Abstract
The RapidRide Roosevelt Project (RapidRide J Line) is a partnership between the City of Seattle (Seattle Department of Transportation or SDOT) and King County Metro (KCM) to implement bus rapid transit serving the neighborhoods from Downtown to Roosevelt. KCM would be the operator of this RapidRide service. The RapidRide Roosevelt Project studied in the January 2020 RapidRide Roosevelt Project Environmental Assessment (January 2020 EA) has a southern terminus in Downtown Seattle and a proposed northern terminus at NE 67th St near Sound Transit’s Roosevelt Light Rail Station. To accommodate the loss of anticipated capital and operating funds for the RapidRide Roosevelt Project due to the economic impacts from the COVID-19 pandemic, the project sponsor, SDOT, in partnership with KCM, identified a shortened design option, the U District Option, for the RapidRide Roosevelt Project. This Supplemental Environmental Assessment (Supplemental EA) has been prepared by SDOT in cooperation with the Federal Transit Administration (FTA) as a supplement to the January 2020 EA to study the U District Option, pursuant to the National Environmental Policy Act (NEPA). The U District Option maintains the same southern terminus in Downtown Seattle, as studied in the January 2020 EA. However, instead of continuing northward to NE 67th St, the U District Option has a proposed northern terminus in the University District that would encircle Sound Transit’s U District Light Rail Station. In the U District Option, the proposed project activities between Downtown Seattle and the University Bridge remain unchanged from the RapidRide Roosevelt Project, as described in the January 2020 EA. North of the University Bridge, the U District Option would have different elements to those studied in the January 2020 EA. As such, the preparation of this Supplemental EA is necessary to identify any potential new environmental impacts associated with the U District Option. The U District Option would meet the Project Purpose and Need, as described in the January 2020 EA, to improve transit travel times, reliability, and capacity to increase high-frequency, all-day transit service and enhance transit connections between Downtown Seattle and the Belltown, South Lake Union, Eastlake and University District neighborhoods. The U District Option would also improve pedestrian and bicycle connections, access to stations, and improve safety for both nonmotorized and motorized travelers. The construction period would be approximately 3 years and would be phased in work zones to minimize impacts.
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PO Box 34996
Seattle, WA 98124-4996

There is a 30-day comment period wherein FTA and SDOT will accept public comments to be considered in the determination of whether there is a Finding of No Significant Impact.

Copies of the Supplemental EA: Paper copies of the Supplemental EA are available for $25 and appendices for $15. For an electronic copy including the Supplemental EA and the appendices/technical reports please email RapidRide@seattle.gov.

Americans with Disabilities Act (ADA) Information

Materials can be provided in alternative formats for persons with disabilities by calling SDOT at (206) 684-5000 or via teletype (TTY) and relay service at 711 or (800) 833-6384.
RAPIDRIDE ROOSEVELT PROJECT
SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

October 2021
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EXEConnCTIVE SUMMARY

ES. 1 Why has a Supplemental Environmental Assessment been prepared?

The RapidRide Roosevelt Project (RapidRide J Line) is a partnership between the City of Seattle (Seattle Department of Transportation or SDOT) and King County Metro (KCM) to implement bus rapid transit serving the neighborhoods from Downtown to Roosevelt. KCM would be the operator of this RapidRide service. The RapidRide Roosevelt Project studied in the January 2020 RapidRide Roosevelt Project Environmental Assessment (January 2020 EA) (SDOT, 2020) has a southern terminus in Downtown Seattle and a proposed northern terminus at NE 67th St near Sound Transit’s Roosevelt Light Rail Station.

To accommodate the loss of anticipated capital and operating funds for the RapidRide Roosevelt Project due to the economic impacts from the COVID-19 pandemic, the project sponsor, SDOT, in partnership with KCM, identified a shortened design option, the U District Option, for the RapidRide Roosevelt Project. The U District Option also functions as the Minimum Operable Segment under FTA’s Capital Investment Grants program requirements.

This Supplemental Environmental Assessment (Supplemental EA) has been prepared by SDOT in cooperation with the Federal Transit Administration (FTA) as a supplement to the January 2020 EA to study the U District Option, pursuant to the National Environmental Policy Act (NEPA).

The U District Option maintains the same southern terminus in Downtown Seattle, as studied in the January 2020 EA. However, instead of continuing northward to NE 67th St, the U District Option has a proposed northern terminus in the University District that would encircle Sound Transit Link Light Rail’s U District Station (Sound Transit U District Station). In the U District Option, the proposed project activities between Downtown Seattle and the University Bridge remain unchanged from the RapidRide Roosevelt Project, as described in the January 2020 EA. North of the University Bridge, the U District Option would have different elements to those studied in the January 2020 EA. As such, the preparation of this Supplemental EA is necessary to identify any potential new environmental impacts associated with the U District Option.¹

Figure ES-1 shows the extent of the U District Option in comparison to the RapidRide Roosevelt Project studied in the January 2020 EA.

On January 8, 2020, SDOT published a Notice of Availability for the January 2020 EA in the Daily Journal of Commerce. This notification announced to the public that the January 2020 EA was available for public comment between January 8, 2020 and February 14, 2020. Responses to comments received on the January 2020 EA will be provided in the final environmental decision.

¹ The RapidRide Roosevelt Project and U District Option have loading zone placements on E Louisa St and E Lynn St in the Eastlake neighborhood. Small portions of these were not included in the Section 106 Area of Potential Effects (APE) associated with the January 2020 EA, but are included in the Revised APE associated with this Supplemental EA. Refer to Section 2.2.8 and Appendix E for more details regarding the Revised APE for Cultural Resources.
document for the RapidRide Roosevelt Project, expected in late 2021. Currently, SDOT and FTA only request new comments on information provided in this Supplemental EA. Comments on this Supplemental EA will be accepted within 30 calendar days of the Notice of Availability of this document, and will be responded to in the final environmental decision document for the RapidRide Roosevelt Project, expected in late 2021.

FTA acknowledges the current impacts of the COVID-19 pandemic and the resulting decline in transit ridership. At this time, it is not possible to predict if any potential changes to the RapidRide Roosevelt Project Purpose and Need, schedule, and impacts would result from the ongoing COVID-19 pandemic response and recovery, due to its unpredictable nature and length. Should substantive changes to the RapidRide Roosevelt Project scope, schedule, or surrounding environment result because of a prolonged COVID-19 pandemic response and recovery, FTA will consider additional evaluation and public input consistent with the NEPA regulations.

ES. 2 What are the features of the U District Option?

As shown on Figure ES-2, the U District Option would include all of the RapidRide Roosevelt Project elements south of the University Bridge as presented in the January 2020 EA. The northern turnaround for the U District Option (refer to the inset box in Figure ES-2) would encircle the Sound Transit U District Station along NE 43rd St, 12th Ave NE, NE 45th St, and 15th Ave NE and would include the following elements north of the University Bridge:

- Up to four new RapidRide stations to support connections to Sound Transit’s U District Station and facilitate other transit connections in the vicinity.
- Full-depth concrete paving, protected bicycle lanes (PBLs), and the overhead contact system (OCS) along NE 43rd St between Roosevelt Way NE and 12th Ave NE.
- New signal with adaptive signal control technology and/or transit signal priority at the Roosevelt Way NE/NE 43rd St intersection.
- Americans with Disabilities Act-compliant curb ramp and sidewalk upgrades, signing, and roadway channelization.
Figure ES-2. U District Option
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Construction of the U District Option would begin as early as 2022, with substantial completion of construction by 2025 and service opening in 2026.\(^2\)

The U District Option would not include any construction elements on 11th Ave NE or Roosevelt Way NE north of NE 43rd St; however, SDOT may choose to proceed separately with certain elements of the RapidRide Roosevelt Project (such as paving and channelization revisions) north of NE 43rd St, depending on funding availability.

**ES. 3  What are the environmental benefits and potential impacts of the U District Option?**

The U District Option corridor is highly urbanized with no natural areas, wetlands, floodplains, or agricultural area; as such, there would be no effect on these resources. Other elements of the environment where the U District Option would not result in any discernible impacts include the following resources: land use/property acquisition, air quality and greenhouse gases, energy, electromagnetic fields, geology and soils, parks and recreational resources, Section 6(f) resources, and threatened and endangered species.

