

# 2 Purpose and Need

# 2.1 Introduction

| 1  | The Council on Environmental Quality (CEQ) regulations implementing the National                     |
|----|--|
| 2  | Environmental Policy Act (NEPA) (40 Code of Federal Regulations [CFR] 1500-1508) require             |
| 3  | that an Environmental Impact Statement (EIS) "briefly specify the underlying purpose and             |
| 4  | need to which the agency is responding in proposing the alternatives including the proposed          |
| 5  | action." <sup>1</sup> This chapter describes the current condition of Washington Union Station (WUS) |
| 6  | and the future challenges that form the basis of the purpose and need for the WUS                    |
| 7  | Expansion Project (the Project).   |
| ,  |  |
| 8  | WUS is the busiest transportation hub in Washington, DC. It accommodates a total of more             |
| 9  | than 37 million visitors annually, more than each of the three airports serving the region.          |
| 10 | WUS is the second-busiest railroad station in the Nation with almost 50,000 passenger trips          |
| 11 | per day across intercity and commuter railroads. Altogether, WUS supports more than                  |
| 12 | 100,000 rail, transit, and bus passenger trips daily via intercity rail (National Railroad           |
| 13 | Passenger Corporation [Amtrak]); commuter rail (Virginia Railway Express [VRE] and                   |
| 14 | Maryland Area Regional Commuter [MARC]); Washington Metropolitan Area Transit                        |
| 15 | Authority (WMATA) Metrorail; and intercity buses. WUS also provides facilities for tour              |
| 16 | buses, local buses, shuttle buses, private cars, rental cars, for-hire vehicles, bicycles, and       |
| 17 | pedestrians. It is the current western terminus of the DC Streetcar.                                 |
|    | As as iteration and side while and in an action of the interaction. Deduced a second comparation     |
| 18 | As railroad service and ridership are increasing, Union Station Redevelopment Corporation            |
| 19 | (USRC) and Amtrak are proposing to expand and modernize WUS to meet current and future               |
| 20 | needs. The Project would address the challenges highlighted in this chapter by improving             |
|    |  |

existing and future station deficiencies by the planned build horizon year of 2040.

# 2.2 Washington Union Station Today

22 23 This section describes WUS's existing components and layout, transportation functions, and multimodal ridership and users.

<sup>&</sup>lt;sup>1</sup> 40 CFR 1502.13. Environmental Impact Statement, Purpose and Need. Accessed from <u>https://www.govinfo.gov/app/details/CFR-2012-title40-vol34/CFR-2012-title40-vol34-sec1502-13</u>. Accessed on April 2, 2018.

#### 2.2.1 **Structures**

WUS consists of the historic station building, comprising the historic headhouse with its Main 24 Hall, East Hall, and West Hall as well as the Retail and Ticketing Concourse; the Claytor 25 Concourse, just north of the historic station building and providing access to trains; an access 26 point to Metrorail; the rail terminal with railroad tracks, platforms, and support facilities; the 27 parking garage (which includes the Rental Car Facility); the bus facility, on the first level of 28 the parking garage; public circulation areas; and various passenger amenities (Figure 2-1). 29

#### 2.2.2 **Mix of uses**

Along with transportation services, WUS provides approximately 210,000 square feet of retail 30 space (shops, kiosks, and restaurants). It also hosts a variety of civic events, presidential 31 inaugural balls, concerts, and art exhibits.<sup>2</sup> Existing uses at WUS facilities are listed and 32 described in Table 2-1. 33

