



MEMORANDUM

DATE: June 24, 2024

TO: Chair Ramos and Transportation and Mobility Commission members

FROM: Maggie Derk, Senior Transportation Planner, and Laurel Priest Associate Transportation Planner, Community Development Department

RE: **Upper Main Street Final Design Recommendation**

CC: Rebecca Kennedy, Deputy Director, Community Development Department; Kate Drennan, Transportation Planning Manager, Community Development Department; Ryan Lopossa, Streets and Transportation Manager, Public Works Department

Meeting Purpose

At the July 2nd Transportation and Mobility Commission (TMC) meeting, the Upper Main Street project team will present the final design concepts and ask the TMC to make a recommendation to the City Manager. This presentation is the sixth with the TMC on this project; the previous presentations were in August and October of 2023, and March, April and June 2024.

Introduction

The Upper Main Street Safety and Mobility Project is exploring how to improve safety and mobility on Main Street between E Fourth Plain Boulevard and the northern city limits (just S of NE Minnehaha / 63rd Street). This project is being undertaken in coordination with planned pavement preservation work on part of the project corridor (scheduled for summer 2025) and the [C-TRAN Highway 99 Bus Rapid Transit Project](#) (scheduled to start construction in early 2025).

The goals of this project are to:

- Improve pedestrian safety by adding/upgrading crossings and filling sidewalk gaps that improve connections to transit.
- Improve bike and small mobility connectivity by addressing network gaps and connecting to regional trails.
- Explore transit speed and reliability treatments and improve transit stop access in anticipation for C-TRAN's Highway 99 BRT project.

Project Timeline

The Project began in fall 2023 and is planned to conclude in summer 2024, with paving and implementation on part of the Project corridor planned for 2025. The Project had three phases:

- **Phase 1 – Assess Existing Conditions (fall 2023 – winter 2023/2024):** The project team evaluated how Upper Main Street operates and how people travel on the corridor today. The first round of public outreach took place during this phase and gathered input on issues people experience while traveling along the project area.
- **Phase 2 – Develop corridor design alternatives (winter 2023/2024 – spring 2024):** The project team used information gathered during Phase 1 to develop preliminary design options and sought community feedback on how well these options addressed transportation needs along Upper Main Street.
- **Phase 3 – Striping Plan and Corridor Design (spring 2024 – summer 2024):** With input from community, the TMC and additional technical analysis, the project team refined the design options. The final design and implementation milestones will be shared with community members and key stakeholders.

Technical Findings

Key findings from the existing conditions analysis include:

- **Pedestrian:** The 2024 Transportation System Plan (TSP) identifies the entire Upper Main Street project area (from Fourth Plain Boulevard to the northern city limit) as a Primary Pedestrian Corridor. Most sidewalks along the project area are less than six feet wide and are directly adjacent to traffic. Sections of Upper Main Street that do not meet our pedestrian crossing policy (marked crosswalk every 800 feet) are between 29th and 33rd Streets, and 33rd and 37th Streets.
- **Transit:** The 2024 Transportation System Plan (TSP) identifies the entire Upper Main Street project area (from Fourth Plain Boulevard to the northern city limit) as an Enhanced Transit Corridor. There are four proposed BRT stations near the project area at Fourth Plain Boulevard, 33rd Street, 37th Street and 45th Street. In

some locations the lane widths are between nine and ten feet wide, which is not the preferred width for C-TRAN bus operations.

- **Bike and Small Mobility:** Main Street from 39th Street to the Discovery Trail is a part of the TSP Bike and Small Mobility Network. Most of the Upper Main corridor lacks bicycle and small mobility facilities, except for a mobility lane along the most northern section between Ross Street and the northern city limits.
- **Vehicle:** The number of travel lanes and width of travel lanes varies along the corridor. Overall, no intersections along Upper Main Street are over capacity but the intersections with the most congestion during peak periods are 33rd and 39th Streets. The posted speed limit along most of the project area is 30mph except north of NE Ross Street where it's 40mph, and between 29th Street and 32nd Street where it's 20 mph when the school zone sign is flashing.
- **Safety:** Between 2018 and 2022, there were three injury collisions along the Upper Main Street corridor that involved vehicles striking people walking, rolling or biking. Three vehicle-only crashes resulted in serious injuries. The highest crash locations include the intersections of 39th Street, 45th Street, 33rd Street and Fourth Plain Boulevard.

