



Lower Connecticut River Valley
Council of Governments



Central CT Loop
ALT-FCT Study

DRAFT Technical Memorandum #1

Existing Conditions Assessment



April 12, 2024





TABLE OF CONTENTS

Table of Contents	1
1 INTRODUCTION	2
Purpose of Study	2
Study Area	2
Study Vision and Goals	4
2 EXISTING CONDITIONS	5
Transportation Facility Context	5
Land Use Context	11
Environmental Context	13
Nearby Related Projects	19
3 PREVIOUS PLANNING WORK	20
APPENDICES	
4 Appendix A: Summary of previous plans, studies and reports	
A1: RiverCOG Plans	1
A2: Non-RiverCOG Plans	9
Misc. Plan Maps and Graphics (to inform the Study)	14
5 Appendix B: Previous Land Use Planning Efforts and Market Analysis	

1 INTRODUCTION

The VHB team (team) is working with the Lower Connecticut River Valley Council of Governments (RiverCOG) and the municipalities of Middletown and Portland to conduct a trail feasibility study to link the current terminus of the Airline Trail (ALT) with the Meriden City Line. Beyond that, the team is also taking a more cursory look at the current and potential planning for the trail extension through both Meriden and Cheshire to connect with the Farmington Canal Heritage Trail (FCHT). Combined, the roughly 23-mile route will constitute a critical gap within the Central Connecticut Loop trail, a vision for a 111-mile loop trail in the middle of the state that incorporates the East Coast Greenway.

Prior to developing more robust trail route alternatives, the study team has provided an overview of the existing physical, environmental, operational and land use conditions for the potential trail corridors through Middletown and Portland. This was accomplished through a high-level evaluation of the various features within the project area using readily available resources as well as field-based observations. The following memorandum describes the results of this data gathering.

Purpose of Study

The purpose of this study is to identify a preferred alignment for the ALT through the Town of Portland and City of Middletown, continuing west through Meriden and Cheshire to the FCHT, using a collaborative process informed by coordination with municipal officials, state agencies, stakeholder input, and public engagement. This study is part of a larger vision for the Central Connecticut Loop Trail (CCLT). When complete, the CCLT would run through 22 cities and towns, forming a 111-mile trail loop that includes sections of the FCHT, the Charter Oak Greenway, the Hop River Trail, and existing and future portions of the Air Line Trail. Of the 23-mile gap between the ALT terminus in Portland and the FCHT in Cheshire, some of the trail exists

in smaller segments or has already been studied. The east half of the 23-mile gap within Portland and Middletown require further study to determine a preferred route. The CCLT may also provide an alternate off-road route in Connecticut for the East Coast Greenway, a 3,000-mile trail running from Florida to Maine.

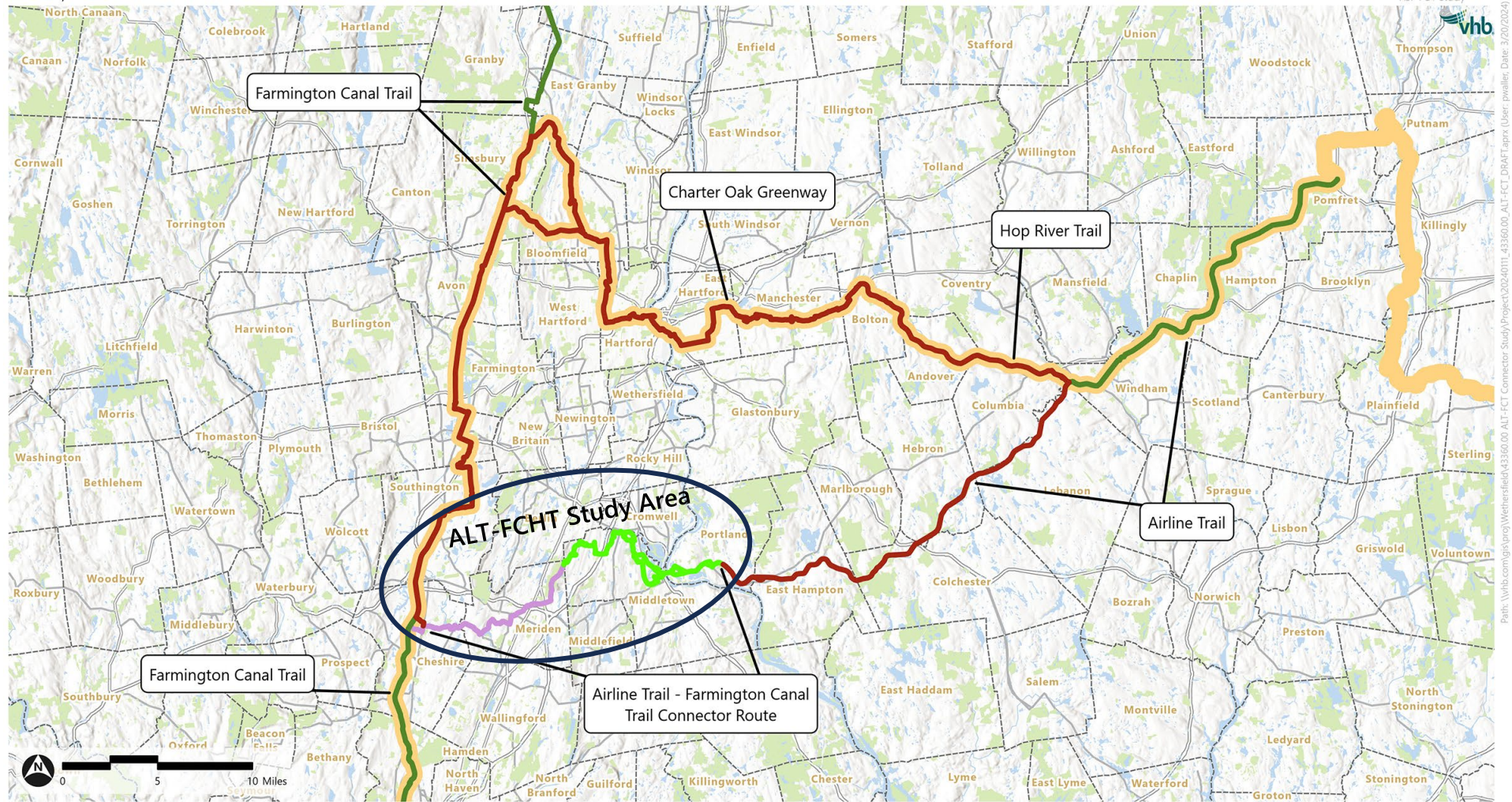
This study evaluates a list of potential alternatives on a planning level, based on a quantitative evaluation methodology to analyze alternatives, and through qualitative input from the project team, stakeholders, and the public. **It ultimately will recommend a greenway trail alignment to be endorsed by the Portland Board of Selectmen and Middletown Common Council** and will be further developed during the design development process using local, state, and federal funds.

Rather than propose a detailed design, this planning study aims to establish a framework for the future design process by highlighting the challenges and opportunities associated with the preferred alignment. This valuable insight will offer guidance for the subsequent phases of project development.

Study Area

Although the CCLT encompasses a number of communities in Central Connecticut and is used as a “brand” for other trail studies—e.g., the City of Meriden’s recent trail study is also titled “Central Connecticut Loop Trail Study”—for the purpose of the RiverCOG Study, the CCLT study area includes areas between the Farmington Canal Heritage Trail in Cheshire and the current west terminus of the Air Line Trail in Portland, just west of Jobs Pond Road. **Of this 23-mile stretch, the primary emphasis of this study is the 11-12 mile portion between the Meriden/Middletown line and the end of the ALT in Portland.** The FCHT provides off-road trail connectivity to New Haven and serves as the north-south spine of the East Coast Greenway through Connecticut, while the ALT creates an east-west connection with eastern and northeastern Connecticut and travels through more rural parts of the state. (See Exhibit 1 on the following page for a map of the CCLT context.)