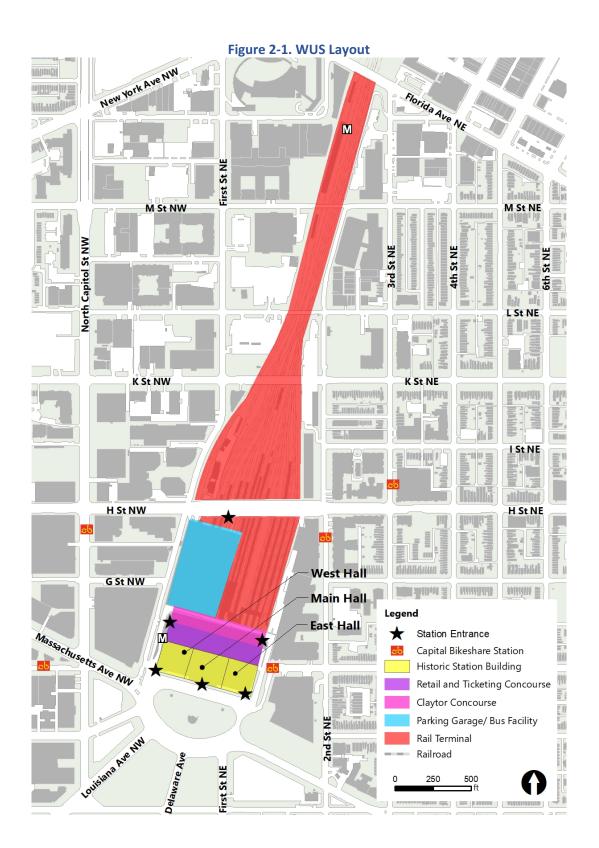
|                                   | Table 2-1. Mix of Uses at WUS   |
|-----------------------------------|---|
| Existing WUS Facility             | Description   |
| Historic Headhouse                | <ul> <li>The Historic Headhouse includes the Main Hall, East Hall, and<br/>West Hall. It connects to the Retail and Ticketing Concourse.</li> </ul>   |
| Main Hall                         | <ul> <li>The Main Hall opens onto Columbus Plaza through the Main<br/>Portico. For-hire vehicles, personal vehicles, and tour buses<br/>use Columbus Circle to pick up or drop off visitors in the front<br/>of the Main Hall.</li> <li>The Main Hall is 26,000 square feet in size.</li> </ul> |
| East Hall                         | <ul> <li>The East Hall contains retail, restaurants, and space for functions and events.</li> <li>The East Hall is 8,000 square feet in size.</li> </ul>  |
| West Hall                         | <ul> <li>The West Hall also contains restaurants and provides a<br/>primary entrance into WUS through the Carriage Porch.</li> </ul>  |
| Retail and Ticketing<br>Concourse | <ul> <li>The Retail and Ticketing Concourse contains Amtrak's ticketing counter.</li> <li>It also contains three levels of retail space, including a food court on the lower level and a two-level shopping arcade above it.</li> </ul>   |

#### + \A/LIC Table 2.1 Mi ....

<sup>2</sup> History of Union Station. Accessed from https://www.unionstationdc.com/History-of-Union-Station//. Accessed on May 13, 2020.

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### DRAFT ENVIRONMENTAL IMPACT STATEMENT



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### DRAFT ENVIRONMENTAL IMPACT STATEMENT

| Table                     | 2-1. Mix of Uses at WUS (Continued)  |
|---------------------------|--|
| Existing WUS Facility     | Description  |
| Claytor Concourse         | <ul> <li>The Claytor Concourse was built in the 1980s. It has two levels (main and mezzanine).</li> <li>The main level has boarding gates to the upper-level stubend platforms, passenger waiting areas, restrooms, retail and food outlets, and access to the Metrorail station.</li> <li>The main level also provides access to Amtrak service areas, Club Acela, and the North Hangar, through which passengers can access the lower-level, run-through platforms.</li> <li>The mezzanine level provides access to the bus facility, parking garage, and Rental Car Facility. It is also connected to the shopping arcade of the Retail and Ticketing Concourse.</li> <li>Existing passenger facilities in the Claytor Concourse are generally overcrowded and uncomfortable. Amtrak is currently designing near-term improvements to the Claytor Concourse. This Concourse Modernization Project (a separate action from the Project) is intended "to alleviate congested conditions, enhance passenger comfort and accessibility, while enlivening the space with new architectural finishes and natural light." 3 The Concourse Modernization Project will not be sufficient to allow the Claytor Concourse facilities to adequately handle projected future demands at WUS, however.</li> </ul> |
| Operations Support Spaces | <ul> <li>Operations support spaces include areas used for provisioning trains (food and beverage); Amtrak Police facilities; maintenance of railroad systems (such as communication and signals, buildings and bridges, electric traction and track); vehicle maintenance areas; and facilities for both Amtrak and MARC train crews.</li> <li>Support spaces for retail operations are also provided.</li> <li>There currently are 85,600 square feet of operations support space at WUS.</li> <li>There also is approximately 120,000 square feet of office space in the upper levels of the West and East Halls.</li> </ul>   |
| Parking Garage            | <ul> <li>The parking garage includes public parking spaces and the rental car facility.</li> <li>The parking garage has approximately 2,200 marked spaces.</li> </ul>  |
| Rental Car Facility       | <ul> <li>The rental car facility has space for up to approximately 295<br/>vehicles as well as check-in kiosks for operators.</li> </ul>   |

