

Reconnecting Our Villages: Historic Libbytown Project
Maine Department of Transportation

U.S. Department of Transportation (USDOT)
FY 2023 Reconnecting Communities and Neighborhoods (RCN) Program

Dual application for:
Reconnecting Communities Pilot (RCP) Program
Neighborhood Access and Equity (NAE) Program

OVERVIEW

The *Reconnecting Our Villages: Historic Libbytown Project* (“Project”) is located in one of Portland’s oldest neighborhoods, Libbytown. Tavern-keeper George Libby and his descendants gave the area its name, having settled in the early 19th century at the intersection of Park and Congress Streets, known as Libby’s Corner. The neighborhood was the center of a small but thriving business district, and the families that lived there gave Libbytown its identity.

When Interstate 295 was built in the late 1960s Libbytown as a distinct neighborhood was destroyed. Construction displaced more than 15 businesses and 200 families in Libbytown. The highway and large cloverleaf interchanges severed the neighborhood and created physical barriers that still exist and cause great concern today.

The Project will:

1. Provide modern and uniform multi-modal connections to employment, retail, healthcare, tourism and recreation
2. Expand safety and efficiency for motorists and active transportation users
3. Improve response time for emergency services
4. Implement multi-modal street design to improve active transportation and vehicle flow
5. Expand the use of safe and convenient public transit
6. Meet Americans with Disabilities Act (“ADA”) and Maine Department of Transportation (“MaineDOT”) standards for transportation infrastructure
7. Manage flooding and stormwater runoff
8. Improve supply chains to support efficient “last mile” delivery of goods to Maine’s largest downtown

The Project meets numerous USDOT goals consistent with the *FY 2022-2026 U.S. DOT Strategic Plan: Safety, Economic Strength and Global Competitiveness, Equity, Climate and Sustainability and Transformation*.¹ It is the culmination of extensive community-based planning alongside innovative state and local design. The Project will implement modern safety standards and reconnect a community that strongly embraces active transportation but has not been able to adequately benefit from it.

¹ https://www.transportation.gov/sites/dot.gov/files/2022-04/US_DOT_FY2022-26_Strategic_Plan.pdf, page IV

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The Project consists of numerous transportation-related connectivity improvements in the Libbytown neighborhood of Portland, Maine:

Reconstructing the confluence of Congress Street and Park Avenue under Interstate 295/US 1:

- Constructing a modern roundabout, including sidewalks and bike lanes, to slow vehicular traffic
- Installing consistent pedestrian infrastructure features, including sidewalks and crosswalks, throughout Congress Street and Park Avenue
- Providing high-quality bicycle infrastructure, separate from streets and sidewalks
- Building separated crosswalks for bikers and pedestrians
- Redesigning connections between interstate ramps and local streets to improve safety
- Increasing streetside greenspace

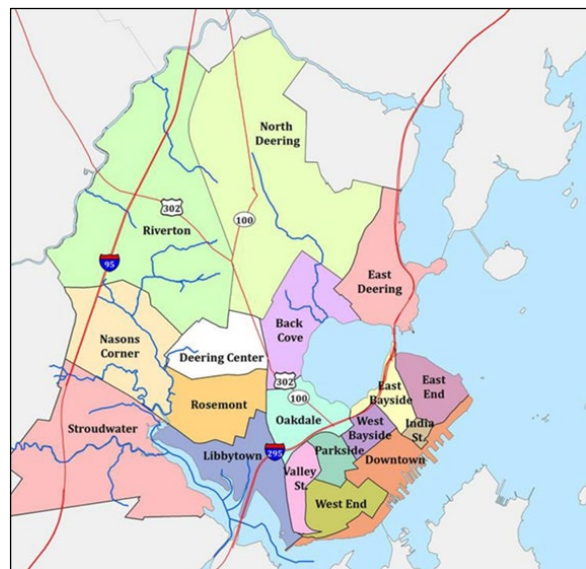
Restoring Park Avenue and Congress Street to two-way flow:

- Reconstructing streets to restore bidirectional traffic flow with traffic-calming features
- Installing center turn lanes while avoiding the creation of additional traffic lanes
- Building modern transit stops that include shelters, benches, bike racks and electronic signage
- Installing sidewalks separated from the street by a tree-lined esplanade
- Creating two-way bike paths/cycle tracks separated by tree-lined esplanade
- Installing separate bike and pedestrian crosswalks
- Replacing railroad crossing signage at a busy at-grade crossing

Barriers, Harms & Burdens

In the late 1960s, Interstate 295 was constructed to move large volumes of traffic to and from Interstate 95 to Portland’s urban core. Like urban highways in many cities, I-295 served its intended purpose. Today, it carries 61,440 vehicles through Portland daily; however, in doing so, it slices through existing communities and neighborhoods. The result for Libbytown—two parts now physically detached and isolated from much of Portland and each other.

“Libbytown really doesn’t have an identity. It doesn’t have a sense of place,” Jaime Parker, then manager for Portland Trails, told a publication in 2010. The fragmentation, combined with street design completed long before the advent of *Complete Streets* principles, resulted in a neighborhood now burdened by traffic, safety concerns, transit inefficiencies and active transportation limitations. Minor infrastructure improvements have been undertaken periodically since the 1970s but, like



Portland neighborhood map showing Libbytown as the only neighborhood that I-295 fully divides

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the neighborhood, these efforts have often been disjointed and inefficient because design did not sufficiently focus on safety, active transportation or integration of transportation investment with surrounding land use. Today, as a result, pedestrian safety concerns and vehicle crashes are on the rise.

Libbytown is a gateway to Portland's downtown peninsula, museums, outdoor festival grounds, sports complexes and entertainment venues. Streets and sidewalks in Libbytown connect residents to nearby schools, parks, hospitals, restaurants and grocery stores. But as Portland grows and develops, the transportation infrastructure in Libbytown remains a significant challenge. The lack of safe bicycle facilities through the area forces bicyclists to choose between riding along the narrow edge of pavement or sharing limited sidewalk space with pedestrians. Many sections of sidewalk have exceeded their service life and are cracked, heaved, separated or otherwise misaligned, creating impediments for pedestrians, bicyclists, skateboarders and others. Crosswalks are dangerous due to the lack of consistent and modern ADA features; crossings lack pedestrian ramps or have ramps that are too steep, contain broken or uneven sidewalks and catch and trap water. Most do not comply with current design standards.