Community Engagement

The **first round of community engagement** took place from mid-January to mid-February 2024. The project gathered community input on peoples' current traveling experience along Upper Main Street through an online survey, an online interactive map activity where people could make location specific comments, door to door canvassing to businesses along the corridor and conversations with various community organizations.

Key feedback themes **incl**uded:

- Sidewalks are too narrow particularly near Vancouver School of Arts and Academics, Main and 39th Street, and Main and 45th Street.
- Crosswalks could be improved or added in front of the Vancouver School of Arts and Academics, Main and 39th Street, and at Broadway and Fourth Plain Boulevard.
- Bicycling or using a small mobility device and walking/rolling/using an assistive device feel the least safe and comfortable of all modes of transportation along the corridor, while driving or riding in a car feels the most safe and comfortable.
- Gaps in both pedestrian and bike/small mobility infrastructure, and a lack of wayfinding signage make travelling along Upper Main Street uncomfortable, particularly between 45th Street and 63rd Street and near Hazel Dell Avenue.
- The improvements that survey respondents identified as the most important included addressing potholes, road striping, etc., adding more sidewalks to fill existing gaps and adding more crosswalks or other features to make crossings safer.

The **second round of community engagement** took place from mid-March to mid-April 2024. The project gathered community input through an online survey, an online interactive map activity where people could make location specific comments, door to door canvassing to businesses along the corridor and conversations with various community organizations.

Overall, there was general support for investing in safety to improve access to area schools, local businesses, and transit stops along Upper Main Street but some people expressed concern about the proposed design concepts causing congestion for vehicles on the corridor.

Design Options

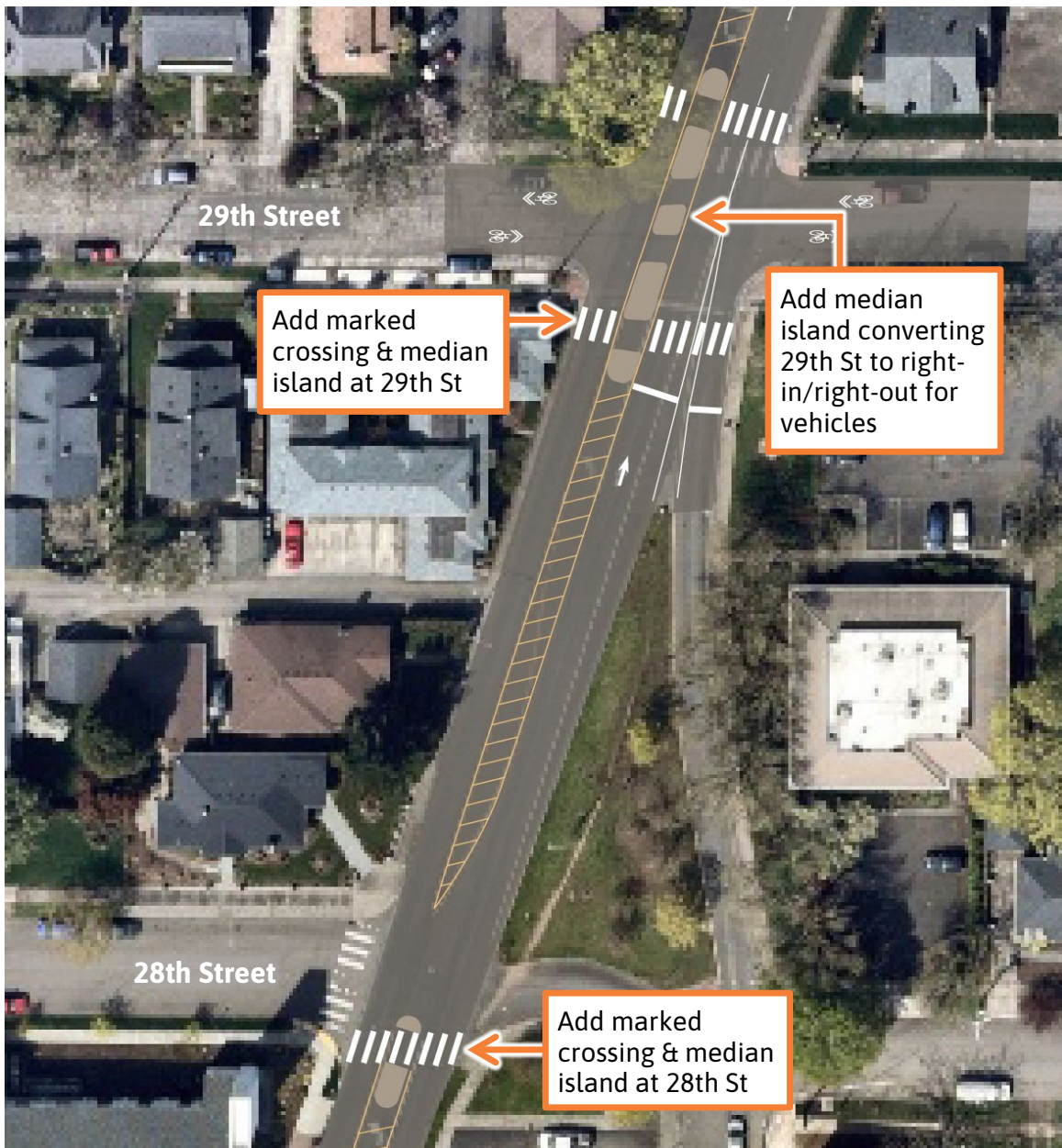
The Project team broke the project area into five segments to understand what treatments would be appropriate corridor-wide, and what would need to be tailored to match the context of the roadway.

