

SECTION 1: OVERALL PROJECT SUMMARY AND APPROACH

A. Description of Greenhouse Gas (GHG) Reduction Measures

The City of Stamford seeks Climate Pollution Reduction Grant (CPRG) funding from the U.S. Environmental Protection Agency (EPA) to implement a key recommendation of the [*Southwest CT Climate Action Plan*](#). Carbon dioxide (CO₂) emissions from the transportation sector are identified as a major source of GHG pollution in the region and city. According to a 2021 GHG inventory conducted with ICLEI, vehicles contribute 31% of all CO₂ emissions locally.¹ In the climate action plan, municipalities across Southwest Connecticut identified Complete Streets as critical tools “for enabling safe walking and biking instead of driving.” CPRG funding will support the conversion of Bedford and Summer Streets in Stamford to Complete Streets with new pedestrian/bike accommodations and improved transit service. The proposed project will benefit residents in Census Tract 201 (now Census Tracts 201.01 and 201.02), identified by the White House Council on Environmental Quality’s Climate and Economic Justice Screening Tool (CEJST) as “disadvantaged.” Federal investment will benefit a majority-minority community and significantly reduce its carbon footprint.

Project Measure – Complete Streets are roadways designed to enable safe, convenient, and comfortable access and travel for all users, regardless of their age or ability. These roadways are intended to improve mobility for pedestrians, cyclists, motorists, and public transit riders.

Key features of Complete Streets include:

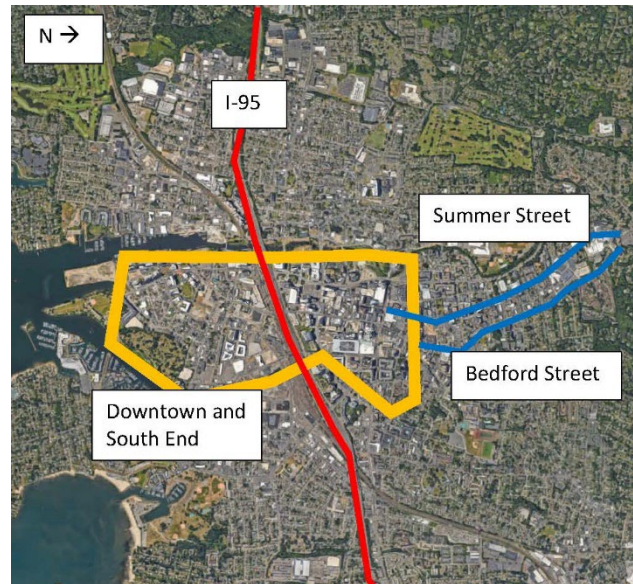
- **Sidewalks:** Well-designed sidewalks provide safe pathways for pedestrians, including seniors and those with disabilities, ensuring comfortable walking spaces separate from vehicular traffic.
- **Bike Lanes:** Dedicated lanes for cyclists promote safe biking and encourage active transportation, reducing reliance on cars and improving overall health and air quality.
- **Crosswalks:** Clearly marked crosswalks enhance pedestrian safety at intersections, signaling to drivers the presence of pedestrians and the need to yield.
- **Transit Facilities:** Complete Streets may include amenities such as bus shelters, benches, and designated areas for waiting, making public transit more accessible and convenient.
- **Traffic Calming Measures:** Strategies like bump outs and narrower lanes help to slow down vehicular traffic, making roadways safer for all users.
- **Landscaping and Greenery:** Incorporating trees, bioswales, plants, and other green infrastructure elements into Complete Streets not only improves aesthetics but also provides shade, reduces heat island effects, and enhances the overall environment.
- **Accessible Design:** Complete Streets meet Americans with Disabilities Act (ADA) requirements with elements such as curb ramps, tactile paving, and crosswalk signals.



Bedford Street and Summer Street in Stamford have poor sidewalks and no/limited bike lanes.

¹ <https://www.stamfordct.gov/home/showpublisheddocument/27561/638175184578100000>

In Stamford, Bedford and Summer Streets once supported two-way, north-south traffic between northern neighborhoods and the Downtown. As part of an ill-fated urban renewal effort, they were both converted to one-way, three-lane roadways acting as a couplet in the mid-1980s to easily convey cars to and from a Downtown shopping mall. Today, the design of Bedford and Summer Streets does not reflect the mobility needs of residents. This transportation infrastructure sees high vehicle speeds and crash rates; both roads are on the City's High Injury Network. Sidewalk conditions are poor along the routes and there are no/limited bike lanes.



Bedford and Summer Streets connect northern neighborhoods with Downtown Stamford.

The area surrounding Bedford and Summer Streets is identified as a transit-oriented development (TOD) corridor in Stamford. Current roadway design does not support

growth in this area, though. With federal funding, Stamford seeks to convert Bedford and Summer Streets into Complete Streets. The project proposes a road diet on Bedford and Summer Streets by narrowing them from three lanes to two lanes and creating parking-protected bike lanes on both roads. New bump outs, crosswalks, pedestrian refuge islands, traffic signals, and street trees will also be introduced to calm traffic. Additionally, bus boarding islands, which create a dedicated, safe space for people waiting for transit, will be constructed.

Project Tasks and Milestones – Stamford can begin work quickly upon award of a CPRG grant and all funds will be spent expeditiously. Key project tasks and milestones include:

- **Design and Engineering:** Federal investment will support the development of construction documents for the Complete Street project. The process will include opportunities for residents and other stakeholders to share input. All planning will be complete by Fall 2025.
- **Environmental and Historic Review:** The project will require National Environmental Policy Act (NEPA) and Section 106 clearance. A Categorical Exclusion is expected as there are no environmental concerns in the area. Historic properties will also not be impacted. NEPA and Section 106 approval is anticipated by early 2026.
- **Permitting:** Construction permits will be secured from the Connecticut Department of Transportation (CT DOT) following final design. Permitting will be complete in the first quarter of 2026.
- **Construction:** Construction of the proposed Complete Street improvements will begin in 2026 and be complete within a year.

Ensuring Project Success – Complete Streets are designed to accommodate all modes of transportation, including pedestrians, cyclists, vehicles, and public transit. By providing safe and convenient infrastructure for alternative modes of transportation, Complete Streets reduce GHG emissions in several ways:

- **Promoting Walking and Bicycling:** Complete Streets along Bedford and Summer Streets

will include sidewalks, parking-protected bike lanes, and pedestrian-friendly crossings, encouraging people to walk or bike for short trips instead of driving. This reduces the number of vehicle miles traveled (VMT), thereby lowering fuel consumption and emissions.

- Encouraging Public Transit Use: The project will incorporate features such as bus boarding islands, enhanced transit service, and transit signal priority. By making public transit more accessible and convenient, people are more likely to use it, further reducing the need for individual car trips and associated carbon pollution.
- Reducing Congestion and Idling: Well-designed Complete Streets can help improve traffic flow with efficient roadway layouts. Additionally, all traffic signals will be replaced and upgraded with Adaptive Traffic Signal technology to better respond to changing traffic volumes. By reducing congestion, vehicles spend less time idling in traffic, which lowers emissions per mile traveled.
- Supporting Mixed-Use Development: Complete Streets in Stamford will support mixed-use development, where residential, commercial, and recreational areas are integrated. This TOD land use pattern encourages shorter trips and reduces the need for long-distance travel, leading to less GHG emissions.
- Green Infrastructure: Complete Streets on Bedford and Summer Streets will incorporate green infrastructure elements such as street trees and bioswales. These stormwater management features not only enhance the aesthetic appeal of roadways but also contribute to carbon sequestration, improve air quality, and mitigate the urban heat island effect.

Stamford is experienced in Complete Street development. In 2015, the City adopted a [*Complete Streets Ordinance*](#) and developed a [*Complete Streets Manual*](#) that sets forth the vision for how local roadways should be designed to support all users. The identified tasks and milestones are achievable as they are based on similar Complete Street projects. By creating a safer and more inviting environment for pedestrians and cyclists, the project will encourage people to adopt active modes of transportation. That shift in behavior will reduce reliance on fossil fuel-powered vehicles, resulting in a more sustainable and environmentally-friendly transportation system.