Park Avenue (one way) looking east towards Marston Street

Furthermore, the design of decades ago failed to consider the importance of adjacent land uses and neighborhood connectivity. The one-way design of Park Avenue and Congress Street creates issues around wayfinding, accessibility, recirculation and contributes to high vehicle speeds that pose safety hazards and serve as a further deterrent to pedestrian and bicycle travel. Over time, Park Avenue's and Congress Street's outdated design has led to a high volume of crashes and injuries. The Project, with its significant investment in modern, multi-modal infrastructure, will make the neighborhood collectively safer and restore Libbytown as a vital connection to a vibrant and growing downtown.

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Community Input and Outcomes

Residents and neighborhood organizations have been advocating for improvements since 2008. Since then, MaineDOT and Portland have engaged a variety of neighborhood stakeholders in Libbytown in various ways. The latest public meeting was held in February 2023; the city and MaineDOT introduced an extensive presentation outlining final concept plans for the Project (*Committee Meeting Presentation February 2023*). A Project website is also available.² At previous meetings, like one held in October 2021, residents offered ideas consistent with those voiced since 2008. Attendees repeated decades-old concerns and were in agreement about areas

² <https://portland.civilspace.io/en/projects/libbytown-safety-accessibility-project>

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of focus—those consistent with the burdens the Project aims to address:

- Designs that do not reflect pedestrian accessibility—sidewalks, crosswalks, streetscapes, lighting, ADA-compliance
- Unsafe travel options for active transportation users
- Safety hazards created by I-295 entrance/exit ramps
- One-way street limitations for vehicles and emergency responders
- Unused space adjacent to thoroughfares

Following listening sessions, designers began to consider roundabouts as a potential traffic solution for vehicles and active transportation in the Project area, given their known safety benefits, growing popularity and recent success within the City of Portland. Designers also considered the need to “right-size” streets to handle additional traffic without constructing more travel lanes. They sought to address these needs while also considering Maine’s challenging winter climate.



Congress Street (one way) looking west at the CSX/Amtrak railroad crossing

Preliminary design of the Project at the 50 percent design level is complete and was used to estimate Project costs. There are no previously completed Project components. Portland plans additional multi-use pathways under funding streams unrelated to this application that will further connect Libbytown to nearby neighborhoods. Those will complement the Project and benefit areas outside of Libbytown, helping to create a connected and cohesive Portland.

LOCATION AND MAP

- City of Portland; Libbytown neighborhood; Cumberland County, Maine
- Project GPS coordinates: 43.655173, -70.284210
- *Census-Designated Urban Area*: Portland Urban Area – population: 205,356 (2020); population density: 1657.7 (2020); UACE: 71263³
- Maine’s 1st Congressional District, represented by Chellie Pingree (D-ME); Maine is represented by U.S. Senators Susan Collins and Angus King

Located in southern Maine, Portland is the state’s most populous city. Cumberland County has a population of 303,069 under the 2020 Census, an increase of 22,000 from the 2010 count.⁴

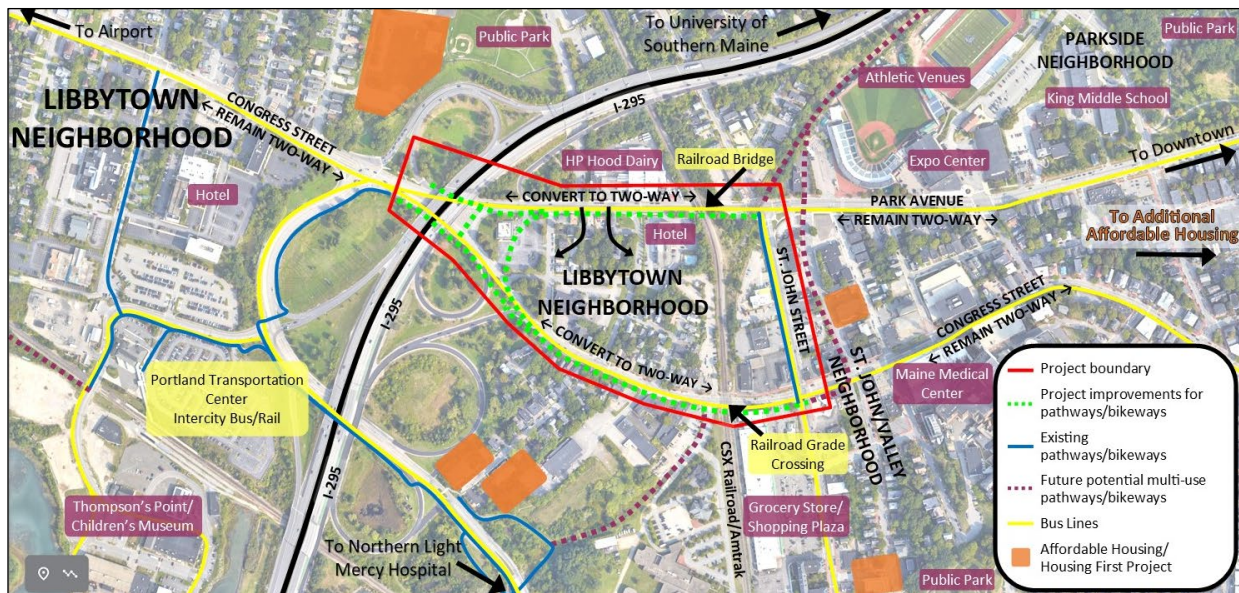
³ https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/

⁴ <https://www.census.gov/quickfacts/fact/table/cumberlandcountymaine.portlandcitymaine/RHI125222>

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Portland is the region’s commercial, employment and residential center—home to jobs, healthcare, dining, shopping and housing, including affordable housing. It is the central part of the Portland-Lewiston-South Portland combined statistical area, which has a total population of 662,879 as of the 2020 Census, or approximately half of the State of Maine’s population of 1.35 million in 2020 Census.