- Segment 1: Fourth Plain Boulevard to 29th Street
- Segment 2: 29th Street to 33rd Street
- Segment 3: 33rd Street to 39th Street
- Segment 4: 39th Street to 45th Street
- Segment 5: 45th Street to City Limits (just south of NE 63rd Street/Minnehaha Street)

With input from additional technical analysis, community members and the TMC, the project team refined the design options for Upper Main Street. The following sections summarize the final design recommendations for Upper Main Street.

Segment 1: Fourth Plain Boulevard to 29th Street

- Add a new marked crossing with a median island at 28th Street.
- Add a new marked crossing with a median island on the southside of the 29th Street intersection. Keep the marked crossing and rapid flashing beacon on the north side of the intersection.
- Replace the left turn lanes at 29th Street with a long median island with cut throughs for bike and small mobility users.
- Convert access to 29th Street as right-in and right-out for vehicles to deter cut-through traffic and support the future Neighborhood Greenway along 29th Street.



Segment 2: 29th Street to 33rd Street

- Remove one northbound through lane and replace it with median islands at marked crossings, a left turn lane or painted median.
- Add a new marked crossing with a median island at 31st Street.
- Narrow the existing travel lanes to 11 feet.
- Add three-foot painted shoulder on both sides of the street and widen sidewalks in the future to reflect status as primary pedestrian corridor.



Segment 3: 33rd Street to 39th Street

- Remove one northbound through lane and:
 - Between 33rd and W 38th Streets, replace it with median islands at marked crossings, a left turn lane or painted median.
 - Between W 38th and 39th Streets, widen the other travel lanes to accommodate bus operations.
- Add new marked crossings with median islands at 35th and 37th Streets.
- Add three-foot painted shoulder on both sides of the street and widen sidewalks in the future to reflect status as primary pedestrian corridor.