Exhibit 1: Central CT Loop Trail Context Map Showing the ALT-FCHT Study Area



— Central Connecticut Loop Trail (CCLT)
 — CCLT Portland-Middletown Study Area
 — CCLT Meriden-Cheshire Study Area
 — Regional Trails Outside of the CCLT
 — East Coast Greenway Route

Study Vision and Goals

This study focuses on the 11-12-mile Air Line Trail gap of the CCLT between Camp Ingersoll in Portland (94 Camp Ingersoll Road) and the Middletown/Meriden city line near Lamentation Mountain State Park and Doctor Francis Giuffrida Park in Meriden (800 Westfield Road). **The vision for this study is to help expedite the completion of a continuous, multi-use trail within this gap—for both recreation and transportation—that is comfortable for users of all ages and abilities and enhances connections to downtown Portland, downtown Middletown, and the local parks, schools, and universities along the corridor.**

The Mattabeset River Trail in Middletown is the ideal model for an off-road, multi-use path linking the ALT in Portland with the FCHT in Cheshire through the study area.



Supporting the Study’s vision are eight goals. Sorted into categories, they are informed by feedback from RiverCOG, the study’s Technical Advisory Committee and other stakeholders, and include:

1. **Off-road:** trail route is primarily off-road along old rail corridors, along waterways, or through open space (requiring coordination with CTDOT and DEEP)
2. **Traffic Safety:** on-road segments of the trail provide some separation from traffic, with special safety features at intersections
3. **Environment:** trail route minimizes impact to wetlands and avoids floodplains and critical wildlife habitat
4. **Security:** trail route has frequent access points, includes clearly-marked wayfinding signage, and is well lit at intersections and underpasses
5. **Cost:** both construction and annual maintenance costs are taken into account when evaluating trail routing
6. **Connectivity:** trail route is direct and includes links to nearby schools, parks, the Wesleyan campus, and passenger rail connections to New Haven and Springfield
7. **Economic Impact:** trail route helps to connect job sites, commercial areas, and potential redevelopment sites
8. **Equity:** trail route provides additional mobility, recreational benefits, and green infrastructure (e.g., more trees) to underserved neighborhoods

2 EXISTING CONDITIONS

Existing conditions data was gathered using GIS data (provided by the Town of Portland, City of Middletown, RiverCOG, CTDOT and other statewide resources), a review of current plans and studies, and on-the-ground fieldwork performed by the consultant team. This work was supplemented by discussions throughout the project with the City of Middletown and Town of Portland staff, members of the Technical Advisory Committee, stakeholders, and members of the public. The existing conditions reviewed for this memorandum fall within four categories:

- Transportation facility context
- Land use context
- Environmental context
- Nearby related projects

Transportation Facility Context

The study area features multi-modal transportation facilities including nearby trails, a sidewalk network, roadways, local bus service provided by River Valley Transit, and rail lines (most of which are still active for freight rail purposes).

Trail Network

- The Farmington Canal Heritage Trail (FCHT) is a multi-use rail trail within Connecticut and Massachusetts along the Farmington Canal in CT and the Hampshire and Hampden Canal in MA. The section between New Haven and Simsbury is formally designated as part of the East Coast Greenway.
- The Mattabesset Multi-Use Trail is on the north end of Middletown and runs for roughly two miles near the Mattabesset River and near State Route 372/Berlin Road. Much of it runs along an old trolley line behind residential properties off of Tuttle Road and W. Lake Drive.
- Westlake Pedestrian Bikeway is a 2.5-mile-long sidepath that starts at the west terminus of the Mattabesset Trail and crosses in front of several

multifamily apartment properties before turning west on Smith Street to Middle Street. After crossing under I-91, the sidepath turns north at Middle Street and terminates just south of Bradley Street.

- An existing sidepath goes partly up Kaplan Drive from Mile Lane to the Lawrence School. A $\frac{3}{4}$ -mile-long shared-use path segment is funded for design that would continue the trail to the north, passing by the east side of the Lawrence School as it travels up to connect with Tuttle Road.

Pedestrian Network

- The pedestrian network is generally complete in the downtown areas of Middletown and Portland, as well as older neighborhoods. In mid-late 20th century suburban/rural locations in both municipalities, sidewalks may be present on only one side or not present at all. For example, sidewalks lie on both sides of Newfield Street/Route 3 in Middletown on the segments closest to downtown, are reduced to one side of the road as one goes north and to an area without sidewalks north of Larosa Lane.
- The Arrigoni Bridge features 6'-wide sidewalks on both sides of the bridge. (Due to limitations of options to cross the Connecticut River for this trail study, this will likely be the best trail route for crossing the river.)
- Crosswalks are present in various locations throughout the study area at signalized intersections, some non-signalized intersections on collector roads (e.g., Westfield Street), and near bus stops and schools.

Pedestrian and Bicycle Crashes

The map on the following page (Exhibit 2) illustrates locations of all crashes between 2018-2023 with emphasis on those involving pedestrians and bicyclists and where fatal crashes occurred. Pedestrian/bicycle crash clusters are evident along the length of Main St., South Main St., Washington St./Route 66, and near the intersection of Newfield St./Route 3 and Westfield St. in Middletown. Fatal crashes (all modes) are almost exclusively located on I-91, Route 9, and other state highways.

Exhibit 2: Crashes highlighting those involving pedestrians and bicyclists in the Middletown area (2018-2023)

