

***East Deering: Pathways to Bridge the Gap Project***  
**Maine Department of Transportation**

U.S. Department of Transportation (USDOT)  
FY 2024 Rebuilding American Infrastructure with Sustainability and  
Equity (RAISE) Grant Program  
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**PROJECT DESCRIPTION**

The *East Deering: Pathways to Bridge the Gap Project* (“Project”) includes constructing new and improving existing active transportation and roadway infrastructure in the East Deering neighborhood of Portland, Maine (Figure 1). Improvements will strengthen bicycle and pedestrian connections and multimodal roadway safety to promote active transportation in a Historically Disadvantaged Community and Area of Persistent Poverty.

Maine Department of Transportation (MaineDOT) and the City of Portland (City) advocate for, and invest extensively in, improved active transportation access throughout the city. Both parties have an overarching mission to improve pedestrian and bicyclist safety and mobility in neighborhoods and increase opportunities for residents to access more than 70 miles of trails and pathways citywide. As a result, residents and visitors can rely less on vehicles and more on active transportation to reach points of interest reducing emissions and improving quality of life.

The Project leverages a transformative donation to higher education in Portland from the Initiative for Digital Engineering and Life Sciences (IDEALS)—a Project funding partner. The donation funded the creation of the Roux Institute at Northeastern University and its new graduate campus, which will be in the Project neighborhood on the dilapidated site of a former food processing facility, now a historic industrial property. This investment will spur immediate workforce and community benefits as well as lay the foundation for continued workforce benefits upon campus completion. The Roux Institute’s entrepreneurship programming and education model prepares students to join the technology-driven workforce of the future.

In addition to improving multimodal transportation safety and access from this neighborhood to points of interest throughout the city, the Project will also restore residents’ access to a section of Maine’s coastline that has been inaccessible for more than a century due to the food processing grounds and the midcentury construction of Interstate 295 which bisected the neighborhood. Following Project completion, residents will gain safer and more efficient connections to access Portland’s extensive trail and pathway network and interstate system.



**Figure 1.** The East Deering neighborhood of Portland in southern Maine.

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The Project meets numerous USDOT goals consistent with the *FY 2022-2026 U.S. DOT Strategic Plan*, including Safety, Economic Strength, Equity, Climate and Sustainability, and Transformation.<sup>1</sup>

The following outcomes are primary Project purposes and align with RAISE Merit Criteria:

1. **Safety** and efficiency for active transportation users and motorists through Complete Street design and Americans with Disabilities Act (ADA) compliance
2. **Environmental Sustainability** through reduced congestion and reliance on vehicles, expanded public transit and active transportation access, and shoreline stabilization
3. **Quality of Life** by expanding the active transportation network in a disadvantaged community and restoring access to coastal areas previously inaccessible due to interstate and industrial development
4. **Mobility and Community Connections** through modern and uniform multimodal transportation systems, including increased public transit access to education, employment, retail, healthcare, tourism, and recreation
5. **Economic Competitiveness and Opportunity** by expanding safe and efficient multimodal access to employment, higher education, entrepreneurship, and tourism facilities
6. **State of Good Repair** by restoring and modernizing existing infrastructure and reducing construction and maintenance burdens
7. **Partnership and Collaboration** through ongoing neighborhood engagement and coordination with public and private local organizations to address historic issues with equity, burdens, and disadvantages
8. **Innovation** by leveraging a recent private investment in higher education in Maine and utilizing private Project match funding while employing innovative technology features

The Project consists of numerous connectivity improvements (Figure 2, Attachment A). A detailed statement of work is included as Attachment B.

### ***Constructing and improving a network of shared-use pathways and nearby resiliency:***

- Building a 14-foot-wide shared-use pathway bridge paralleling Tukey's Bridge (I-295) to connect the Downtown Portland peninsula and East Deering neighborhood (Attachment C.1)
- Extending the existing Back Cove Trail under Tukey's Bridge to provide a safe connection to the new shared-use pathway bridge, including direct access to the new graduate campus (Attachment C.2)



Figure 2. Project Scope of Work Image. See Attachment B

<sup>1</sup> USDOT Strategic Plan: [https://www.transportation.gov/sites/dot.gov/files/2022-04/US\\_DOT\\_FY2022-26\\_Strategic\\_Plan.pdf](https://www.transportation.gov/sites/dot.gov/files/2022-04/US_DOT_FY2022-26_Strategic_Plan.pdf), page IV

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- Improving lighting, drainage, and trail width (10') on the existing Back Cove Trail system approaches at Tukey's Bridge to reduce pathway crowding and safety concerns
- Constructing a 12' shared-use pathway around the Roux campus perimeter that will connect the neighborhood to the campus, public access space, a scenic pier and possible water taxi service, and a potential future rail-trail connection (Attachment C.3)
- Stabilizing the shoreline around pathway improvements (Attachment C.4)

