.2%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	1.8	1.8	1.8	1.8
Lost Time Adjust (s)		0.0	0.0	0.0
Total Lost Time (s)		4.8	4.8	4.8
Lead/Lag				
Lead-Lag Optimize?				

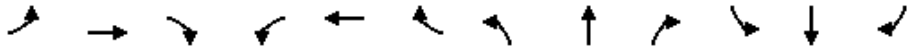
Intersection Summary
Cycle Length: 69.6
Actuated Cycle Length: 69.6
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Green
Natural Cycle: 70
Control Type: Pretimed

Splits and Phases: 10: 11th Street & Cecil B. Moore Avenue



Cecil B. Moore Vision Zero
10: 11th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	146	0	0	202	45	54	363	38	0	0	0
Future Volume (veh/h)	85	146	0	0	202	45	54	363	38	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	0.93		1.00	1.00		0.86	1.00		0.95			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.90	1.00	0.90	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	2034	2034	0	0	2034	2034	2100	2067	2100			
Adj Flow Rate, veh/h	93	160	0	0	222	49	59	399	42			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91			
Percent Heavy Veh, %	4	4	0	0	4	4	0	2	0			
Cap, veh/h	248	405	0	0	606	134	92	623	66			
Arrive On Green	0.43	0.43	0.00	0.00	0.43	0.43	0.43	0.43	0.43			
Sat Flow, veh/h	411	940	0	0	1405	310	214	1446	152			
Grp Volume(v), veh/h	253	0	0	0	0	271	500	0	0			
Grp Sat Flow(s),veh/h/ln	1351	0	0	0	0	1715	1813	0	0			
Q Serve(g_s), s	4.0	0.0	0.0	0.0	0.0	7.4	15.1	0.0	0.0			
Cycle Q Clear(g_c), s	11.4	0.0	0.0	0.0	0.0	7.4	15.1	0.0	0.0			
Prop In Lane	0.37		0.00	0.00		0.18	0.12		0.08			
Lane Grp Cap(c), veh/h	653	0	0	0	0	739	781	0	0			
V/C Ratio(X)	0.39	0.00	0.00	0.00	0.00	0.37	0.64	0.00	0.00			
Avail Cap(c_a), veh/h	653	0	0	0	0	739	781	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	14.2	0.0	0.0	0.0	0.0	13.4	15.6	0.0	0.0			
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.0	0.0	1.4	4.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	5.6	0.0	0.0	0.0	0.0	5.3	10.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	0.0	0.0	0.0	0.0	14.8	19.6	0.0	0.0			
LnGrp LOS	B	A	A	A	A	B	B	A	A			
Approach Vol, veh/h		253			271			500				
Approach Delay, s/veh		15.9			14.8			19.6				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		34.8		34.8				34.8				
Change Period (Y+Rc), s		* 4.8		* 4.8				* 4.8				
Max Green Setting (Gmax), s		* 30		* 20				* 30				
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0				
Green Ext Time (p_c), s		0.0		0.0				0.0				
Intersection Summary												
HCM 6th Ctrl Delay			17.4									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	174	5	1	248	1	3
Future Vol, veh/h	174	5	1	248	1	3
Conflicting Peds, #/hr	0	21	21	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	0	0	4	0	0
Mvmt Flow	198	6	1	282	1	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	225	0	507	223
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	285	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1356	-	529	822
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	768	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1333	-	519	808
Mov Cap-2 Maneuver	-	-	-	-	519	-
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	766	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	709	-	-	1333	-
HCM Lane V/C Ratio	0.006	-	-	0.001	-
HCM Control Delay (s)	10.1	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

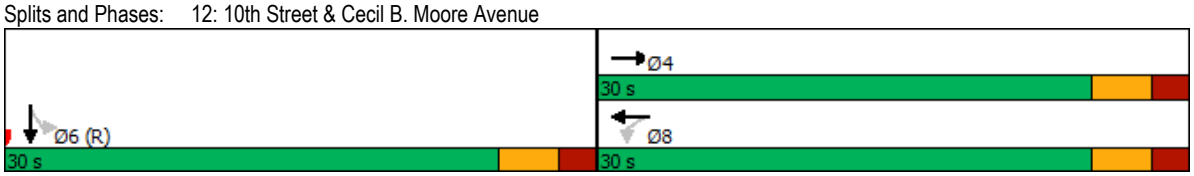
Cecil B. Moore Vision Zero
12: 10th Street & Cecil B. Moore Avenue

