
Multi-Use Trail Implementation Plan

Governor Malloy's 5-year Transportation Ramp Up Plan



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Multi-Use Trail Implementation Plan – Closing the Gaps

1.1.1 Overview

In early 2012, The Connecticut Department of Transportation (Department) established a goal to develop a more robust and complete multi-use trail network to compliment the vehicular roadway system in Connecticut. In an effort to determine how to prioritize trail projects and potential funding, the Department would first concentrate on multi-use trail networks that had statewide significance, then secondly, focus on multi-use trail networks of regional significance. The East Coast Greenway (ECG) is a planned multi-use trail which, when completed, will be 2,900 miles long linking Calais, Maine, at the Canadian border, with Key West, Florida and entails approximately 200 miles through Connecticut. The ECG was identified as the State’s trail of Statewide significance. Since 2012, the Department has rearranged trail funding priorities and provided additional attention to trail development for both the ECG and other trails of regional significance.



Trails of regional significance have been identified as; Air Line Trail (both North and South of the ECG alignment), Farmington River Trail, Five Mile River Greenway, Housatonic River Trail, Naugatuck River Greenway, Pequonnock River Greenway, Norwalk River Valley Trail, Route 11 Extension Trail, Shoreline Greenway Trail and the Tri-Town Trail. While the Department remains fully supportive of efforts by municipalities and/or regional planning agencies to develop proposed trail projects funded with eligible monies on these trail



networks, to date there has been no effort to prioritize between these many trails of regional significance. Previous and future approval of these trail projects will be on a case-by-case basis, with consideration given to their overall effect on/benefit to regional and/or statewide networks.

While it is recognized that there are many other sources of Federal and State funds available for multi-use trails, including but not limited to: Recreational Trail Grant Program (RTG), Local Transportation Capital Improvement Program (LOTICIP), Transportation Alternatives Program (TA), this document is only intended to address gap closure efforts and the trail maintenance program.



The following is a complete listing of current trail projects and their status as of June 2015:

1.1.2 Statewide Multi-Use Trail Gap Closure Efforts

The Department is proposing a program to facilitate completion of a network of interconnected statewide trails in Connecticut. The program will be focused on closing gaps in existing statewide trails with an initial focus on the ECG. The key is to establish clear priorities that will close the most critical gaps and create long continuous portions of the statewide trail network. The program may include other regional trails that link to the ECG, but the majority of funds and resources will be devoted to completing the ECG.

The Department, under the previous federal transportation legislation (SAFETEA-LU), received approximately \$8.8 million per year for Transportation Enhancement (TE) type projects. For nearly two



decades, the construction of major trails in Connecticut relied on individual municipalities to design and construct segments of trails that are routed through their respective communities. This approach left many gaps that are proving difficult to complete under the previous approach to trail planning and funding. The Department recently shifted its practice to assist communities in the pursuit of closing gaps in the statewide trail network. As a result of this change in practice, the Department has initiated and/or advanced the design and construction activities on several projects which further promote this goal. The projects below represent a chronological list of locations resulting from the Department's efforts, beginning with completed trail sections, followed by those currently in construction, and then finally projects which are under design.

Trumbull - Project 144-186. (Constructed 2014). This project constructed a 10-foot wide multi-use trail that is part of the Pequonnock River Trail system beginning at the northern end of Quarry Road (and the terminus of State Project 144-191), continuing southerly for 3,050 feet to the intersection of Trumbull Road and Quarry Road. The trail then continues easterly along Trumbull Road, then southerly along River Road for another 2,150 feet, ending at the entrance to Beardsley Park (and the beginning of State Project 15-359). The total project length is 5,200 feet. Construction was completed in December 2014. This trail is open to the public.



Bridgeport - Project 15-359. (Constructed 2014). This project constructed a multi-use trail that is part of the Pequonnock River Trail system beginning at the northern end of Beardsley Park at River Road (and the terminus of State Project 144-186), and continuing southerly along the park road for 6,100 feet, where the project will terminate at Crown Street. Construction was completed in fall 2014. This trail is open to the public.