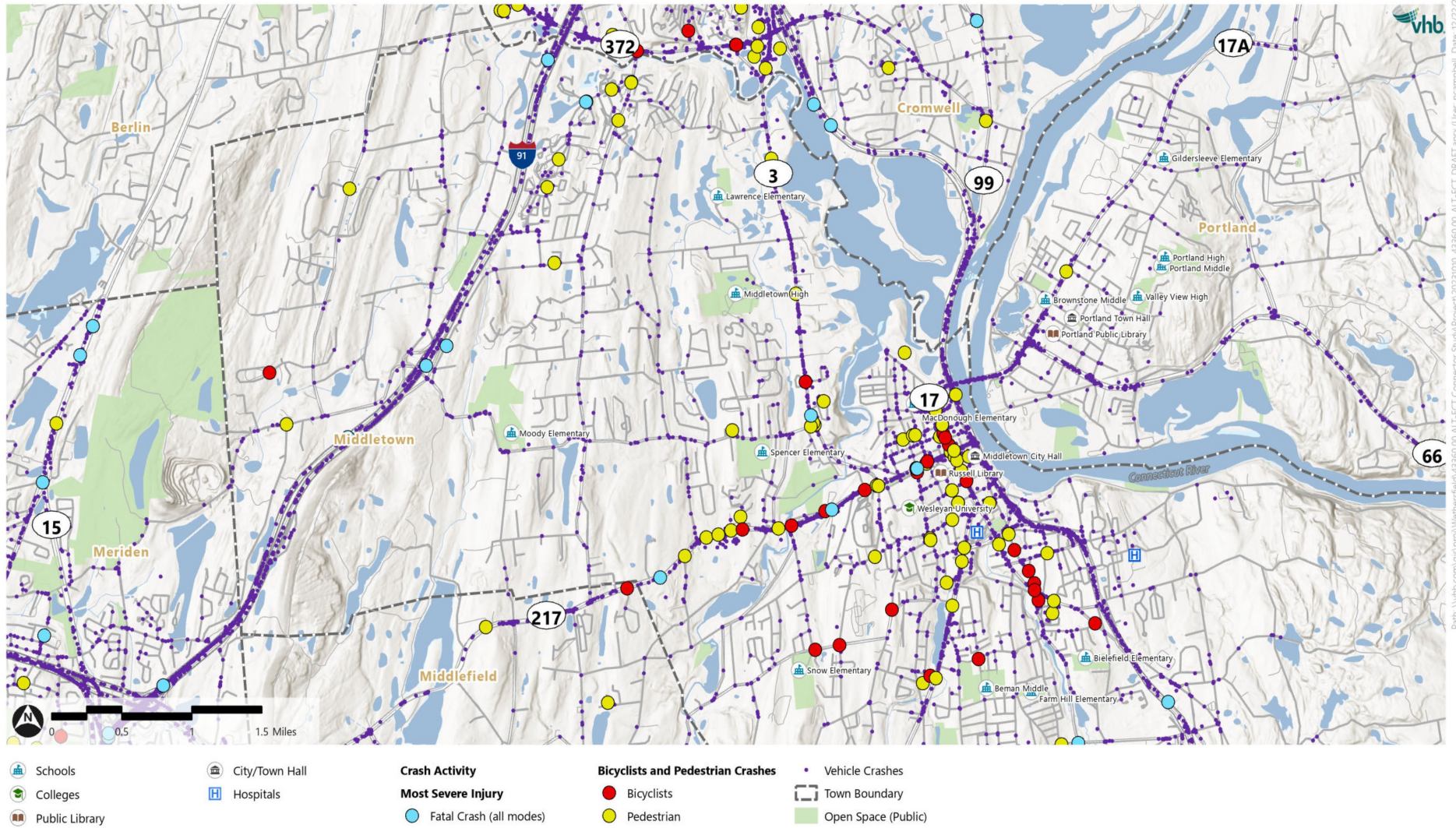
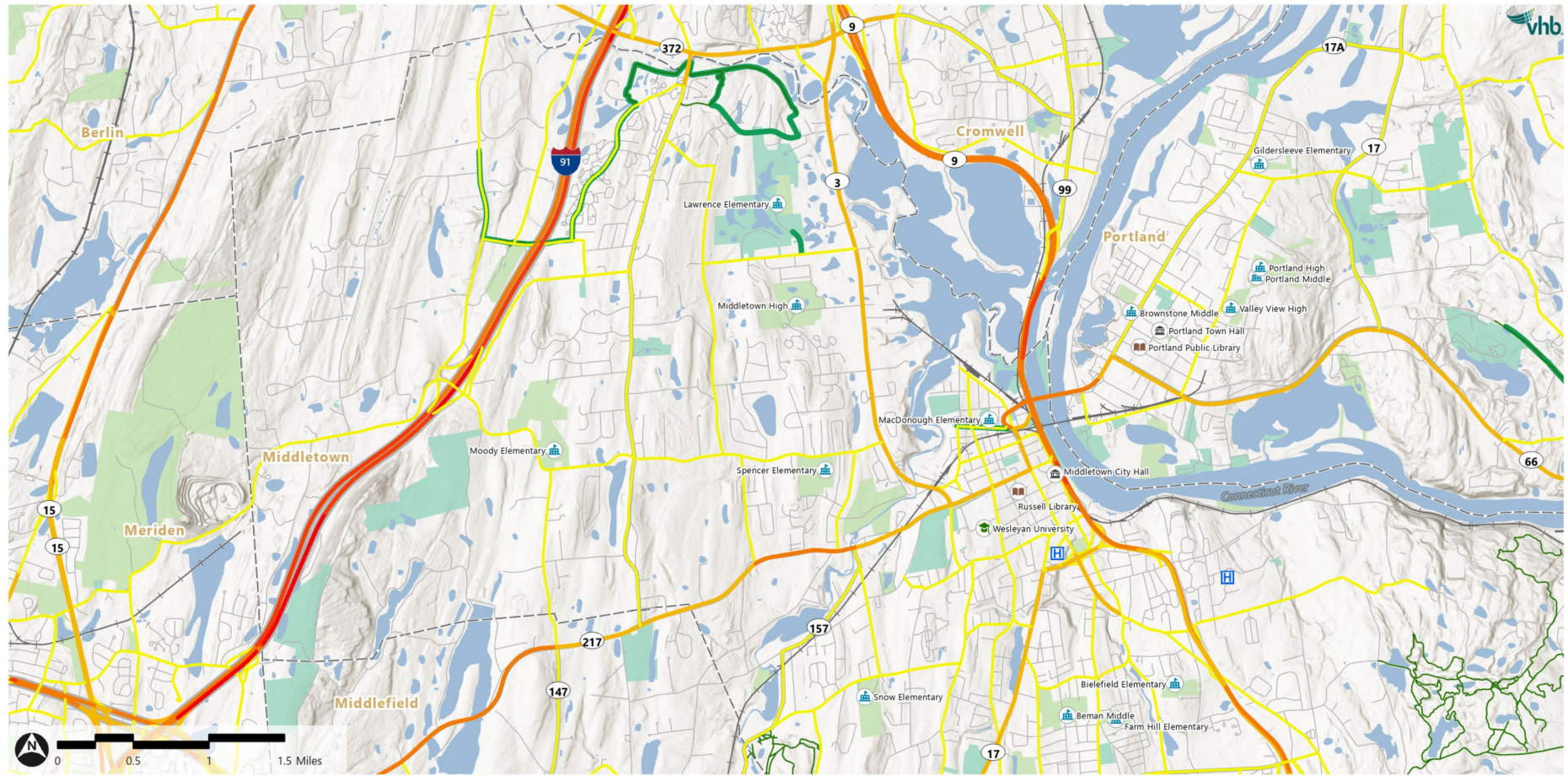