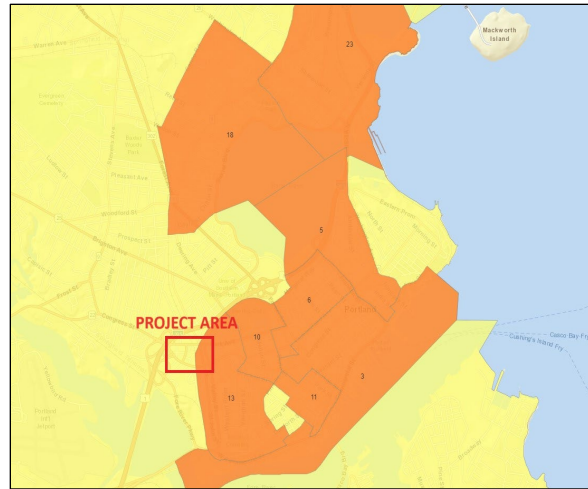
Seven miles south of the Project area, Interstate 295, built in the 1960s, splits off of I-95 and traverses greater Portland, including the western edge of the Project area. I-295 cut Libbytown into two sections, creating a large and distinctive community barrier and a series of on- and off-ramps that are confusing for drivers and create conflict points for pedestrians and bicyclists on the local street network.



RESPONSE TO MERIT CRITERIA

Equity and Environmental Justice

The Project location spans three census tracts which experience several burdens due to housing, transportation, language and flooding challenges.⁵ One of the three census tracts (Census Tract 13) is designated as an Area of Persistent Poverty (APP), qualifying the Project as one in an Economically Disadvantaged Community.⁶ While a majority of Project costs will not be spent in an APP, the eastern portion of the Project, *is* located in an APP, and the remainder of the project lies on the border of this Disadvantaged Community census tract. Further, seven census tracts that adjoin Census Tract 13 are also APPs.⁷ Many residents living in these census tracts utilize Libbytown to access I-295, Thompson’s Point entertainment and museums, the Portland Transportation Center, Maine Medical Center, Northern Light Mercy Hospital, athletic venues and the exposition hall. The Project will improve connectivity for these areas as the Project itself *is* the major thoroughfare for those seven census tracts northeast of the Project zone.



Eight census tracts adjoining the Project location are identified as Areas of Persistent Poverty.

None of the three census tracts in the Project location are identified as Disadvantaged Communities based on the CEJST or ETC Explorer. However, Census Tract 23005002002, that contains the majority of the Project area, is bordered on the southwest side by a Disadvantaged tract.⁸ While none of the three tracts are categorized as Disadvantaged, each of the tracts is burdened by several Individual Indicator Rankings including high percentile rankings for Underserved Communities.⁹ Additionally, when compared to the State of Maine, the Project includes block groups in the 80th percentile or above for Limited English Proficiency,¹⁰ Unemployment Rate,¹¹ and People of Color,¹² according to EJScreen.

Housing

Greater Portland’s housing and rental market has created a significant burden on low-income residents who are frequently priced out of homes and leases. The Project area faces a Housing Cost Burden which is exacerbated by the community’s income inequality challenges. The entire

⁵ Census Tracts 23005002002, 23005001300, 23005001500

⁶ RAISE Persistent Poverty Tool: <https://maps.dot.gov/BTS/GrantProjectLocationVerification/>

⁷ See map for Census Tracts 23005001000, 23005001100, 23005000300, 23005000600, 23005000500, 23005001800, and 23005002300

⁸ Census Tract 23005000300

⁹ CEJST, ETC Explorer, EJScreen

¹⁰ Blockgroup 230050013002 at 97th percentile, Census Tract 2002 at 88th percentile

¹¹ Blockgroup 230050013002 at 92nd percentile

¹² Blockgroup 230050020021 at 88th percentile

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Project area experiences high rates of Endemic Inequality, House Tenure and Housing Cost Burden.

The current traffic flow and active transportation dangers limit safe accessibility for seven deed-restricted affordable housing properties and two Housing First projects in proximity of the Project area. The residents of these 299 units will gain safer and more efficient routes to vital points of interest including medical facilities, grocery stores, parks and schools as a product of the Project.

Burdens from Individual Indicator Rankings by Census Tract¹³

	Tract 23005002002	Tract 23005001300	Tract 23005001500
Indicator	National Percentile		
200% Poverty Line	< Disadvantaged Threshold	< Disadvantaged Threshold	70%
House Tenure	66%	85%	85%
Housing Cost Burden	80%	< Disadvantaged Threshold	85%
Endemic Inequality	72%	86%	68%
Disability	67%	< Disadvantaged Threshold	< Disadvantaged Threshold
Limited English Proficiency	67%	< Disadvantaged Threshold	< Disadvantaged Threshold
Transportation Safety	94%	< Disadvantaged Threshold	< Disadvantaged Threshold
Impervious Surfaces (from Land Cover)	< Disadvantaged Threshold	89%	79%
Asthma Prevalence	79%	< Disadvantaged Threshold	81%
Cancer Prevalence	65%	< Disadvantaged Threshold	67%
Low Mental Health Prevalence	66%	< Disadvantaged Threshold	67%
Pre-1980s Housing	66%	91%	89%
High-Volume Road Proximity	70%	86%	86%
Railways Proximity	72%	93%	78%
Airports Proximity	72%	72%	72%
Ports Proximity	97%	99%	99%
Impaired Surface Water	69%	69%	< Disadvantaged Threshold
Indicator	Percentage of Population		
Housing Burden (Households spending 30%+ income on housing)	41%	< Disadvantaged Threshold	43%
Households with No Personal Vehicle	< Disadvantaged Threshold	20%	< Disadvantaged Threshold

Transportation

High-volume roads are prevalent in the Project area and create significant safety and environmental burdens, especially for the residents of surrounding affordable housing and Housing First projects. The Project falls in an area with low personal vehicle ownership rates,

¹³ Source: USDOT Equitable Transportation Community (ETC) Explorer, Climate and Economic Justice Screening Tool (CEJST)

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increasing the likelihood of nearby residents using active and public transportation.¹⁴ Further, because local property costs and income disparities are continually rising at untenable rates, it is expected that challenges related to transportation cost and access will increase significantly and create additional burdens in the Project location. The Project will address safety concerns, public transit challenges and active transportation limitations. The inclusion of modern transit stops and separated bicycle and pedestrian paths will mitigate the effects of high transportation costs and safety concerns as well as low vehicle ownership rates.

Underserved Communities

The Project area's population consists of several Underserved Communities including high populations of Limited English Proficiency residents as well as residents living with a disability or in poverty. The Endemic Inequality rate is a notable characteristic of the community in the Project Area with all three census tracts falling into that Indicator's Disadvantaged threshold.

Flooding

Most of the Project is located in two census tracts Federally identified as having high levels of Impervious Surfaces that contribute to flooding. Project design includes drainage infrastructure capable of handling a greater volume of stormwater runoff consistent with the need to mitigate climate change-related weather concerns. The Project will alleviate additional weather concerns by creating alternative travel routes for historically impacted flood areas. Two-way streets will provide alternative paths for emergency vehicles enroute to Maine Medical Center—the primary Level I Trauma Center north of Boston.