2021 Proposed
Timing Plan: PM Peak Hour

Lane Group	EBT	WBL	WBT	SBT
Lane Configurations				
Traffic Volume (vph)	122	36	172	310
Future Volume (vph)	122	36	172	310
Turn Type	NA	Perm	NA	NA
Protected Phases	4		8	6
Permitted Phases		8		
Minimum Split (s)	30.0	30.0	30.0	30.0
Total Split (s)	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0
Total Lost Time (s)	5.0		5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed

Splits and Phases: 12: 10th Street & Cecil B. Moore Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	122	47	36	172	0	0	0	0	5	310	78
Future Volume (veh/h)	0	122	47	36	172	0	0	0	0	5	310	78
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.99		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00				1.00	0.90	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2018	2018	2034	2034	0				2100	2084	2100
Adj Flow Rate, veh/h	0	144	55	42	202	0				6	365	92
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85				0.85	0.85	0.85
Percent Heavy Veh, %	0	5	5	4	4	0				0	1	0
Cap, veh/h	0	514	196	154	699	0				10	589	149
Arrive On Green	0.00	0.42	0.42	0.42	0.42	0.00				0.42	0.42	0.42
Sat Flow, veh/h	0	1233	471	201	1678	0				23	1415	357
Grp Volume(v), veh/h	0	0	199	244	0	0				463	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1705	1879	0	0				1795	0	0
Q Serve(g_s), s	0.0	0.0	4.6	0.0	0.0	0.0				12.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	4.6	4.8	0.0	0.0				12.2	0.0	0.0
Prop In Lane	0.00		0.28	0.17		0.00				0.01		0.20
Lane Grp Cap(c), veh/h	0	0	710	853	0	0				748	0	0
V/C Ratio(X)	0.00	0.00	0.28	0.29	0.00	0.00				0.62	0.00	0.00
Avail Cap(c_a), veh/h	0	0	710	853	0	0				748	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.6	11.6	0.0	0.0				13.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.0	0.8	0.0	0.0				3.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	3.2	3.9	0.0	0.0				8.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	12.5	12.4	0.0	0.0				17.6	0.0	0.0
LnGrp LOS	A	A	B	B	A	A				B	A	A
Approach Vol, veh/h		199			244						463	
Approach Delay, s/veh		12.5			12.4						17.6	
Approach LOS		B			B						B	

Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				30.0		30.0		30.0				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				25.0		25.0		25.0				
Max Q Clear Time (g_c+I1), s				0.0		0.0		0.0				
Green Ext Time (p_c), s				0.0		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			15.1									
HCM 6th LOS			B									

Figure B-1: Community Surveys

VISION ZERO

CECIL B. MOORE

Community Survey

Vision Zero is a strategy to eliminate all traffic-related deaths and severe injuries, while increasing safety, health, and mobility for all. As part of the City of Philadelphia's Vision Zero Action Plan 2025, Cecil B. Moore Avenue from Willington Street to 10th Street was identified as a top ten corridor. For more information, please visit www.dvrpc.org/cecilbmoore.

How do you use Cecil B. Moore Avenue?

1. When you use Cecil B. Moore Avenue, what do you use it for? [check all that apply]

- ☐ Commute to work
- ☐ Commute to school
- ☐ Run errands or go shopping
- ☐ Go to religious services
- ☐ Go out to restaurants or bars, socialize or entertainment
- ☐ I do not currently use Cecil B. Moore Avenue
- ☐ Other: _____

2. How frequently do you travel to destinations on or near Cecil B. Moore Avenue?

- ☐ Every day
- ☐ Every week
- ☐ Every few weeks
- ☐ Every month
- ☐ Every few months
- ☐ Never

3. Thinking about the last month, how have you traveled to destinations on or near Cecil B. Moore Avenue? [check all that apply]

- ☐ Driving by myself
- ☐ Driving with others
- ☐ Walking
- ☐ Biking
- ☐ Bus/Train
- ☐ Uber/Lyft
- ☐ Taxi

4. Are there types of travel from the previous question that you would like to do more, and what keeps you from traveling that way more often?

_____

_____

What is your vision for Cecil B. Moore Avenue?

5. On a scale of 1-5, how would you rate the current conditions of the following on Cecil B. Moore Ave?

Crash safety

○ 1 (Bad) ○ 2 ○ 3 ○ 4 ○ 5 (Great)

Illegal parking issues

○ 1 (Bad) ○ 2 ○ 3 ○ 4 ○ 5 (Great)

Use of roadway space (travel lanes, parking, bike lanes)

○ 1 (Bad) ○ 2 ○ 3 ○ 4 ○ 5 (Great)

Traffic and congestion

○ 1 (Bad) ○ 2 ○ 3 ○ 4 ○ 5 (Great)

Please turn over >

Transit facilities

○ 1 (Bad) ○ 2 ○ 3 ○ 4 ○ 5 (Great)

Pavement markings

○ 1 (Bad) ○ 2 ○ 3 ○ 4 ○ 5 (Great)

Potholes/road surface

○ 1 (Bad) ○ 2 ○ 3 ○ 4 ○ 5 (Great)

Sidewalk

○ 1 (Bad) ○ 2 ○ 3 ○ 4 ○ 5 (Great)

Drainage (ponding, flooding, etc.)