Exhibit 3: Prevailing 2023 traffic volumes in Middletown/Portland area

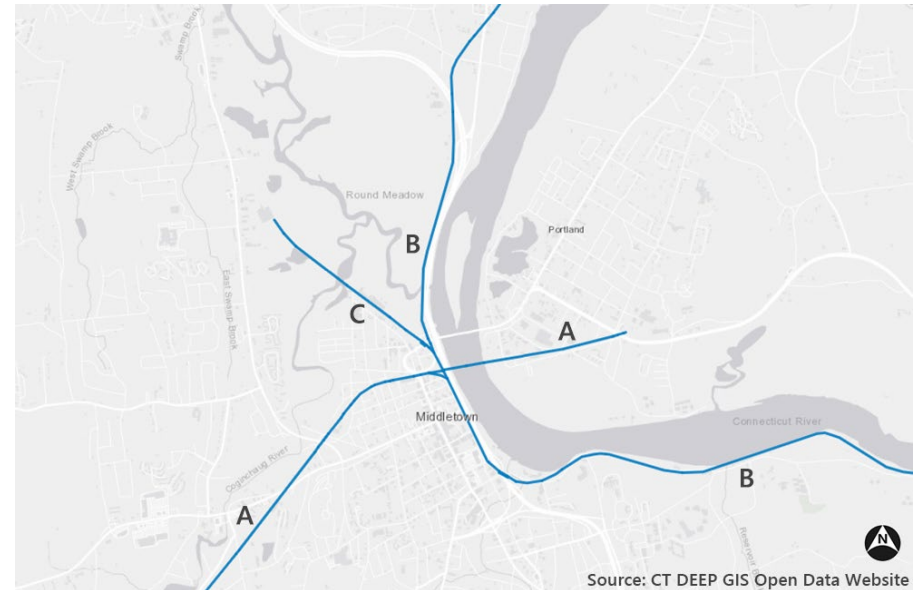


Roadway Network

- The study area includes many key roadways that serve longer distance regional traffic including Newfield Street/Route 3 in Middletown, Route 66 and 17 in Middletown and Portland, Route 17A/Main Street in Portland, Route 217 in Middletown, Route 9 in Middletown, and Interstate 91. Route 9 and Interstate 91 are expressways that can create barriers to the trail due to the limited number of locations where the roads can be crossed. All other streets are classified as minor or principal arterials by CTDOT. (For a snapshot on prevailing traffic volumes in 2023, see Exhibit 3 on the previous page.)
- Key Major Collector streets in Middletown include North Main Street, High Street, Spring Street, Prospect Street, Mile Lane, West Lake Drive, Smith Street, and Middle Street.
- Considered Minor Arterials, Westfield Street and Country Club Road in Middletown provide important connectivity east-west in Middletown and can provide an alternate on-road route for the CCLT for experienced bicyclists who feel reasonably comfortable riding adjacent to motor vehicle traffic.
- Other streets in the study area are generally low-volume and low-speed residential streets.
- As noted previously, the most significant roadway bridge in the study area is the Arrigoni Bridge which carries Routes 17 and 66 over the Connecticut River and connects Portland and Middletown.
- Since Route 9 and I-91 can only be crossed in certain locations, use of existing overpasses and/or underpasses will be needed for the trail route as it travels east-west. Using the Arrigoni Bridge, Route 9 can be crossed. Within the study area in Middletown, I-91 can be crossed at Smith Street and Country Club Road. Route 3 in Middletown, though not a limit-access highway like Route 9 or I-91, can also be challenging to cross in locations. Currently, an underpass parallel to a rail line allows pedestrians to cross below Route 3 between Berlin Street and Jackson Street.

Rail Infrastructure

The study area features three state-owned rail corridors which are currently active with freight traffic. One crosses the Connecticut River on a historic swing bridge.



The corridors include:

- **Corridor A** runs east-west, just north of downtown Middletown and crosses over Route 9 and the Connecticut River. Traveling parallel to the Arrigoni Bridge, it crosses into an industrial area in Portland around Pickering Street and Airline Ave. The railroad bridge over the Connecticut River is a swing bridge to allow ships to pass the train bridge going north or south (See Exhibit 2-3). This railroad bridge is being used by industrial businesses in Portland, most notably RED Technologies which transports waste byproduct by rail. The rail line continues for a short distance to the east, parallel with Airline Ave, before terminating at Route 17/66. On the west side of the river, the railroad travels southwest out of Middletown to Middlefield and points further south.

- **Corridor B** travels north-south along the west bank of the Connecticut River, adjacent to the Route 9 corridor. It continues north along the Route 9 corridor into Cromwell and south along Route 9 and the river further south to Pratt and Whitney. South of Pratt and Whitney, the line is owned by CTDEEP as part of the Connecticut Valley RR State Park with passenger excursion trips operated by the Essex Steam Trail/Valley Railroad.
- **Corridor C** (referred to as the East Berlin Industrial Track) splits off from Corridor B just north of downtown Middletown and passes next to the old Remington Rand building at the end of Johnson Street. The 1.1-mile-long rail corridor crosses the Coginchaug River as it continues northwest until terminating at the Primary Steel warehouse and distribution facility just east of the Newfield Street/La Rosa Lane intersection (see photo at right). Five hundred feet to the south, a short rail spur splits to the west, but it is not used for any rail service. Currently, Primary Steel relies on the rail line for freight-based service. Given the potential linkage between downtown Middletown and the area near the high school, this corridor will be studied for potential use as a trail corridor.

Local Bus Service

Bus service in the Middletown-Portland area is provided by River Valley Transit (RVT), a rebranded service after the merger of Middletown Area Transit and 9 Town Transit provided by the Estuary Transit District. Bus routes run on one- or two-hour frequencies in the area and connect to the Connecticut shoreline and as far away as New London, Meriden, and Madison.

Of the 11 routes within Middletown (see Exhibit 4 on the following page) bus routes on or near the trail alignments being studied include Route 584 – Newfield Street; Route 585 – Westlake Drive; Route 584-585 – Newfield/Westlake Evening; and Route 586 – Portland/East Hampton. Annual ridership varies from a low of roughly 5,000 on route 645 to nearly 48,000 on route 585.

River Valley Transit also provides Dial-A-Ride and ADA Paratransit services in the study area.

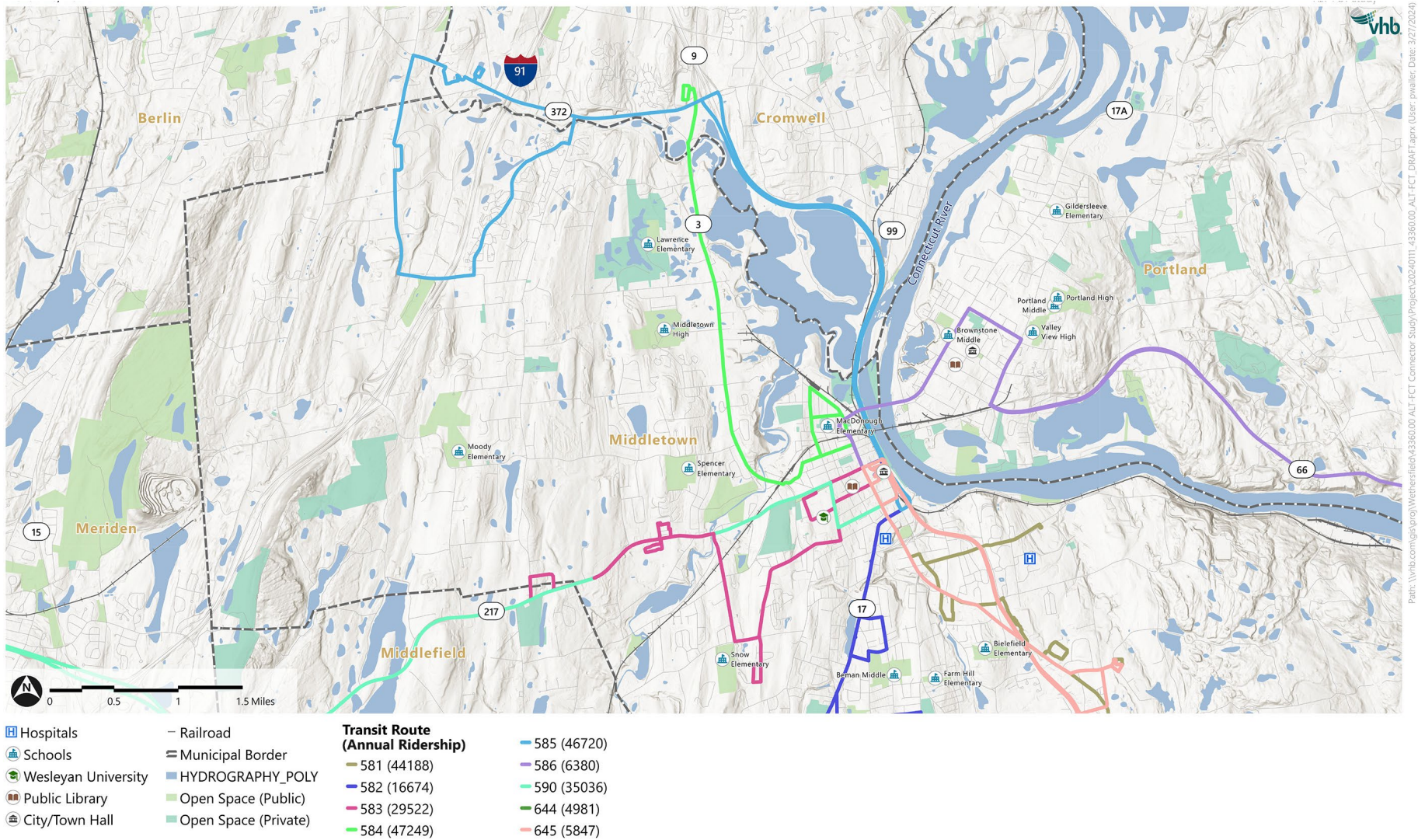
Railroad swing bridge over the Connecticut River between Middletown and Portland (courtesy of Google Maps)