Assumptions and Risks – The proposed project is low-risk. There are no issues in conducting the proposed construction. Complete Street improvements will be located on public land and within the existing right-of-way. Potential construction mitigation strategies to avoid risk include:

- NEPA Delays: The City has consulted with CT DOT, which administers NEPA reviews on behalf of the U.S. Department of Transportation (DOT) for federal-aid projects. Pending State Historic Preservation Office documentation that historic resources will not be affected and notice from the U.S. Fish and Wildlife Service confirming that no rare/endangered species will be harmed, Stamford expects to work cooperatively with the state transportation agency to expeditiously complete environmental review. Early engagement with CT DOT will ensure that NEPA approval occurs expeditiously.
- Cost Overruns: Contingency costs have been built into the budget. Stamford also pledges to cover any expenses beyond grant funding.

Alignment with Priority Climate Action Plan (PCAP) and CPRG Program – The [*Southwest CT Climate Action Plan*](#) identifies seven “action areas” to reduce CO₂ emissions, including transportation, buildings, electric power, waste management, carbon reduction, sustainable development, and the green economy. Complete Street development is a priority recommendation

of the climate action plan: “Complete Streets projects and policies can enhance the transportation network at the corridor-level to create accessible, useful, and enjoyable accessways for all users.” The proposed project aligns with two specific plan strategies:

- **1b: Active Mobility:** Develop robust, reliable, and accessible mobility options to encourage and enable a shift from single-occupancy vehicles towards zero-emission modes such as walking and biking.
- **1c Public Transit:** Improve public transportation frequency and reliability, expand public transit options, and expand programs to reduce trips by car.

Active Mobility and Public Transit were designated as priorities in the climate action plan due to their regional GHG reduction potential. By promoting active transportation methods, the negative environmental impacts of a vehicle-centric system can be reduced. Likewise, increased transit use will decrease the amount of GHG emissions from single-occupancy vehicles. VMT reductions across Southwest Connecticut have the potential to reduce 74,141 metric tons of carbon equivalents annually (MTCO₂e/year).²

Complete Streets on Bedford and Summer Streets in Stamford also support EPA’s CPRG Program goals. The funding notice identifies projects that “encourage mode shift from private vehicles to walking, biking, and public transportation (e.g., Complete Streets)” as an illustrative potential GHG reduction measure. With federal support, Stamford will enhance pedestrian, bike, and public transit use while still supporting those who travel by car.



Increased transit use will reduce GHG emissions in Stamford.

B. Demonstration of Funding Need

Funding Need – The City faces a combination of fiscal challenges that limit its ability to implement the proposed Complete Street improvements absent federal funding. With a population of 136,188, Stamford is the only community in Connecticut that has seen major growth over the past 20 years.³ Approximately 40% of state’s growth between 2010 and 2020 is attributable to population increases in Stamford alone. As such, the City struggles to keep pace with rising financial obligations. While local budgets increase annually, the majority-minority community’s needs (including transportation infrastructure upgrades) have expanded exponentially as well.

New fiscal obstacles are on the horizon. “This has been a very challenging budget year,” Mayor Caroline Simmons told a joint meeting of the Board of Finance and the Board of Representatives on March 6, 2024. Growing education needs (\$1.5 billion to reconstruct/renovate 18 schools) and new union contracts for firefighters and police officers have increased local expenditures. The City is spending an extra \$1.7 million to serve its rising homeless population. Insurance expenses, driven by national trends, have also risen by 3.8%.

As Stamford recovers from the COVID-19 pandemic, the community is responding to a myriad of

² [*Southwest CT Climate Action Plan*](#)

³ U.S. Census Bureau, 2022 population estimate

economic issues that impact municipal operations. Inflation creates uncertainty in financial forecasting. Supply chain issues and rising prices for fuel, vehicles, equipment, and construction materials are impacting the expenses of many City departments. A statewide workforce crisis is manifesting itself in increasing wages to attract talent. Interest rate fluctuations are also affecting Stamford's budget.

Increased costs coupled with uncertain revenue may force budget reductions in the coming years to avoid economic difficulties. Given this reality, Stamford is requesting CRPG implementation funding to support its proposed GHG reduction activities. Complete Street development on Bedford and Summer Streets is not possible in the near-term without federal resources.

Other Federal and State Funding – The City's transportation infrastructure is aging, and it is actively pursuing state/federal funding to meet its needs. Over the past few years, Stamford has received \$800,000 from CT DOT to improve connectivity and safety in the Belltown neighborhood, \$2.1 million in DOT RAISE funding to plan West Main Street revitalization, and a \$17.7 million DOT Reconnecting Communities and Neighborhoods grant to support trail development in Mill River Park. Every opportunity is pursued to bring critical state and federal resources to the community. However, these dollars are not enough to address growing challenges.

Stamford will chase additional state/federal funding to expand Complete Street implementation. Future applications for DOT RAISE, Reconnecting Communities and Neighborhoods, and Safe Streets for All funding will support transportation infrastructure that expands pedestrian, bike, and transit use, thereby reducing GHG emissions.

C. Transformative Impact

Pioneering, Replicable, and Scalable Project – Stamford's leadership has adopted Complete Streets policies and guidelines, signaling a commitment to creating a sustainable transportation network. This framework provides a roadmap for improving pedestrian/bicycle safety and transit service. The pioneering nature, replicability, and scalability of Complete Streets stem from their collaborative approach, data-driven decision-making, innovative design, cost-effectiveness, and demonstrated success. These attributes make Complete Streets a model for creating a more livable, equitable, and resilient community.

In Stamford, the move toward Complete Streets is the result of extensive collaboration among various stakeholders, including transportation officials, city planners, community organizations, businesses, and residents. This collaborative approach fosters knowledge sharing, capacity building, and cross-sector partnerships. Since approval of its [*Complete Streets Ordinance*](#) and [*Complete Streets Manual*](#), the City has demonstrated that this innovative practice is replicable in all parts of town.

Data analysis is integral to Complete Streets implementation. These projects rely on research and evidence-based practices to inform decision-making and evaluate outcomes. Unlike typical roadway development, Complete Streets take all users into account. Transportation patterns, safety metrics, environmental impacts, and community preferences are fully considered during the design process.

Complete Streets also incorporate innovative design elements that prioritize safety, accessibility, and sustainability. These designs showcase how transportation infrastructure can be transformed to accommodate diverse modes of travel while enhancing the urban environment. Innovative project features of Stamford's proposed project include:

- **Parking-Protected Bike Lanes:** CPRG investment will support the creation of over 2 miles of parking-protected bike infrastructure from High Ridge Road to Downtown. Parking-protected bike lanes offset parking from the side of the road and form a barrier between the bike lane and vehicle travel lane, significantly improving safety and comfort for cyclists. This will be the City's first example of such parking-protected bike infrastructure.
- **Transit Signal Priority:** Transit signal priority is a system that gives priority to buses at traffic signals. The goal of transit signal priority is to improve the efficiency, reliability, and speed of public transportation by reducing delays caused by congestion. The project will encourage more CTtransit bus use and decrease GHG emissions.
- **Green Infrastructure:** The reduction of three lanes to two and the addition of bump outs and pedestrian refuge islands will create locations for the installation of street trees and bioswales. This green infrastructure will enhance air and stormwater quality.

Cities often demonstrate cost savings with Complete Streets, too. These projects demonstrate that the local transportation network can be modernized cost-effectively, especially when integrated into routine roadway maintenance, rehabilitation, and redevelopment efforts. That economic viability justifies Complete Street investment and attracts funding for replication and scaling.

Finally, Stamford has implemented Complete Streets projects and seen tangible benefits, such as reduced traffic fatalities, increased active transportation, improved air quality, lower GHG emissions, and enhanced economic development. These success stories serve as compelling examples for other jurisdictions looking to replicate similar outcomes.



Stamford's Complete Streets policy seeks to retrofit existing infrastructure to be more friendly to all users, including pedestrians and cyclists.

Potential for Significant Additional GHG Emission Reductions – The success of

Complete Street development in Stamford

generates additional demand for Complete Streets. When residents across town witness how easily some neighborhoods can access daily destinations with better sidewalks, protected bike lanes, and user-friendly transit amenities, they want these improvements on their doorsteps too.