La Quinta Inn & Suites at Park Avenue & Marston Street. Photo courtesy *Maine Public*

Equity Assessment & Mitigation

More than 40 percent of the Project outcomes will benefit Disadvantaged, Underserved and Overburdened communities due to the increased access and safety the Project provides local residents. The active transportation additions and improvements, increased local accessibility and safety via the roundabout at Park Avenue and Congress Street, and protections for emergency vehicle and public transit vehicles account for more than 40 percent of the Project outcomes that directly benefit the target communities. Additionally, the Project is improving roadways that *are* the connection for Libbytown and the surrounding Disadvantaged Communities to the national interstate network, Greater Portland and the Northeast.

There will be no displacement of residential or commercial locations during construction of, or following completion of, the Project. There will be periodic travel lane and sidewalk closures, but those will be minimal, and planners will avoid the need to completely close a street to the extent possible. There will be no disruptions to bus service or access to I-295, and noise

¹⁴ Census Tract 13

disruptions will be kept to a minimum during Project activities. The Project will not impede snow removal in winter months.

The Project is the result of a long-term partnership between the City of Portland and the public. Public engagement records are detailed on the Project’s official website.¹⁵ The Portland community supports the integration of safe active transportation and less reliance on automobiles for residents and visitors, and these goals are reflected in adopted city policy such as the City’s comprehensive plan.¹⁶ Over the past decade, the Libbytown Neighborhood Association,¹⁷ MaineDOT, the city and neighborhood stakeholders have engaged frequently to ensure that the goals of this Project reflect the needs of all stakeholders and that the proposed street design satisfies those goals.

Access

The Project will significantly improve *access to and the time it takes to access* everyday destinations like employment centers, schools, grocery stores, medical facilities, pharmacies, restaurants, museums, entertainment and recreation. The Project creates better and more convenient affordable transportation connections to essential needs and economic opportunities. It will enhance and encourage transportation options that do not require an automobile. Portland has an extensive transit system, *Greater Portland Metro*, which operates four key routes through the Project area and four bus stops there. The routes are critical transit connections from neighborhoods north and west of downtown Portland—and the Portland Transportation Center—to the city’s downtown core. They also serve as the entry point for Libbytown residents to board *Metro*. The region’s Metropolitan Planning Organization, the Portland Area Comprehensive Transportation System (PACTS), is currently examining the potential for rapid transit to downtown Portland. This work has included an assessment of existing transit conditions, completed in November 2022.¹⁸ The comprehensive 118-page report examined the city’s rapid transit needs, including those the Project will enhance. The report focused on ways transit can guide Portland in moving towards *Destination 2040*, the region’s long-range transportation plan. It details how *Metro* can expand transit safety and efficiency through the Project’s infrastructure improvements.



Portion of *Greater Portland Metro* system map showing routes through Project area.

¹⁵ <https://portland.civilspace.io/en/projects/libbytown-safety-accessibility-project>

¹⁶ <https://view.publitas.com/city-of-portland/portlands-plan-2030/page/1>

¹⁷ <https://www.portlandmaine.gov/851/Libbytown-Neighborhood-Association>

¹⁸ https://www.gpcog.org/DocumentCenter/View/2682/GPCOG_GWP_RTS_Existing-Conditions-Report_20230120-1

Safety

Improving safety is a primary Project strategic goal. In 2022, Maine suffered its highest traffic fatality rate in 15 years.¹⁹ Cumberland County ranks above average for the concentration of roadway fatalities denoted on USDOT’s *Concentration of Roadway Fatalities Map* under the National Roadway Safety Strategy.²⁰ MaineDOT has increased messaging to bring public awareness to this trend and combat unsafe driving and is simultaneously redesigning and modernizing roads throughout the state to meet state and Federal safety guidelines. As noted in their support letter, the Greater Portland Council of Governments has highlighted Congress Street and Park Avenue in Libbytown as critical safety corridors and the Libbytown Project as aligning with the region’s Vision Zero Action Plan.

The numerous required and community-desired safety improvements will help reduce crashes and injuries in a neighborhood confronting a surrounding area that has grown rapidly.

Location	Annual Safety Benefit Value
I-295 Ramp to St. John Street on Park Street	\$64,143
Fore River Parkway to St. John Street on Congress Street	\$78,777
Park Avenue/St. John Street Intersection	\$27,159
Congress Street/St. John Street Intersection	\$24,573
TOTAL	\$194,652

The intersection of Congress Street and the I-295 northbound Exit 5 on- and off-ramps in Portland is a high-crash location. The intersection saw 41 crashes from 2015 to 2018 and had an estimated Annual Average Daily Traffic (AADT) of 15,000 to 24,000 vehicles. The injury rate was 9 to 30 percent. Safety issues are due to conflicts with the Congress Street/Park Avenue one-way pair as well as failures to yield to oncoming traffic, abrupt lane changes and congestion at driveways and highway ramps. The Project addresses these concerns by including ramp consolidation, conversion of some streets to two-way, reconfiguring traffic controls, making physical upgrades and restriping crosswalks and bike lanes for greater visibility.

Vehicle Safety

There were 183 vehicle crashes in the Project area between January 2020 and December 2022. The Project’s busiest thoroughfares, Park Avenue and Congress Street had a combined AADT of 19,450 in 2021. A roundabout will be located at the intersection of these two streets immediately east of I-295. The Insurance Institute for Highway Safety estimates roundabouts reduce crashes by up to 62 percent and injury crashes by up to 87 percent.