Rail line northwest of downtown Middletown (facing north)



Exhibit 4: Transit service and ridership in the Middletown/Portland area



Land Use Context

Open Space

The primary open spaces in the study area include:

- Giuffrida Park is at the east edge of Meriden and where the City's trail is planned to go through to continue east into Middletown. One of the key features of this park is a trail around the Bradley-Hubbard Reservoir part of which may be converted into a section of the Central CT Loop Trail.
- Lamentation Mountain State Park is on the westerly slope of the mountain near the Berlin/Meriden municipal line, and adjacent to the Berlin Turnpike (Route 5/15). The area east of the park is a wooded ridgeline that provides a potential route option for the trail from Giuffrida Park in Meriden towards Middletown.
- Veterans Memorial Park in Middletown has been discussed as an important connection for the trail, though it requires crossing Newfield Street or the Coginchaug River to reach it. The City of Middletown plans to build a pedestrian/bike bridge over the river connecting the park to the west end of Jackson Street. Combined with the existing underpass below Newfield Street, the bridge will provide a strong pedestrian/bike connection to the neighborhood northwest of downtown Middletown.
- The East Swamp Brook area provides a potential alternate route for the trail, just west of Newfield Street.

Underpass below Newfield Street looking southwest to Jackson Street



- There is a key open space parcel around the Lawrence School in Middletown. This area will be where the extension of the sidepath from Mile Lane will go north past the school to Tuttle Road (currently under design by the City of Middletown).
- Open space and wetlands north and east of the potential rail line route in Middletown, by the Coginchaug and Mattabesset Rivers, separate the northern part of Middletown from Route 9 and the Connecticut River. Some of this open space area can be reached and could be made more accessible via a potential trail.

Housing

- Single-family residential housing is the predominant housing type in most parts of the study area, including Portland and the many areas of Middletown. However, housing types vary with small multifamily housing near downtown Middletown and larger multifamily complexes along W. Lake Drive and along parts of Newfield Street.
- Multifamily housing complexes of note include Carriage Crossing, Ridgefield Apartments, Windshire Terrace, and Peppermill Condominiums off W. Lake Drive. The east side of Newfield Street in Middletown hosts hundreds of apartments in 8-story towers and the Rose Garden and Willowcrest garden apartment complexes.
- On Newfield Street, just north of the Congdon Street intersection, a large-scale multi-family apartment complex of 414 units within 15 buildings is under construction on nearly 50 acres of land. According to the Hartford Business Journal (03/02/2023) it will be completed by 2028.
- In Portland, a large multifamily and mixed-use development called Brainerd Place is currently under construction on nearly 15 acres of land at the Marlborough St/Route 66 intersection with Main St in Portland. It will include 99 apartment units, with multiple retail spaces.

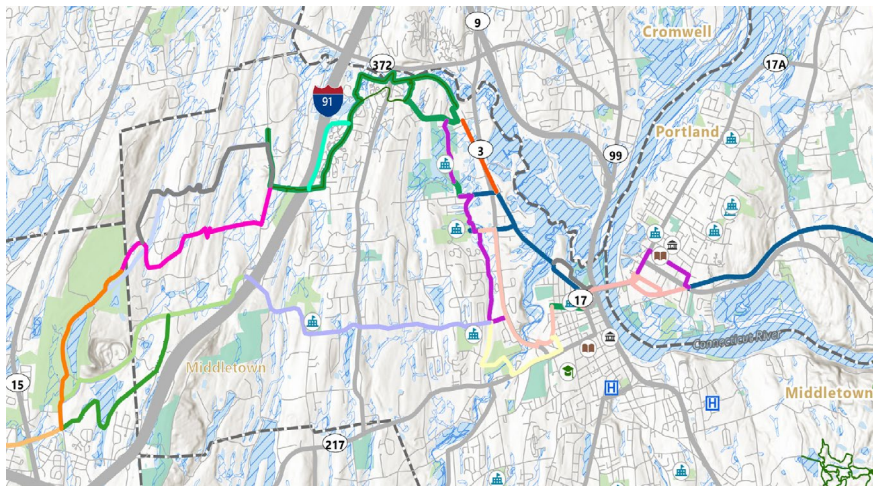
Commercial

- The most significant commercial areas in the study are the downtown areas of Middletown and Portland. Other commercial areas that the potential route options cross near are more industrial in nature that may not be open to the public.
- In Middletown near the Coginchaug River and the potential parallel rail route, is the Remington Rand building that has been redeveloped with a brewery and distillery. This is an important commercial area with a potential trail orientation.

Market Analysis

As part of the Central CT Loop Study, the team looked at market conditions along potential trail routes within the study area. A market analysis was conducted to understand current and projected demographics and current market conditions along the potential routes shown in Exhibit 5 below.

Exhibit 5: Map of hypothetical Central CT Loop trail route alternatives that informed the market analysis



Key takeaways from the Market Analysis memorandum in Appendix B include:

- The residential population that currently resides near the trail routes is stable (approximately 64,400) but is aging, with a median age of 40 years (in 2020), with minimal growth in new families with young children expected.
- The population has grown more educated since 2010 and is becoming more diverse demographically. Currently, 45% of adult residents in the “Primary Market Area”¹ (PMA) hold a Bachelor’s degree or more compared with the state average of 43%.
- The Middletown Market Area (MMA) is a smaller area than the PMA and includes less expensive housing stock. However, with smaller homes in more dense areas of Middletown, it is more expensive on a per square foot basis. Single family homes in the MMA number 11,807 with 25,970 in the PMA.
- Home sale prices are growing at a similar rate in both the PMA and the MMA near any of the trail route alternatives. Demand for multi-family apartments is relatively low as large scale projects have yet to open and will absorb much of the latent demand.
- Retail growth in the area has been slow but steady in the last decade, with higher growth rates since the pandemic. Institutional growth is anticipated to remain steady in the MMA. According to Wesleyan University, a large new science building with labs, classrooms, and café will break ground in 2026.
- Because much of the land adjacent to the route alternatives is own by the City of Middletown, “institutional” use is the most predominant land use, followed by single family housing and industrial.

¹ The Primary Market Area include most of Middletown, Portland, Cromwell, parts of Meriden and the east half of Berlin

Environmental Context

Given the proximity of the Coginchaug River and East Swamp Brook along some segments of a potential CCLT route, it will be closely tied to the prevailing environmental context. While the route must accommodate environmental constraints in this area, the study recognizes that the areas close to a river or wetland area can be a valuable asset and destination to a future trail as well. With this in mind, the trail routing study will consider the environmental constraints within the study area and look at ways to mitigate potential impacts. Potential constraints to building the CCLT along portions of the Coginchaug River or elsewhere in the study area will need to consider flood zones, areas of steep grades and elevation change, wetlands and other critical habitat areas, Coginchaug River hydrology requirements, and cultural resources concerns (see Exhibit 6).