### ***Upgrading neighborhood roads and intersections to conform with Complete Street principles:***

- Improving active transportation pathways on Sherwood Street between East Deering residences and the new Roux campus (Attachment C.5)
- Redesigning active transportation paths and crossings at the Baxter Boulevard–Bates Street–Exit 9 ramp intersection to improve access between the Back Cove Trail system and East Deering (Attachment C.6)
- Retrofitting Washington Avenue from the Veranda Street/Bates Street to Presumpscot Street intersections to include bicycle lanes<sup>2</sup> (Attachment C.7)

### ***Improving the existing I-295 ramp system:***

- Adjusting the off-ramp at Exit 8 to provide direct inbound access to the campus via Sherwood Street which diverts traffic away from neighborhood streets (Attachment C.8)
- Reconstructing the Baxter Boulevard–Bates Street–Exit 9 ramp intersection to improve traffic flow and bicyclist/pedestrian safety

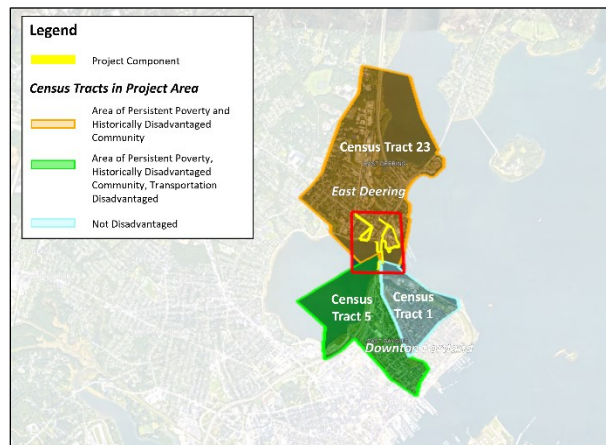
## **Project Location**

Portland is Maine's most populated city and is experiencing population growth. Both Portland and Cumberland County's populations grew between 2010 and 2020 Census counts—3.3 percent and 7.6 percent, respectively.<sup>3</sup> The city is the region's commercial, workforce, and residential center—home to employment, education, housing, healthcare, dining, and tourism.

The Project area, in the East Deering neighborhood (Table 1), is 1.5 miles north of Downtown Portland. Accessing East Deering from the Downtown peninsula involves crossing the mouth of Back Cove via Tukey's Bridge which carries both I-295 and the Back Cove Trail system.

**Table 1.** Project Location Details

<b>Location</b>	East Deering neighborhood; City of Portland; Cumberland County, Maine
<b>GPS coordinates</b>	43.679082, -70.256894
<b>Census Tracts (2010 and 2020)</b>	23005002300 (23) 23005000500 (5) 23005000100 (1)
<b>Census-Designated Urban Area</b>	Portland Urban Area UACE: 71263 <sup>4</sup> Population: 203,914 (2020)
<b>Congressional Representation</b>	ME's 1 <sup>st</sup> District Chellie Pingree (D) U.S. Senators Susan Collins (R) and Angus King (I)



**Figure 3.** Census Tracts in Project area and Disadvantaged Statuses.

<sup>2</sup> The subject of a FY23 SS4A Planning/Demonstration Grant award

<sup>3</sup> <https://www.census.gov/quickfacts/fact/table/cumberlandcountymaine,portlandcitymaine/POP010210>

<sup>4</sup> UACE 71263. Source: <https://www.transportation.gov/RAISEgrants/urbanized-areas>

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The Project spans three Census Tracts—23, 5, and 1 (Figure 3). Tracts 23 and 5 are designated Areas of Persistent Poverty and Historically Disadvantaged Communities.<sup>5</sup> Tract 5 is also a Transportation Disadvantaged Tract due to its high transportation burdens.<sup>6</sup> Most Project components are in Tract 23, but bridge-related construction and improvements that span Back Cove fall within Tracts 5 and 1 (see *Project Budget* section). Portland and the East Deering neighborhood are part of a Census-Designated Urban Area with a total population of 203,914.

Six miles southwest of the Project area, I-295 splits from I-95 and traverses greater Portland. I-295 passes through the center of, and borders portions of, East Deering, disconnecting a section of the neighborhood. Residential and commercial areas, the coastline and its scenic trails, as well as the future graduate campus will continue to be disconnected without Project implementation.