## Table 2-1. Mix of Uses at WUS (Continued)

<sup>&</sup>lt;sup>3</sup> Washington Union Station Concourse Modernization Project. Accessed from <u>https://nec.amtrak.com/project/washington-union-station-concourse-modernization-project/</u>. Accessed on April 3, 2020.

| Table 2-1. Mix of Uses at WUS (Continued) |  |  |
|---|--|--|
| Existing WUS Facility                     | Description  |  |
| Bus Facility                              | <ul> <li>The bus facility, located on the first level of the parking garage, has 61 slips (short-term parking spots) serving intercity, tour/charter, and DC Circulator buses.</li> <li>The bus facility also includes operator check-in desks, a small shop, restrooms, and a passenger waiting area.</li> <li>On the same level as the bus facility, there is a cell phone waiting area for passenger pick-up. The offices of Union Station parking garage (USPG), LLC, which operates the parking garage, are located there as well.</li> </ul> |  |

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# 2.2.3 Tracks and Platforms

| 34 | The rail terminal at WUS has 23 tracks and 14 platforms (See Table 2-2). Twenty tracks are         |
|----|--|
| 35 | used for revenue service and three are used for storage and pooling. The tracks are                |
| 36 | distributed on two levels: 14 stub-end tracks and seven platforms are located on the upper         |
| 37 | level (west side of the rail terminal); nine run-through tracks and seven platforms are located    |
| 38 | on the lower level (east side of the rail terminal). All 14 stub-end tracks (Tracks 7-20) are used |
| 39 | for revenue service and are served by MARC and by Amtrak's Acela Express, Northeast                |
| 40 | Regional, Vermonter, and Capitol Limited trains, which terminate at WUS. Six of the run-           |
| 41 | through tracks (Tracks 23-28) are used for revenue service by Amtrak regional trains, Amtrak       |
| 42 | long distance trains (Crescent, Cardinal, Palmetto, Silver Star, and Silver Meteor), and VRE.      |
| 43 | Currently, all passengers must enter and exit the platforms at their south end.                    |

## Table 2-2. Track and Platform Uses at WUS

| Track Number   | Type of Track   |
|----------------|---|
| 7              | Stub-end track, non-electrified, occupied by private cars   |
| 8, 9           | Stub-end track, non-electrified   |
| 10, 11, 12     | Stub-end track  |
| 13, 14         | Stub-end track  |
| 15, 16         | Stub-end track  |
| 17, 18, 19, 20 | Stub-end track  |
| 22             | Run-through track without a useable platform face   |
| 23, 24, 25     | Run-through track   |
| 26             | Run-through track   |
| 27, 28         | Run-through track   |
| 29             | Run-through track without a useable platform face   |
| 30             | Stub-end track, non-electrified, used by MARC for mid-day storage and by Amtrak to switch locomotives between diesel and electric power |

Source: Washington Union Station Terminal Infrastructure EIS Report (Appendix B).

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# 2.2.4 Vehicular Parking

WUS's parking garage is located to the northwest of the historic station building above the 44 westernmost tracks and platforms. The garage is a six-level structure. The first level is 45 occupied by the bus facility (see Section 2.2.5, Bus Parking and Operations). The first level 46 also includes a cell phone waiting area. The five other levels provide approximately 2,200 47 marked parking spaces, including 140 marked spaces for the rental car facility.<sup>4</sup> The lowest 48 deck was completed about 42 years ago and the other levels from 5 to 10 years later, with 49 the original structure being completed in 1987. The garage was last expanded in the late 50 2000s. 51

Access to the garage is from H Street NE via a ramp connected to the H Street Bridge.
Vehicles can also reach the garage via the "east ramp," extending from Columbus Circle along
the east side of WUS and north of the Claytor Concourse. Exiting vehicles use H Street NE or
the "west ramp," which extends along the west side of WUS down to Columbus Circle.