○ 1 (Bad) ○ 2 ○ 3 ○ 4 ○ 5 (Great)

6. Select and rank your top five goals for this project:

- ☐ Safe pedestrian crossings
- ☐ Safe bike lanes
- ☐ Less aggressive driving
- ☐ Increased pedestrian space
- ☐ Better parking and loading
- ☐ Safe bus boarding
- ☐ Quick drive times
- ☐ Other: _____

7. How do you think safety along Cecil B. Moore Avenue could be improved?

_____

_____

DEMOGRAPHICS

DVRPC's public outreach process will ideally represent the residents of the Cecil B. Moore Avenue project area by geographic and demographic diversity. Please help us understand who is responding to this survey by sharing some of your demographic characteristics.

8. Are you of Spanish/Hispanic/Latino origin? ☐ Yes ☐ No

9. With which race do you identify? [Select all that apply]

- ☐ American Indian, Native American, or Alaskan Native
- ☐ Asian or Pacific Islander
- ☐ Black or African American
- ☐ White
- ☐ Other _____

10. What is your age range? ☐ Under 18 ☐ 18-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65-74 ☐ 75+

11. What is your gender? _____

12. Do you consider yourself someone with a disability that requires mobile assistance, such as a cane, walker, scooter, or wheelchair? ☐ Yes ☐ No

13. What is your zip code? _____

14. If you are interested in receiving updates about this project, please provide your email address:

_____

Figure B-2: Postcard

Appendix C: Survey Results

INITIAL SURVEY

Zip Code of Responses

59.4% of respondents self-identified as living in the zip codes of 19121 or 19122 (where the study area is located). Three percent of respondents (6 people) live outside of Philadelphia. The remaining 37% of respondents live throughout Philadelphia.

Race and Ethnicity of Respondents

After aggregating the in-person and online surveys, the study team reviewed responses by race.

- Black or African American: 37.2%,
- White: 33.2%,
- No response: 17.3%,
- Multiracial: 4.6%,
- Asian or Pacific Islander: 3.6%,
- American Indian, Native American, or Alaska Native: 3.1%; and
- Other: 1%.

Online responses were skewed toward white respondents (who made up 47.1% of responses), and also had a higher percentage of "no response" answers. In-person outreach resulted in a higher response from Black or African American respondents, with 46.9% of the total in-person responses.

6.6% of all respondents identified as Hispanic or Latino, and 16.8% of those surveyed did not respond to this question.

The study team tested out weighting responses by the racial breakdown of the census tracts closest to the study area using American Community Survey Census data to see if this caused priorities identified through the survey responses to shift, but priorities for improvement remained the same as the unweighted responses; the original unweighted method is shown here.

Age

Age was collected in ranges. The age breakdown of responses is as follows:

- Under 18: 0.5%,
- 18-34: 43.9%,
- 35-44: 10.2%,
- 45-54: 8.7%,
- 55-64: 9.2%,
- 65-74: 8.2%; and
- 75+: 7.1%.

Additionally, 12.2% of respondents did not provide an age range.

Gender

50.6% of respondents identified as female, 38.2% identified as male, 10.6% did not respond, and 0.6% identified as nonbinary.

Ability

10.2% of respondents indicated having a disability that requires a mobility device such as a cane, walker, scooter, or wheelchair.

Corridor Use

Among respondents, the corridor is overwhelmingly used for shopping, socializing, and commuting to work or school, as indicated by the chart below. This activity makes up 91% of the activity of survey respondents, followed by religious services, "other", and five responses from individuals who do not use the corridor at all.

Travel Mode

Travel mode was evaluated by asking respondents to consider all modes of travel they had used on the corridor within the last month. The results are as follows:

- Walking: 57.9%,
- Driving by myself: 43.2%,
- Driving with others: 30.5%,
- Biking: 24.7%,
- Bus/train: 24.7%,
- Uber/Lyft: 16.3%; and
- Taxi: 1.1%.