As previously discussed, Complete Streets promote active transportation and transit use, reduce VMT and congestion, and curb GHG emissions. Stamford's local transportation network includes 320 miles of roadways. Complete Streets currently represent 22 miles or 7% of that system. The proposed project on 2 miles of Bedford and Summer Streets is expected to reduce 6,181.39 MTCO_{2e} between 2025 and 2030 and 38,268.77 MTCO_{2e} between 2025 and 2050. The potential for significant additional GHG emission reductions with the rollout of more Complete Streets is enormous. CPRG funding will help Stamford to further develop its Complete Street model and grow interest in repeating its success.

SECTION 2: IMPACT OF GHG REDUCTION MEASURES

A. Magnitude of GHG Reductions from 2025 through 2030

The proposed GHG reduction measure (Complete Street development) will cut carbon pollution in five separate and complementary ways, including:

- **TOD:** Conservatively, over 5,000 new units of housing can be built along Bedford and Summer Streets, with safe pedestrian, bike, and transit infrastructure to support them. This population is factored into the calculations of travel mode shift and new transit ridership below.
- **Travel Mode Shift:** Travel mode shift refers to the transition of individuals from one mode of transportation to another. This shift typically involves moving away from reliance on single-occupancy vehicles and towards more sustainable transportation modes, such as walking and biking. The goal of travel mode shift is to enhance mobility, reduce congestion, improve air quality, and mitigate the environmental impacts of vehicles. In Stamford, the proposed project will support more walking and biking along Bedford and Summer Streets. Average annual daily traffic (AADT) along these corridors is estimated at 12,626 vehicles in 2025, with 0.5% growth expected annually along these corridors. After construction in 2026, the City anticipates that 20% of that traffic will walk and bike. The average passenger vehicle emits about 400 grams of CO₂ per mile.⁴ Presuming an average daily trip of 2.5 miles, the project will result in the following travel mode shift benefits until 2030 using EPA's GHG Equivalencies Calculator (see Technical Appendix for details):
 - 2025: Project design, environmental/historic review, and permitting
 - 2026: Complete Street construction
 - 2027: 12,754 2027 AADT x 365 days x 0.20 travel mode shift x 2.5 average passenger miles x 400 grams CO₂/mile = 931,042,000 grams CO₂ or 931.04 MTCO₂e in 2027
 - 2028: 12,818 2028 AADT x 365 days x 0.20 travel mode shift x 2.5 average passenger miles x 400 grams CO₂/mile = 935,714,000 grams CO₂ or 935.71 MTCO₂e in 2028
 - 2029: 12,883 2029 AADT x 365 days x 0.20 travel mode shift x 2.5 average passenger miles x 400 grams CO₂/mile = 940,459,000 grams CO₂ or 940.46 MTCO₂e in 2029
 - 2030: 12,948 2030 AADT x 365 days x 0.20 travel mode shift x 2.5 average passenger miles x 400 grams CO₂/mile = 945,204,000 grams CO₂ or 945.20 MTCO₂e in 2030
 - **Total:** A total of 3,752.42 MTCO₂e will be reduced due to travel mode shift between



Minorities and low-income residents in Stamford depend upon sidewalks and bike lanes for commuting.

⁴ <https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle>

2025 and 2030.

- More Transit Ridership: Improved transit amenities along Bedford and Summer Streets will increase bus ridership and further support GHG emission reductions. Again, AADT along these corridors is estimated at 12,626 vehicles in 2025, with 5% growth expected annually. After construction in 2026, the City anticipates that 10% of traffic along Bedford and Summer Streets will use transit for their daily commute. The average passenger vehicle emits about 400 grams of CO₂ per mile. Presuming an average trip of 2 miles, the project will result in the following transit benefits until 2030 using EPA's GHG Equivalencies Calculator (see Technical Appendix for details):
 - 2025: Project design, environmental/historic review, and permitting
 - 2026: Complete Street construction
 - 2027: 12,754 2027 AADT x 365 days x 0.10 new transit use x 2 average passenger miles x 400 grams CO₂/mile = 372,416,800 grams CO₂ or 372.42 MTCO₂e in 2027
 - 2028: 12,818 2028 AADT x 365 days x 0.10 new transit use x 2 average passenger miles x 400 grams CO₂/mile = 374,285,600 grams CO₂ or 374.18 MTCO₂e in 2028
 - 2029: 12,883 2029 AADT x 365 days x 0.10 new transit use x 2 average passenger miles x 400 grams CO₂/mile = 376,183,600 grams CO₂ or 376.18 MTCO₂e in 2029
 - 2030: 12,948 2030 AADT x 365 days x 0.10 new transit use x 2 average passenger miles x 400 grams CO₂/mile = 378,081,600 grams CO₂ or 378.08 MTCO₂e in 2030
 - Total: A total of 1,500.97 MTCO₂e will be reduced due to more transit ridership between 2025 and 2030.
- Less Congestion and Idling: Idling reduces a vehicle's fuel economy, costs money, and creates pollution. Idling for more than 10 seconds wastes fuel and produces more emissions that contribute to smog and climate change than stopping and restarting an engine does.⁵ Every minute an automobile idles, 35.28 grams of CO₂ are released into the air according to U.S. Department of Energy's (DOE) Argonne National Laboratory.⁶ For the remaining Bedford and Summer Street motorists, reduced congestion due to Complete Street development will help to decrease GHG emissions. The City estimates a daily idling time savings of 0.80 minutes per trip following Complete Street construction between 2025 and 2030. See calculations through 2030 below, again using EPA's GHG Equivalencies Calculator (see Technical Appendix for details):
 - 2025: Project design, environmental/historic review, and permitting
 - 2026: Complete Street construction
 - 2027: (12,754 2027 AADT – 2,550.80 travel mode shift trips – 1,275.40 new transit trips) x 365 days x 0.80 minutes idle time savings x 35.28 grams CO₂/minute = 229,930,132.32 grams CO₂ or



Idling vehicles generate significant GHG emissions in Stamford.

⁵ https://afdc.energy.gov/files/u/publication/idling_personal_vehicles.pdf

⁶ https://afdc.energy.gov/files/u/publication/which_is_greener.pdf

- 229.93 MTCO₂e in 2027
 - 2028: (12,818 2028 AADT – 2,563.60 travel mode shift trips – 1,281.80 new transit trips) x 365 days x 0.80 minutes idle time savings x 35.28 grams CO₂/minute = 231,083,929.44 grams CO₂ or 231.08 MTCO₂e in 2028
 - 2029: (12,883 2029 AADT – 2,576.60 travel mode shift trips – 1,288.30 new transit trips) x 365 days x 0.80 minutes idle time savings x 35.28 grams CO₂/minute = 232,255,754.64 grams CO₂ or 232.26 MTCO₂e in 2029
 - 2030: (12,948 2030 AADT – 2,589.60 travel mode shift trips – 1,294.80 new transit trips) x 365 days x 0.80 minutes idle time savings x 35.28 grams CO₂/minute = 233,427,579.84 grams CO₂ or 233.43 MTCO₂e in 2030

 - *Total:* A total of 926.70 MTCO₂e will be reduced due to less idling between 2025 and 2030.
- **Green Infrastructure:** Street trees sequester CO₂ in their roots, trunks, stems, and leaves as they grow. When planted near buildings, this green infrastructure can also indirectly reduce heating and air conditioning demands, thereby reducing emissions associated with power production. The proposed project will include planting 100 trees along Bedford and Summer Streets. According to the Arbor Day Foundation's [National Tree Benefit Calculator](#), young native trees (boxelders, hedge maples) will reduce atmospheric CO₂ by 3,175.15 grams annually between 2025 and 2030. Using EPA's GHG Equivalencies Calculator, the project will result in (see Technical Appendix for details):
 - 2025: Project design, environmental/historic review, and permitting
 - 2026: Complete Street construction
 - 2027: 100 trees x 3,175.15 CO₂ grams/year = 317,515.00 grams CO₂ or 0.32 MTCO₂e in 2027
 - 2028: 100 trees x 3,175.15 CO₂ grams/year = 317,515.00 grams CO₂ or 0.32 MTCO₂e in 2028
 - 2029: 100 trees x 3,175.15 CO₂ grams/year = 317,515.00 grams CO₂ or 0.32 MTCO₂e in 2029
 - 2030: 100 trees x 3,175.15 CO₂ grams/year = 317,515.00 grams CO₂ or 0.32 MTCO₂e in 2030

 - *Total:* A total of 1.27 MTCO₂e will be reduced due to carbon capture by street trees between 2025 and 2030.