# 2.2.5 Bus Parking and Operations

The bus facility, on the first level of the parking garage, provides 61 bus slips, 30 of which are 56 permanently reserved (by intercity, tour, and shuttle bus providers). Four slips are available 57 for pick-ups and drop-offs, and 18 are available for hourly and daily use and rental. The D.C. 58 Circulator operates from five slips and there are designated stops for two local tourist bus 59 operators. A handful of unmarked slips in the bus facility are used for temporary loading and 60 unloading, primarily by tourist buses. In addition, the bus facility currently accommodates 61 oversized vehicles such as vans and recreational vehicles (RVs) for long-term storage and 62 parking. Buses enter and exit the bus facility via H Street NE. Outside the bus facility, "hop-63 on, hop-off" sightseeing buses use the middle lanes of the Columbus Circle pick-up and drop-64 off area in front of WUS. 65

# 2.2.6 Bicycle/Pedestrian Facilities and Operations

- 66 A "Bikestation" located just west of the historic station building provides parking for 67 approximately 100 bicycles as well as bicycle rentals. Capital Bikeshare has a station to the 68 east of the historic station building and there are four other Bikeshare stations within a two-69 block radius of WUS (see **Figure 2-1**).
- There are currently six pedestrian entrances into WUS. Four are located on the south side of
   the historic station building: on First Street NE near G Street NE; under the Portico on the
   west side of the building; through the central doors; and on the east side of the building, for

<sup>&</sup>lt;sup>4</sup> There are 140 marked rental car spaces. However, according to counts taken by USPG, LLC, the garage operator, there are often 295 rental cars parked in the Rental Car Facility and garage. This is due to due to "stacked" parking, that is the practice of tightly parking more than one car within a space. Therefore, total parking garage capacity is approximately 2,450 vehicles.



access to the East Hall offices. There is also an exit to H Street NE through the bus facility and
 an exit to the Station Place private development (located between 2nd Street NE and WUS)
 through a corridor on the east side of the Claytor Concourse.

# 2.2.7 Vehicular Access and Circulation

Vehicular access to the parking garage and bus access are described in Section 2.2.4, 76 Vehicular Parking and Section 2.2.5, Bus Parking and Operations. Pick-up and drop-off 77 activity by personal or for-hire vehicles is concentrated on Columbus Circle in front of the 78 historic station building. The pick-up and drop-off area on Columbus Circle consists of three 79 bays of two lanes each. Taxi pick-up occurs in the two lanes nearest to WUS, with the 80 vehicles queueing along the east ramp and the west ramp to H Street NE. Taxi passengers 81 queue in the portico in front of the central doors. All other for-hire vehicles and private 82 passenger vehicles use the two outermost lanes for both pick-up and drop-off. As noted 83 above, the middle lanes of the pick-up and drop-off area are used by hop-on, hop-off buses. 84

# 2.2.8 Transportation

| 85 | WUS is served by seven modes of transportation and more than 30 transportation providers.                     |
|----|---|
| 86 | Modes of transportation include: Amtrak intercity rail; VRE and MARC commuter rail;                           |
| 87 | Metrorail <sup>5</sup> ; bus (intercity, local, tour, charter, and sightseeing); taxi, for-hire, and personal |
| 88 | vehicles; and bicycle. Reflecting this range of modes:  |
| 89 | <ul> <li>WUS is one of the Nation's busiest passenger transportation facilities,</li> </ul>                   |
| 90 | accommodating nearly 50,000 rail passenger trips per day;   |
| 91 | <ul> <li>WUS is the second busiest station on the Amtrak system, handling more than</li> </ul>                |
| 92 | five million passengers annually with more than 16,000 average weekday riders;                                |
| 93 | <ul> <li>WUS is the third most utilized station on the VRE system, with more than</li> </ul>                  |
| 94 | 4,000 average weekday riders;   |
| 95 | <ul> <li>WUS accounts for 28,000 average weekday entries and exits for MARC;</li> </ul>                       |
| 96 | <ul> <li>WUS is the region's central intercity and tour/charter bus facility, with 10,000</li> </ul>          |
| 97 | average daily users; and  |
| 98 | <ul> <li>WUS is the most heavily used passenger facility for Metrorail, with 29,000 average</li> </ul>        |
| 99 | weekday entries and exits.  |

<sup>&</sup>lt;sup>5</sup> Access to the Metrorail station (Red Line) is located on the west side of WUS. The WMATA-owned tracks run along the west side of WUS and the rail terminal.

# 2.3 Purpose and Need Statement

100The purpose of the Project is to support current and future long-term growth in rail service101and operational needs; achieve compliance with the Americans with Disabilities Act of 1990102(ADA) and emergency egress requirements; facilitate intermodal travel; provide a positive103customer experience; enhance integration with the adjacent neighborhoods, businesses, and104planned land uses; sustain WUS's economic viability; and support continued preservation and105use of the historic station building.