Windham/Chaplin/Hampton/Pomfret/Putnam/Thompson – Project 172-421. (*In Construction*). The “Airline Trail – North” project is a “materials-only” partnership between the Department and the Department of Energy and Environmental Protection (DEEP). The project consists of the re-surfacing/re-grading of an extended section of the existing Airline Trail (former railroad bed) currently owned by DEEP. The proposed limits begin at the eastern end of the existing Veteran’s Memorial Greenway at its intersection with Route 203 in Windham, and potentially will extend northeasterly through the town of Thompson to the Massachusetts state line. The Federal funds obligated for this project are being utilized to purchase materials only, while DEEP is providing the labor and equipment to establish a stone dust surface for as many miles as the funds will allow. The \$669,140 in Federal funds, with a matching share of \$167,298 in State funds, was obligated in August 2013 for a total of \$836,493 in available construction monies. Approximately 3 miles have been resurfaced and a preliminary review of the budget indicates that at least 17 more miles of the proposed trail will be able to be resurfaced with the available balance. This project is anticipated to be completed by fall 2016.

Windham – Project 163-194. (*In Construction*). This project is an approximately 1.4 mile pedestrian/bike trail along the Willimantic River in the town of Windham that will extend both the Hop River Trail and the Airline Trail. The extension of the Hop River Trail will begin at a point on the northern side of Route 66/Columbia Avenue, just east of the Route 66 Bridge over the Willimantic River, and will continue east under the Route 66 overpass, generally paralleling the Willimantic River, where it will intersect with the Airline Trail at an abandoned railroad trestle bridge adjacent to the Connecticut Eastern Railroad Museum. The extension of the Airline Trail begins on the south side of the Willimantic River at the Lebanon/Windham town line, proceeding across the abandoned trestle bridge to meet up with the Hop River Trail, then continues easterly adjacent to the access drive for the Museum, before terminating at a proposed parking area approximately 800 feet west of Bridge Street.

The construction of this project was awarded \$1,441,291.33 and a pre-construction meeting was held on April 30, 2015. Construction is currently underway and is anticipated to be substantially complete by fall 2015.

Cheshire – Project 25-135. (*In Construction*). The project is located along a railroad grade owned by DEEP. It begins at Routes 68 and 70, continues northerly and ends 100 feet north of Jarvis Street in the town of Cheshire. The Town proposes to design/permit approximately 8,000 feet of multi-use trail. The project consists of a 12-foot wide paved multi-use path along the former railroad bed. Design elements include a stone dust shoulder, culvert repair/installation, benches, lighting, landscaping, signage, parking lot, prefabricated bridge, crosswalks, and a Rectangular Rapid Flashing Beacon system for the West Main Street crossing. The Town designed the project in partnership with DEEP through the use of Recreational Trails Grant funds.

The construction of this project was awarded \$2,571,616. Construction began in April 2015 and is expected to be substantially complete by fall 2015.



East Hartford – Projects 42-300 and 42-301. (*In Construction*). Project 42-300 begins at the north side of the Charter Oak Bridge and continues southerly along Route 2, turning along Willow Street Extension and ending at Main Street. Project 42-301 begins at the Simmons Road Bridge over I-84 and continues easterly along I-84 under the Forbes Street Bridge, and connects with the existing Charter Oak Greenway. These two projects are in construction and will help close an approximately 1.77 mile gap in the Charter Oak Greenway. The construction cost is approximately \$2.5 million and construction is expected to start in fall 2015. This project was advertised in June 2015.

Manchester – Project 76-217. (*In Construction*). Project 76-217 picks up at the end of the existing Charter Oak Greenway, beginning at the parking lot on Camp Meeting Road across from Porter Street and extending to Finley Street, and will include a new pedestrian/bike bridge over Camp Meeting Road. Project 76-217 was advertised on May 15, 2015, and construction is expected to begin in fall 2015 with a cost of \$6.5 million. This project and Project 12-96 will close the approximately 2.75 mile-long gap between the Charter Oak Greenway and the Hop River State Park Trail in Bolton.

New Haven – Project 92-621. (*In Final Design*). The Farmington Canal Greenway Phase IV project is the southernmost portion of the Farmington Canal Heritage Trail. The project adds unique features to the existing Farmington Canal Trail, as it traverses below-grade and through tunnels in an urban environment. This project is being funded and designed to be a place-making “showpiece” project. The project begins at the completed trail section at Yale University property and continues below-grade until it ramps up at the intersection of Orange and Grove Streets. The trail then becomes an on-road facility along Grove and Olive Streets. A cycle track then separates the bicyclists from the pedestrians along Water Street. District 3A, as part of the “Q-Bridge” Contract E, will also be constructing an independent multi-use path and a cycle track along Brewery Street, Sargent Drive and Canal Dock Road. The City is currently finalizing the required property easements. The construction cost is approximately \$6.93 million, and design completion is currently scheduled for April, 2016.