Cumulatively, the Complete Street project will reduce 6,181.39 MTCO₂e from TOD, travel mode shift, more transit ridership, less congestion and idling, and green infrastructure between 2025 and 2030. These reductions will be durable as they represent systemic behavior changes and ongoing carbon capture. CPRG investment will result in a permanent reduction of GHG emissions.

B. Magnitude of GHG Reductions from 2025 through 2050

Pedestrian, bike, and transit improvements are imperative as AADT grows on the Bedford and Summer Street corridors between 2025 and 2050. Long-term, the project will continue to generate GHG emission reductions:

- **TOD:** Smart growth is critical to Stamford's future. Dense development will help the City to better manage and deliver services. Population density and carbon footprint are also closely linked. In densely-populated areas, residents have shorter distances to travel for work, shopping, and other activities. This proximity encourages walking, biking, and the use of public transit, which will lead to lower per capita transportation emissions between

2025 and 2050.

- **Travel Mode Shift:** Travel mode shift will account for a total of 3,752.42 MTCO₂e between 2025 and 2030. AADT will continue to rise between 2030 and 2050, requiring Stamford to maintain existing pedestrian/bike benefits and to grow travel mode shift. The City anticipates that 20% of yearly traffic will walk and bike on an ongoing basis. Extrapolating out to 2050, walking and biking along Bedford and Summer Streets will generate a total of 23,690.25 MTCO₂e (see Technical Appendix for calculations).
- **More Transit Ridership:** Likewise, transit ridership will need to increase as Stamford grows. Between 2025 and 2030, it is anticipated that transit use will help Stamford reduce 1,500.97 MTCO₂e. After 2030, transit use is still expected to represent 10% of traffic along Bedford and Summer Streets. The full 2025 to 2050 timespan will include a total 9,476.10 MTCO₂e of transit benefits (see Technical Appendix for calculations).
- **Less Congestion and Idling:** Over time, congestion and idling benefits are likely to decrease with more AADT. The City estimates an average idling time savings of 0.80 minutes per trip between 2025-2030, 0.75 minutes per trip between 2030-2035, 0.70 minutes per trip between 2035-2040, 0.65 minutes per trip between 2040-2045, and 0.60 minutes per trip between 2045-2050. Using EPA's GHG Equivalencies Calculator, that will result in a total 5,071.52 MTCO₂e of idling time reductions over 25 years (see Technical Appendix for calculations).
- **Green Infrastructure:** The carbon sequestration benefits of trees grow over time. According to the Arbor Day Foundation, mature trees (10-20 years old) capture approximately 48 pounds of CO₂ from the atmosphere.⁷ Using a graduated scale, the City estimates that young street trees (boxelders, hedge maples) will reduce 3,175.15 grams of atmospheric CO₂ annually between 2025-2030, maturing trees will reduce 12,473.78 grams of atmospheric CO₂ annually between 2035-2040, and mature trees will reduce 21,772.40 grams of atmospheric CO₂ annually between 2040-2050. The project will produce a total of 30.87 MTCO₂e carbon capture benefits by street trees between 2025 and 2050 (see Technical Appendix for calculations).

Between 2025 and 2050, the Complete Street project will cumulatively reduce 38,268.77 MTCO₂e from TOD, travel mode shift, more transit ridership, less congestion and idling, and green infrastructure. Again, these permanent reductions are durable due to systemic behavior changes and ongoing carbon capture.

C. Cost Effectiveness of GHG Reductions

The total project cost is \$29,956,000. As described above, the CPRG measure will cumulatively generate 6,181.39 MTCO₂e between 2025 and 2030 and 38,268.77 MTCO₂e between 2025 and 2050. The cost-effectiveness of the anticipated GHG reductions is calculated below:



Mayor Simmons kicked off an effort in 2023 to install green infrastructure in Stamford to reduce stormwater runoff and curb GHG emissions.

⁷ <https://www.arborday.org/trees/treefacts>

$\$29,956,000 \text{ CPRG request} / 2025-2030 \text{ } 6,181.39 \text{ MTCO}_2\text{e} = \$4,846.16 \text{ per MTCO}_2\text{e}$

The first two years of the project are devoted to Complete Street construction activities and no GHG emissions are projected. Over the long term (2025-2050), the cost-effectiveness of the project is significantly higher:

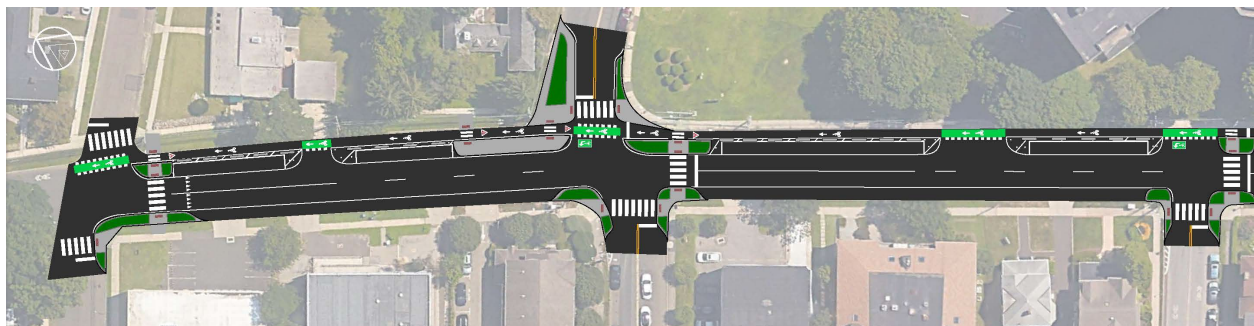
$\$29,956,000 \text{ CPRG request} / 2025-2050 \text{ } 38,268.77 \text{ MTCO}_2\text{e} = \$782.80 \text{ per MTCO}_2\text{e}$

Complete Street development is a proven GHG emission reduction tool. There are no external factors that would affect the project's cost-effectiveness. All costs have been included in the proposed budget. Benefits have also been conservatively estimated. In fact, only direct carbon emissions are calculated. The project will be responsible for multiple indirect benefits, including:

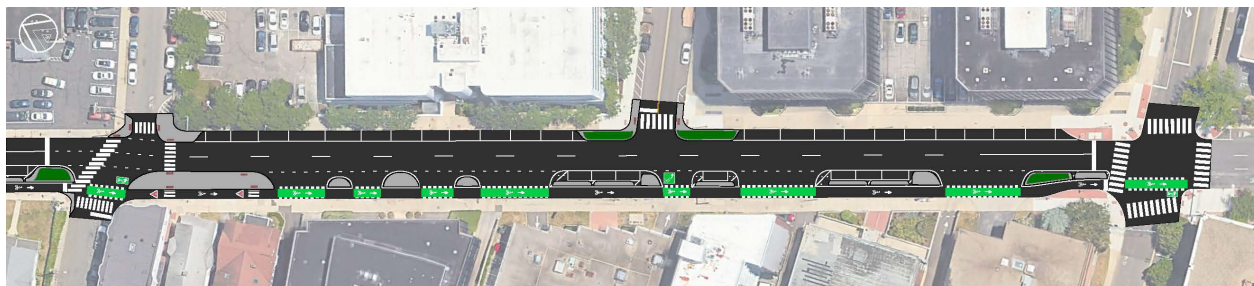
- **Building Energy Use:** Compact, high-density redevelopment along Bedford and Summer Streets will include more multi-unit residential buildings and commercial spaces, which will be more energy-efficient than older, single-family homes. Energy savings in Stamford buildings will contribute to GHG emission reductions.
- **Infrastructure Efficiency:** Denser areas benefit from more efficient infrastructure systems, such as water supply, sewage treatment, and waste management, which reduces per capita energy consumption and emissions compared to lower-density areas where infrastructure must be spread over larger areas.
- **Better Land Use:** Smart growth promotes land use efficiency and reduces urban sprawl, which helps preserve natural habitats and carbon sinks.

D. Documentation of GHG Reduction Assumptions

Carbon benefit calculations are briefly summarized above and more fully documented in the attached Technical Appendix, which describes all the methodologies and assumptions used. Stamford has relied on EPA, DOE, and other organization's GHG calculators and other tools to determine project benefits.