106The Project is needed to improve rail capacity, reliability, safety, efficiency, accessibility, and107security for both current and future long-term railroad operations at WUS.

# 2.4 Project Need

Many aspects of WUS in its current condition are inadequate to meet current or anticipated 108 future passenger and station needs. WUS adequately accommodates current rail operations; 109 however, over the long-term, it will need additional capacity to meet future demand. 110 Cumulative train ridership across Amtrak, MARC, and VRE is anticipated to more than double 111 by 2040, which would quickly push WUS beyond its capacity unless substantial efforts are 112 made to prepare for the growth. The NEC FUTURE plan anticipates growing ridership and 113 train service in the northeast corridor. The planned growth in passenger volumes at WUS 114 would increase congestion on platforms, in queueing areas, and in the hallways connecting 115 the various transportation modes. 116

- 117WUS's existing platforms and waiting areas do not provide high-quality passenger experience118and accessibility. They would also not be able to adequately serve the projected future119passenger demand for Amtrak and other rail services. WUS's platforms are generally120adequate for current passenger volumes but they would be unable to accommodate future121needs for nearly simultaneous train arrivals and safe and efficient movement of a greater122volume of passengers. Furthermore, the existing station platforms are not compliant with123current ADA<sup>6</sup> or emergency egress standards.
- 124Multimodal operations and access need improvement, as they are frequently constrained125today and will only become more so in the future. WUS does not provide a consistently126positive passenger experience befitting a central multimodal transportation facility in the127Nation's capital. Passenger experience needs to be improved. The layout of the rail terminal128restricts connectivity with and between the adjacent neighborhoods to its east and west. The129Project would enhance connections with and among these neighborhoods. Finally, to provide130for sustainable future operation, preservation, and maintenance, WUS needs to remain

<sup>&</sup>lt;sup>6</sup> 42 USC 12101 *et seq*. Americans with Disabilities Act of 1990, as amended. Accessed from <u>https://www.govinfo.gov/content/pkg/USCODE-2009-title42/html/USCODE-2009-title42-chap126.htm</u>. Accessed on May 13, 2020.

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financially viable. The following sections provide more details on the needs underlying the 131 Project. 132

#### 2.4.1 **Station Facilities and Operations**

Rail capacity, support services, loading facilities, and logistics at WUS meet current needs but 133 will not be sufficient to accommodate future intercity and commuter rail trains and 134 passengers. Internal circulation areas do not have adequate capacity to accommodate 135 existing or future passenger and WUS needs. The demand for parking is expected to change 136 by 2040, driven by evolving transportation mode preferences. The parking supply must 137 reflect these changing preferences. 138

#### 2.4.1.1 **Rail Capacity and Service Demands**

Existing rail capacity at WUS is insufficient to meet long-term service needs. Future passenger 139 140 rail activity is forecasted to exceed the existing capacity. As reflected in the modeling conducted for the NEC FUTURE Final EIS, by 2040, FRA anticipates substantial growth in 141 Amtrak, MARC, and VRE ridership over the 2012 baseline levels used for the modeling. A 142 factor in the projected growth is the future introduction by Amtrak of a new "Metropolitan" 143 service providing intercity service along the Northeast Corridor with more frequent stops 144 than existing services. By 2040, Amtrak ridership is expected to be 95 percent above 2012 145 levels and commuter rail to see even greater ridership growth: compared to 2012 levels, 146 MARC is projected to see a 150 percent increase in daily rides and VRE is likely to expand its 147 ridership by 250 percent (Figure 2-2).<sup>7</sup> Growth is ongoing, as shown by more recent (2015) 148 ridership numbers, shown in Figure 2-2, when compared to 2012 numbers. The growth in 149 commuter rail use is driven by the VRE<sup>8</sup> and MARC<sup>9</sup> investment plans, which call for 150 substantial increases in service into WUS. 151

#### 2.4.1.2 Accessibility, Security and Life Safety Codes

152 153 154 155

Initially completed in 1908 and with a rail passenger concourse built in 1988, WUS has systems and facilities that need to be upgraded to meet modern standards and codes. The existing platforms do not meet ADA requirements for safety zones, vertical circulation, and pedestrian circulation. The platforms also do not allow level boarding<sup>10</sup> and gaps between

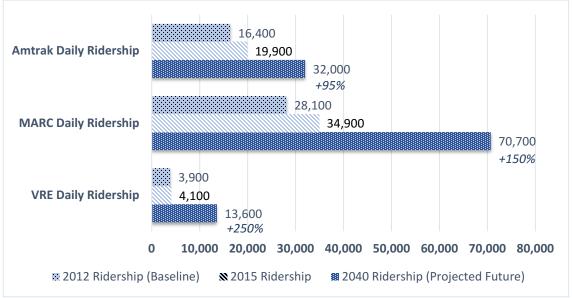
<sup>7</sup> FRA. 2016. NEC FUTURE FEIS. Accessed from https://www.fra.dot.gov/necfuture/tier1 eis/feis/. Accessed on April 3, 2020. Some modifications were made based on WUS operating constraints.