Pedestrian and Bicycle Safety

There were two bicycle-related and four pedestrian-related vehicle crashes in the Project area between January 2020 and December 2022. The Project contains a number of safety-driven improvements that together will create substantial safety benefits:

- Sidewalks will be available on both sides of Park Avenue and Congress Street eliminating the safety risk of crossing the street to access a sidewalk
- Crosswalks and sidewalks will be built/rebuilt to comply with Federal and MaineDOT ADA guidelines

¹⁹ <https://www.mainepublic.org/maine/2022-12-28/maine-highway-fatalities-reach-15-year-high>

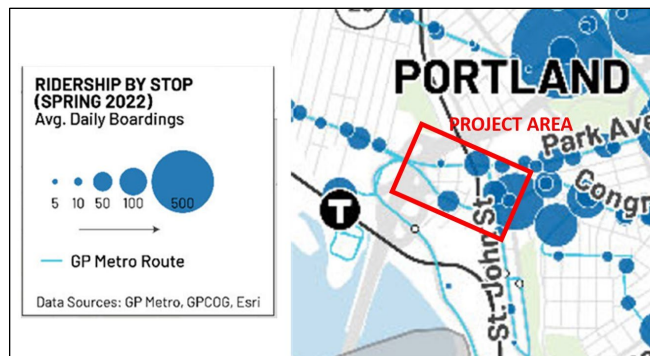
²⁰ <https://storymaps.arcgis.com/stories/9e0e6b7397734c1387172bbc0001f29b>

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- Crosswalks will be highly visible to motorists
- One- and two-way raised cycle tracks will eliminate the danger of cyclists sharing the road with vehicles or sharing the sidewalk with pedestrians
- Cycle tracks will be raised and/or separated by street trees and a grassy esplanade
- Lighting will be added in locations currently without it, consisting of energy-efficient LED bulbs
- Crosswalk, median and bike lane designs will all comply with USDOT’s *National Roadway Safety Strategy* plan.²¹
- Intersection designs will provide clearly designated facilities for both pedestrians and bicyclists and utilize state-of-the-art technologies to improve their passage through these locations, including passive detection, lead pedestrian and bicycle intervals and bicycle signal heads

The numerous safety improvements support the USDOT’s Strategic Goal of “making the transportation system safer for all and advancing a future without transportation-related serious injuries and fatalities” as well as meeting the region’s *Vision Zero Initiative* and the state’s efforts to reduce fatalities. Meeting these important safety goals is a primary objective of the Project.

One-hundred yards east of the Project is the Maine Medical Center, Portland’s largest employer, which relies on *Metro* to transport more than 800 employees daily at stops surrounding the facility.²² The Portland Transportation Center, less than one mile from the Project, hosts local transit services and intercity bus and passenger rail service operating throughout New England. The intercity bus service’s long-distance ridership in Maine rose by more than 50 percent the past decade. Amtrak’s Downeaster service, a state-supported intercity operation between Boston and Brunswick, stops at the transit center. Annual ridership exceeded 515,000 passengers in fiscal year 2023.



Greater Portland Metro ridership by stop within or near the Project area.

The current one-way flow of Park Avenue and Congress Street makes access very difficult for transit riders because eastbound riders can only connect to the system at Congress Street while westbound riders can only board along Park Avenue. Two-way streets will create a much more efficient and user-friendly transit experience with paired bus stops, more direct/efficient routing and improved legibility overall. The Project will restore public transit as a viable option for all.

Access will also improve for emergency services. Two-way traffic flow along both Park Avenue and Congress Street will give emergency vehicles the option to use Park Avenue when a train is

²¹ <https://www.transportation.gov/NRSS/SaferRoads>

²² https://www.gpcog.org/DocumentCenter/View/2683/GWP_RTS_Existing-Conditions-Report_20230120_RF-1 Figure 3-9, page 3-16 of Existing Conditions Report

blocking the Congress Street crossing or to use Congress Street when portions of Park Avenue are flooded.

Improving multi-use pathways in the Project area, combined with the city's plans to close a downtown circumferential pathway loop and add more pathway mileage, will culminate in an expansive network of easily accessible multi-use pathways.

Existing pathways reach west to the entertainment district called

Thompson's Point—home to museums, an ice rink, food trucks and a concert venue. The Portland Transportation Center is also connected by pathway. Plans call for adding more trails via the Union Branch Pathway and Union Branch Connector, which will connect the Project area to Hadlock Field, Deering Oaks Park and the Bayside Trail, as well as plans to complete the 50-mile Mountain Division Trail between Portland and New Hampshire. The Project will help advance these plans by providing a critical grade-separated multi-use link along Congress Street.



Congress Street looking east near Frederic Street showing aging brick sidewalk and bike lane dangerously close to active travel lane

Portland carefully considers how transportation links to area housing. Housing costs have risen dramatically in Portland. To help alleviate the high-cost burden, the City of Portland is working actively on revisions to its zoning ordinances to support additional housing where infrastructure can support it and to connect housing to affordable transportation options. The city's *ReCode* initiative²³, a comprehensive rewrite of the land use code, foregrounds transit-oriented development and nodal, high-density mixed-use zoning, reflecting the importance of access to travel choices that can help reduce residents' transportation expense.

Facility Suitability

The Project is a collection of facility improvements that cohesively provide better connections for drivers, transit riders and active transportation users. Transforming Congress Street and Park Avenue into two-way thoroughfares will significantly reduce a public transportation burden. It will allow transit riders to travel through Libbytown bidirectionally instead of in only one direction. Sidewalks on both sides of the street and bidirectional bike lanes will provide the same efficiency for individuals who choose active transportation.

Active transportation improvements will make it safer and more convenient for schoolchildren who walk to school (transportation is provided for those living more than two miles from campus). King Middle School is located immediately northeast of the Project zone. Planners estimate more than 50 schoolchildren will walk through the zone and immediate surrounding area to get to the school after Project completion. They tally that 24 students currently walk through the area to get to the school.

²³ <https://www.recodeportland.me/>

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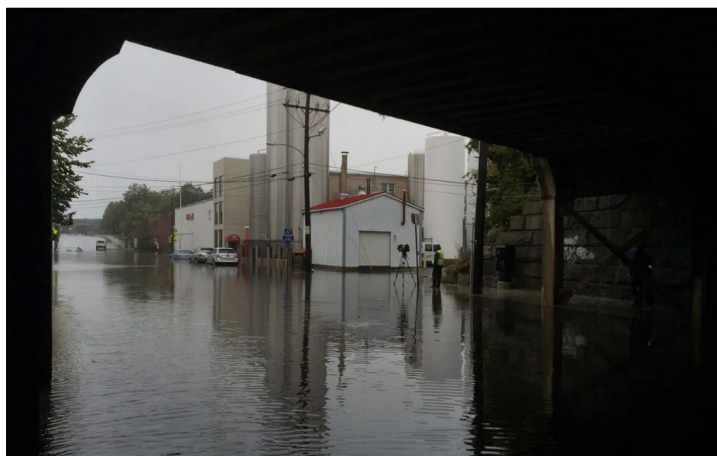
Bus stops serve as the public’s introduction to a transit system. The condition and amenities of transit stops often portray the level of service and efficiency a system provides. The Project calls for bus stop improvements that include shelters, benches, bike racks and electronic signage. In Maine’s harsh winter climate, the bus shelters will protect riders from snow and wind.