The U District Option would have similar utility impacts to those discussed in the January 2020 EA. No utility impacts would occur during operation, and access to utilities would be maintained. As design progresses, SDOT will work with Seattle Public Utilities, Seattle City Light, and other utility providers as part of the utility relocation plan.

Consistent with the January 2020 EA, the environmental resources described in Table ES-1 have been evaluated in this Supplemental EA for potential new or additional benefits or impacts during operation and construction of the U District Option.

**Table ES-1. U District Option: Benefits and Potential Impacts Summary**

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>IMPACTS/BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>There would be minor additional operational impacts from those discussed in the January 2020 EA. The U District Option would result in several transportation benefits during operation from traffic signal upgrades, optimization of bus stop spacing and PBLs to reduce the interactions between buses and bicycles. Relative to the existing KCM Bus Route 70, the U District Option is estimated to provide a 2- to 4-minute in-vehicle travel time savings in the University District, depending on direction. With the increased transit service hours, more frequent service, travel time savings, and improved reliability, transit ridership in this corridor is expected to increase with the U District Option. The U District Option would not modify the roadway channelization along 12th Ave NE, NE 45th St, and 15th Ave NE, and would not impact vehicle circulation or property access. Because the U District Option proposes only a few minor changes to the roadway system on NE 43rd St, the intersection level of service and general purpose travel times would be similar in the University District to the conditions without the U District Option. The U District Option would remove one passenger loading zone, between approximately eight and eleven on-street parking spaces (depending on the time of day), and one shuttle loading zone on NE 43rd St.</td>
</tr>
<tr>
<td>ELEMENT</td>
<td>IMPACTS/BENEFITS</td>
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<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>between 11th Ave NE and Roosevelt Way NE. SDOT would relocate the passenger loading zone and shuttle loading zone nearby, where feasible, to facilitate passenger pick-up and drop-off for nearby buildings.</td>
</tr>
<tr>
<td></td>
<td>There would be no additional construction impacts from those discussed in the January 2020 EA. SDOT will prepare detailed construction plans during final design before commencing construction. Potential mitigation measures for impacts during construction would be consistent with measures proposed in the January 2020 EA.</td>
</tr>
<tr>
<td>Noise and Vibration</td>
<td>There would be no additional noise or vibration impacts from those discussed in the January 2020 EA.</td>
</tr>
<tr>
<td>Socioeconomics</td>
<td>There would be no additional operational or construction socioeconomic impacts from those discussed in the January 2020 EA. During operation, there would be benefits related to increased transit connectivity and reliability, closer access to the Sound Transit U District Station, and pedestrian and bicycle improvements.</td>
</tr>
<tr>
<td>Visual and Aesthetic Resources</td>
<td>There would be no additional operational or construction visual impacts from those discussed in the January 2020 EA. U District Option elements such as OCS poles and wires would be visible, but would be consistent with the existing urban visual character, which contains bus stops and aboveground utilities.</td>
</tr>
<tr>
<td>Stormwater/Water Quality</td>
<td>There would be no additional operational or construction impacts to water quality or stormwater from those discussed in the January 2020 EA.</td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>There would be no additional operational or construction hazardous materials impacts from those discussed in the January 2020 EA. Impacts during normal operation are unlikely because most of the RapidRide vehicles would be powered by electricity. The U District Option would be constructed mainly within existing right-of-way in areas that have been previously disturbed, encountering hazardous materials during construction is not likely. SDOT will implement best management practices and develop plans to guide the characterization, management, and disposal of any hazardous materials encountered.</td>
</tr>
<tr>
<td>Section 4(f) Resources</td>
<td>There would be no additional operational or construction impacts to Section 4(f) resources from those discussed in the January 2020 EA.</td>
</tr>
<tr>
<td>Cultural Resources</td>
<td>There would be no additional operational or construction impacts to cultural resources from those discussed in the January 2020 EA. SDOT will prepare an Inadvertent Discovery and Archaeological Monitoring Plan before construction.</td>
</tr>
<tr>
<td>Indirect and Cumulative</td>
<td>The U District Option would remove some on-street parking in the University District; however, with the implementation of mitigation measures related to parking and improvements to transit and bicycle access, no long-term indirect impacts related to operations are anticipated.</td>
</tr>
<tr>
<td></td>
<td>There would be no additional construction indirect impacts from those discussed in the January 2020 EA.</td>
</tr>
<tr>
<td></td>
<td>There would be no additional operational cumulative impacts from those discussed in the January 2020 EA. Operation of the U District Option along with other transportation projects in the vicinity would result in beneficial cumulative impacts related to transit service, bicycle connectivity, and air quality and stormwater improvements.</td>
</tr>
<tr>
<td>ELEMENT</td>
<td>IMPACTS/BENEFITS</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>There would be no additional construction cumulative impacts from those discussed in the January 2020 EA. Construction activities that overlap with other construction projects would result in temporary noise, dust, traffic congestion, and parking loss that would be minimized through the implementation of mitigation measures.</td>
</tr>
<tr>
<td>Environmental Justice</td>
<td>There would be no additional operational or construction impacts to Environmental Justice populations from those discussed in the January 2020 EA.</td>
</tr>
</tbody>
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E RapidRide Roosevelt Project Supplemental Cultural Resources Technical Report
ACRONYMS AND ABBREVIATIONS

ADA      Americans with Disabilities Act
APE      Area of Potential Effects
BAT      business access and transit
BMP      best management practice
CIG      Capital Investment Grants
City     City of Seattle
EA       Environmental Assessment
FTA      Federal Transit Administration
HPI      Historic Property Inventory
KCM      King County Metro
LOS      level of service
MHA      Mandatory Housing Affordability
MOS      Minimum Operable Segment
NEPA     National Environmental Policy Act
OCS      overhead contact system
PBL      protected bicycle lane
RPZ      restricted parking zone
SDOT     Seattle Department of Transportation
SHPO     State Historic Preservation Officer
TCE      temporary construction easement
TSP      transit signal priority
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1. PROJECT BACKGROUND

1.1 Introduction

The RapidRide Roosevelt Project (RapidRide J Line) is a partnership between the City of Seattle (Seattle Department of Transportation or SDOT) and King County Metro (KCM) to implement bus rapid transit serving the neighborhoods from Downtown to Roosevelt. KCM would be the operator of this RapidRide service. The RapidRide Roosevelt Project studied in the January 2020 RapidRide Roosevelt Project Environmental Assessment (January 2020 EA) has a southern terminus in Downtown Seattle and a proposed northern terminus at NE 67th St near Sound Transit’s Roosevelt Light Rail Station.

To accommodate the loss of anticipated capital and operating funds for the RapidRide Roosevelt Project due to the economic impacts from the COVID-19 pandemic, the project sponsor, SDOT, in partnership with KCM, identified a shortened design option, the U District Option, for the RapidRide Roosevelt Project. The U District Option also functions as the Minimum Operable Segment (MOS) under FTA’s Capital Investment Grants (CIG) program requirements.

This Supplemental Environmental Assessment (Supplemental EA) has been prepared by SDOT in cooperation with the Federal Transit Administration (FTA) as a supplement to the January 2020 EA to study the U District Option, pursuant to the National Environmental Policy Act (NEPA).

The U District Option maintains the same southern terminus in Downtown Seattle, as studied in the January 2020 EA. However, instead of continuing northward to NE 67th St, the U District Option has a proposed northern terminus in the University District that would encircle Sound Transit Link Light Rail’s U District Station (Sound Transit U District Station). In the U District Option, the proposed project activities between Downtown Seattle and the University Bridge remain unchanged from the RapidRide Roosevelt Project, as described in the January 2020 EA. North of the University Bridge, the U District Option would have different elements to those studied in the January 2020 EA. As such, the preparation of this Supplemental EA is necessary to identify any potential new environmental impacts associated with the U District Option.¹

Figure 1-1 shows the extent of the U District Option in comparison to the RapidRide Roosevelt Project studied in the January 2020 EA.

On January 8, 2020, SDOT published a Notice of Availability for the January 2020 EA in the Daily Journal of Commerce. This notification announced to the public that the January 2020 EA was available for public comment between January 8, 2020 and February 14, 2020. Responses to comments received on the January 2020 EA will be provided in the final environmental decision document for the RapidRide Roosevelt Project, expected in late 2021. Currently, SDOT and FTA

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1. PROJECT BACKGROUND

only request new comments on information provided in this Supplemental EA. Comments on this Supplemental EA will be accepted within 30 calendar days of the Notice of Availability of this document, and will be responded to in the final environmental decision document for the RapidRide Roosevelt Project, expected in late 2021.