Bolton – Project 12-96. (*In Preliminary Design*). Project 12-96 extends from Finley Street to the Hop River State Park Trail in Bolton, and will include a new bridge over Route 6 and Route 44. Project 12-96 has been through public involvement and the Department’s Right-of-Way Division has begun correspondence with affected property owners. Final Design is scheduled for June 26, 2016, and the estimated construction cost is \$9 million. This project and Project 76-217 will close the approximately 2.75 mile long gap between the Charter Oak Greenway and the Hop River State Park Trail.

Trumbull - Project 144-192. (*In Preliminary Design*). This project will complete a section of the Pequonnock River Trail between Tait Road and the entrance to Twin Brooks Park at Manor Drive for a total project length of approximately 2,300 feet. The proposed alignment traverses property at the rear of the Trumbull Center shopping plaza adjacent to the Pequonnock River, and will require a new bridge over the Pequonnock River to connect to the existing trail at Twin Brooks Park. This project will fill in the gap between previously constructed sections of the trail. A proposed project, submitted by the Town of Trumbull under the State-funded “LOTICIP” program, was added to Project 144-192 and includes trail amenities and parking facilities. The current schedule for final design is April, 2017. The estimated cost is \$1.7 million.



Bloomfield – Project 11-152. (*In Semi-Final Design*). This project will construct a 12-foot wide multi-use trail on the former rail bed of the Griffin trolley line, from the intersection of Day Hill Road and Tunxis Avenue (Route 189) north for approximately 8,000 linear feet. The trail will bypass a section of non-access highway until it joins Route 189 again, allowing non-motorized users to traverse this area. The majority of the former rail bed property is currently owned by Eversource, and will be accessed by easement. The proposed alignment includes at-grade crossings of Duncaster Road, Hoskins Road and Tarriffville Road, and will require a 50-foot bridge crossing of Griffin Brook. The Town is designing the project with 100% municipal funds and will advertise and inspect the construction phase. The current schedule for final design is December 16, 2015. Construction costs are estimated at \$2,435,000, and are proposed to be funded with Federal Transportation Alternative Funds.

Cheshire – Project 25-144. (*In Construction*). This project begins at Jarvis Street, where it will meet the section of trail currently in construction immediately to the south (Project 25-135 designed by the Town of Cheshire), and will extend to the Southington town line, for a total distance of 2.5 miles. The trail will be constructed over the abandoned railroad corridor, where it will pass over three existing bridges including the bridge over I-691. The estimated construction cost for this project is \$4.5 million. The project was advertised in May 2015 and construction is scheduled to begin late summer 2015 and to be completed in fall 2016.

Cheshire – Project 25-145. (*In Final Design*). This project begins at Cornwall Avenue, where it will meet an existing 16-mile paved trail section to the south and extend to Route 68/70 (West Main Street), for a length of approximately 0.66 miles. This section of the trail has many alignment challenges. Due to a previous purchase of the rail corridor by a commercial entity, the proposed trail will be constructed off of the former railroad alignment, and will cross Willow Brook and its associated wetlands at two locations utilizing an elevated precast concrete boardwalk. This project will include a proposed 10-space parking lot near West Main Street. Currently, the project is entering its final design stage, thus beginning rights-of-way activities and environmental permit preparations. The final design is scheduled for completion on September 21, 2016. The estimated construction cost is \$ 6.7 million. Construction is scheduled to start in spring 2017, and is expected to be completed in fall 2017. This project will be the last of three projects implemented to complete a 4.7 mile gap in the Cheshire portion of the Farmington Canal Heritage Trail, and will result in a continuously paved trail for a total distance of 23 miles from New Haven to Southington.

Trumbull - Project 144-191. (*In Semi-Final Design*). This project will complete a section of the Pequonnock River Trail over the Merritt Parkway in the vicinity of its interchange with Route 25 using an existing railroad bridge and traversing beneath two access ramps with new tunnels. Design Approval was obtained on September 16, 2014. The current schedule for final design is March 9, 2016, and the estimated cost is \$3.5 million. The project is in the final design stage and will fill in the gap between sections of the trail previously constructed by the municipality. Construction is expected to begin in fall 2016.