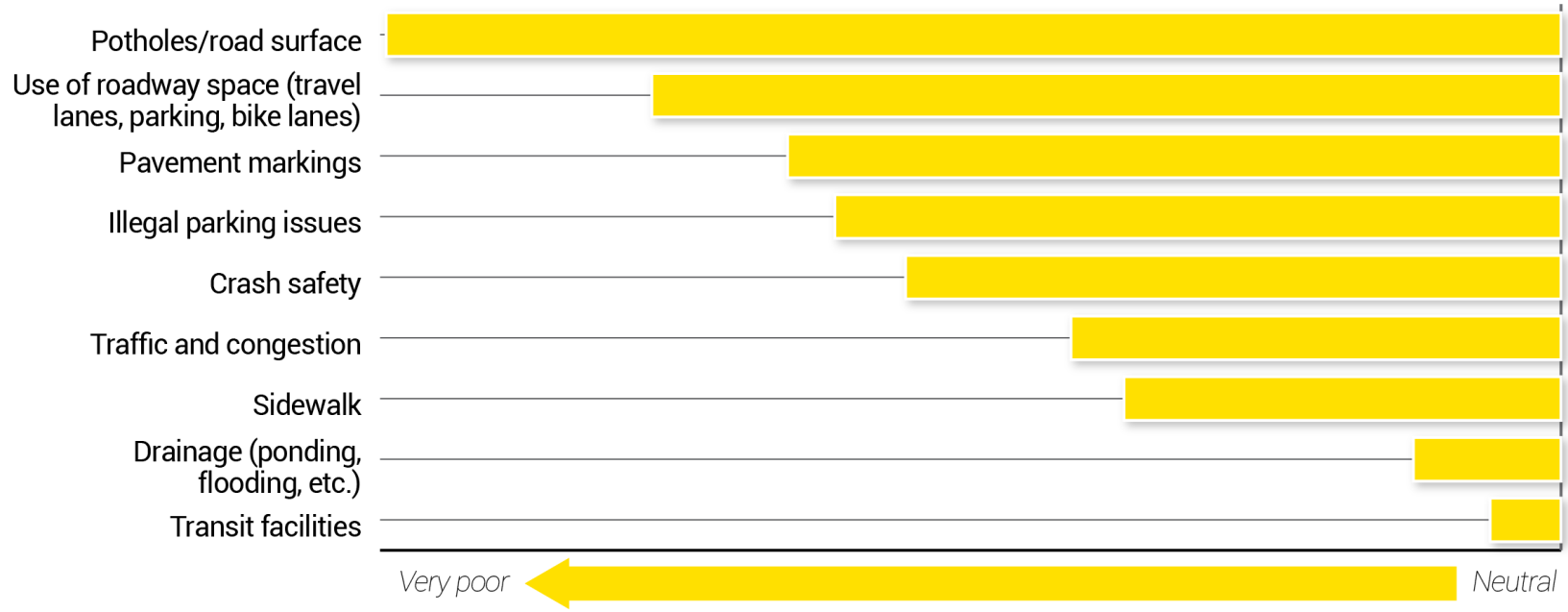
Conditions Ratings

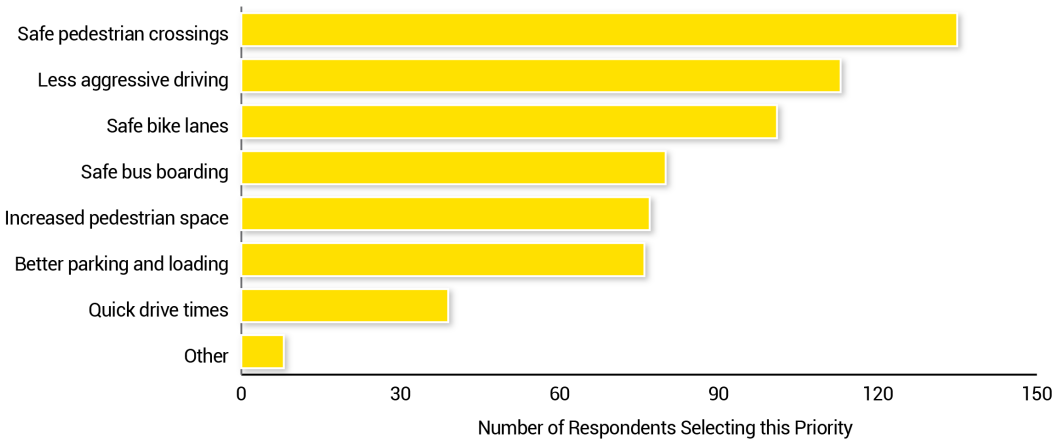
Conditions were ranked from 1 to 5, with 1 being "Bad" and 5 being "Great". After the survey was closed, the study team reassigned each number, transforming the 1-5 scale into a -2 through +2 scale. For example, if a respondent scored sidewalks as a 1, that number was reassigned to a -2. If they assigned sidewalks to a 3 (a neutral score between good and bad), that number would become a zero. This was a way to capture negative and positive sentiment in a numeric way, rather than just summing all rankings (which, using the 1-5 scale, would have resulted in a bar chart of all positive numbers).