Bedford Street conceptual plan.



Summer Street conceptual plan.

SECTION 3: ENVIRONMENTAL RESULTS

A. Expected Outputs and Outcomes

The Complete Street project will produce the following outputs and outcomes:

<i>Transportation</i>	
Outputs	Outcomes
<ul style="list-style-type: none"> Removal of one travel lane along Bedford and Summer Streets Construction of 5 miles of sidewalks Installation of 2.5 miles of parking-protected bike lanes Introduction of traffic calming measures, including bump outs, crosswalks, and pedestrian refuge islands New traffic signals with transit priority Dedicated bus boarding islands 	<ul style="list-style-type: none"> Improved safety for pedestrians and cyclists Travel mode shift from single-occupancy vehicles to walking and biking (20% of AADT) More transit ridership (10% of AADT) Reduced VMT Less congestion and idling (0.80 minutes 2025-2030, 0.75 minutes 2030-2035, 0.70 minutes 2035-2040, 0.65 minutes 2040-2045, and 0.60 minutes 2045-2050) Reduction of 38,237.87 MTCO₂e (travel mode shift, more transit ridership, less congestion and idling) between 2025-2050 Better air quality with fewer criteria air pollutants (CAPs), including carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), and particulate matter (PM)
<i>Green Infrastructure</i>	
Outputs	Outcomes
<ul style="list-style-type: none"> Planting 100 street trees and 50 bioswales 	<ul style="list-style-type: none"> Improved aesthetics Less stormwater runoff Enhanced urban biodiversity Decreased heat island effect Reduction of 30.87 MTCO₂e (green infrastructure) between 2025 and 2050
<i>Economic Development</i>	
Outputs	Outcomes
<ul style="list-style-type: none"> 5,000 new units of housing along Bedford and Summer Streets More foot traffic for area businesses 	<ul style="list-style-type: none"> Smart growth Increased property values Stimulated economic activity Job creation
<i>Social</i>	
Outputs	Outcomes
<ul style="list-style-type: none"> Enhanced streetscapes 	<ul style="list-style-type: none"> Community cohesion Improved quality of life for residents Better health due to physical activity Equity for all residents regardless of age, ability, or income, with safe and accessible transportation options

B. Performance Measures and Plan

Proposed Performance Measures – Stamford will evaluate how Complete Streets along Bedford and Summer Streets meet sustainability, safety, and accessibility goals. Progress on achieving the identified outputs and outcomes will be measured by:

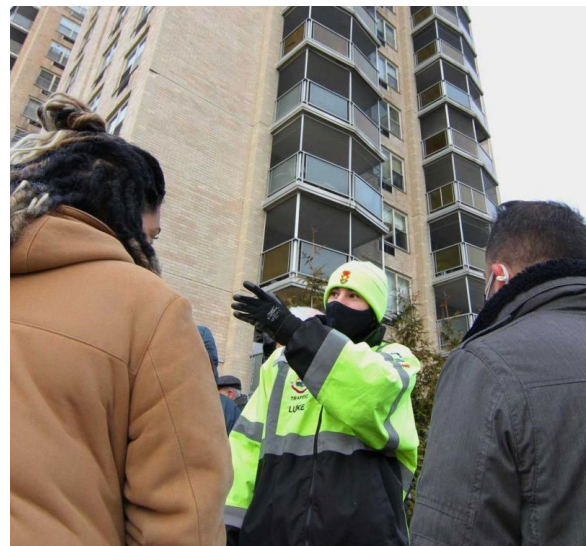
<i>Transportation</i>	
Outputs	Performance Measures
Removal of one travel lane along Bedford and Summer Streets	# of travel lanes removed
Construction of 5 miles of sidewalks	Miles of sidewalks created
Installation of 2.5 miles of parking-protected bike lanes	Miles of parking-protected bike lanes created
Introduction of traffic calming measures	# of traffic calming measures introduced
New traffic signals with transit priority and adaptive signaling	# of traffic signals installed
Dedicated bus boarding islands	# of bus boarding islands developed
Outcomes	Performance Measures
Improved safety for pedestrians and cyclists	# of traffic accidents involving pedestrians, cyclists, and vehicles; rate of fatalities and injuries per mile traveled for pedestrians, cyclists, and motorists
Travel mode shift from single-occupancy vehicles to walking and bike (20% of AADT)	Mode share, including the percentage of trips made by walking and cycling
More transit ridership (10% of AADT)	Bus rider counts
Reduced VMT	Vehicle counts
Less congestion and idling (0.80 minutes 2025-2030, 0.75 minutes 2030-2035, 0.70 minutes 2035-2040, 0.65 minutes 2040-2045, and 0.60 minutes 2045-2050)	Congestion levels and delays
Reduction of 38,237.87 MTCO ₂ e between 2025 and 2050	Air quality monitoring
Better air quality with fewer CAPs, including CO, NO ₂ , O ₃ , and PM	Air quality monitoring
<i>Green Infrastructure</i>	
Outputs	Performance Measures
Planting 100 street trees and 50 bioswales	Tree counts, # of bioswales
Outcomes	Performance Measures
Improved aesthetics	Satisfaction surveys of Complete Street users
Less stormwater runoff	Water quality monitoring
Enhanced urban biodiversity	Species counts
Decreased heat island effect	Ambient air temperature measurements
Reduction of 30.87 MTCO ₂ e (green infrastructure) between 2025 and 2050	Air quality monitoring
<i>Economic Development</i>	
Outputs	Performance Measures
5,000 new units of housing along corridors	Building permits

More foot traffic for area businesses	Pedestrian counts
Outcomes	Performance Measures
Smart growth	Acres redeveloped
Increased property values	Property tax assessments
Stimulated economic activity	Sales tax receipts
Job creation	Employment reports, unemployment rate
<i>Social</i>	
Outputs	Performance Measures
Enhanced streetscapes	Public attitudes
Outcomes	Performance Measures
Increased social interaction	Community engagement and participation in planning process
Improved quality of life for residents	Satisfaction surveys of Complete Street users
Better health due to physical activity	Public health outcomes, such as rates of physical activity and obesity
Equity for all residents regardless of age, ability, or income, with safe and accessible transportation options	Demographic disparities in transportation options and safety outcomes

Plan for Tracking and Measuring Progress – Stamford will track performance measures throughout and beyond the project period, starting with the planning process and extending beyond Complete Street construction. This measurement will help policymakers and planners assess the effectiveness of the initiative and make informed decisions to improve the local transportation system.

The City will develop a performance measurement plan to ensure timely data gathering and analysis. Key steps will include:

- **Define Responsibilities:** Specific project team members will be assigned roles to collect performance data based on their backgrounds and expertise. Frank Petise, P.E., Stamford's Traffic Bureau Chief, will assign these responsibilities.
- **Create Reporting Template:** A tracking system will be created to gather project information. This centralized approach will allow staff to easily input data.
- **Identify Data Sources:** The project team will determine how to collect data for each output and outcome. Trusted sources will be identified for each measure.
- **Establish Baselines:** Current levels of performance indicators will be determined to help measure progress toward goals. Examples include air quality benchmarks, pre-project surveys, and other existing data.



Luke Buttenwieser, the Transportation Planner in Stamford, regularly engages with residents on Complete Street projects.

- Monitor and Review Data: Procedures will be established to analyze the data collected. This will involve comparing actual performance to targets, identifying trends over time, and conducting root cause analyses for any deviations from expected results. The project team will regularly review project effectiveness and adjust as needed to ensure success. Feedback mechanisms will also be developed to gather input on the performance measurement process itself.
- Communicate Results: Stamford will provide EPA with quarterly reports during the grant period. A final report will be developed upon funding closeout. The City will continue to monitor GHG results post-project.

C. Authorities, Implementation Timeline, and Milestones

Responsible Party – Stamford’s Transportation, Traffic & Parking Bureau will be responsible for project implementation. This agency has demonstrated its ability to advance transportation infrastructure projects in compliance with state and federal laws. The City has previously implemented DOT TIGER and RAISE projects on-time and on-budget, in accordance with all grant requirements including, but not limited to, compliance with ADA, Davis Bacon Act, Uniform Relocation Assistance and Real Property Acquisition Act, and other obligations.