Flood Hazard Areas

The flooding limits for a 100-year storm are regulated by the Connecticut Department of Energy and Environmental Protection (DEEP). Trail construction within the Connecticut River floodway or floodplain may be challenging as it can negatively affect compensatory flood storage and can increase the possibility of damage to the trail during a flood event. Survey data in subsequent phases of the design will need to establish the 100-year flood line to gain a better understanding of how it may impact the routing for the CCLT in Middletown and, to a lesser degree, in Portland. For potential trail corridors being studied in Middletown, flood issues are of greatest concern for segments that incorporate the rail spur running from the north end of downtown to the northwest. The corridor crosses adjacent to floodplains and designated wetlands:

- just east and southeast of the Remington Rand building at the end of Johnson Street
- crossing the Coginchaug River and the narrow spit of land just northwest of the river crossing and extending to the end of the active rail line adjacent to an industrial property (see photo)

Photo facing north of the rail spur northwest of downtown Middletown, with the Coginchaug River discernable at lower right.



Wetlands and Other Critical Habitat Areas

Numerous wetlands flank the Coginchaug River and the Connecticut River, especially on the flatter west side. Trail alternatives in these areas may need to include elevated boardwalks, in some cases hundreds of feet long, to minimize disturbances. Greater dependence on boardwalks will likely increase the costs of the trail, annual maintenance costs, and create additional permitting needs. As shown in the Environmental Issues map (see Exhibit 6), a significant portion of the study area sits within critical habitat zones. These two realities will especially come into play in the next phase of the planning and design process when a more specific route will be finalized and segments will be identified as including boardwalk segments.

Coginchaug River

The presence of the Coginchaug River provides the opportunity for route alternatives to emphasize the environmental features of the area. For any trail routes running across or alongside the river, the alignment, material choice, and branding/signing of the future route could emphasize sustainable design principles, eco-educational opportunities (geology, natural history, wildlife, and river flow dynamics), and habitat restoration.

Grades and Elevation

In various parts of the study area, elevation change and steep grades need to be taken into account during the trail route-planning phase. From west to east, areas in particular where topography will need to be considered include:

- The trail route near the Bradley-Hubbard Reservoir established by the City of Meriden to a likely crossing of Atkins Street near Scarborough Lane in Middletown includes an elevation drop of 70 feet in a short distance on the approach to Atkins. From Atkins further east to Timber Ridge Road includes a 50-foot drop in elevation as well.
- Although somewhat gradual, the slope of the existing sidepath along West Lake Drive is long enough to create a challenging environment for some bicyclists or for those operating a wheelchair. Opportunities to plan for a complementary path at the edge of the I-91 right of way will be explored to provide an option to avoid the hill on West Lake.
- Any trail route alternative that follows the east-west utility corridor between Middletown High School/La Rosa Lane and East Street/Rt. 217 will need to contend with steep slopes in multiple locations (though the cleared right-of-way for the power lines offers enough space for switchbacks).
- Potential on-road routes through the North End neighborhood in Middletown will need to take into account the small hill at the north end of Prospect Street and steep grades along Erin Street and Spring Street to connect to it.

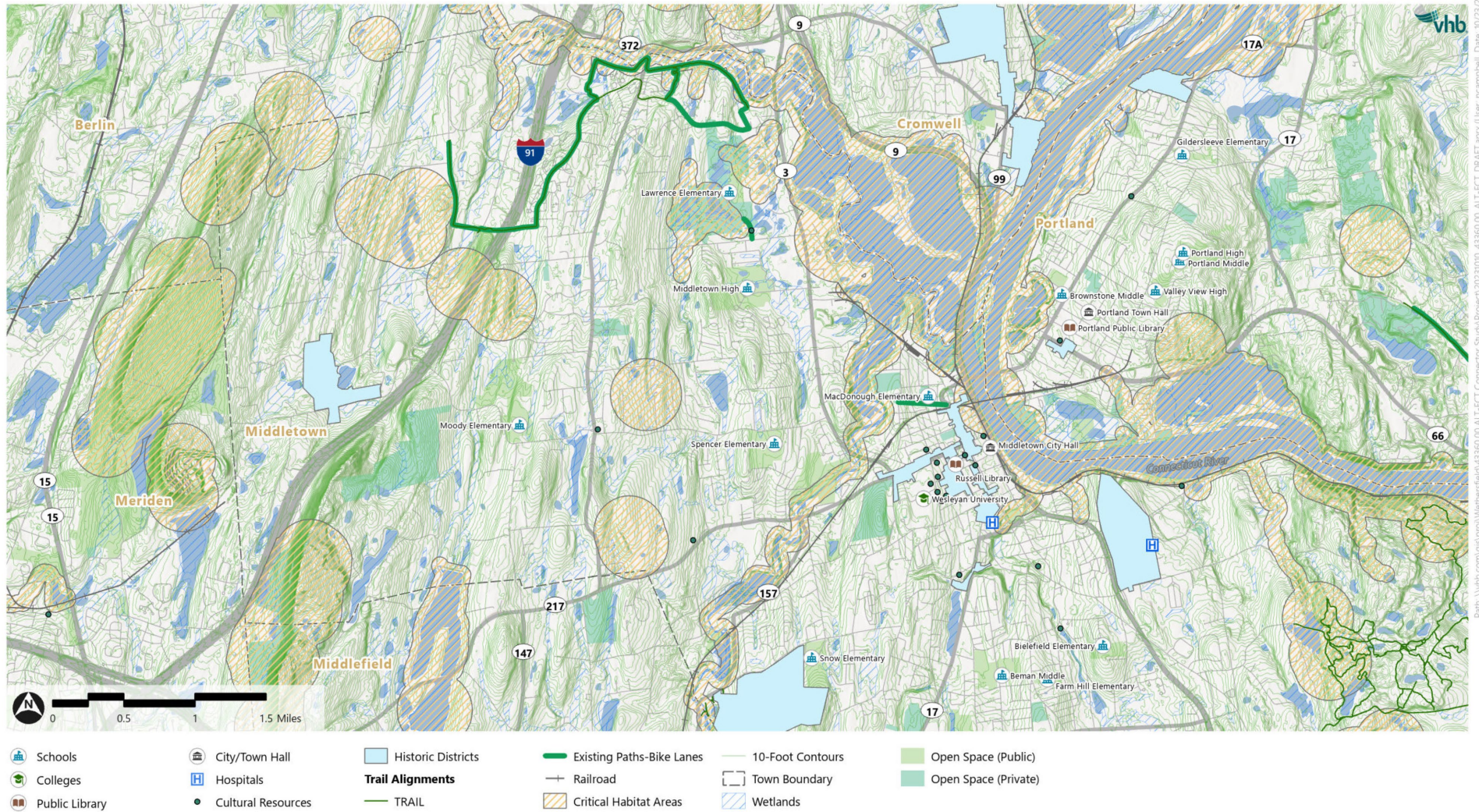
- In Portland, the most significantly sloped area lies along Lower Main Street from Pickering St up to the Arrigoni Bridge. This area is likely considered a long-term connection to the bridge relative to access to and from the bridge from Main Street in downtown Portland.

Lower Main Street slope up to the Arrigoni Bridge from Pickering Street in Portland (image: Google Streetview)



Although shared-use path design standards allow for segments steeper than a 5% grade change for short distances, that is not an ideal condition for a regional trail system. To remain in compliance with the ADA and to promote a trail route that is comfortable for bicyclists of all ages and abilities, the route planning aspires to maintain trail segments below a 5% grade. To do so will require switchbacks—sometimes multiple switchbacks—and/or segments with long and swooping curves to accommodate areas with substantial elevation change. Where possible, route alternatives will likely follow routes with more-gradual changes in grade to minimize regrading and environmental disturbances during future construction.