FTA acknowledges the current impacts of the COVID-19 pandemic and the resulting decline in transit ridership. At this time, it is not possible to predict if any potential changes to the RapidRide Roosevelt Project Purpose and Need, schedule, and impacts would result from the ongoing COVID-19 pandemic response and recovery, due to its unpredictable nature and length. Should substantive changes to the RapidRide Roosevelt Project scope, schedule, or surrounding environment result because of a prolonged COVID-19 pandemic response and recovery, FTA will consider additional evaluation and public input consistent with the NEPA regulations.

1.2 Process to Identify U District Option

In response to the loss of anticipated capital and operating funds noted in Section 1.1, SDOT, in partnership with KCM, evaluated design options to the RapidRide Roosevelt Project. In fall 2020, SDOT and KCM identified a preferred design option, the U District Option, through a joint agency evaluation process. As part of this evaluation, several criteria were used in the evaluation, including plan and policy consistency, ridership, transit connections, operations, service design/coverage, alignment with community commitments, environmental impacts, timeframe, and cost and funding. While several options were considered by KCM and SDOT, the evaluation criteria identified the preferred U District Option with a northern terminus, layover, and stations in the vicinity of Sound Transit’s U District Station. The selection of the U District Option as the preferred design option was confirmed by both KCM and SDOT in November 2020 through the joint SDOT-KCM RapidRide Steering Committee.

The U District Option would meet the RapidRide Roosevelt Project’s Purpose and Need, as described in the January 2020 EA, which is to improve transit travel times, reliability, and capacity to increase high-frequency, all-day transit service and enhance transit connections.
between Downtown Seattle and the Belltown, South Lake Union, Eastlake, and University District neighborhoods. The U District Option would also improve pedestrian and bicycle connections, access to stations, and safety for both nonmotorized and motorized travelers. KCM would operate this RapidRide bus service once improvements have been constructed.

### 1.3 Project Description

The U District Option, instead of continuing northward to NE 67th St, has a proposed northern terminus in the University District that would encircle Sound Transit’s U District Station and a southern terminus in Downtown Seattle. As shown on Figure 1-2, the U District Option would include all the RapidRide Roosevelt Project elements south of the University Bridge as presented in the January 2020 EA. The portion of the U District Option containing additional elements being studied in this Supplemental EA are shown in the inset map on Figure 1-2.

The U District Option northern turnaround (refer to inset box on Figure 1-2) would encircle the Sound Transit U District Station along NE 43rd St, 12th Ave NE, NE 45th St, and 15th Ave NE. To facilitate this connection to the Sound Transit U District Station, the U District Option would include the following elements north of the University Bridge:

- Up to four new stations to support connections to the Sound Transit U District Station and facilitate other transit connections in the vicinity. These stations/stops would be located along Roosevelt Way NE, NE 43rd St, and NE 45th St. The station at the southwest corner of NE 43rd St and 12th Ave NE would be an alighting-only stop (no passenger boardings), and as such, would not include the bus shelter infrastructure that the other RapidRide stations would have.

- Full-depth concrete paving for both travel lanes, protected bike lanes (PBLs), and the overhead contact system (OCS) along NE 43rd St between Roosevelt Way NE and 12th Ave NE. Paving and PBLs along NE 43rd St would connect with improvements currently being constructed along NE 43rd St by SDOT between 12th Ave NE and 15th Ave NE.

- New signal with adaptive signal control technology and/or transit signal priority (TSP) at the Roosevelt Way NE/NE 43rd St intersection.

The U District Option would also include additional new or upgraded aboveground facilities, including Americans with Disabilities Act (ADA)-compliant curb ramp and sidewalk upgrades, signing, and roadway channelization.

During operations, buses would lay over along 12th Ave NE between NE 43rd St and NE 45th St. This layover is being developed by KCM to support planned service revisions associated with the opening of the Sound Transit U District Station and would be in place before the U District Option opening.

New OCS would be required for the U District Option route along NE 43rd St between Roosevelt Way NE and 12th Ave NE. Otherwise, the U District Option would use the existing OCS that is already being used by buses, the new OCS previously described in the January 2020 EA, or the OCS being constructed to support the planned service revisions associated with the opening of Sound Transit’s U District Station that would be in place before the U District Option opening.
Construction would begin as early as 2022 with substantial completion of construction by 2025 and service opening in 2026. During construction, City of Seattle property would be used as staging areas for storage of equipment and materials, and specific locations would be identified during final design. Other staging areas would be established where feasible within the roadway right-of-way. As was the case in the January 2020 EA, other staging locations could include vacant or underutilized lots. Temporary construction easements (TCEs) for staging may be required and would be identified during final design. Additional activities that could require a TCE include access for workers and construction equipment for sidewalk and curb ramp improvements and signal or OCS pole installation; as part of the final design process all ADA requirements will be met.

Construction of the U District Option could affect on-street parking and require temporary closure of travel lanes. Temporary sidewalk closures with signage noting detour routes meeting ADA requirements could be necessary when constructing around stations and installing utilities or OCS poles.

Appendix A, RapidRide Roosevelt Project U District Option Conceptual Design Drawings provides detailed design drawings of the U District Option. The U District Option would not include any construction elements on 11th Ave NE or Roosevelt Way NE north of NE 43rd St; however, SDOT may choose to separately proceed with certain elements of the RapidRide Roosevelt Project (such as paving and channelization revisions) north of NE 43rd St, depending on funding availability.

Lastly, KCM has named the route the RapidRide J Line, per their standard route-naming conventions, and the name RapidRide J Line will be phased into future outreach materials.

1.3.1 Project Funding

As stated in the January 2020 EA, the RapidRide Roosevelt Project funding plan includes a combination of local, regional, and federal sources. As part of this funding plan, SDOT continues to seek FTA Small Starts Grant funding through FTA’s CIG program.

To accommodate the loss of anticipated capital and operating funds for the RapidRide Roosevelt Project due to the economic impacts from the COVID-19 pandemic, the project sponsor, SDOT, in partnership with KCM, identified this shortened design option, the U District Option, for the RapidRide Roosevelt Project. The U District Option provides a design option that continues to meet the Purpose and Need of the RapidRide Roosevelt Project within the limits of available capital and operating funding. The U District Option is the MOS and would be the basis for an updated CIG grant application for an FTA Small Starts Grant.

Construction costs for the RapidRide Roosevelt Project (as studied in the January 2020 EA) were developed as part of the preliminary design. Construction costs for the U District Option will be developed as the design for the U District Option progresses. U District Option costs will reflect design changes from the RapidRide Roosevelt Project to construct the new terminus reflected in the U District Option, and escalation costs associated with the updated project schedule.

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4 Due to the financial constraints caused by the COVID-19 pandemic, the U District Option would begin service in 2026, two years later than what was described in the January 2020 EA.
Figure 1-2. U District Option

**U District Option Highlights**

- New/Upgraded RapidRide Stations
- 5.6 Miles Project Corridor Length
- 0.8 Miles of Overhead Contact System (DCS/Trolley Wire)
- 7.5 Minute Peak Service (or Better)
- 10 Minute Midday Service (or Better)
- 2.3 Miles of New Transit Lanes
- 0 New Fleet Purchase Required (Rebranding existing/fleet)
- 24 Hour Service Everyday

*Estimated walkways between 7.5 minutes or better to 90 minutes.*

**Corridor Treatment**
- General Purpose Lane
- Business Access & Transit Lane
- Transit Only Lane
- Service Alignment
- No Project Improvements

**Transit Stop / Station**
- Existing Stop / Station
- New (or Upgraded) Stop / Station

**Paving Improvements**
- Concrete Paving
- Mill and Overlay
- Asphalt Paving

**Bicycle Facilities**
- Existing Protected Bike Lane (PBL)
- Planned or In-Progress PBL
- New PBL proposed as part of Project

**Other Transit Facilities**
- New DCS Infrastructure
- Queue Jump Location
- Existing/Future Layover

**Other Transit Services**
- Existing Link Light Rail
- Planned Link Light Rail
- Link Light Rail Station
- Existing Streetcar
- Planned Streetcar
- Existing Streetcar Stop
- Planned Streetcar Stop
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2. ENVIRONMENTAL RESOURCES, IMPACTS, AND MITIGATION

The U District Option would have different elements north of the University Bridge compared to those studied in the January 2020 EA. This section assesses whether there are any potential new environmental impacts associated with these additional U District Option elements.