Other Entities – Project partners include:

- Western Connecticut Council of Governments (WestCOG): Stamford partnered with WestCOG to develop the [Southwest CT Climate Action Plan](#). Complete Street implementation is identified as a priority in the climate action plan. WestCOG will support the City with data gathering, community outreach, and other project actions.
- CT DOT: The state transportation agency supports Stamford’s efforts to develop Complete Streets on Bedford and Summer Streets. During the project period, CT DOT will work expeditiously to complete NEPA review of the proposed work.
- People Friendly Stamford: The non-profit will provide input on sidewalk and bike infrastructure.

Timeline and Milestones – The proposed project will move forward on the following schedule:

	2024	2025				2026				2027		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Quality Assurance Project Plan and Pre-Project Benchmarking												
Design and Engineering		X		X								
Environmental/Historic Review						X						
Permitting												
Bidding and Procurement												
Construction								X		X		
Monitoring												
Grant Closeout												

X = Community Engagement

SECTION 4: LOW-INCOME AND DISADVANTAGED COMMUNITIES

A. Community Benefits

Low-Income and Disadvantaged Population – In Stamford, the minority population is 57.7%, with a significant representation of Asian (7.9%), Black (21.6%), and Hispanic (29.8%) residents. The community experiences high poverty (10.1%). A language other than English is spoken by 42.1% of the population. The median age in Stamford is 37.6, compared to 38.5 nationwide.⁸

Stamford’s Bedford and Summer Streets are critical local corridors located north of Downtown. This area consists of a mix of commercial, residential, and civic uses. The neighborhoods in the project area are very diverse – 57.8% of residents are minority. According to the U.S. Census Bureau, Census Tract 216.01 experiences 50% more poverty (15.8%) than Stamford (10.1%) and Connecticut (10.1%). Education levels in Census Tracts 201.02 and 213 are lower than state and national averages; 16.0% and 11.1% of residents in the area, respectively, did not graduate high school, compared to 8.7% in Connecticut and 10.9% across the country. Census Tract 201.02 households also strongly depend upon Food Stamp/SNAP benefits (17.7%).⁹ Census Tract 201 (now 201.01 and 201.02) is identified as “disadvantaged” by CEJST. Federal investment will provide direct benefits to minority and low-income residents, as demonstrated in the chart below; Census Tract data that deviates from state and/or national levels is shown in red:

	Census Tracts						Stamford	Connecticut	United States
	201.01	201.02	212	213	216.01	216.02			
Minority	49.9%	66.0%	33.0%	65.1%	51.1%	72.0%	57.7%	36.1%	41.1%
Black	19.0%	35.1%	5.1%	24.7%	28.6%	28.9%	21.6%	13.3%	14.3%
Hispanic	12.7%	20.8%	15.2%	32.5%	13.4%	27.1%	29.8%	17.4%	18.7%
Asian	17.9%	9.3%	10.7%	9.5%	13.9%	19.2%	7.9%	5.7%	7.0%
Foreign Born	36.0%	28.4%	29.4%	31.1%	33.6%	37.7%	32.6%	15.0%	13.7%
Language Besides English	41.3%	32.1%	35.9%	31.6%	38.7%	47.5%	42.1%	22.6%	21.7%
Disability Population	10.6%	14.3%	7.3%	4.6%	6.1%	5.1%	9.4%	11.6%	12.9%
No High School Degree	7.0%	16.0%	6.6%	11.1%	5.1%	5.7%	11.9%	8.7%	10.9%
Poverty	11.8%	9.7%	2.5%	5.8%	15.8%	13.5%	10.1%	10.1%	12.5%
Food Stamps/ SNAP	11.8%	17.7%	2.1%	3.5%	11.0%	9.9%	9.2%	11.4%	11.5%
No Vehicle	8.6%	31.0%	2.3%	9.7%	14.8%	14.1%	9.4%	8.5%	8.3%
Commute – Walking/ Biking	10.9%	11.7%	3.3%	9.7%	14.2%	7.1%	5.5%	2.9%	2.9%

Source: U.S. Census Bureau, 2018-2022 American Community Survey

⁸ U.S. Census Bureau, 2018-2022 American Community Survey

⁹ Ibid.

The Bedford and Summer Street corridors are identified as environmental justice areas of concern. According to the EPA’s EJSCREEN tool, this area ranges between the 80th and 98th percentiles for Connecticut environmental indicators, and up to the 91st percentile nationally, associated with vehicle-generated pollution. See results below:

Environmental Indicator	Percentile in Connecticut	Percentile in United States
PM	89 th	65 th
O ₃	90 th	86 th
Diesel PM	85 th	80 th
Air Toxics Cancer Risk	98 th	91 st
Air Toxics Respiratory Hazard	90 th	83 rd
Traffic Proximity and Volume	80 th	80 th

In addition, a CEJST analysis of disparities in Census Tract 201 (now Census Tracts 201.01 and 201.02) finds the following socioeconomic burdens:

Socioeconomic Indicator	Census Tract 1
Linguistic Isolation	95 th percentile
No High School Degree	12%

Direct and Indirect Project Benefits – Complete Streets will benefit low-income and minority residents in Stamford, particularly households in Census Tract 201 (now 201.01 and 201.02). The project will create the following direct and indirect benefits:

Direct Benefits

- **Less VMT, Idling, and Traffic Congestion:** Increasing transportation options on Bedford and Summer Streets will provide area residents with options to walk, bike, and use transit. That travel mode shift will reduce VMT with fewer cars on the road. Less traffic will result in fewer idling vehicles and better traffic flow. This relief is particularly important in an area where disadvantaged residents live close to traffic (80th percentile in both Connecticut and across the country for traffic proximity and volume according to EPA’s EJSCREEN tool).
- **Safer Streets:** Stamford’s [*Vision Zero Safety Action Plan*](#) lists Bedford and Summer Streets (including 14 intersections along the routes) on its High Injury Network map, identifying transportation infrastructure with the highest number of crashes resulting in serious injuries or fatalities. Between 2018 and 2022, there were 430 crashes, 100 injuries, and 2 fatalities on the corridors. Improved sidewalks, protected bike lanes, and traffic calming measures will make travel safer on the corridors, especially for pedestrians and cyclists. Many residents in the project area cannot afford to own a car.
- **Enhanced Accessibility:** Complete Streets will ensure that people of all ages and abilities can safely and conveniently access various destinations, including schools, workplaces, shops, and public transit stops. This accessibility promotes independence and mobility for seniors and persons with disabilities.
- **GHG Reductions:** The project will reduce carbon pollution in Stamford. Travel mode shift, increased transit use, and green infrastructure will generate combined reductions of 38,268.77 MTCO₂e between 2025 and 2050. Reducing GHG emissions is crucial for mitigating climate change, which disproportionately affects vulnerable populations (e.g., low-income individuals, people of color, children, seniors, and those with pre-existing

health conditions). Vulnerable populations are more susceptible to health problems exacerbated by climate change, such as respiratory issues and heat-related illnesses.

- **Improved Air and Water Quality:** Promoting walking, cycling, and public transit usage reduces dependence on single-occupancy vehicles, resulting in improved air quality. The project will result in fewer emissions of CO, NO₂, O₃, and PM. That will improve health outcomes in a marginalized area with a high incidence of asthma and heart disease. The incorporation of green infrastructure elements like street trees and bioswales will also help to manage stormwater runoff and protect water quality in the Long Island Sound.
- **Mitigated Urban Heat Island Effect:** Street trees will provide shade, reduce surface temperatures through evapotranspiration, and absorb CO₂, helping to cool the surrounding environment and mitigate the urban heat island effect. Cooler temperatures are important to residents with health disparities affected by warmer weather.

Indirect Benefits

- **Improved Resilience:** Completes Streets on Bedford and Summer Streets will improve the climate resilience of Stamford. Project features will help the community to mitigate the impacts of heatwaves, extreme storms, and other weather events.
- **Social Equity:** GHG reductions promote environmental justice by reducing the burden of carbon pollution on disadvantaged communities. The project will help to alleviate mobility challenges, economic hardships, and health disparities faced by vulnerable populations in Stamford.
- **Smart Growth and Economic Activity:** Complete Street investment will support the development of over 5,000 new units of housing along Bedford and Summer Streets. Safe pedestrian, bike, and transit infrastructure will also attract more foot traffic to local businesses, leading to increased sales and revenue.
- **Increased Property Values:** Well-designed Complete Streets can lead to increased property values in adjacent neighborhoods. Enhanced walkability, access to amenities, and improved aesthetics contribute to the desirability of these areas, attracting homebuyers and investors.
- **Healthier Lifestyles and Reduced Health Care Costs:** Active transportation options through Complete Streets can lead to long-term health benefits for residents, including reduced rates of chronic diseases such as obesity, diabetes, and heart disease.