Farmington – Project 51-268. *(In Semi-Final Design)*. This project will construct a 12-foot wide paved multi-use trail on a former railroad right-of-way currently owned by the Department, from Red Oak Hill Road southerly for approximately 2.2 miles to Northwest Drive in Plainville, CT. Once complete, the entire Farmington Canal Heritage Greenway will be complete in Farmington. The proposed alignment includes a prefabricated bridge on new abutments over Route 6, an at-grade crossing of Hyde Road and a small parking lot adjacent to Northwest Drive. The Town is designing the project with 80% Federal and 20% State funds through an agreement with the Department. The Town will advertise and inspect the construction phase. The current schedule for final design is December 30, 2015 with an estimated cost of \$5,100,000, based on preliminary design.

Southington – Project 131-203. *(In Consultant Selection Process)*. This project consists of the construction of approximately 1.3 miles of 12-foot wide bituminous multi-use trail with two-foot shoulders along a former railroad bed. DEEP owns approximately 0.6 miles and Pan Am Railways owns approximately 0.7 miles of the proposed project right-of-way. Pan Am has indicated a willingness to sell their right-of-way at fair market value. The project begins at Lazy Lane and extends northerly along the former railroad bed, crossing the Quinnipiac River via an existing bridge. Further north, the proposed trail crosses Spring Street, Aircraft Road and West Queen Street at their existing intersection via new crosswalks. The project terminates on the north side of West Queen Street by connecting to the existing sidewalk network. The Department was recently made aware of a potentially cooperative commercial property owner, and will be exploring the potential to extend the trail north to Town Line Road as a possible addition to this project. The Town will be designing the project with 80% Federal and 20% State funds under an agreement with the Department. The Department will manage the ROW phase and the Town will advertise and inspect the construction phase. The current schedule for final design is January, 2017, and the estimated construction cost is \$1,800,000. The construction is currently proposed to be funded with Transportation Alternative and State matching funds.

Windham – Project 163-204. *(In Consultant Selection Process)*. This project will provide an extension of the Hop River Trail easterly from its current terminus at Flanders Road to the western project limits of Project 163-194 at Route 66 where it crosses the Willimantic River. The project will upgrade the former rail bed to a 10-foot wide multi-use trail, and includes the rehabilitation of the abandoned railroad trestle bridge over the Willimantic River. The Town will be designing the project under an agreement with the Department utilizing 80% Federal and 20% State funds. The current final design schedule is February 8, 2017. The cost is estimated at \$370,000 and is currently proposed to be funded with Transportation Alternative funds.

Plainville – Project No. TBD. *(In Consultant Selection Process)*. The proposed Farmington Canal Trail in Plainville does not yet have a defined route. The rail line is still in use and is owned and operated by Pan Am Southern Railway (Pan Am). Pan Am is averse to allowing a trail system within certain sections of their ROW. The Department recently approved a Planning Study for trail routing options. The Planning Study will be administered by the Capital Region Council of Governments and the RFQ for the selection of the consultant was published in May 2015.



1.1.3 Moving Forward

In response to Governor Malloy's Let's Go CT - Bold Vision for a Transportation Future and five-year Transportation Ramp Up Plan (Governor Malloy's 5-year Ramp Up Plan), an additional \$10 million per year investment in gap closure efforts, and an additional \$1.2 million per year in Trail Maintenance funds may become available. In selecting locations, the Department will prioritize proposed projects within municipalities that have the best chance of success. Prioritization will be given based on municipalities that have an ECG gap segment, a defined route, staff capable of administering the contracts in an efficient manner, and where the Chief Elected Officials and the Public are supportive of the gap closure efforts.



Additionally, the Department met with DEEP to discuss means and methods for efficiently contracting and constructing certain trail segments on DEEP property with 100% State funds. It is clear that the expectations are that these new monies will be spent efficiently and effectively. The Department and DEEP consider this new program an opportunity to further collaborate and define new methods for the evaluation of projects that reduce the time it takes for procurement of materials and contractors to complete important gap closure segments. While some effort has been made in determining initial concepts for the best approach to initiate design and construction of trail projects with 100% State funds, there is still considerable work to be done.



1.1.4 Trail Maintenance Program

The Department realizes that, although there is still significant progress required to complete all of the gaps, there are existing trail segments, some completed many years ago, that require major pavement rehabilitation to remain part of this important transportation network.