2.1 Environmental Resources with No New or Additional Impacts

The U District Option corridor is highly urbanized with no natural areas, wetlands, floodplains, or agricultural area, and there would be no effect on these resources. The January 2020 EA noted that the RapidRide Roosevelt Project would result in minor or no impacts on the following resources, and the U District Option would have no additional impacts to these resources:

- Land use/property acquisition
- Air quality and greenhouse gases
- Energy
- Electromagnetic fields
- Geology and soils
- Parks and recreational resources
- Section 6(f) resources
- Threatened and endangered species

The U District Option would have similar utility impacts to those discussed in the January 2020 EA. No utility impacts would occur during operation, and access to utilities would be maintained. The January 2020 EA noted that during construction, impacts could occur as a result of demolition, excavation, and the installation of stations and OCS poles. Depending on the depth of utilities, there may be conflicts that require relocation or protection. It was determined that the U District Option would not require the installation of a new traction power substation in addition to the existing substations currently in service. As design progresses, SDOT will work with Seattle Public Utilities, Seattle City Light, and other utility providers as part of the utility relocation plan.
2.2 Environmental Resources Assessed for Potential New or Additional Benefits or Impacts

The assessment of potential new or additional benefits or impacts for the environmental resources during operation and construction of the U District Option in the following subsections is consistent with methodologies used for the January 2020 EA. Where needed, mitigation measures are identified that would avoid or minimize impacts.

2.2.1 Transportation

2.2.1.1 No Build Condition

The No Build condition for the transportation analysis assumes the U District Option would not be constructed and KCM Route 70 would continue to operate. The U District Option is expected to be open by year 2026 with a horizon year of 2040, which is consistent with local and regional planning. Therefore, the No Build condition includes all reasonably foreseeable transportation projects assumed to be completed by years 2026 and 2040; these projects include the following:

- Sound Transit Northgate Link Extension
- KCM North Link Connections Mobility Project
- Community Transit Service Revisions
- SDOT 12th Ave NE and NE 43rd St Paving Project
- SDOT NE 43rd St Improvements Project
- SDOT Route 44 Transit-Plus Multimodal Corridor Project
- SDOT University of Washington Subarea Multimodal Integrated Corridor Mobility for All (MICMA)

The cumulative impacts from projects under the No Build condition will improve the transportation system compared to existing conditions for most modes (including transit service, roadway operations, and the nonmotorized environment) in the University District prior to the U District Option being in service.

2.2.1.2 U District Option

The U District Option would include all the elements described in Section 1.3 and previously built transportation improvements as part of the No Build condition. The U District Option would follow the 11th Ave NE/Roosevelt Way NE couplet up to NE 43rd St, and then it would be routed east along NE 43rd St toward the Sound Transit U District Station as its northern terminus. Appendix B, RapidRide Roosevelt Project Supplemental Transportation Technical Report provides greater detail regarding the transportation analysis for the U District Option.
**Operation**

The U District Option would have minor new operational transportation impacts compared to those discussed in the January 2020 EA, as described herein.

Because no operational impacts to regional traffic, roadways, and freight operations are anticipated with implementation of the U District Option, these elements are not discussed in this section.

**Transit**

There are several proposed changes to the future transit network in the University District reflected in the No Build condition that will be in place before the U District Option (refer to Section 2.2.1.1). These projects include the construction of the Sound Transit U District Station as part of the light rail extension to Northgate, the concurrent restructuring of bus service to serve and leverage this new rail service, and local transit speed and reliability improvements, including business access and transit (BAT) lanes on NE 45th St and 15th Ave NE. As part of the bus service restructurings, KCM Route 70 would be revised to terminate at the Sound Transit U District Station for northbound (outbound) trips, which it would reach via NE 43rd St from 15th Ave NE. Southbound (inbound) trips would originate at the intersection of NE 45th St and University Way NE.

The U District Option would serve the University District and circulate around the Sound Transit U District Station. The U District Option would replace KCM Route 70 and would have northbound (outbound) service originating from Downtown Seattle and along the route described in the January 2020 EA and shown on Figure 1-2 up to 11th Ave NE then turn east onto NE 43rd St. Northbound service would terminate at NE 43rd St and 12th Ave NE and would lay over along 12th Ave NE between NE 43rd St and NE 45th St. This layover would be the same location as the No Build condition to be implemented as part of KCM’s North Link Connections Mobility Project. Inbound (southbound) service for the U District Option would begin eastbound on NE 45th St, turn southbound onto 15th Ave NE and turn onto NE 43rd St and head west until Roosevelt Way NE, where it would turn south and continue along the route described in the January 2020 EA and shown on Figure 1-2. The U District Option would include inbound RapidRide stations located at NE 45th St/University Way NE and NE 43rd St/Brooklyn Ave NE, and the last outbound stop would be located at NE 43rd St/12th Ave NE.

As shown in Table 2-1, the U District Option would improve transit travel times and reliability within the University District. The U District Option includes several transit improvements that would benefit transit travel time and reliability, including:

- A new signal at Roosevelt Way NE and NE 43rd St with TSP and/or adaptive signal control technology
- Operational improvements at stations, including all-door boarding
- PBLs on NE 43rd St, reducing interactions between buses and bicycles
- Optimization of bus stop spacing (which may include consolidation of stops) between each transit stop pair

The No Build condition in Table 2-1 is represented by KCM Route 70 (revised per the KCM North Link Connections Mobility Project). Travel times for KCM Route 70 are to/from its first and last stops adjacent to the Sound Transit U District Station. Besides the transit improvements, the
U District Option would travel about 1/3 mile less to complete its northern turnaround trip compared to KCM Route 70 in the No Build condition, and would travel through eight fewer traffic signals. Therefore, the U District Option travel times are estimated to provide between a 2- to 4-minute in-vehicle travel time savings, depending on direction. This is due to a combination of factors, including TSP, a more direct route than the No Build condition, RapidRide-standard bus stop spacing,\(^5\) and RapidRide operational features such as all-door boarding.

The 2040 PM peak period end-to-end U District Option travel time savings (approximately 16 minutes) are shorter than the travel time savings for the RapidRide Roosevelt Project (24.2 minutes) described in the January 2020 EA due to the U District Option’s shorter route length; however, the relative time savings are similar, approximately 32% and 36%, respectively.

### Table 2-1. Transit In-Vehicle Travel Times, PM Peak

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>EXTENT</th>
<th>2026</th>
<th>2040</th>
<th>U DISTRICT OPTION – NO BUILD DIFFERENCE (MIN/%)</th>
<th>U DISTRICT OPTION – NO BUILD DIFFERENCE (MIN/%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO BUILD TRAVEL TIME (MIN)</td>
<td>U DISTRICT OPTION TRAVEL TIME (MIN)</td>
<td>U DISTRICT OPTION – NO BUILD DIFFERENCE (MIN/%)</td>
<td>NO BUILD TRAVEL TIME (MIN)</td>
<td>U DISTRICT OPTION TRAVEL TIME (MIN)</td>
</tr>
<tr>
<td>NORTHBOUND</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd Ave/Stewart St to Eastlake Ave E/ Harvard Ave E</td>
<td>35</td>
<td>26</td>
<td>-9</td>
<td>39</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-26%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastlake Ave E/ Harvard Ave E to Last Stop (12th Ave NE/ NE 43rd St)</td>
<td>8</td>
<td>5</td>
<td>-3</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-36%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound Total (Full Route)</td>
<td>43</td>
<td>31</td>
<td>-12</td>
<td>49</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-28%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOUTHBOUND</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Stop (NE 45th St/ University Way NE) to Eastlake Ave E/ Harvard Ave E</td>
<td>10</td>
<td>6</td>
<td>-4</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-37%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastlake Ave E/ Harvard Ave E to 3rd Ave/Virginia St</td>
<td>32</td>
<td>24</td>
<td>-8</td>
<td>39</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southbound Total (Full Route)</td>
<td>42</td>
<td>30</td>
<td>-12</td>
<td>49</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-28%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^5\) KCM standards for RapidRide stops are spacing of 1/3 to 1/2 mile in high-density (built-up) areas and a minimum spacing between each transit stop pair of 1/4 mile.
Table 2-1. Transit In-Vehicle Travel Times, PM Peak

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>EXTENT</th>
<th>2026 NO BUILD TRAVEL TIME (MIN)</th>
<th>2026 U DISTRICT OPTION TRAVEL TIME (MIN)</th>
<th>2026 U DISTRICT OPTION – NO BUILD TRAVEL TIME (MIN)</th>
<th>2040 NO BUILD TRAVEL TIME (MIN)</th>
<th>2040 U DISTRICT OPTION TRAVEL TIME (MIN)</th>
<th>2040 U DISTRICT OPTION – NO BUILD TRAVEL TIME (MIN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOTH DIRECTIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average of Northbound and Southbound Full Route</td>
<td></td>
<td>43</td>
<td>50</td>
<td></td>
<td>34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Due to rounding, some totals may equal the sum of the values in their columns.