Potential Negative Impacts – Gentrification is a potential risk for Complete Street development. Stamford actively seeks to prevent displacement of existing residents, though. In 2024, Wallet Hub ranked Stamford as one of the most ethnically diverse cities in the nation.¹⁰ The majority-minority

¹⁰ <https://wallethub.com/edu/cities-with-the-most-and-least-ethno-racial-and-linguistic-diversity/10264>

community (57.7% non-White) has strong Hispanic (29.8%), Black (21.6%), and Asian (7.9%) representation. Equity and inclusion are central frameworks of the City's mission to build a vibrant community. Through that lens, Stamford has identified the need to improve transportation infrastructure for minority and low-income residents. Complete Streets on Bedford and Summer Streets complement local policies to encourage sustainable growth, promote affordable housing, and prevent gentrification. CPRG investment will build on planning efforts to reduce opportunity barriers for disadvantaged people. Stamford's proposed project meets the Biden Administration's Executive Order on *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* and Justice40 Initiative goals.



CPRG funding will connect affordable senior housing located on Summer Street to community destinations.

In 2022, the City hired its first Director of Diversity, Equity, and Inclusion. This office launched the Inclusion, Diversity, Equity, Accessibility, and Strategies (IDEAS) Committee, a group of diverse community representatives that seeks to raise awareness and invoke change. The project team will work with the IDEAS Committee to ensure that project improvements are responsive to residents in equitable and accessible ways.

Assessing, Quantifying, and Reporting Benefits – Stamford's performance measurement plan will incorporate the views of neighborhood stakeholders. Project assessment and reporting activities will be shared broadly with interested stakeholders, including low-income individuals and minorities in the Bedford and Summer Street corridors. Complete Street benefits, including mobility improvements, GHG/air pollutant reductions, and environmental justice advancements, will be summarized and conveyed regularly. All communications will be available in multiple languages to ensure accessibility. A collaborative task force, including a diverse array of community members and representatives from interest groups, will also be established to help solve problems during the project period.

B. Community Engagement

Engagement to Date – Preliminary project discussions have involved various community stakeholders. The City has connected with neighborhood residents and businesses interested in Complete Street development on the Bedford and Summer Street corridors through workshops, small group meetings, surveys, and one-on-one interviews. That relationship building has cultivated trust and fostered transparency with people. Key concerns in the project area include:

- Traffic speeds are high along Bedford and Summer Streets, leading to crashes and injuries;
- Walking is difficult on aging pedestrian infrastructure;
- Safe bike accommodations are important for making cycling a viable transportation option;
- Bus use is difficult without better transit facilities; and
- Streetscapes should be enhanced with green infrastructure.

Stamford has already formed collaborative partnerships with key public and private organizations (see attached letters of support), including:

Partner	Project Interest
Building One Stamford	Providing the City with input on the needs of low-income and minority residents
People Friendly Stamford	Growing safe walkable and bikeable neighborhoods in Stamford
CT DOT	Preliminary NEPA discussions
WestCOG	Included Complete Streets as a climate action plan priority
CTtransit	Leveraging transit investment
Downtown Stamford	Improving Downtown connectivity
Stamford Chamber of Commerce	Business development on the Bedford and Summer Street corridors

Ongoing Engagement – Community engagement will continue throughout project design. A community participation plan (CPP) will be developed to ensure meaningful public involvement, avoiding one-size-fits-all approaches to encourage broad interest. Previously, voices from Stamford’s downtown neighborhoods have not been heard as loudly as others. The project team will conduct an ongoing education campaign, collaborating with schools, neighborhood associations, and community anchor institutions. City leaders and engineers will meet with community groups to provide information and gather feedback. Stamford will work to include residents that have been historically disadvantaged or adversely affected by persistent poverty.

Stakeholder engagement is incorporated into the CPRG schedule. Following grant award, the project team will update its CPP to ensure that there is continued robust public involvement with residents, community-based organizations, and local businesses. Stamford will align the CPP with DOT’s [*Promising Practices for Meaningful Public Involvement in Transportation Decision-Making Guide*](#). Key engagement techniques for informing the public during the construction phase include briefings, speakers’ bureaus, social media, newsletters, and other outreach tools.

SECTION 5: JOB QUALITY

CPRG implementation funding will support both job growth and connectivity to employment opportunities. During the project period, the City will take concrete steps to ensure that federal investment generates economic opportunities for low-income and minority residents through apprenticeships, workforce development, hiring, contracting, and other practices. Key labor strategies include:

- **Inclusive Economic Development**: Contracting opportunities will be advertised with a preference for local Disadvantaged Business Enterprises, minority-owned businesses, and women-owned businesses. The bidding process will provide opportunities for these businesses to compete for the work.
- **Local Hiring Preferences**: The City will include local hiring provisions in construction contracts that support the ability of area residents to benefit from federal infrastructure investment in their neighborhood. This will support Stamford's goal to create good-paying jobs that directly benefit residents of the project area. The City will also encourage competing firms to include apprenticeship opportunities for local low-income individuals, women, people of color, and others that are underrepresented in infrastructure jobs (e.g., people with disabilities). Several school-to-job training programs will also support the project.
- **Stronger Unions and Good-paying Jobs**: In Connecticut, workers have the right to bargain collectively through a labor union. Connecticut's state code declares, "Employees shall have the right of self-organization, to form, join or assist labor organizations, to bargain collectively through representatives of their own choice and to engage in concerted activities for the purpose of collective bargaining or other mutual aid or protection." The City will promote the project to local contractors and their union members. CPRG investment will support efforts to create good-paying jobs, promote upward economic mobility, and grow Stamford's middle class.
- **Wealth Building**: Development in the project area will provide opportunities for wealth building among underserved populations. Short-term construction jobs and long-term employment will occur along the Bedford and Summer Street corridors. Property values will also rise in Stamford.
- **Improved Access to Jobs**: CPRG dollars will improve the movement of workers in Stamford. Complete Streets will provide better access to Downtown jobs. Sidewalks and bike accommodations along Bedford and Summer Streets will also connect neighborhoods to the intermodal Stamford Transportation Center, the busiest rail station between New York City and Boston.
- **Long-term Economic Growth**: Infrastructure improvements will help drive Stamford's economic future. The City is investing significant resources to create prosperity in the project area. Long term, this development is expected to increase Stamford's tax base.



Complete Street construction will provide job opportunities for area residents.

SECTION 6: PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE

A. Past Performance

Stamford has deep experience managing federally-funded projects. This work has been conducted on time and on budget. Examples of grants received in the last three years include:

- SWIFR Food Waste Collection/Composting and Other Recycling
 - Funder: EPA
 - Grant agreement #: EPA-I-OLEM-ORCR-23-03
 - CDFA #: 66.920
 - Description: This project's main goal is to reduce the amount of food waste that the City sends to landfills by collecting and composting it. Industrial food waste composters (dehydrators) are being procured, installed, and operated in Stamford; food waste collection bins will also be distributed in Stamford's 13 neighborhoods (e.g., on sidewalks) that will be available to the public.
 - Federal agency contact: Christine Beling
- Stamford Air Quality Monitoring
 - Funder: EPA
 - Grant agreement #: 00A01097
 - CDFA #: 66.034
 - Description: The purpose is to conduct ambient air monitoring of pollutants of greatest concern in areas of Stamford with environmental and health outcome disparities stemming from pollution and the COVID-19 pandemic, including the South End and West Side neighborhoods. Stamford is organizing an Air Quality Monitoring Working Group, conducting community meetings, installing air quality monitors, developing an air quality monitoring web site, and conducting outreach and promotion.
 - Federal agency contact: Madeline Isenberg
- West Main Street Corridor Planning
 - Funder: DOT – Federal Highway Administration
 - Grant agreement #: 693JJ32340284
 - CDFA #: 20.933
 - Description: The project will improve safety at nine dangerous intersections along the West Main Street corridor, as well as add sidewalks, bus boarding islands, and separated bike lanes, where feasible.
 - Federal agency contact: Jennifer Brady, P.E.
- Stamford Urban Transitway, Phase II
 - Funder: DOT – Federal Transit Administration
 - Grant agreement #: CT-03-138-01
 - CDFA #: 20.500
 - Description: The Stamford Urban Transitway (Phase 2) is a 3,000-foot-long facility that improves access to the Stamford Intermodal Transportation Center. The project includes exclusive lanes for buses and other high-occupancy vehicles, as well as bike lanes, pedestrian-friendly sidewalks, and landscaping.
 - Federal agency contact: Bert Pechhold

B. Reporting Requirements

The City submitted/is submitting timely quarterly reports for each of the identified federally-funded projects, describing activities conducted, results achieved, and monies expended. Final reports were also submitted for projects that were completed. Stamford will meet all CPRG reporting requirements as well.