Exhibit 6: Map of Environmental Issues in the study area

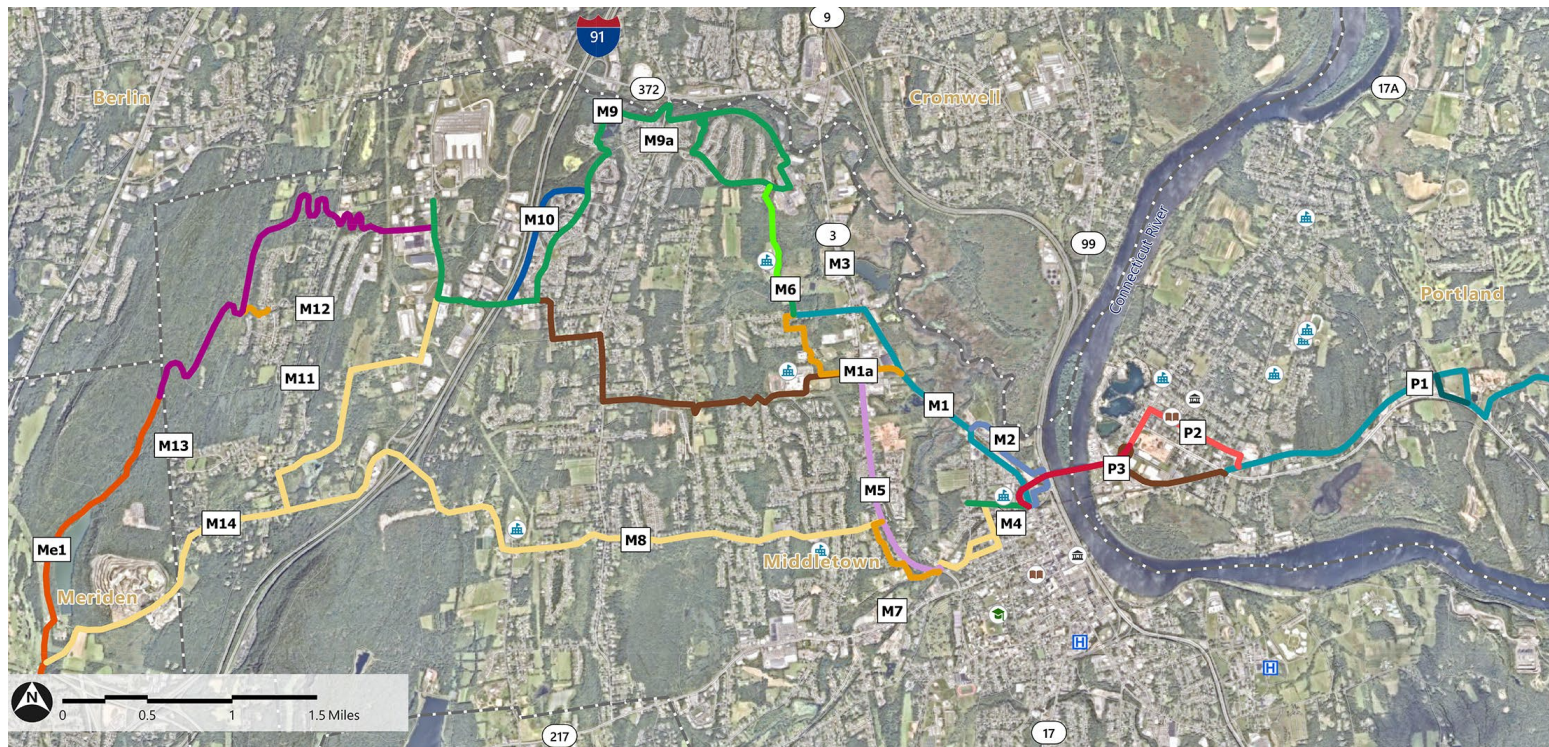


Potential Permitting and Approvals

The map shown in Exhibit 7 below displays segments of the potential trail alignment options that will likely be considered in the next phase of this study. The corresponding Table 1 isolates each potential segment, identifying the municipality, environmental conditions, and potential permitting and approvals that may be necessary for future implementation.

Permitting requirements vary by segment and some segments of the potential trail route would not require permitting. If this future project is built in phases, it is anticipated that permitting requirements would be less rigorous (depending on segment) than if the project was permitted in its entirety.

Exhibit 7: Map key illustrating the Potential Permitting Areas, as shown in Table 1 on the next page



Potential permits and approvals that may be required include, but are not limited to:

- Stormwater Construction General Permits
- CTDEEP Certificate of Permission (COP)
- United States Army Corps of Engineers (USACE) Sec. 10 Approvals
- United States Army Corps of Engineers (USACE) 404 Permit
- CTDEEP Structures/Dredging/Tidal Wetlands Permit
- CTDEEP Natural Diversity Database (NDDDB) coordination

Table 1: Potential Permitting Areas and Needs

Segment ID	Municipality	Environmental Summary	Potential Permitting/Approvals
P1	Portland	No NRCS mapped hydric soils along this section; within NDDB Areas (north of Rt 66-east of Johnson Farm Road and in vicinity of Rt 66 and Airline Ave. and at Arrigoni Bridge); not in floodplains; potential for tree clearing	Stormwater Construction GP (if >1 acre of land disturbance)
P2	Portland	All on road alignment through built areas; no mapped wetlands/watercourses; not in floodplains;	Stormwater Construction GP (if >1 acre of land disturbance)
P3	Portland/ Middletown	All on road or developed rail bed; mapped wetlands/watercourse just west of Route 66 - widening could impact this area; not in floodplains	CTDEEP Certificate of Permission (COP) and USACE Sec. 10 Approvals; if widening at inland wetland area Inland Wetland Permit and USACE 404 approval would be needed
M1	Middletown	Much of this segment is within 100-year floodplain, with a crossing of Coginchaug River floodway; wetlands are on both sides of this segment and any widening may cause impacts; new bridge would be required over Coginchoug River; this segment crosses through NDDB critical habitat areas; potential for tree clearing	CTDEEP Structures/Dredging/Tidal Wetlands Permit or COP and USACE Sec. 404/10 Approvals
M1a	Middletown	Assume inland wetlands/watercourses along La Rosa Lane - widening could impact these; no wetlands east of Rt 3; 100-yr floodplain east of Rt 3 and floodplain/floodway along La Rosa Lane; NDDB Area on far eastern end near rail line; potential tree clearing	If widening required, then inland Wetlands Permit and USACE Sec. 404 approvals
M2	Middletown	Almost entirely in 100-year floodplain; very close to tidal wetlands near center of segment (along rail line); almost entirely with NDDB areas and partially within critical habitat area; potential tree clearing	If widening required, then CTDEEP Structures/Dredging/Tidal Wetlands Permit and USACE Sec. 404/10 Approvals
M3	Middletown	Watercourse and wetlands on west side of Rt 3; 100-year floodplain and floodway on east side of Rt 3; crosses through NDDB area east of Rt 3; no mapped resources east of Rt 3; potential tree clearing	Assumed wetlands are tidal; if widening required, then CTDEEP Structures/Dredging/Tidal Wetlands Permit and USACE Sec. 404/10 Approvals
M4	Middletown	All within street; no mapped resources	none anticipated
M5	Middletown	Crosses Coginchaug River floodplain and floodway at south end; floodplain and floodway at north end at La Rosa Ln.; within NDDB area in south; likely inland wetlands at south and at north along La Rosa Ln.	Assumes outside of tidal influence; if widening at inland wetland area Inland Wetland Permit and USACE 404 approval would be needed
M6	Middletown	Follows East Swamp Brook for much of the segment; floodplain and floodway all along the brook; wetland and watercourse resources along the brook with both hydric and floodplain soils; NDDB areas in northern reach of segment, south of Tuttle Road; tree clearing required	Assumes outside of tidal influence; if widening at inland wetland area Inland Wetland Permit and USACE 404 approval would be needed; coordination for NDDB species