The Project will reduce vehicle emissions in two significant ways—by *reducing vehicle idle time* and *reducing the number of vehicles* and associated traffic that burdens the community today. The large, unused concrete void immediately adjacent to I-295—where the roundabout will be constructed—collects heat and presents an inefficient and confusing connection between Congress Street, Park Avenue and the I-295 interchange. Land adjacent to the concrete void is the site of a former Denny’s restaurant which has been vacant for several years. MaineDOT is expected to close on the land by November 2023. The Project will use those areas to install a roundabout which will include green space, decreasing impervious area. It will improve traffic flow and routing options for vehicles and active transportation users while also reducing the current expanse of concrete.

Park Avenue near the railroad overpass is prone to flooding. Heavy rains combined with high tidal shifts in the Atlantic Ocean prevent stormwater runoff from properly draining. Flooding has been so severe that vehicles in the parking lot of the La Quinta Inn and Suites in the Project area fill with water, and water seeps into the building. The Project will remedy this problem by creating more efficient stormwater infrastructure.

Consistent with Portland’s desire to advance environmental stewardship, plans include a tree canopy along Congress Street and Park Avenue suitable to shade sidewalks, bike lanes, bus stops and streetside parking. Installing trees and vegetation in the urban environment brings benefits well beyond mitigating urban heat islands. Tree canopies provide shade, improve air quality, lower greenhouse gas emissions, enhance stormwater management and contribute to more aesthetically-pleasing spaces. Their presence has also been shown to reduce vehicle speeds, a top priority for an area where speeding has been common.

Downtown Portland has abundant hotels and restaurants that receive supplies via local freight delivery. Two-way streets through Libbytown will improve the efficiency of goods moving to downtown and surrounding city neighborhoods. The location of the city center means frequent deliveries between I-295 and downtown that flow through Project area facilities.



Flooding along Park Avenue looking west from under the railroad overpass

Community Engagement and Community-based Stewardship, Management, and Partnerships

The Project is the result of years of collaborative planning between the City of Portland, MaineDOT and affected neighborhoods. MaineDOT and the City of Portland recognize the value of partnering with neighborhoods to create transportation connections that were not considered decades ago. Beginning in 2012, the City of Portland began looking at traffic circulation patterns and traffic-pedestrian-bicyclist safety in the Libbytown and St. John/Valley neighborhoods in the vicinity of Congress Street and Park Avenue. Among other changes, the study looked at potential safety and accessibility benefits of converting Congress Street and Park Avenue to two-way operation. The study ultimately recommended two-way conversion of both of these streets, along with a slate of bicycle and pedestrian improvements in the area. Since that time, extensive outreach has occurred to gather community input for the Project.

The *Libbytown Traffic Circulation & Streetscape Study*, completed in 2018, included recommendations such as converting the one-way sections of Park Avenue and Congress Street to two-way streets with modern accommodations for bicycles and pedestrians as well as streetscape improvements to assist with safety and functionality.

In 2021, the City of Portland was awarded funding from PACTS for the *Libbytown Safety & Accessibility Project*, which, following multiple phases, progressed through 50 percent engineering and design, giving rise to this application.

In February 2023, the City of Portland and MaineDOT shared concept plans for the Project with the public. The ideas were well received with special appreciation given to the plan to restore two-way traffic on Park Avenue and Congress Street as well as the emphasis on bicycle and pedestrian safety and connectivity. During surveys, residents overwhelmingly approved concept and design, with 95 percent of attendees responding favorably to key questions:

- *How well do you think the overall concept plan meets the Design Goals for the project?*
- *How well do you think the Congress Street concept meets the Design Goals for the project?*
- *How well do you think the Park Avenue concept meets the Design goals for the project?*

PACTS drafted an extensive long-range transportation plan in 2022 called *Destination 2040*.²⁴ Development of the plan involved nearly 1,000 residents throughout Cumberland County and included extensive and widespread community engagement including 11 meetings and/or surveys in a recent two-year period.

These community meetings and planning studies served as the foundation for the Project. It is the culmination of comprehensive community engagement and planning that considers all forms of transportation by all residents.

Consistent with RCN objectives, the MaineDOT will work with USDOT to identify and measure metrics that assess Project benefits prior to commencement of a grant agreement. MaineDOT is

²⁴ <https://www.gpcog.org/DocumentCenter/> – Transportation Plans/Destination 2040

very experienced, with systems in place, to gather baseline data and establish ongoing measurements that ensure Project intentions are realized. Given MaineDOT’s experience administering numerous Federal grant applications with a variety of partners, the Department will collaborate with Portland to measure Project success under numerous categories, including injuries (vehicle and pedestrian), traffic volume at specific intersections, public transit and active transportation use.

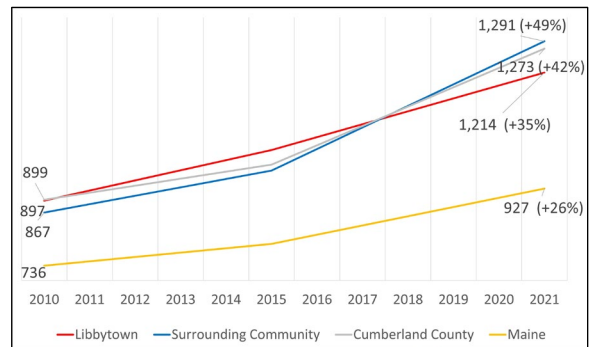
In addition to the MaineDOT/Portland partnership that is the foundation of this application, numerous other parties have been involved in Project planning and design. The application includes numerous letters of support from a wide range of city services, lawmakers, civic organizations, and more, that see the transformational value the Project will bring to the city.