Through this analysis, it becomes clear that all of the conditions on the corridor are ranked as "negative" in the aggregate, with potholes being the most negative, and transit facilities being the closest to neutral. The chart below shows the sum of all condition rankings across categories, but the major takeaway is that road conditions and use of the cartway are the areas that scored the lowest.

Priorities for Improvement

Priorities were analyzed across all respondents, but also across those who use the corridor to commute to school or not. This serves as a proxy for college students, so that priorities can be separated and understood between students and other neighborhood





residents. Both groups, students and non-students indicated "safe pedestrian crossings" and "safe bike lanes" as their #1 and #2 priorities, respectively. Non-students ranked "safe bus boardings" higher than students.

The survey presented two open-ended questions in which participants had the opportunity to discuss their experiences with and suggestions for the improvement of Cecil B. Moore Ave.

The first question asked the following: *Are there types of travel from the previous question [walking, driving, biking, taking transit, etc.] that you would like to do more, and what keeps you from traveling that way more often?*

The most common factor limiting travel in the respondent's desired mode was traffic stress. Though some drivers also reported traffic stress, there was no explicit indication that it caused them to drive less. Pedestrians and cyclists who experience traffic stress, however, reported traveling less in their desired mode due to fear for their personal safety.

Most of those who responded with a travel mode they wanted to do more of reported wanting to bike or skate more. The reasons reported for not doing so could be summarized by a fear of personal safety in regard to other traffic. Narrow streets and a lack of adequate bike infrastructure force cyclists to share the road with car traffic and aggressive drivers. Double parking in the places where there is a dedicated bike lane, such as between Broad St. and 11th St., means that cyclists must again reckon with car traffic outside the bike lane. Additionally, poor street maintenance in the form of potholes and faded street markings are also a challenge for bicyclists.

Those who reported wanting to walk, cycle, or use public transportation more cited personal safety concerns that limited the opportunity to use their desired traveling modes or caused them to avoid traveling the Cecil B. Moore Ave. corridor, especially during peak travel hours or at night. These personal safety concerns included a lack of lighting, poor waste management, and a fear of crime and gun violence. For pedestrians especially, poor quality sidewalks and crossings and aggressive driving made walking in the area feel unsafe. Respondents also commented on disruptive construction that often failed to provide adequate pedestrian alternatives. Some respondents want to use public transportation more, but found that a lack of reliability, route access, and amenities (bus shelters, benches, etc.) limited their engagement.

Although there were many comments on how the state of street maintenance and traffic congestion made driving difficult, only two respondents explicitly reported they wished

to drive more on Cecil B. Moore Ave., and one explained that the ease of driving made it more appealing than other modes of travel. The narrowness of the street and general traffic congestion were cited as reasons drivers would avoid the Cecil B. Moore Ave. corridor.

The second question asked the following: *How do you think safety along Cecil B. Moore Avenue could be improved?*

Many respondents identified a desire for the corridor to prioritize pedestrian, cyclist, and public transportation modes over cars. Bike infrastructure and traffic calming were the most frequent improvement suggestions. Comments identified potential to remove lanes of traffic, unused center lanes, and/or some street parking to make room for bus loading zones and priority lanes, bike lanes, and wider sidewalks. Pedestrian infrastructure like improved sidewalk maintenance, curb ramp access, and safe pedestrian pathways during construction disruptions were also included as desired improvements.

Respondents had conflicting opinions about parking along Cecil B. Moore Ave. Drivers often requested more parking, but as stated above, others suggested removing parking and replacing them with other street amenities. It was also suggested that parking fees could be dedicated towards improving public transit, and that parking should prioritize disability access or deliveries and loading. Additionally, respondents had conflicting perceptions of the use of travel lanes and road space. Drivers and some cyclists reported that traffic lanes were too narrow, and others, primarily those with a pedestrian or safety focus, reported that travel lanes were too wide. Overall, an overwhelming majority of responses cited street maintenance (fixing potholes, updated signage, clearer road markings, etc.) as a needed improvement along the corridor.