With the increased transit service hours, more frequent service, travel time savings, and improved reliability, transit ridership in this corridor is expected to increase with the U District Option, as shown in Table 2-2. In the future No Build condition, which reflects Sound Transit light rail service to Northgate, the daily ridership on KCM Route 70 would be 3,800 in 2026 and 4,800 by 2040. The daily ridership with the U District Option would be 10,500 in 2026 and up to 14,300 by 2040. This represents a 177% to 198% increase in ridership over the No Build condition.

Table 2-2. No Build Condition and U District Option Projected Daily and Annual Corridor Ridership

<table>
<thead>
<tr>
<th>ALTERNATIVE</th>
<th>OPENING YEAR (2026)</th>
<th>HORIZON YEAR (2040)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Build Condition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Boardings – Route 70</td>
<td>3,800</td>
<td>4,800</td>
</tr>
<tr>
<td>Annual Boardings – Route 70</td>
<td>1,168,000</td>
<td>1,485,000</td>
</tr>
<tr>
<td><strong>U District Option</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Boardings</td>
<td>10,500 (+6,700, +177%)</td>
<td>14,300 (+9,500, +198%)</td>
</tr>
<tr>
<td>Annual Boardings</td>
<td>3,232,000 (+2,064,000, +177%)</td>
<td>4,421,000 (+2,936,000, +198%)</td>
</tr>
</tbody>
</table>

Notes:
1. Due to rounding, some totals may not equal the sum of values shown.
2. In the January 2020 EA, Route 67 was included in the ridership comparison due to the overlapping service with the RapidRide Roosevelt Project, but with the U District Option, there is not a substantial overlap of transit service with Route 67 and, therefore, it is not included.

**Arterial and Local Streets**

The University District will experience a variety of planned transportation projects that will be in place before the U District Option service opening and are included as part of the No Build condition, as described in Section 2.2.1.1. These planned projects would change roadway channelization and operations by providing an eastbound BAT lane along NE 45th St between
Roosevelt Way NE and 15th Ave NE, and BAT lanes on sections of 15th Ave NE between NE 45th St and NE Pacific St. The planned projects would also change NE 43rd St to westbound one-way operation between 15th Ave NE and Brooklyn Ave NE, install adaptive signal control technology at many of the traffic signals, and implement pedestrian, bicycle, and transit improvements on 12th Ave NE and NE 43rd St.

The U District Option would not modify roadway operations along 12th Ave NE, NE 45th St, and 15th Ave NE from the operations of the No Build condition. The U District Option would include rechannelization on NE 43rd St to install PBLs between Roosevelt Way NE and 11th Ave NE and a new traffic signal at Roosevelt Way NE and NE 43rd St. The U District Option would not impact vehicle circulation or property access from the No Build condition.

The U District Option proposes minor changes to the roadway system, and the PM peak hour intersection level of service (LOS) would be similar between the No Build condition and the U District Option. With the U District Option, no intersections would operate at LOS F (which indicates long delays in travel time), nor would any intersections operate with a worse delay than under the No Build condition. Because the U District Option does not propose substantial roadway modifications and would have similar intersection LOS operations, general purpose travel time in the University District is expected to be similar between the No Build condition and the U District Option.

**Pedestrians and Bicyclists**

A variety of pedestrian and bicycle improvements are planned for the University District as part of projects identified in the No Build condition in Section 2.2.1. The Sound Transit U District Station and SDOT’s NE 43rd St Improvements Project and 12th Ave NE and NE 43rd St Paving Project would upgrade pedestrian and bicycle conditions by adding a curbless design, improving traffic calming/circulation, replacing sections of sidewalk, and installing PBLs on NE 43rd St between 11th Ave NE and 15th Ave NE.

The U District Option would further improve pedestrian access and conditions. New stations would be designed to meet ADA, City of Seattle, and KCM standards; therefore, typical station platform widths would be 8 to 10 feet and typical platform lengths would be 55 feet. All existing pedestrian crossing movements would be maintained with the U District Option and approximately six existing curb ramps would be replaced at the Roosevelt Way NE/NE 43rd St intersection.

The U District Option would also improve bicycle conditions by adding one block (approximately 250 feet) of new PBLs along both sides of NE 43rd St between Roosevelt Way NE and 11th Ave NE in addition to the section of the PBL on 11th Ave NE, as identified in the January 2020 EA, from the University Bridge to NE 43rd St. These bike lanes would improve the bicycle network by creating a continuous connection between the University of Washington, Sound Transit’s U District Station, and the 11th Ave NE/Roosevelt Way NE couplet, providing a regional connection across the University Bridge and through Eastlake, South Lake Union, and Downtown.

**Parking**

The future No Build condition will affect the parking conditions in the University District compared to the current parking conditions. SDOT, in response to the Sound Transit U District Station opening in 2021, will implement a variety of curbside management strategies.
surrounding the station. This includes converting unrestricted on-street parking to restricted (paid) parking within 1/4 mile of the Sound Transit U District Station. Additionally, SDOT’s 12th Ave NE and NE 43rd St Paving Project and the NE 43rd St Improvements Project would remove on-street parking along the east curb of 12th Ave NE between NE 45th St and NE 43rd St to provide bus layover, and along both sides of NE 43rd St between 11th Ave NE and 15th Ave NE to install PBLs.

The parking impacts south of the University Bridge and described in the January 2020 EA (SDOT, 2020) would remain unchanged by the U District Option, including removing all on-street parking and loading zones along Eastlake Ave E between Fairview Ave N and Fuhrman Ave E. In addition, the U District Option would remove one passenger loading zone, between approximately eight and eleven on-street parking spaces, and one shuttle loading zone (depending on the time of day) on NE 43rd St between 11th Ave NE and Roosevelt Way NE to install PBLs.

Safety

Under the U District Option, vehicular and nonmotorized safety is likely to improve or remain similar along streets that would be modified. Overall, the bus route under the U District Option would be about a 1/3 of a mile less, have fewer signals to travel through, and have fewer conflicts with other travel modes than the KCM Route 70 bus route. New crosswalks, ADA curb ramps, and the proposed traffic signal at Roosevelt Way NE and NE 43rd St would improve pedestrian and cyclist safety. The U District Option would also provide cyclists PBLs that complete the connection between the University of Washington, Sound Transit’s U District Station, and the couplet of the southbound PBL along Roosevelt Way NE and the northbound PBL along 11th Ave NE.

Construction

The U District Option would have minor new construction impacts from those discussed in the January 2020 EA, as described herein. The total construction duration of the U District Option would be approximately 36 months,\(^6\) depending on how construction is staged and phased.

Mitigation

Operation

No mitigation is proposed for operational impacts to the regional traffic and roadways, transit, arterial and local street operations, pedestrians and bicyclists, safety, and freight beyond what was proposed in the January 2020 EA.

As part of the U District Option, SDOT will relocate the impacted NE 43rd St passenger loading zone and shuttle loading zone nearby, where feasible, to facilitate passenger pick-up and drop-off for nearby buildings. Otherwise, the parking mitigation with the U District Option south of the University Bridge would be the same as described in the January 2020 EA, and summarized below:

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\(^6\) Potential water utility work in the Eastlake neighborhood associated with the U District Option will be coordinated with Seattle Public Utilities. This would include potential Seattle Public Utilities-led water utility improvements on Eastlake Ave E that may be constructed as a separate or concurrent project. The water utility and paving effort would extend the total construction schedule for the U District Option (which was previously planned for 24 months) to approximately 36 months in the Eastlake neighborhood.
• Parking in Eastlake Neighborhood
  – SDOT will work with Eastlake businesses and residents on the following parking and access strategies: identify and implement ways to manage street parking during construction and post-construction for commercial deliveries, passenger pick-up and drop-off, and visitor and customer access; prepare a shared-use parking plan for the neighborhood looking at the potential for businesses and residential properties to identify and share off-street parking spaces; and review restricted parking zone (RPZ) 8 to ease parking congestion in the residential areas and more appropriately balance and prioritize the needs of curb space users in the neighborhood.