Segment ID	Municipality	Environmental Summary	Potential Permitting/Approvals
M7	Middletown	Mostly in existing road areas, but crosses Coginchaug River at middle of segment; floodway and floodplains at Coginchaug River crossing; NDDB areas at river crossing. Minor tree clearing.	Assumes outside of tidal influence; existing bridge over the River, but if widening or improvements needed then Inland Wetland Permit and USACE 404 approval may be needed; coordination for NDDB species
M8	Middletown	Entire segment within road, crosses East Miner Brook and Fall Brook; several small wetland areas adjacent to road; within one NDDB area at west end.	Within existing road over the stream crossings, but if widening or culvert improvements needed then Inland Wetland Permit and USACE 404 approval may be needed; coordination for NDDB species
M9	Middletown	East end loop near Mattabesset River floodplains and floodway; crosses Minor Brook floodplain/floodway; crosses Sawmill Brook floodplain/floodway on west end of segment; tree clearing likely	Within existing road over the stream crossings, but if widening or culvert improvements needed then Inland Wetland Permit and USACE 404 approval may be needed; coordination for NDDB species
M9a	Middletown	Within existing Road; crosses Minor Brook floodplain/floodway; no NDDB	All in road and likely no impact to wetlands, watercourses, floodplains or floodway.
M10	Middletown	One stream crossing w/ no mapped floodplain/floodway; no mapped wetlands; removal of trees; no NDDB areas	One new stream crossing required so Inland Wetland Permit and USACE 404 approval may be needed.
M11	Middletown	New wetland and watercourse crossings; potential crossing of East Spruce Brook; potential work within NDDB area; tree clearing will be needed; no work in floodplains/floodways.	Several new stream/wetland crossings required so Inland Wetland Permit and USACE 404 approval may be needed; potential NDDB Coordination.
M12	Middletown	New wetland and watercourse crossings; crossing East and West Spruce Brooks; potential work within NDDB area; tree clearing will be needed; no work in floodplains/floodways.	Several new stream/wetland crossings required so Inland Wetland Permit and USACE 404 approval may be needed; potential NDDB Coordination.
M13	Middletown/ Meriden	New wetland and watercourse crossings; crossing East Spruce Brook; potential work within NDDB area; tree clearing will be needed; no work in floodplains/floodways.	Several new stream/wetland crossings required so Inland Wetland Permit and USACE 404 approval may be needed; potential NDDB Coordination.
M14	Middletown/ Meriden	Segment within existing road; wetland and watercourse crossings; crossing North Branch Harbor Brook; potential work within NDDB areas; no work in floodplains/floodways; no tree clearing expected.	Within existing road over the stream crossings, but if widening or culvert improvements needed then Inland Wetland Permit and USACE 404 approval may be needed; coordination for NDDB species
Me1	Meriden	No work in floodplains/floodways; potential work near or in wetlands; tree clearing needed; large area of segment located within NDDB Areas and potential critical habitats.	If stream/wetland crossing required Inland Wetland Permit and USACE 404 approval may be needed; NDDB coordination needed.

Nearby Related Projects

Current and on-going investments in shared use paths and other pedestrian and bicycle facilities in the immediate area create opportunities to leverage other projects and help provide additional connectivity within the study area and potentially become part of the trail route. Projects that were identified as being under development during this study are:

Lawrence School Trail

- As noted earlier in this memo, a trail is under design that will connect from Mile Lane north along Kaplan Drive then continue north to Tuttle Road. It will provide better bicycle/pedestrian connections to the Lawrence Elementary School on Kaplan Drive, as it will pass just to the east of the school. This 3/4-mile-long greenway is currently in design with construction anticipated in the next 3-5 years.

Giuffrida Park Trail - Meriden

The City of Meriden's preferred route for the trail connects through Giuffrida Park and goes north through the park on the west side of the Bradley-Hubbard Reservoir. This will end at the Meriden-Middletown line north of the Reservoir and be picked up to continue north along the ridgeline as the potential route to continue the Air Line Trail and part of the larger Central CT Loop Trail. Additional details include:

- This 3.5-mile long multi-use trail begins at Brookside Park in Meriden and continues east along an existing historic railroad right-of-way to Bee Street. The trail continues north along Bee Street as a multi-use trail sidepath, and through an existing utility easement to connect to the Doctor Francis Giuffrida Park parking lot.
- The Meriden trail will close a critical gap in the Central CT Loop Trail while connecting neighborhoods to the existing trail network, and improving connectivity between Brookside Park, Baldwins Pong & Park, and Giuffrida Park. At Giuffrida Park, local users will have the opportunity to explore the

numerous trails and peaks associated with the blue blazed Mattabesett Trail.

- The City of Meriden has been awarded Recreational Trails Funding, which is being utilized to initiate the preliminary design of the City of Meriden's trail to a logical terminus at the Giuffrida Park parking area. The City is actively pursuing additional funding for the remaining design phases and construction of the trail. A construction schedule has not been established at this time.
- The City of Meriden and the City of Middletown are coordinating on the connection through Giuffrida Park, and the City of Meriden is committed to making this connection at the municipal border when the routing and funding is determined for the Middletown connection.

Proposed trail alongside the Bradley-Hubbard Reservoir in Meriden



3 PREVIOUS PLANNING WORK

As part of the assessment of existing conditions, the consultant team reviewed a selection of completed plans, studies, and reports related to short- and long-term transportation and trail improvements in the core study area. The review is intended to inform the team’s understanding of the local context and to build off planning and design work completed prior to the initiation of this portion of the Central Connecticut Loop Trail study. As such, the team reviewed reports completed by RiverCOG, the City of Middletown, the Town of Portland, and the City of Meriden, including:

- RiverCOG Route 66 Transportation Study (October 2020)
- RiverCOG Hazard Mitigation Plan (May 2021)
- RiverCOG Bicycle and Pedestrian Master Plan (March 2022)
- RiverCOG Transit Study (July 2020)
- RiverCOG Regional Metropolitan Transportation Plan (March 2023)
- Connecticut Resource Conservation & Development’s Airline State Park Trail Region Master Plan (June 2023)
- Middletown Complete Streets Master Plan (March 2013)
- Middletown Newfield St. Corridor Trail Study Findings (January 2020)
- Portland Complete Streets Policy (September 2016)
- Meriden Central CT Loop Trail Connection Study (June 2023)
- Middletown Connection to Meriden Concept (January 2024, map graphic only)
- Historic Middletown Trolley Line Route Map (map graphic only)
- Middletown Plan for Newfield Street Corridor Trail (2020, map graphic only)

- Middletown Trail Plan along RR Line (2019 Transportation Alternatives grant application, graphic only)
- Middletown Multi-use Trail Concept: Downtown to Wesleyan Hills (2013, map graphic only)
- Portland Air Line Trail Concept Plan (July 2023, map graphic only)
- Portland Complete Streets Network Plan (2016, map graphic only)
- Portland Route 66 corridor study (undated, map graphic only)

A high-level summary of each report and map graphic can be found in Appendix A. A summary of the land-use based reports listed below can be found in the summary of land use and market conditions in Appendix B.

- RiverCOG Regional Plan of Conservation and Development, 2021-31
- RiverCOG Comprehensive Economic Development Strategy (2023)
- RiverCOG GrowSMART Regional Economic Growth Strategy (2016)
- RiverCOG Regional Housing Plan (July 2022)
- RiverCOG/City of Middletown Economic Development Resources
- City of Middletown Conceptual Development Plan