The Department has developed the following Trail Maintenance Program to assist in the development of a prioritized listing of needs and a process for how these projects should be developed and contracted for corrective actions.

The purpose of this program is to maintain a state of good repair of the statewide regional trail network by providing funding in the approximate amount of \$1.2 million per year for 5 years for trail maintenance. It is understood that normal, regular trail maintenance is contractually obligated to the municipality; however, there are times where a trail requires more intensive maintenance items. This program will help address a longstanding issue of deferred maintenance by the State's municipalities, as many towns lack the financial resources and/or specialized equipment necessary for routine maintenance. The program will provide necessary support for local maintenance of the current system of ADA accessible trail miles, as well as to potentially enhance the Department of Energy and Environmental Protection's (DEEP) trail maintenance efforts.



The most common concern for users of the trail system, and the part of the trail that most directly affects the usability of the trail, is the surface condition. Since the majority of the existing trails that are considered to be of statewide significance are paved, repairing the surface of paved trails is also the most costly component of trail maintenance. Therefore, the Department has determined that the best way to ensure proper serviceability of these trails is to inventory, assess, prioritize and correct surface-related maintenance issues.

The surface of a paved trail should be maintained/preserved in the same manner as the surface of a paved road. Performing routine and corrective maintenance can significantly extend pavement life, thereby delaying the need for more costly replacement of pavement that has completely failed.

As noted, maintenance responsibility for these trail systems is contractually delegated to the respective municipality in which a trail resides. Therefore, as part of the aforementioned statewide inventory and assessment, the Department will also identify other trail maintenance issues (for example, fencing,



drainage) that will need to be remedied by the municipality before State funds are authorized for trail surface repair.



Burlington – Project 20-107. (Constructed 2015). This project recently reconstructed a section of the Farmington River Greenway from Arch Street southerly for a distance of approximately 9,300 linear feet. The location is intended to be an example of a trail maintenance project that fully reconstructed the 15 year-old surface which was in poor condition because of tree root (Black Locust) damage. Construction was substantially completed in June 2015.

1.1.5 Maintenance Guidelines

Completed Trails on 2015 Trail Map

East Coast Greenway – approx. 50 miles (most paved)

Regional Trails – approx. 90 miles (some paved, most stone dust)

Task 1: The Department of Transportation (Department) will create an inventory of existing trails. A GIS based system will be utilized for this inventory (features may include)

- trail length
- trail width
- pavement/surface condition
- date of construction
- constructed pavement/surface structure (from original plans & specs)
- Where available, original plans and specs will be scanned and saved in digital format
- A windshield survey will be done for other potential maintenance needs

Task 2: Utilizing roadway pavement management software, the Department will complete an assessment of existing trail pavement conditions and determination of trail pavement life-cycle features, as well as develop a proposal for corrective measures. Corrective options could include:

- Pavement Rehabilitation
- Overlay
- Crack Sealing, etc.

The Department will also develop a rating system for unpaved trail sections and provide assessments of these sections with proposed corrective measures. Corrective options could include:

- Re-grading of trail



- Placement of additional stone dust and compaction
- Other measures

Task 3: The Department will develop a listing of maintenance projects and determine priorities based on available funding

If major rehabilitation work is required, such as failed culverts, major drainage issues affecting the long term maintenance and use of the trail, etc., the Department will coordinate with the municipality on the best engineering and contract solution for the given location and conditions that currently exist.

Task 4: Once trails are selected for maintenance activity in a certain fiscal year, the Department will then re-visit these project areas to develop a more detailed inventory of trail items and amenities. These items may include:

- Fences
- Intersection treatments
- Other pertinent items

All of this information will be entered into the trail maintenance GIS system for future reference and use.

The Department will then assess maintenance needs for these items, in addition to the trail surface. A listing of required maintenance items will be developed for Department use.

Task 5: The Department will send a letter to the subject municipality requiring that minor maintenance items be corrected prior to the Department releasing any State funds to the municipality for pavement / surface improvements.

Task 6: The Municipality performs all required corrective maintenance outlined in the Department's letter (Task 5), and certifies to the Department that the work has been completed. The Department will conduct a field visit and verify 100% compliance with required maintenance actions.

Task 7: The Department, in cooperation with the municipality, will determine the most appropriate contracting methodology to implement the proposed improvement. Generally, the Municipality will hold the construction contract, and execute the improvements through a low bid contract, force account, or utilizing the Department's Vendor-in-Place (VIP) program.