Policing was another frequently suggested improvement. This included traffic policing (illegal parking enforcement, red light and speeding cameras, etc.) and crime policing (of gun violence, drug crimes, loitering, and curfews). Related suggestions include enhanced lighting, improved waste management, and the desire to make the Cecil B. Moore Ave. corridor more family-friendly.

RECOMMENDATIONS SURVEY

ZIP Code

60.0% of respondents identified their ZIP code. The ZIP code home to the most respondents of this survey is ZIP code 19125 (30.4%), which is not a part of the study area. In fact, most respondents lived outside the study area, as only 38.6% of respondents lived in ZIP codes 19121 (26.1%) or 19122 (12.5%). Most respondents living outside the study area live in Philadelphia.

Race and Ethnicity

95.0% of respondents identified their race. 68.3% of these respondents identified as White, 23.7% identified as Black or African American, 5.3% identified as Asian or Pacific Islander, and 2.6% identified as some other race. The in-person survey resulted in more responses from Black or African American respondents, as 46.2% of the in-person respondents identified as Black or African American. The online survey resulted in more responses from White respondents, as 88.0% of the 25 online respondents who gave their race identified as White.

92.5% of respondents identified their ethnicity. Only 2.6% of these respondents identified as being of Spanish/Hispanic/Latino origin.

Age

97.5% of respondents identified their age range. 51.3% of these respondents were between 18 and 34 years old, 33.3% were between 35 and 44 years old, 10.3% were between 45 and 54 years old, 2.6% were between 55 and 64 years old, and 2.6% were between 65 and 74 years old. Both the in-person and online survey had more responses from younger respondents.

Gender

92.5% of respondents identified their gender. 64.9% of these respondents identified as male and 35.1% identified as female.

Ability

97.5% of respondents identified whether they had a disability that required mobile assistance, including a cane, walker, scooter, or wheelchair. Only 10.3% of these respondents had a disability that required mobile assistance.

How Respondents Heard about Project

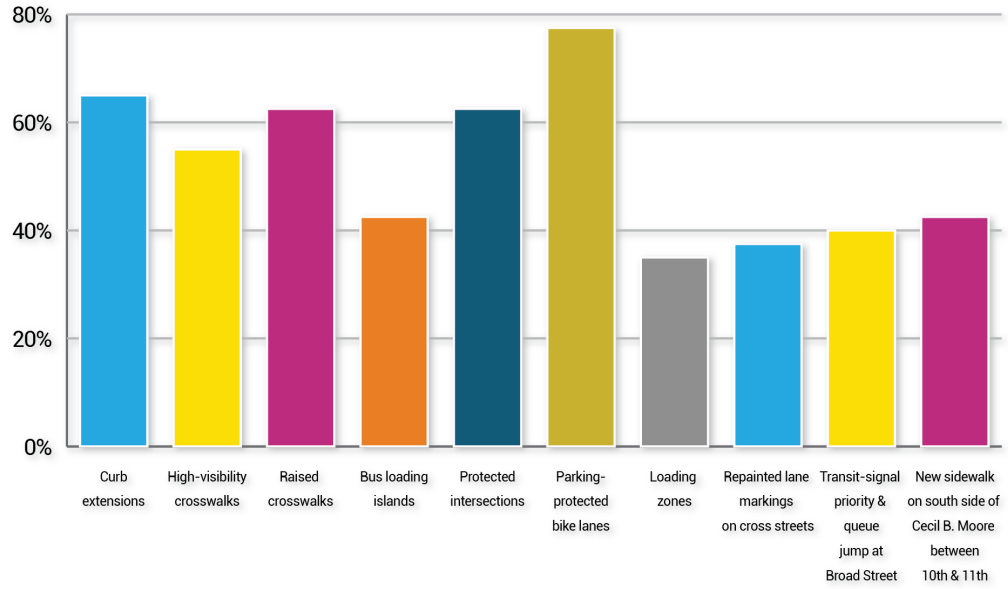
42.5% of the respondents identified how they heard about the project. The most common way respondents heard about the project was Twitter, with 35.3% of respondents finding out via the social media platform. DVRPC (including its Public Participation Task Force), Facebook, email, and 5th Square (a political action committee in Philadelphia) each informed 11.8% of respondents about the project. Other ways that respondents heard about the project include Instagram, Temple University, and Beech International Village.

Favorite Recommendations

All respondents answered the first question of the survey: Which recommendations do you like the most? The most liked recommendation was parking-separated bike lanes, with 77.5% of respondents including it in the three recommendations that they liked the most. Other recommendations that respondents liked were curb extensions (65.0%), raised crosswalks (62.5%), protected intersections (62.5%), and high-visibility crosswalks (55.0%). Only 35.0% of respondents included loading zones in the three recommendations that they liked the most.