The Project is located in the *Statewide Transportation Improvement Program (STIP)*.²⁵

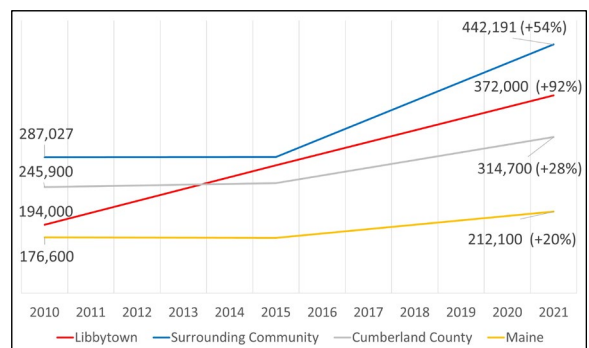
Equitable Development

Like many parts of the U.S., Maine is suffering from a housing shortage. The Pine Tree State attracts residents who desire living in a mild summer climate without the same heat and humidity southern states face in the wake of a drastically changing climate. The state’s scenic coastal shoreline and interior lakes and forests draw tourists; many decide to become permanent residents. In 2023, the state’s in-migration rate was higher than any other New England state and was seventh-highest in the U.S.²⁶ As the population increases (eight percent over the past decade) and rents rise, Portland is no longer affordable for many. Rent for a two-bedroom apartment in the city has risen by 84 percent since 2010. This is locking many out of housing in Portland’s neighborhoods and the surrounding communities. Housing costs now consume a dangerously large portion of a family’s monthly expenses.²⁷

The Project will benefit neighborhood families because it is designed for connectivity to future affordable housing and efficient public and active transportation. That connectivity will help relieve residents of the need and expense burden of vehicle ownership.



Libbytown and surrounding area median rent 2010-2021. Courtesy PolicyMap



Libbytown and surrounding area median home value 2010-2021. Courtesy PolicyMap

²⁵ <https://www11.maine.gov/mdot/stip/docs/2023-2026%20STIP.pdf>, page 151

²⁶ <https://www.islandinstitute.org/working-waterfront/another-good-year-for-maine-tourism/#:~:text=That%20typical%20visitor%20is%20a,in%20earnings%20to%20Maine%20households>

²⁷ <https://www.pressherald.com/2023/02/12/scenes-from-the-affordable-housing-crisis/>

Reconnecting Our Villages: Historic Libbytown Project

Libbytown historically has been one of Portland's more affordable neighborhoods. But, like many Portland neighborhoods, that is changing. The city has implemented a number of housing-related measures to address affordability issues, including the establishment of a Housing Trust Fund to support affordable housing construction. As an indicator of the success of these measures, in 2022, the proportion of deed-restricted affordable housing units approved in the City of Portland was 31 percent, higher than the average for the last 12 years as a whole and significantly higher than any other community in the region.²⁸

Portland's existing land use code includes a number of provisions designed to support the production of housing in a wide range of types and sizes, as well as the creation of legally-binding affordable and workforce housing targeted for residents of low or moderate incomes. Provisions include adjusting zoning in Libbytown and surrounding neighborhoods to allow higher housing densities and removing hurdles for certain housing units. Other provisions include:

- Dimensional bonuses for affordable and workforce housing including those that allow increased height, increased density and reduced setbacks for affordable housing projects
- Expedited permitting
- Inclusionary zoning to ensure that affordable housing is constructed in tandem with market rate housing and hotel development
- Support of housing in a mixed-income setting

Libbytown has 244 units of deed-restricted affordable housing in the Project area, including 48 units under construction and 108 in development. Two of the City's three Housing First projects, designed for individuals experiencing chronic homelessness, are also located proximate to the Project. They include 55 housing units and onsite assistance for individuals experiencing homelessness, which is on the rise in the region. The city provides services at its homeless shelter and at the *Greater Portland CareerCenter*, a career development entity.

Alongside the city's support for housing, Portland promotes public art and invests financially in the *Portland Public Art Program* which funds a Percent-for-Art ordinance.²⁹ Under it, the city allocates one-half of one percent of its annual capital improvement budget for restoration and development of public art. Portland plans to incorporate art into the roundabout and other parts of the Project, as appropriate.

Within a 10-minute walk of the Project area, the City of Portland has recently invested heavily in the nearby Dougherty Field Park, which includes a new natural playground, expanded skatepark and outdoor pool. The Project also improves access to Western Promenade Park, where the city is completing a Community Development Block Grant (CDBG) project to install a basketball court, improved ADA and bike parking, trailhead improvements, dog park improvements and an expanded community garden, benefitting nearby neighborhoods including Libbytown.

²⁸ <https://civicclerk.blob.core.windows.net/stream/PORTLANDME/34c8e6d3-a607-4627-afb8-c3ba56878916.pdf?sv=2022-11-02&st=2023-06-20T16%3A32%3A33Z&se=2024-06-20T16%3A37%3A33Z&sr=b&sp=r&sig=5XQA%2FOedE5rDQ8PcwzwTAS2dkEk%2Bd2kCSFhmNEN%2FnnE%3D>, page 15

²⁹ <https://www.portlandmaine.gov/470/Public-Art-Program>

Climate and Environment

MaineDOT is methodically focusing on statewide environmental improvements of significant importance. Maine's climate action plan, *Maine Won't Wait*, illustrates the Pine Tree State's statutory goal to achieve carbon neutrality by 2045, reduce emissions 45 percent by 2030 and 80 percent by 2050 and transition to 80 percent renewable energy by 2030 with a goal of 100 percent by 2050.³⁰ These overarching state goals are aligned with USDOT's focus on climate and sustainability. The Project will "help combat the climate crisis by ensuring that transportation plays a central role in the solution."

The Project will help avoid adverse environmental impacts to air quality by reducing vehicle idle time and mileage with a roundabout at the confluence of two busy roads as well as by changing one-way streets to two-way thoroughfares. The Project's focus on public transportation and active transportation will make those options more popular, further reducing the use of internal-combustion engines. Engineers estimate building the Project will:

- Generate CO₂ emissions savings of about \$800,000, discounted at three percent
- Increase biking through the Project area by 227 percent
- Increase walking trips by about 24 percent
- Reduce vehicle traffic by 17 percent by 2040
- Reduce cumulative traffic speed by 5 MPH based on creating a roundabout and restoring one-way streets to two-way traffic flow

The Project includes tree-lined sidewalks and bike paths. The use of trees and vegetation in the urban environment brings benefits beyond mitigating urban heat islands, including:³¹

- Reduced energy use: Trees and vegetation that directly shade buildings decrease demand for air conditioning.
- Improved air quality and lower greenhouse gas emissions: By reducing energy demand, trees and vegetation decrease the production of associated air pollution and greenhouse gas emissions. They also remove air pollutants and store and sequester carbon dioxide.
- Enhanced stormwater management and water quality: Vegetation reduces runoff and improves water quality by absorbing and filtering rainwater.
- Reduced pavement maintenance: Tree shade can slow deterioration of street pavement, decreasing the amount of maintenance needed.
- Improved quality of life: Trees and vegetation provide aesthetic value, habitat for many species and can reduce noise.