• Parking in other Neighborhoods
  – Within the University District, South Lake Union, and Downtown Seattle neighborhoods, parking mitigation is not required because either the on-street parking removed in the neighborhood is not substantial or there is sufficient available parking (on-street or off-street) in the neighborhood to accommodate the lost on-street parking.

• Loading Zones
  – SDOT will relocate affected passenger, commercial vehicle, shuttle services, and truck loading zones along the project corridor, where feasible.

Construction

No mitigation is proposed for construction transportation impacts beyond what was proposed in the January 2020 EA. Before construction of the U District Option, SDOT will prepare detailed construction plans during final design. All mitigation associated with constructing the U District Option will comply with SDOT-approved/coordinated traffic control plans, ADA requirements, and, if required, a construction management plan and haul-route plan.

2.2.2 Noise and Vibration

2.2.2.1 Operation

The U District Option would have no new noise or vibration impacts during operations from those discussed in the January 2020 EA.

For the U District Option, it was determined that none of the receptors studied would exceed impact thresholds and are unlikely to be impacted by noise generated by bus operations. Similarly, vibration levels from bus operations were predicted at all receptors along the U District Option and then compared with FTA impact thresholds. Again, it was found that none of the receptors would exceed impact thresholds and are unlikely to be impacted by vibration generated by bus operations. Appendix C, RapidRide Roosevelt Project Supplemental Noise and Vibration Technical Report provides greater detail regarding the noise and vibration analysis for the U District Option.

2.2.2.2 Construction

The U District Option would have no new noise or vibration impacts during construction from those discussed in the January 2020 EA. Construction activities are predicted to result in short-term noise and vibration annoyance impacts and exceed City of Seattle noise criteria. However, with mitigation, construction activities are likely to satisfy City noise criteria, and noise impacts would
be negligible. Vibration from roadway paving along NE 43rd St between Roosevelt Way NE and 12th Ave NE and the OCS and station construction has the potential to cause minor cosmetic damage (i.e., cracked plaster) to adjacent structures. Nine buildings are within building damage impact contours. However, with the implementation of mitigation measures, such as adjusting power settings on compaction equipment and vibration monitoring, potential impacts to adjacent buildings would be minimized or avoided.

2.2.2.3 Mitigation
No mitigation is proposed for operational noise or vibration impacts beyond what was proposed in the January 2020 EA. No mitigation is proposed for construction noise or vibration impacts beyond what was proposed in the January 2020 EA (including development of a construction noise and vibration control plan).

2.2.3 Socioeconomics

2.2.3.1 Operation
The U District Option would have no new socioeconomic impacts during operations from those discussed in the January 2020 EA.

The U District Option would provide access to the Sound Transit U District Station and University of Washington with connections to Eastlake, South Lake Union, Belltown, and Downtown Seattle. While new PBLs would require the removal of on-street parking spaces on NE 43rd St, there would be improvements to transit and safety by separating bicycles from automobile and transit traffic. While the alighting-only stop at the southwest corner of NE 43rd St and 12th Ave NE would be one block west of the Sound Transit U District Station (approximately 325 feet), there would be pedestrian safety improvements to crosswalks and sidewalks, and ADA-compliant curb ramps. Overall, it is anticipated that the U District Option would benefit residents and employees along the corridor with increased connectivity and increased transit speed, reliability, and passenger-carrying capacity.

2.2.3.2 Construction
The U District Option would have no new socioeconomic impacts during construction from those discussed in the January 2020 EA.

2.2.3.3 Mitigation
No mitigation is proposed for operational socioeconomic impacts beyond what was proposed in the January 2020 EA.

No mitigation is proposed for construction socioeconomic impacts beyond what was proposed in the January 2020 EA. During construction, SDOT would develop and implement a public information plan that will prescribe outreach to businesses and residents near construction zones, and will communicate regularly with community organizations and service providers.
2.2.4 Visual and Aesthetic Resources

2.2.4.1 Operation

The U District Option would have no new visual impacts during operations from those discussed in the January 2020 EA. The U District Option is located in an area that contains existing bus stops and above ground utilities. The new stations would reinforce this urban visual character and would not impact important views or create new light and glare. The primary change would be the OCS poles and wires, which would be visible but similar to the existing utility wires and poles, and consistent with the urban visual character.

Figures 2-1 and 2-2 provide the existing conditions and a visual simulation, respectively, showing the U District Option looking eastward along NE 43rd St toward the Sound Transit U District Station in the background (with the alighting-only bus station at the intersection of NE 43rd St and 12th Ave NE in the foreground).
Figure 2-1. Existing Conditions Looking East along NE 43rd St from 11th Ave NE

Figure 2-2. Simulation of U District Option Improvements Looking East along NE 43rd St from 11th Ave NE
2. ENVIRONMENTAL RESOURCES, IMPACTS, AND MITIGATION

2.2.4.2 Construction
The U District Option would have no new visual impacts during construction from those discussed in the January 2020 EA. There would be minor impacts to the existing visual character in the corridor because of the temporary nature and anticipated phasing of work zones. If nighttime construction is required, lighting will be directed downward to reduce impacts on adjacent residences.

2.2.4.3 Mitigation
No mitigation is proposed for operational and construction visual impacts beyond what was proposed in the January 2020 EA.

2.2.5 Stormwater/Water Quality

2.2.5.1 Operation
The U District Option is not anticipated to have any new operational impacts to stormwater or water quality from those discussed in the January 2020 EA. The U District Option is anticipated to improve the quality of stormwater runoff draining to the Ship Canal/Lake Union as a result of stormwater treatment.

2.2.5.2 Construction
The U District Option would have no new construction impacts to stormwater or water quality from those discussed in the January 2020 EA.

Potential stormwater infrastructure and paving work on NE 43rd St associated with the U District Option will be coordinated with Seattle Public Utilities. This would include potential Seattle Public Utilities-led stormwater and water utility improvements on NE 43rd St that may be constructed as a separate or concurrent project.

2.2.5.3 Mitigation
No mitigation is proposed for operational and construction stormwater or water quality impacts beyond what was proposed in the January 2020 EA.

2.2.6 Hazardous Materials

2.2.6.1 Operation
The U District Option would have no new operational impacts to hazardous materials from those discussed in the January 2020 EA.

Impacts during normal operation are unlikely because most of the RapidRide vehicles would be powered by electricity; the likelihood of impacts (i.e., releases) from U District Option operations and maintenance activities would be low.

2.2.6.2 Construction
The U District Option is not anticipated to have any new construction impacts to hazardous materials from those discussed in the January 2020 EA.

One high-risk hazardous material site was identified on a private property north of NE 43rd St between Roosevelt Way NE and 11th Ave NE (refer to Appendix D, RapidRide Roosevelt Project...
Supplemental Hazardous Materials Technical Memorandum for more information). This site was also identified as a potential risk site in the January 2020 EA. Potential impacts during excavation activities could result from encountering existing soil or groundwater contamination, and/or containers holding hazardous materials. Soil or groundwater contamination could be found adjacent to contaminated sites within the right-of-way and in utility corridors, which can be conduits for underground contamination.

Because the U District Option would be constructed mainly within existing right-of-way in areas that have been previously disturbed, encountering hazardous material containers (such as underground storage tanks) is not likely. While there would be no construction on the private property outside of the right-of-way referenced above, SDOT will identify the high-risk site in construction plan specifications, and will include publicly available information from the Washington State Department of Ecology. Any unanticipated contamination encountered during construction will follow the Standard Specifications for Road, Bridge, and Municipal Construction (SPU, 2020). Potential construction impacts could also result from an accidental release of hazardous substances (such as lubricants and fuels needed for heavy equipment), a hazard common to all construction projects. Spills of any size, if not contained, could require emergency response.

### 2.2.6.3 Mitigation

No mitigation is proposed for operational hazardous material impacts beyond what was proposed in the January 2020 EA.