VRE. 2014. VRE System Plan 2040. Accessed from https://www.vre.org/vre/assets/File/2040%20Sys%20Plan%20VRE%20finaltech%20memo%20combined.pdf. Accessed on April 3, 2020.

<sup>9</sup> MARC. 2013. MARC Growth and Investment Plan 2013-2050.

<sup>10</sup> Level boarding is when train interiors are at the same level with station platforms so that passengers do not have to use steps to board the train.

156 157 158 the platform and the train are excessive. Security systems require modernization. Safety features and performance, including peak platform clearance times, do not fully meet building, fire, and life safety codes.





Source: FRA, 2016

# 2.4.1.3 Platforms

Many of the deficiencies of the existing platforms and tracks limit the railroads' operational 159 flexibility and restrict station and track capacity. In their current condition, WUS platforms 160 will not be able to adequately accommodate the projected increase in passenger volumes, 161 nearly simultaneous train arrivals, and movement of through-trains on relatively short 162 headways.<sup>12</sup> The platforms are too short and narrow to serve the longer trains carrying 163 growing passenger volumes. Long dwell times<sup>13</sup> reduce platform capacity and impede the 164 ability to move trains in and out of WUS in a reasonable time. Combined, these factors impair 165 the railroads' ability to provide existing customers with high-quality service and limit their 166 ability to increase service in the future. 167

168Current passenger volumes and flows cause access challenges. Platform entry and exit points169are very limited. All passengers must enter and exit the platforms from the south (Claytor170Concourse) end and there are no other platform entry and exit points. Full trains arriving at171WUS often discharge large numbers of passengers. For instance, arriving commuter trains172(VRE and MARC) can currently unload up to 1,400 passengers at a time; Amtrak Regional

<sup>&</sup>lt;sup>11</sup> Percentage growth shown in chart represents growth from 2012 to 2040.

<sup>&</sup>lt;sup>12</sup> Headways are the times between scheduled trains on a same line or route.

<sup>&</sup>lt;sup>13</sup> Dwell time is the time that trains sit at platforms during loading/unloading operations.

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- 173trains can discharge up to 560 passengers; and Acela trains can unload up to 300 passengers.174Current arrival patterns can result in nearly 2,000 passengers arriving on the same platform175within 15 minutes. The combination of high passenger volumes and narrow platforms with176only one point of egress means that it can take up to 10 minutes to clear the platform of177passengers.
- 178The narrow platforms and single point of access and egress also causes conflicts between179passengers and Amtrak service staff performing necessary WUS functions, like train and180station maintenance, and baggage handling. As a result, conditions on the platforms may181become unsafe in the future.14

# 2.4.1.4 Support Services, Loading, Logistics

Space for passenger support functions, such as ticketing, customer service, lost and found, 182 and baggage operations, is too limited to be able to properly accommodate forecasted future 183 operations and ridership. Operations support spaces, which includes areas for the 184 provisioning of trains (food and beverage), Amtrak Police functions, maintenance of railroad 185 systems (communication and signals, buildings and bridges, electric traction, and track), 186 vehicle maintenance, and facilities for both Amtrak and MARC train crews, are similarly 187 undersized for projected future operations, as are the loading docks. Amtrak's ongoing 188 Concourse Modernization Project will address space issues to some extent, but further 189 expansion will be needed to meet 2040 demand and service levels. 190

# 2.4.1.5 Passenger Experience

The experience of passengers arriving at WUS by train can occasionally be unpleasant and fall 191 short of what the experience of arriving at the grand multimodal transportation center of the 192 Nation's capital should be. Passengers alight on frequently congested platforms and must 193 make their way to the station via often-congested escalators and circuitous and narrow 194 hallways. They enter WUS through the Claytor Concourse, a commonly overcrowded space 195 with outdated seating areas, poor signage, and undersized restrooms. As previously 196 mentioned, Amtrak has a near-term project planned to expand and improve the Claytor 197 Concourse's waiting and circulation areas, which will address the space deficit and often poor 198 passenger experience in the concourse. However, even with the implementation of this near-199 term project, the concourse will not be able to adequately accommodate projected 2040 200 travel demands. Without further improvements, wayfinding, circulation, and passenger 201 experience at WUS will remain below the standards applicable to world-class transportation 202 hubs in cities around the world. 203