Desired Changes to Recommendations

60.0% of the respondents answered the second question of the survey: What would you change about the recommendations?



Half of the respondents commented on bicycle infrastructure in response to this question, making it the top concern for respondents. Respondents routinely suggested bike lane extensions, especially west of Broad Street, and for Cecil B. Moore Avenue bike lanes to be better connected to other bike networks in the city. Respondents argued that the disappearance of a bike lane forces cyclists to merge into traffic, which can be dangerous and frightening. Similarly, commenters identified a desire to reduce the implementation of sharrows where cyclists share road space with drivers. Respondents also expressed a desire for bicycle infrastructure to include physical separation – such as with concrete barriers, curbs, or parked cars – between the bike lane and vehicle travel lanes. One commenter argued that plastic delineators were not as useful as other methods, such as K71 bollards, because they are easily knocked down. Some commenters were wary of parking-separated bike lanes due to the possibility of dooring and vehicles parking in the bike lane, both of which pose risks to cyclists, but others advocated for their implementation on Cecil B. Moore Avenue and its adjacent side streets. Some even suggested removing parking, such as along the south side of 10th and 11th Streets, to make room for bike lanes. To address the lack of bike safety at the intersection of Broad Street and Cecil B. Moore Avenue, one commenter suggested implementing a bike lane behind a curb where the right-turning lane currently exists. Almost all comments about bicycle infrastructure, including the extension of bike lanes and the separation of bike lanes from travel lanes, cited a desire for safety and protection as a reason for requesting improved bicycle infrastructure.

33.3% of respondents discussed improvements related to altering driver behaviors in addition to traffic calming. Desired suggestions included improved policing of illegal turns and moving violations, installing additional pedestrian crossing signals, and posting signage that reminds drivers to heed pedestrian right-of-way at intersections with flashing pedestrian crossing signals. The intersection of Broad Street and Cecil B. Moore Avenue is especially problematic, according to respondents, because drivers tend to not wait for pedestrians to cross before making right turns, blocking the crosswalk and forcing pedestrians into the intersection, or even encouraging pedestrians to cross illegally. One respondent suggested adding signage to warn drivers that Cecil B. Moore Avenue goes through Temple University and that they could detour onto a side street.

20.8% of respondents discussed street design in their comments. Suggestions included the implementation of more traffic calming measures on both Cecil B. Moore Avenue and its adjacent side streets, the raising of the intersection at Broad Street, the pairing of a queue jump and a bike lane behind an island to replace the existing right-turn lane at the intersection at Broad Street, and the redesign of the street to address uniformity inconsistencies with pavement, traffic signs, and light placement. One respondent reported a need for more dedicated turn lanes to improve vehicle throughput. Another commenter highlighted the need to make the entire corridor safer and more accessible for people with disabilities.

12.5% of respondents discussed parking in their comments. All respondents who commented on parking conditions indicated that they would like to see reduced parking on Cecil B. Moore Avenue. One argument for this is that side streets have enough parking to offset any spaces that are removed from Cecil B. Moore Avenue. Another respondent suggested that since there was already a parking zone on the private road on the south side of Cecil B. Moore Avenue, the parking

spots in front of that sidewalk could be removed for a bike lane, which was already part of the proposed improvements. Multiple respondents also indicated that they would like to see increased parking regulation and enforcement, especially in regards to illegally-parked vehicles.

12.5% of respondents also discussed public transit in their comments. Several respondents commented on bus service and a desire to prioritize buses in street design. One comment noted that curb extensions, which often force buses in and out of traffic, may slow down service. Another respondent reported that parked vehicles outside the Cecil B. Moore Broad Street Line station made it difficult to board buses or cross the street safely. One comment outside the project scope but important to note is the need for slip-resistant steps at the entrances of the Cecil B. Moore Broad Street Line station.

Respondent Comments

47.5% of the respondents answered the third question of the survey: What other comments do you have for the project team?

Like the second question of the survey, the topic that received the most comments were bicycles and bike infrastructure, as 31.6% of respondents discussed them in their comments. Multiple respondents indicated that they would like to see more protected bike lanes. Comments also included extending bike lanes to connect to other bike networks, prioritizing bicycle mobility, educating drivers that bicyclists have the same right to the street as drivers in areas without bike lanes, and narrowing bike lanes so that dirtbike and ATV riders are not able to use bike lanes to weave in and out of traffic. Respondents also highlighted that many Temple University students live off-campus and bike to class.