Segment 4: 39th Street to 45th Street

- Remove one northbound travel lane and widen the other travel lanes to accommodate bus operations.
- Add a protected two-way mobility lane on the east side of Main Street from 40th Street to the Covington House driveway exit. At the Covington House driveway exit, the two-way mobility lane becomes a multi-use path for pedestrians, people biking and using small mobility devices until 45th Street.
- To connect to the 39th Street mobility lanes to this new multi-use path:
 - Add a new southbound mobility lane on the west side of Main Street between 39th and 40th Streets.
 - Add median islands, a rapid flashing beacon, and marked crossings at 39th and F Street.
 - Add buffered mobility lanes along 40th Street between Main Street and F Street.
 - Add wayfinding signage to help people navigate these connections.
- Add curb extensions at 39th and F Street to deter cut-through traffic and support the future development of F Street as a Neighborhood Greenway.
- Nearby parallel routes (protected mobility lanes on Columbia Street and the future Neighborhood Greenway on F Street) can be used to access destinations south of 40th Street.



Add protected two-way mobility lane

Add marked crossing at 40th and F St

Add southbound mobility lane from 39th to 40th St

Add buffered mobility lanes on 40th St

Remove one northbound lane

Add curb extensions, marked crossings, median islands, & rapid flashing beacon at 39th & F St