C. Staff Expertise

Stamford's Transportation, Traffic & Parking Bureau has administered multiple federal awards. Recent projects include DOT TIGER funding to improve the Stamford Transportation Center and a RAISE grant supporting Complete Street planning on West Main Street. The Transportation, Traffic & Parking Bureau recently won a \$17 million DOT Reconnecting Communities and Neighborhoods grant for trail development in Mill River Park.

The City has demonstrated its ability to manage federal funding effectively. Staff are familiar with complying with all grant requirements, including, but not limited to, ADA, Davis Bacon Act, Uniform Relocation Assistance and Real Property Acquisition Act, and other obligations.

Mayor Caroline Simmons has charged local government staff with making the City more sustainable and working to protect all of Stamford from the risks and hazards of climate change. GHG emissions are a lens that capital development projects are now viewed through. Complete Street development is an important tool that Stamford is deploying to achieve carbon reductions citywide.

The proposed project will be supported by key City staff including:

- Frank Petise, P.E.: The Transportation, Traffic & Parking Bureau is led by Frank Petise, P.E. He has managed over \$60 million of federal-aid transportation projects over the past 20 years. Mr. Petise holds a Bachelor of Science in Civil Engineering from the University of Connecticut. He has successfully administered federally-funded projects.
- Luke Bittenwieser: Luke Bittenwieser, the City's Transportation Planner, will support project implementation. Mr. Bittenwieser received a Bachelor's degree in Sustainable Urban Environments and is a Master of Urban Planning candidate, both at New York University. He is experienced in managing federally-funded transportation projects and will lead community engagement activities.
- Danielle Petretta, Ph.D.: Danielle Petretta, Ph.D., Stamford's Environmental Sustainability Coordinator, will also provide project assistance. She received her Doctorate in Urban Planning from Columbia University. Dr. Petretta will oversee specific GHG data tracking and analysis.

See attached resumes.

SECTION 7: BUDGET

A. Budget Detail

The attached budget narrative provides a detailed breakout for Complete Street construction on Bedford and Summer Streets. The total cost of the project is \$29,956,000. All expenses are included in the Construction category. A summary of costs follows:

Item	Quantity	Unit	Unit Price	Cost
Sidewalks	25,000	Per Foot	\$100	\$2,500,000
Pavement Markings	200,000	Per Foot	\$0.50	\$100,000
ADA Pedestrian Ramps	75	Per	\$5,000	\$375,000
Bump Outs	50	Per	\$50,000	\$2,500,000
Drainage	50	Per	\$10,000	\$500,000
Bus Boarding Islands	17	Per	\$50,000	\$850,000
Bus Shelters	17	Per	\$15,000	\$255,000
Transit Signal Priority	19	Per	\$25,000	\$475,000
Traffic Signal Upgrades	19	Per	\$750,000	\$14,250,000
Adaptive Signals	19	Per	\$25,000	\$475,000
Bioswales	50	Per	\$10,000	\$500,000
Street Trees	100	Per	\$1,000	\$100,000
Subtotal				\$22,880,000
Contingency and Incidentals (20%)				\$4,576,000
Design, Environmental and Historic Review, and Permitting				\$2,500,000
TOTAL				\$29,956,000

B. Expenditure of Awarded Funds

Stamford has decades of experience completing capital projects with various funding sources. The City's highly qualified staff will manage the project in compliance with all federal regulations. Financial management systems, policies, and guidelines are in place to account for all spending. Stamford has demonstrated its capacity to execute large infrastructure initiatives. Recent examples of federally-supported transportation projects include the Stamford Urban Transitway, citywide traffic signal coordination, and West Main Street planning.

Key municipal department that will provide project support include:

- Grants Office: Stamford's Grants Office serves as the centralized department responsible for seeking, obtaining, and administering grant funds. This dedicated team of grant management professionals has expertise in financial management practices, project management, and compliance.
- Controller's Office: The Controller's Office will support financial management of the grant. This department has rigorous procedures in place to ensure compliance and control expenses. Its financial management system will ensure proper fiscal controls and accountability. All accounting and billing will be performed by Controller's Office staff.
- Purchasing Department: The City's Purchasing Department will procure contractors for the project work, ensuring that local and federal bidding requirements are met.
- Office of Legal Affairs: Stamford's Office of Legal Affairs is able to provide assistance as necessary during project implementation.

To ensure that awarded funds are expended in a timely and efficient manner, Stamford has developed a comprehensive grant management approach involving clear procedures and robust

controls. A detailed budget plan, approved by EPA, will allocate federal dollars to specific activities according to grant objectives. Budget expenditures will be regularly monitored by the City's Grants Office to track spending against planned expenses. Established budget controls will prevent overspending, misappropriation, or misuse of grant funds. Regular internal audits will be conducted to review compliance with grant requirements.

Stamford regularly enlists the support of contractors to support local infrastructure improvements. The City will advertise the construction of the proposed Complete Street project following established procurement procedures that ensure competitive bidding, transparency, and compliance with grant requirements. Records of all procurement transactions will be maintained for audit purposes.

Quarterly reports will be submitted to EPA describing work completed, progress towards project objectives, and all expenses incurred using grant funds.

Stamford has never been cited for an adverse Office of Management and Budget (OMB) Circular A-133 audit finding and has never been required to comply with "high risk" terms or conditions under OMB Circular A-102.

C. Reasonableness of Costs

The project budget is reasonable for the proposed scope of work. Cost estimates are based on industry standards and Stamford's experience with similar projects.

As discussed, the project will reduce 6,181.39 MTCO₂e between 2025-2030. The budget costs identified above support the following specific GHG emission reductions:

- Travel Mode Shift: A total of 3,752.42 MTCO₂e will be reduced due to travel mode shift between 2025 and 2030. That will be accomplished with 25,000-feet of new sidewalks (\$2,500,000) to support pedestrian movement, 200,000-feet of pavement markings (\$100,000) to establish parking-protected bike lanes, the installation of 75 ADA pedestrian ramps (\$375,000) for improved mobility of seniors and persons with disabilities, the construction of 50 bump outs (\$2,500,000) to calm traffic, and the creation of 50 new drainage systems (\$500,000) to control runoff. These improvements will support a 20% shift from single-occupancy vehicles to walking and biking along the project corridors.
- More Transit Ridership: A total of 1,500.97 MTCO₂e will be reduced due to more transit ridership between 2025 and 2030. The project will support these GHG reduction targets with 17 bus boarding islands (\$850,000) that create places for people to board and alight from buses, 17 bus shelters (\$255,000) where people can safely wait for transit, and transit signal priority at 19 traffic lights (\$475,000) that will allow buses to move first through intersections. CPRG funding will support a 10% shift to transit in Stamford.
- Less Congestion and Idling: 926.70 MTCO₂e will be reduced due to less idling between 2025 and 2030. These emission reductions will result from 19 traffic signal upgrades (\$14,250,000) and 19 adaptive signals (\$475,000), which will improve the flow of traffic.
- Green Infrastructure: A total of 1.27 MTCO₂e will be reduced due to carbon capture between 2025 and 2030. A total of 50 bioswales (\$500,000) and 100 street trees (\$100,000) will be installed along Bedford and Summer Streets to sequester CO₂ and reduce stormwater runoff.

In addition, \$2,500,000 is budgeted for design, environmental/historic review, and permitting. A 20% contingency of \$4,576,000 is also included to better manage costs.