<sup>&</sup>lt;sup>14</sup> Amtrak. 2012. Union Station Master Plan, July 2012 Report. Accessed from <u>https://nec.amtrak.com/wp-content/uploads/2017/08/Washington-Union-Station-Master-Plan-201207.pdf</u>. Accessed on April 2, 2020.

# 2.4.2 Intermodal Travel

# 2.4.2.1 Internal Circulation

204 Throughout much of the day, WUS experiences internal congestion, as passenger flows and queues exceed the capacity of the current configuration. Wayfinding is generally poor due to 205 the lack of clear access and circulation patterns to and between common destinations. 206 Although they generally remain manageable today, issues with flow, circulation, and 207 navigation will worsen as passenger volumes increase. Peak period arrivals could nearly 208 double by 2040 relative to current conditions, with off-peak arrivals also becoming 209 substantially higher than today. This will result in congestion during a greater portion of the 210 day. Even with the Concourse Modernization Project improvements, conditions at some key 211 locations may in the future be reduced to a standstill. 212

Multimodal transfers can be confusing and challenging, requiring passengers to take indirect
 routes to reach their destination. The concentration of ingress and egress points on the south
 side of WUS is a key limiting factor in accommodating increased passenger volumes.
 Passengers from all directions will be forced into increasingly congested doors. Future
 congestion in the northern mezzanine of the Metrorail station, which provides access to the
 Claytor Concourse near existing Gate A, will also affect passenger movements within WUS.

# 2.4.2.2 Columbus Circle, Taxi Stand, Pick-up and Drop-off Area

219Columbus Circle and Union Station Drive NE in front of WUS are commonly congested, with220frequent conflicts among pedestrians, bicyclists, vehicles, and other traffic. To reach the front221of WUS from the south, a pedestrian must cross six lanes of active pick-up and drop-off222traffic. Bicycle accommodations are provided nearby but bicyclists experience conflicts with223vehicles and pedestrians at the northeast (F Street NE) and northwest (First Street NE)224corners of the pick-up and drop-off area. The north side of Columbus Circle adjacent to WUS225presents several points of conflict among pedestrians, bicycles, and vehicles as well.

# 2.4.2.3 For-Hire Vehicles

226The projected growth in rail ridership will overburden the existing for-hire vehicle15 facilities227and exceed their capacity. For-hire vehicles are important for rail passengers at WUS.228According to 2015-2016 Amtrak survey data, 16 30 percent of arriving passengers depart WUS229via taxi or other for-hire vehicle, and 20 percent of departing passengers (excluding those230who connect to or from another Amtrak train) arrive by taxi or other for-hire vehicle.231Substantial queues and delays for taxis are common. Taxis waiting to pick up riders often232queue along the full length of the east ramp, roadway behind the Claytor Concourse, and

<sup>&</sup>lt;sup>15</sup> "For-hire vehicles" refer to taxis, hired cars, and transportation networking companies such as Uber and Lyft.

<sup>&</sup>lt;sup>16</sup> Amtrak. 2015. eCSI Survey Access/Egress Questions.

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WUS parking garage ramp to H Street NE, leading to queueing on the street itself. The 233 average peak-hour queue is 51 cars long in the morning and 103 cars long in the afternoon. 234 Field observations indicate that some taxis stand in line for up to 46 minutes before picking 235 up passengers. At the pick-up location, the passenger queue can be up to 70 to 80 individuals 236 long in the peak hours.<sup>17</sup> Future demand for for-hire vehicles is expected to grow in 237 proportion with the growth in rail ridership. Accommodating the projected increase in for-238 hire vehicles traveling to and from WUS will require multiple, efficient pick-up and drop-off 239 locations around the station. 240

# 2.4.2.4 Bus Operations: Intercity, Charter, Tour, and Sightseeing Buses

Current users of the WUS bus facility include a range of intercity bus operators, local tour 241 buses, charter coaches, the DC Circulator, Federal government buses, and local employer 242 shuttles. The existing facility can accommodate current intercity bus demand, although 243 passenger flows and queueing areas are cramped and, for some services, require passengers 244 to cross an active roadway. However, the bus facility is not adequate for forecasted 2040 245 needs. It is estimated that intercity bus ridership will grow 19 percent by 2040, while tour 246 and charter ridership will grow 51 percent. These projected increases in bus ridership will 247 require more efficient operations and improved passenger facilities to serve charter, tour, 248 and intercity buses. Use of the bus facility by shuttles and for RV storage is not expected to 249 continue. The Union Station Redevelopment Act of 1981<sup>18</sup> states that the WUS complex 250 would serve as a multiple use transportation terminal to include facilities for charter, transit, 251 252 and intercity buses.