During project design, careful consideration has been given to climate change resiliency. The Project improves the way drainage infrastructure will handle stormwater runoff by increasing the volume of and speed at which rainwater is removed from the area. Portions of Park Avenue near the railroad overpass flood during heavy rains combined with high ocean tidal shifts. The

³⁰ https://climatecouncil.maine.gov/future/sites/maine.gov.future/files/inline-files/MaineWontWait_December2020.pdf

³¹ <https://www.epa.gov/heat-islands/heat-island-compendium>

Reconnecting Our Villages: Historic Libbytown Project

Project's design, with resiliency in mind, is consistent with state guidelines calling for infrastructure that considers the changing climate.

The Project area does not contain wetlands and will not affect endangered species. Work will take place in locations where similar infrastructure already exists. MaineDOT has received federal funding for numerous projects that contain a high level of environmental work. MaineDOT is very experienced performing environmental due diligence and adhering to all National Environmental Policy Act requirements.

The effects of climate change are destabilizing global transportation infrastructure. Surface transportation faces a persistent threat and cities must continue to develop and implement improvements to infrastructure that can reliably withstand weather extremes. Cities in Maine face challenging seasonal threats including excessive rainfall from Atlantic hurricanes and flooding caused by rapid seasonal snow and ice melt under increasingly warm temperatures. Project engineers have considered these climate challenges by designing the infrastructure to withstand extreme weather events.

Workforce Development and Economic Opportunity

Given the region's rise in cost of living, Portland recognizes the urgency of developing a workforce that supports the regional economy and can be versatile as job needs change. Workforce development is a way, aside from the housing shortage, that the city assists residents.

Maine's statewide CareerCenter and its workforce partners provide a variety of employment and training services for both workers and businesses without a fee. The Center assists with job qualifications and the search for a new career or new employees. Additional career development aid is available for veterans and those with disabilities. The Project will improve access to Portland's CareerCenter branch southwest of the Project location as well as a partner site, Workforce Solutions, one mile east of the Project location.

Libbytown and the immediate surrounding area are home to a number of employers, including Maine Medical Center, the region's Level 1 trauma center:

- Maine Medical Center³²: 3,682 full-time positions; 361 part-time positions; 700-bed facility
- TD Bank: 2,784 full-time; 157 part-time
- UNUM: workplace insurance benefits company; 2,650 full-time; 200 part-time
- Northern Light Mercy Hospital: 775 full-time; 608 part-time; 230 bed facility
- Martin's Point Health Care: 796 full-time; 40 part-time
- Portland Jetport: 1,167 employees
- Barber Foods: 300 employees
- Cozy Harbor: 100 employees

Maine and Portland benefit from the state's \$8.5 billion tourism industry. The Pine Tree State

³² There are other Maine Health employees in the city that do not work for the hospital.

Reconnecting Our Villages: Historic Libbytown Project

sees more than 15 million visitors annually. Their spending supports 151,000 jobs, and restaurant and lodging taxes paid by tourists reduce Maine household tax burdens by \$2,172.

Portland has been supportive and welcoming of asylum seekers. The Portland Expo Center, site of conventions, conferences and sports events, is located just 500 feet east of the Project area. In 2023, the facility temporarily housed approximately 300 asylum seekers, mostly families having fled Angola or the Democratic Republic of Congo. They were among more than 1,600 asylum seekers registered with the city in 2023. The New Mainers Resource Center, located about one mile east of the Project area, supports Maine's economic development through adult education programming for immigrants and refugees in Portland by connecting employers with this diverse and skilled population.

Improving accessibility to affordable transportation options helps individuals—especially those who are disadvantaged or facing undue burdens—connect to their employer more efficiently and cost effectively. This helps families financially—many who are forced to spend a staggering percentage of their income on other basic needs.

MaineDOT offers an on-the-job training program that helps women, minorities and the disadvantaged gain experience on road and bridge construction jobs and requires programs as part of a contractor's equal employment opportunity affirmative action program. It is MaineDOT's intention that a contractor's overall workforce reflects the diverse population of the state. The primary objective of the on-the-job training is to train and upgrade women, minorities, and disadvantaged workers toward journey worker status in the type of trade or job classification involved. Maine ranks near the middle of the U.S. for states with employees who are part of a union workforce. MaineDOT and Portland are supportive of a worker's choice to join a union.

BENEFIT-COST ANALYSIS SUMMARY

The Benefit-Cost Analysis estimates that there will be more than \$100 million in total benefits over the 30-year analysis period (undiscounted), resulting from the \$31.5 million investment. *(These costs and the BCA include \$3.5 million of previously incurred expenses prior to this application which are not included in the Project budget.)* When evaluated on a discounted NPV basis (7% for all costs and benefits except CO₂, which is discounted at 3%), the Project yields a benefit-cost ratio of 1.56:1, with benefits in exceeding costs by \$11.7 million. These benefits arise from various sources, including safety improvements, ongoing maintenance cost savings, property value enhancements, reduced harmful emissions, increased active transportation, and the value associated with bicycling facility improvements. Additionally, there is a modest residual value that remains at the end of the 30-year analysis period.

The full Benefit-Cost Analysis Narrative is located in the *Supporting Documents* section of the application.

PROJECT READINESS SUMMARY

MaineDOT is an accomplished, experienced and responsible recipient of past successful FASTLANE, TIGER, INFRA and BUILD grants and can be relied upon to fully fund and commence the Project well in advance of the obligation date and to complete the Project well in advance of the completion date requirement without risk. During the development of the Reconnecting Communities and Neighborhoods package, numerous risks were contemplated, but each has a comprehensive mitigation strategy. MaineDOT is applying an innovative means with respect to NEPA and permitting for the Project through Programmatic Agreements to ensure timely and consistent reviews and accelerate project delivery. MaineDOT also adheres to Administrative and National Policy Requirements during all phases of all projects. The Project Schedule outlines milestones by date:

Milestone	Finish Date
Project Kickoff	April 2023
Preliminary Design Report	May 2024
NEPA Complete	February 2025
Right of Way Certified	August 2026
Plans, Specifications & Estimates	August 2026
Advertise	September 2026
Construction Begin	November 2026
Construction Complete	July 2029

The full Project Readiness Narrative is located in the *Supporting Documents* section of the application.