No mitigation is proposed for construction hazardous material impacts beyond what was proposed in the January 2020 EA. To avoid or minimize construction-related impacts, SDOT will implement best management practices (BMPs) and develop plans to guide the characterization, management, and disposal of hazardous materials.

### 2.2.7 Section 4(f) Resources

#### 2.2.7.1 Operation

Operation of the U District Option would not result in the use of any Section 4(f) resources.

#### 2.2.7.2 Construction

Construction of the U District Option would not result in the use of any Section 4(f) resources. The minor (de minimis) impacts to the NE Ravenna Blvd Section 4(f) resource described in the January 2020 EA would not occur under the U District Option.

#### 2.2.7.3 Mitigation

No mitigation is required because the U District Option would not result in the use of any Section 4(f) resources.

### 2.2.8 Cultural Resources

On October 1, 2019, the Washington State Historic Preservation Officer (SHPO) concurred with a finding of No Adverse Effect for the RapidRide Roosevelt Project. However, updates to design associated with the U District Option required an update to the Area of Potential Effects (APE)
and evaluation of potential cultural resources. Only the areas newly added to the APE, referred to as “Revised APE,” are assessed in this Supplemental EA.\(^7\)

The Revised APE is illustrated within the context of the previous RapidRide Roosevelt Project APE on Figure 2-3. SHPO agreed with the definition of the Revised APE in correspondence dated February 2, 2021 (refer to Appendix E, RapidRide Roosevelt Project Supplemental Cultural Resources Technical Report for more information).

No National Register of Historic Places-eligible archaeological sites or traditional cultural properties were identified in the Revised APE.

Table 2-3 lists the previously and newly recorded properties within the Revised APE. There are four properties in the Revised APE that are eligible for the National Register of Historic Places.

**Table 2-3. Previous and Newly Recorded Historic Properties within the Revised Area of Potential Effects**

<table>
<thead>
<tr>
<th>MAP ID NO.</th>
<th>NAME AND ADDRESS</th>
<th>BUILT DATE</th>
<th>PREVIOUS INVENTORIED RECOMMENDATION OR (NEWLY INVENTORIED RECOMMENDATION)</th>
<th>SHPO CONCURRENCE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University of Washington Parking Garage,</td>
<td>1969</td>
<td>Eligible – Previously determined</td>
<td>2019</td>
</tr>
<tr>
<td></td>
<td>4317 12th Ave NE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Commercial Building,</td>
<td>1925</td>
<td>Ineligible – Previously determined</td>
<td>2019</td>
</tr>
<tr>
<td></td>
<td>4241 11th Ave NE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>La Miranda Apartments,</td>
<td>1957</td>
<td>Ineligible – Recommended (New HPI)</td>
<td>2021</td>
</tr>
<tr>
<td></td>
<td>1120 NE 43rd St</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Carol Apartments,</td>
<td>1929</td>
<td>Eligible – Previously recommended (2005) (updated HPI)</td>
<td>2021</td>
</tr>
<tr>
<td></td>
<td>1115 NE 43rd St</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Roberta Apartments,</td>
<td>1929</td>
<td>Eligible – Previously determined (updated HPI)</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>1119 NE 43rd St</td>
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<tr>
<td></td>
<td>4310 12th Ave NE</td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>Neptune Theater,</td>
<td>1921</td>
<td>Ineligible – Previously determined (updated HPI)</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>1303 NE 45th St</td>
<td></td>
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<tr>
<td>8</td>
<td>Martin &amp; Eckmann,</td>
<td>1949</td>
<td>Eligible – Recommended (updated HPI)</td>
<td>2021</td>
</tr>
<tr>
<td></td>
<td>4345 University Way NE</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HPI = Historic Property Inventory

\(^7\) The RapidRide Roosevelt Project and U District Option have loading zone placements on E Louisa St and E Lynn St in the Eastlake neighborhood. Small portions of these were not included in the Section 106 APE associated with the January 2020 EA, but are included in the Revised APE associated with this Supplemental EA. Refer to Appendix E for more details regarding the Revised APE for Cultural Resources.
Figure 2-3. U District Option: Revised Area of Potential Effects
2. ENVIRONMENTAL RESOURCES, IMPACTS, AND MITIGATION

The U District Option would have no new operational impacts to cultural resources from those discussed in the January 2020 EA.

Operations of the U District Option would be within the existing road right-of-way. The RapidRide stations would be separated from adjacent historic buildings by the sidewalk and would not obscure the building facades or side elevations. There would be minor changes to the setting and feeling from the presence of OCS poles and PBLs adjacent to the historic University of Washington Parking Garage and Carol and Roberta Apartments. The U District Option does not anticipate any physical impacts to buildings from operation. Noise from operations would be similar to existing conditions and would not adversely affect any historic properties. As such, there would be no adverse effects on historic properties from operation of the U District Option.

2.2.8.2 Construction

The U District Option would have minor new construction impacts to cultural resources from those discussed in the January 2020 EA, as described herein.

Construction effects on historic buildings and structures can include temporary loss of access, visual effects, noise, vibration, dust, and debris. Paving and OCS and station construction within the right-of-way has the potential to cause cosmetic building damage (i.e., cracked plaster) to the historic Carol and Roberta Apartments and the University of Washington Parking Garage. Potential impacts will be minimized or avoided through the implementation of noise and vibration mitigation measures. The new PBLs and OCS would be placed within the right-of-way on NE 43rd St adjacent to historic buildings and would not adversely affect the buildings. Of the four proposed stations within the Revised APE, two would be located adjacent to the historic Roberta Apartments and the Martin & Eckmann Men's Shop. The construction of the stations would not require physical changes to the buildings and would have no adverse effects on historic properties. As such, there would be no adverse effects on historic properties from construction of the U District Option.

2.2.8.3 Mitigation

No mitigation is required during operation because the U District Option would not result in effects on archaeological or historic resources. FTA, in consultation with SHPO, determined on April 27, 2021, that the U District Option would result in No Adverse Effect on historic buildings or structures, and therefore, no mitigation is required.

To minimize or avoid impacts from construction vibration, a Construction Vibration Control Plan will be developed. Measures will include using lower power settings during paving on vibratory rollers or large static rollers, especially near buildings with plaster or within 36 feet of structures, and implementing vibration monitoring at buildings with masonry or high susceptibility to damage. With the implementation of mitigation, no adverse effects on historic buildings or structures from the U District Option are anticipated.
2. ENVIRONMENTAL RESOURCES, IMPACTS, AND MITIGATION

Figure 2-4. U District Option: Historic Properties in the Revised Area of Potential Effects
FTA initiated consultation with the Muckleshoot Indian Tribe, Snoqualmie Indian Tribe, Stillaguamish Tribe of Indians of Washington, Suquamish Indian Tribe of the Port Madison Reservation, Tulalip Tribes of Washington, and Confederated Tribes and Bands of the Yakama Nation to invite them to provide input on the Supplemental Cultural Resources Report on April 16, 2021. The non-federally recognized Duwamish Tribe and Seattle’s Historic Preservation Officer were also contacted during the Section 106 process.

SDOT will prepare an Inadvertent Discovery and Archaeological Monitoring Plan and consult with SHPO and tribes before construction. The Inadvertent Discovery and Archaeological Monitoring Plan will be incorporated into the U District Option Construction Manual. SDOT will develop special provisions based on City of Seattle Standard Specifications for Road, Bridge, and Municipal Construction (SPU, 2020) 1-07.5(5) to be included in contract documents. Construction will be monitored by a qualified archaeologist when ground disturbance exceeds 18 inches in depth, except for areas already disturbed for existing utility corridors and OCS poles. The Snoqualmie Indian Tribe has requested to be onsite as part of any archaeological fieldwork. For those areas where an archaeological monitor is required, coordination will occur with the Snoqualmie Indian Tribe before fieldwork is conducted.

### 2.2.9 Indirect and Cumulative Impacts

#### 2.2.9.1 Indirect Impacts

**Operation**

Based on the discussion below, the U District Option would have no new indirect impacts during operations from those discussed in the January 2020 EA.

The U District Option would remove some on-street parking in the University District; however, with the implementation of mitigation measures related to parking and improvements to transit and bicycle access, no long-term indirect impacts related to operations are anticipated. The U District Option would have minimal indirect impacts on environmental resources because it would be located within existing right-of-way. Because the U District Option supports the City’s policies and goals, and planned growth in the corridor, it would not have indirect impacts on land uses, population density, or growth rates.