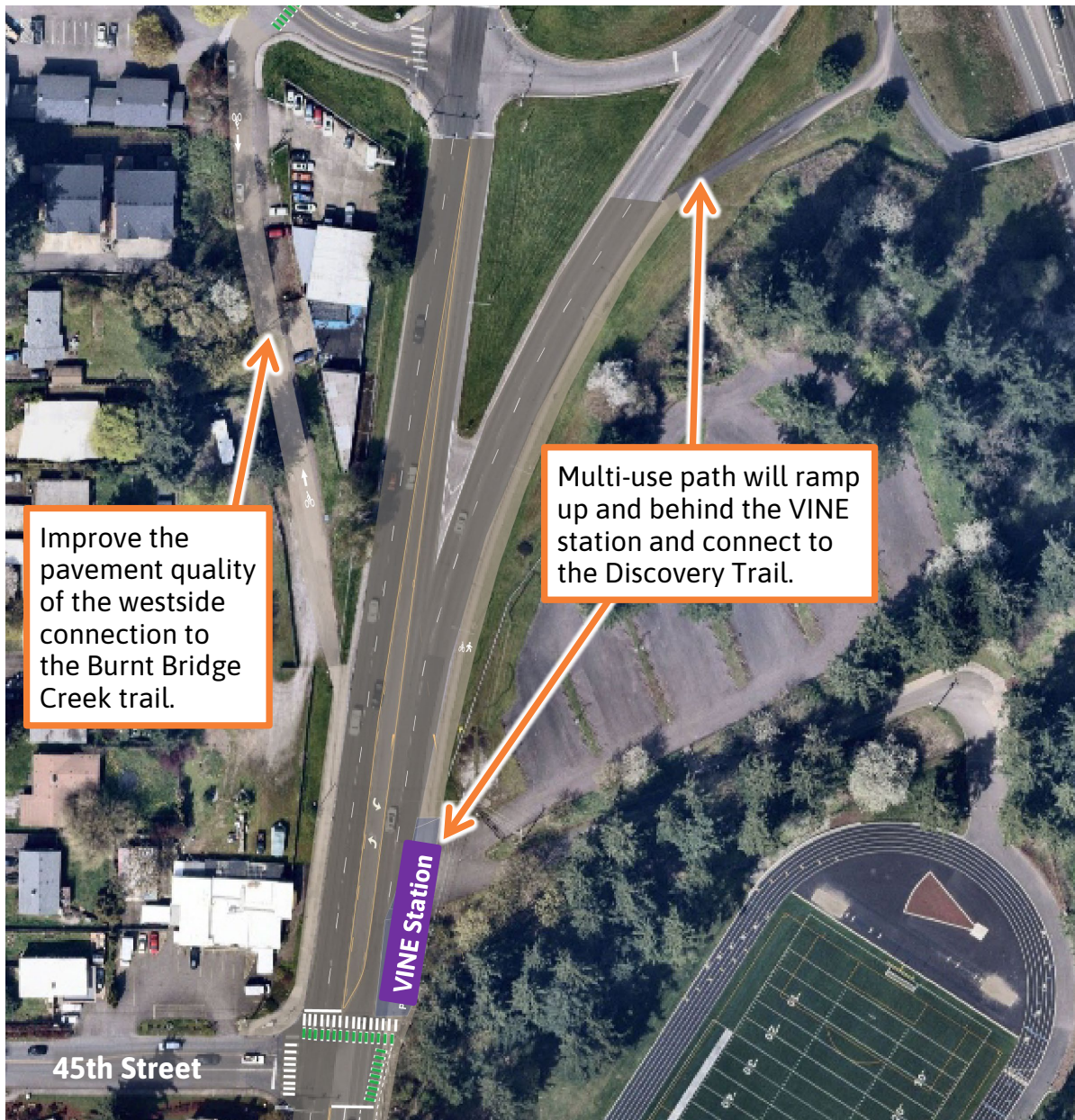


45th Street

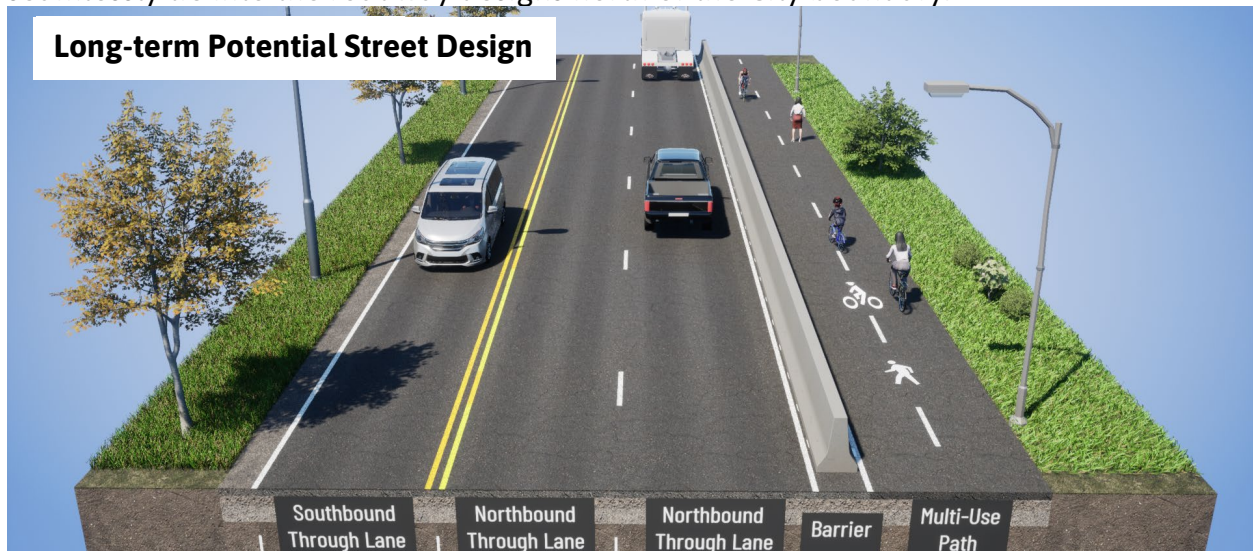
Protected two-way mobility lane ends and protected multi-use path begins.

Segment 5: 45th Street to City Limits (just south of NE 63rd Street / Minnehaha Street)

- At 45th Street, multi-use path will ramp up and behind the VINE station and connect to the Discovery Trail.
- Improve the pavement quality of the westside connection to the Burnt Bridge Creek trail.
- Replace and improve visibility of wayfinding signage.



The project team will continue to develop the long-term design concept from NE Ross Street to the northern City limit. Implementation of this concept will require close coordination with Clark County on a future capital project to ensure that facilities seamlessly tie into the roadway designs north of the City boundary.



Recommendation

The Project Team recommends the above project designs and investments for Main Street, to be implemented through scheduled pavement work in 2025 and beyond for future roadway segments, and through future capital projects and the transportation improvement program as funding becomes available.

Staff contact information

Maggie Derk (she/her), Senior Transportation Planner, Community Development, 360-487-7889, maggie.derk@cityofvancouver.us

Attachment(s):

- None