### Transportation Barriers, Harms, and Burdens

Historically, Portland was a port town, and the shipbuilding industry was the largest employer. The city's population was largely restricted to the east peninsula where Downtown Portland exists today. Upon electrification and extension of streetcar lines, the commute to Downtown became easier, and residents sought suburban living off-peninsula. East Deering experienced significant development and population growth when a new streetcar line opened in 1895 connecting Downtown Portland to nearby Falmouth via Tukey's Bridge. Later, construction of the Grand Trunk Railroad roundhouse in the center of the neighborhood and the Burnham and Morrill (B&M) Cannery (future site of the Roux Institute campus) along the coast increased employment in East Deering and further contributed to residential growth.

Transportation projects in the mid-twentieth century had profound impacts on the landscape of East Deering.<sup>7</sup> In the 1950s, construction of I-295 began in an effort to move large volumes of traffic to and from I-95 to Portland's urban core. Tukey's Bridge became part of the planned I-295 bypass, and a wider bridge replaced the preceding structure to accommodate the increased traffic. The bypass and network of on- and off-ramps required demolition of East Deering homes and businesses, bisected the neighborhood, and left a portion of the city's scenic waterfront inaccessible to the public (Figure 4).

Much of East Deering was developed prior to 1925; therefore, the street design reflects design principles of the last century. Although all city dwellings in Portland are within one-half mile of the Portland Trails system, there are limits to this accessibility.<sup>8</sup> Sidewalks exist on most primary thoroughfares, but many of the surrounding residential streets do not have infrastructure that supports safe, active transportation access. The current pathway infrastructure in the Project area, namely the width and condition of Back Cove Trail access points on Tukey's Bridge, is inadequate for traffic flow and concurrent users. Busy Project area intersections



**Figure 4.** Work on the East Deering I-295 Bypass in 1953 which separated the neighborhood from the coast (looking northeast). Source: Maine Memory Network

<sup>5</sup> RAISE Grant Project Location Verification tool: <https://maps.dot.gov/BTS/GrantProjectLocationVerification/>

<sup>6</sup> ETC Explorer: <https://experience.arcgis.com/experience/0920984aa80a4362b8778d779b090723/page/Homepage/>

<sup>7</sup> Greater Portland Landmarks: East Deering. Source: <https://www.youtube.com/watch?v=n1sZBNMPccs>

<sup>8</sup> Portland Trails: <https://www.trails.org/our-work/>

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create challenging active transportation movements and significant safety concerns. Heavily traversed areas have received improvements in recent years, but many sidewalks and pathways have reached the end of their useful life or do not adhere to Complete Streets principles. I-295 creates additional burdens as it separates portions of the neighborhood.

### **Transportation Solutions**

The Project will create meaningful access to vital community areas and improve safe and efficient active transportation options for East Deering residents. Project components prioritize safe, modern, and environmentally friendly active transportation mobility in tandem with upgrades to city streets and an interstate ramp configuration that will improve neighborhood traffic, transit routes, and connectivity.

The East Deering neighborhood currently has less than one mile (0.88) of dedicated active transportation pathways. The Project's active transportation-related improvements will expand the existing path network in the neighborhood by approximately 1.45 miles. This expansion increases residents' level of connectivity significantly through the important connections to the Downtown peninsula, Eastern Waterfront, and East Bayside neighborhoods. Increasing active transportation options and safer access to transit decreases transportation cost burdens and greenhouse gas emissions while simultaneously increasing safety and public health benefits.

The Project also includes upgrades to neighborhood streets and interstate access points in East Deering. A key Project outcome will be to advance roadway operations that consider traffic control, travel time, and vehicle movement in relation to the safety and efficiency of non-motorized travelers sharing the same right-of-way. Every Project improvement will increase safety for drivers, pedestrians, and bicyclists as engineers reconstruct roads to conform to Complete Street principles. This will include signalized crossings, buffered bicycle lanes, vehicle lane realignment and restrictions, and intersection reconfiguration.

### **Project Design**

Preliminary design varies across Project elements ranging from a minimum of 30 percent design level to 50 percent design level for most of the bicycle and pedestrian improvements. There are no previously completed Project components. The Project connects to related completed and planned projects nearby, such as:

#### ***MaineDOT's I-295 Overpass-Veranda Street-Martin's Point Bridge Pathway Extension***

- Completed in 2022; 0.75 miles north of the Project area
- Strengthened thoroughfare connecting the Project area to nearby Martin's Point, across Presumpscot River to Mackworth Point and Island with new 1,200' shared-use pathway
- Created shorefront parcel that will become a future public open space/park

#### ***Greater Portland Council of Government's Safe System Demonstration Projects and Supplemental Planning Activities***

- Received a Federal FY23 Safe Streets and Roads for All (SS4A) Planning/ Demonstration Grant award
- Project for bike lane/Complete Streets safety demonstrations on Washington Avenue from Ocean Avenue to Veranda Street (within the Project area)