As part of the City’s Performance-Based Parking Program, SDOT actively manages the paid parking in the University District between Roosevelt Way NE and 15th Ave NE and NE 50th St and Portage Bay to provide paid parking spaces on each blockface, where feasible. Therefore, no indirect impacts on businesses in the University District are expected as a result of the elimination of on-street parking on NE 43rd St between 11th Ave NE and Roosevelt Way NE.

Furthermore, the parking mitigation strategies described in the January 2020 EA would be implemented as part of the U District Option and reduce the potential for indirect impacts on businesses and residents. The U District Option would implement facilities (such as PBLs) along the curb space that are consistent with the Comprehensive Plan and the City’s goals and policies related to curb use priorities. With the implementation of mitigation measures related to parking, improvements in transit and bicycle access, and the planned growth in the corridor, no long-term indirect impacts on businesses are anticipated.
Construction

The U District Option would have no new indirect impacts during construction from those discussed in the January 2020 EA.

Mitigation

Mitigation for indirect impacts related to parking south of the University Bridge would be the same as described in the January 2020 EA (and summarized in Section 2.2.1.2 of this document). Therefore, no further mitigation beyond what was described in the January 2020 EA is required.

As part of the U District Option, SDOT will relocate the impacted NE 43rd St passenger loading zone and shuttle loading zone nearby, where feasible, to facilitate passenger pick-up and drop-off for nearby buildings. SDOT, in response to the Sound Transit U District Station opening in 2021, is implementing a variety of curbside management strategies surrounding the station. This includes converting unrestricted on-street parking to restricted (paid) parking within 1/4 mile of the Sound Transit U District Station.

Based on the above discussion, no further mitigation is proposed for operational or construction indirect impacts for the U District Option.

2.2.9.2 Cumulative Impacts

Operation

There would be no additional operational cumulative impacts from those discussed in the January 2020 EA.

Operation of the U District Option would result in beneficial cumulative impacts related to connections to existing and planned transit services. The improved access would be especially beneficial to those who are transit-dependent by providing more connections to employment and educational opportunities. The addition of PBLs in the University District would support existing and future expansions of the bicycle network and connections to transit in the vicinity. The U District Option would also result in beneficial air quality and stormwater benefits in combination with other transportation projects that reduce vehicle miles traveled and require stormwater treatment. The cumulative transportation impacts under the No Build condition are discussed in Section 2.2.1.1, which includes the reasonably foreseeable transportation projects for the U District Option year of opening (2026) and future horizon year (2040). With other planned transit projects (i.e., Sound Transit light rail and other King County RapidRide corridors), transit ridership is expected to increase, and, as a result, no cumulative impacts on the roadway network in the corridor are anticipated.

On-street parking is already heavily used in the University District under existing conditions. With the opening of the Sound Transit U District Station and the subsequent curb space management policies and measures, the parking supply and utilization in the University District will adjust in the future. As part of previous commitments on other projects, SDOT is conducting a parking study surrounding the Sound Transit U District Station before light rail service operation in 2021. Before station opening, SDOT is working with the community and stakeholders to identify measures to manage parking in the area. After the station opens, SDOT will continue to monitor to see if any adjustments to the curb space management measures are warranted.
The U District Option would remove one passenger loading zone, between approximately eight and eleven on-street parking spaces, and one shuttle loading zone (depending on the time of day) on NE 43rd St between Roosevelt Way NE and 11th Ave NE, in addition to the parking removal described in the January 2020 EA. The construction of private development projects could increase or decrease off-street parking supply. Private developments in the University District would benefit from access to the U District Option and the future Sound Transit U District Station. This transit-oriented development of residential and commercial space within walking distance of public transit is consistent with the City’s goals and policies related to the best use of curb space.

The City of Seattle recently adopted citywide Mandatory Housing Affordability (MHA) legislation that covers certain areas and requires that new multifamily and commercial development either include affordable homes or contribute to a City fund for affordable housing. To implement MHA, the City made zoning changes and modifications to the land use code (Seattle Municipal Code [SMC], Chapter 23). Future developments must comply with MHA, and the construction of additional affordable units could reduce the availability of off-street parking within future developments by allowing for more housing units and less parking. However, mitigation strategies identified as part of MHA would reduce these potential parking impacts, including travel demand management and parking strategies such as SDOT’s Community Access and Parking Program, and Performance-Based Parking Program. With the mitigation proposed by the U District Option to relocate the impacted NE 43rd St passenger loading zone and shuttle loading zone where feasible, the development of additional off-street parking with permitted private projects, and the mitigation requirements under MHA for certain areas including the University District Urban Center, there would be no cumulative impacts with regard to a reduction of on-street parking.

Construction

The U District Option would have no new cumulative impacts during construction compared to those discussed in the January 2020 EA. Construction activities that overlap with other construction projects in the University District would result in temporary noise and dust. Construction of the U District Option and other developments would temporarily reduce on-street parking during overlap periods. These impacts during construction would be minimized through the implementation of mitigation measures as part of the U District Option and other construction projects in the same manner described in the January 2020 EA, including phasing of work zones and traffic detours.

Mitigation

No mitigation is proposed for operational and construction cumulative impacts beyond what was proposed in the January 2020 EA.

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8 The University District neighborhood has already implemented MHA requirements through separate processes.
3. ENVIRONMENTAL JUSTICE

3.1 Operation

The U District Option would have no new operational impacts to Environmental Justice populations from those discussed in the January 2020 EA.

The January 2020 EA noted that the University District has the highest percentage of minority (54%) and low-income (50%) populations within the RapidRide Roosevelt Project neighborhoods, but that operations would not result in disproportionately high and adverse effects on minority or low-income populations.

Operation of the U District Option would potentially result in impacts associated with the removal of on-street parking and fewer bus stops for passenger access (which decreases travel times). SDOT will continue to monitor parking conditions in the neighborhood with the opening of the Sound Transit U District Station. Bus stop optimization, which is consistent with KCM RapidRide guidelines, would increase walking distances to bus stops in the University District and may result in minor impacts to users, especially those with mobility issues. The consolidation of stops is not expected to result in adverse impacts on minority or low-income populations because the associated nonmotorized improvements and improved travel times and reliability would benefit transit-dependent populations, including low-income populations. The removal of on-street parking and bus stop optimization would impact minority and low-income populations to the same degree as all populations.

The U District Option would result in several benefits, including improved transit speed and reliability, expanded connections to transit, and bicycle safety. These benefits would apply to a greater degree to low-income populations and others who depend on transit. The transit, bicycle, and pedestrian improvements would help to maintain movement in the University District neighborhood, which is identified for high growth, and expected to become more congested.

Based on this information, the U District Option would not result in disproportionately high and adverse effects on minority or low-income populations.

3.2 Construction

The U District Option would have no new construction impacts to Environmental Justice populations from those discussed in the January 2020 EA.

3.3 Mitigation

No mitigation for Environmental Justice impacts is required during operation or construction (this was also the case in the January 2020 EA).
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4. PUBLIC, TRIBAL, AND AGENCY COORDINATION

Public outreach and participation are integral parts of the transportation planning process. Federal guidelines and procedures have been followed to involve the public, tribes, and agencies. Throughout the planning process for the U District Option, SDOT has worked closely with KCM and FTA.

Beginning in December 2020, SDOT began outreach with the public for the U District Option through notifications to the email distribution list, partner publications and press releases to media outlets, a virtual information session, and targeted calls to stakeholders, including organizations and agencies. Feedback received from the public and agencies on the U District Option will be considered as design proceeds. SDOT will continue to engage and solicit feedback from the public and agencies throughout design and construction.

FTA is responsible for government-to-government consultation with interested federally recognized Native American tribes regarding transit projects. The U District Option does not cross any tribal lands; however, tribes have been consulted with regarding their interests related to natural and cultural resources. FTA initiated consultation with the Muckleshoot Indian Tribe, Snoqualmie Indian Tribe, Stillaguamish Tribe of Indians of Washington, Suquamish Indian Tribe of the Port Madison Reservation, Tulalip Tribes of Washington, and Confederated Tribes and Bands of the Yakama Nation to invite them to provide input on the Supplemental Cultural Resources Report on April 16, 2021. The non-federally recognized Duwamish Tribe and Seattle’s Historic Preservation Officer were also contacted during the Section 106 process.
5. REFERENCES


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