# 2.4.2.5 Parking

The WUS parking garage supports short-term, multi-day, and valet parking. Users park there 253 before taking Amtrak trains, visiting the WUS shops and restaurants, going to work in the 254 area, or to make WUS their starting point to visit local sights. There are currently 255 approximately 2,200 marked spaces in the parking garage. The mezzanine level is currently 256 used for rental vehicles and is leased on a square foot basis. Including these areas, total 257 garage capacity is approximately 2,450 vehicles. Review of USPG data indicates that the 258 garage operates above or near 90 percent occupancy on most weekdays throughout the 259 year. Regional models indicate a shift away from single-occupancy vehicles by 2040. 260 However, existing lease agreements require that at least 1,500 parking spaces and 75 rental 261 car spaces be provided. 262

<sup>&</sup>lt;sup>17</sup> Gorove-Slade. 2015.

<sup>&</sup>lt;sup>18</sup> Union Station Redevelopment Act of 1981. Accessed from <u>https://www.gpo.gov/fdsys/pkg/STATUTE-95/pdf/STATUTE-95-</u> <u>Pg1667.pdf</u>. Accessed on April 2, 2020.

## 2.4.2.6 Neighborhood Integration

- WUS is not well integrated within the existing street context, surrounding neighborhoods,
   businesses, and planned land uses because of poor connectivity with the surrounding
   neighborhoods. This reduces the quality of pedestrian environments and limits direct access
   to the historic station building. These issues will intensify as nearby properties are developed
   and pedestrian volumes increase.
- 268Because many of the access points to WUS are in the south and the southwest corner of the269station, it is difficult for travelers to reach the neighborhoods and employment centers270located to the northwest and east such as NoMA (H Street NW, G Street NW, and F Street271NW), Capitol Hill/Near Northeast (H Street NE, G Street NE, and F Street NE), H Street272Corridor (H Street NE between 2nd Street NE and 15th Street NE), and the Atlas District273(along H Street NE from WUS to the crossroads of 15th Street NE, Bladensburg Road, and274Florida Avenue).
- To the north, the rail terminal blocks movements between existing and emerging 275 neighborhoods and economic development areas. The H Street Bridge across the terminal is 276 not convenient for pedestrian use. The NoMA, Capitol Hill, and Near Northeast/H Street 277 Corridor neighborhoods have limited access to WUS, with the most direct access point being 278 through the parking garage from H Street NE. Planned future land uses at and near WUS will 279 drive neighborhood changes. They will require new connections to adequately accommodate 280 passengers and visitors and promote neighborhood connectivity. The proposed expansion of 281 282 WUS, along with nearby existing and planned developments, would improve pedestrian connectivity and neighborhood connections. 283

# 2.4.3 Economic Viability

The historic station building needs continuous preservation, rehabilitation, restoration, and 284 reconstruction efforts to maintain its architectural and cultural integrity. Such efforts require 285 a steady revenue stream. Congress passed the Union Station Redevelopment Act in 1981 to 286 preserve the architecturally significant features of the building and redevelop WUS as a 287 multi-use transportation terminal and a commercial complex. USRC, a 501(c)(3) non-profit 288 organization, was later put in charge of overseeing this redevelopment. The preservation and 289 maintenance of the historic structures at WUS is one of the primary missions of USRC. 290 Currently, USRC is funded by two operations: the parking garage and retail activity. The 291 parking garage is USRC's main source of revenue as well as a resource for train riders, station 292 shoppers, local commuters, and visitors to Capitol Hill. The revenue generated from the 293 parking garage and from retail is reinvested in WUS. Over time, WUS has evolved into a 294 popular commercial destination among locals and tourists for both shopping and dining. 295 Approximately 210,000 square feet of leased retail space provide a source of revenue for 296 USRC and WUS preservation activities. 297