The topic that received the second most comments were sidewalks, as 15.8% of respondents discussed them in their comments. Several comments addressed environmental and aesthetics concerns, such as a desire for better waste management and more street tree planting. Sidewalks along Cecil B. Moore Avenue were also noted to need practical improvements to improve ADA accessibility. Additionally, one respondent reported that dirtbike and ATV riders sometimes drive on sidewalks to avoid traffic lights.

A topic that received multiple comments were street trees, as 10.5% of respondents discussed them in their comments. The comments noted a desire for more street trees along Cecil B. Moore Avenue to address health and environmental concerns, as well as encouraging a reduction to travel speeds. The comment acknowledged the difficulty of street tree planting along the south side of Cecil B. Moore Avenue due to the presence of power lines and notes a potential solution in planting trees within curb extensions and bus loading islands.

Another topic that received multiple comments was driver behavior, as 10.5% of respondents discussed it in their comments. One comment notes speeding and red-light running on side streets along Cecil B. Moore Avenue. Another comment notes that the recommendations do not address the street's poor vehicular flow, and states that if the traffic system is not balanced, then undesirable traffic patterns such as speeding, turning against traffic, and cutting off pedestrians will continue to occur.

Other comments include the implementation of safer crosswalks, the installation of cameras, and using durable materials that do not need constant maintenance. Most importantly, one comment requested that DVRPC continues to include community members in planning efforts in their neighborhood, especially by connecting

with local block captains who can share information with local residents.

Location of Potential Gateway

50.0% of the respondents answered the only bonus question of the survey: Where do you feel the Cecil B. Moore Ave. business district starts? If an investment were made in a gateway to the district, where would you like to see it installed?

25.0% of respondents indicated that Broad Street was the start of the Cecil B. Moore Avenue business district, making it the most popular start of the business district. Furthermore, most of these respondents stated that Broad Street was the business district's east boundary. The streets between 15th Street and 18th Street (from east to west: 15th, Sydenham, 16th, Willington, 17th, Bouvier, and 18th Streets) were also selected as the start of the business district, with Willington Street being selected by two respondents. Other locations mentioned as the start of the Cecil B. Moore Avenue business district include 5th Street, 6th Street, 7th Street, 11th Street, 22nd Street, and 23rd Street and Ridge Avenue.

There were other comments that were not relevant to the location of a potential gateway, but were relevant to planning issues along Cecil B. Moore Avenue. These comments included connecting the Cecil B. Moore corridor from Broad Street to Fishtown, the desire for more bike lanes, and creating recommendations to BIPOC-owned businesses and requiring mixed-income housing along the corridor. Other comments stated that the city should invest in infrastructure instead of a gateway, with one comment stating that the government should not attempt to invest for businesses, another comment stating that there should be commercial use along the corridor from Fairmount Park to Front Street, and a third comment stating that the city should invest in a protective pedestrian and bicycle infrastructure plan.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CECIL B. MOORE

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Abstract:

This project was funded by the City of Philadelphia as part of Vision Zero, an effort to eliminate traffic fatalities by 2050. Cecil B. Moore Avenue is a dangerous arterial roadway in North Philadelphia with a history of severe crashes. The study area for this project stretches from Willington Avenue to 10th Street along Cecil B. Moore Avenue. The study team for this project conducted extensive neighborhood outreach, research on existing planning efforts, a road safety audit, and a crash and traffic analysis, all of which indicated the need for safety improvements on the corridor. The study team produced a series of recommendations aimed at improving safety, mobility, and community vitality for all users of the street. The recommendations were presented to a steering committee made up of city government and community members, as well as to the public during a pop-up event hosted at a local community center.

Staff Project Team:

Marco Gorini, *Senior Transportation Planner*
Kelsey McElduff, *Senior Transportation Engineer*
Mark Morley, *Transportation Planner*
Kendra Nelson, *Transportation Planner*
Sarah Moran, *Manager, Office of Mobility Analysis and Design*
Kevin Murphy, *Manager, Office of Safe Streets*
Elise Turner, *Manager, Office of Communications and Engagement*
Gina Myers, *Senior Communications Specialist*
Stephanie Cavacini, *Associate Manager, Office of Creative and Print Services*

Staff Contact:

Kelsey McElduff
Senior Transportation Engineer
Phone: 215.238.2870
Email: kmcelduff@dvrpc.org

DELAWARE VALLEY dvrpc REGIONAL PLANNING COMMISSION

190 N Independence Mall West
8th Floor
Philadelphia, PA 19106-1520
215.592.1800
www.dvrpc.org

DELAWARE VALLEY dvrpc REGIONAL PLANNING COMMISSION

190 N Independence Mall West
8th Floor
Philadelphia, PA 19106-1520
215.592.1800
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