



CHAPTER 2

Needs Analysis

AIR LINE STATE PARK TRAIL TYPOLOGIES








The Air Line State Park Trail is an ongoing linear infrastructure project that began when the State of Connecticut took ownership of it in 1969. As a multi-use rail trail and linear state park and as segments have been completed over time, the trail has been described in the various sections shown at right.

Within each of these trail sections, trail bed conditions vary from passable for hikers or horseback riders, compacted stone dust for multiple uses included bicyclists with hybrid tires and bicyclists with aggressive tread tires for mountain biking. There are sections near the



more urbanized center of Windham that are paved and the newest addition in East Hampton will be a boardwalk carrying trail users over a significant gap in the trail, a drainage area designated as wetlands by the Army Corps of Engineers. There are incomplete sections extending from the current terminus in Portland to the Arrigoni bridge and a section between Pomfret and Thompson travelling through Putnam's commercial center, which is another more urbanized section of the trail (see Figure 2A).

CURRENT SECTIONS OF THE AIR LINE STATE PARK TRAIL

-  **Southern Air Line State Park Trail**
25 miles
East Hampton to Windham, designated as a National Recreational Trail
-  **Northern Air Line State Park Trail**
21 miles
Windham to Putnam, which also encompasses a segment of the East Coast Greenway
-  **The Thompson Section**
6.6 miles
Thompson to the Massachusetts state line.[1]
-  **Colchester Center Spur**
3.6 miles
A spur to Colchester village center, designated as part of the Air Line trail.
-  **The Portland Section**
2.3 miles
A maintained portion of the trail that connects to the southern end of the state park at the town line with East Hampton

Trail & Connections to Adjacent Trails — Trail Characteristics

FIGURE 2A

	ASPHALT PATH	RE-ADAPTED ROADWAY	CONCRETE PATH	BOARDWALK	CRUSHED GRAVEL	NATURAL SURFACES	MOUNTAIN BIKE TRAIL	FOOT TRAIL
								
SURFACE	10+ ft. asphalt path	Either 8 ft road-side bike path (sidewalk possible) or gravel roadbed	5-10 ft wide path (Farmington Heritage Trail photo above is 8 ft wide)	5-8 ft wide wood, composite or concrete boards	5-12ft rushed limestone or similar stone dust compacted	3-4 ft natural graded surface	Ungraded natural surface for both trail hiking and mountain bikes	3-4 ft natural surface – graded or ungraded
AVERAGE COST	\$150-\$200K per linear mile	Low cost for markings – shared road pavement or reused roadbed	\$35/sq ft estimated	\$40/sq ft	\$50/sq ft	\$5/sq ft	Under \$5/sq ft exempting ramp construction	Under \$5/sq ft
NOTES	Most durable option for bicycling but relatively incompatible for horse riding and similar activities	Not to be used for road grades exceeding 10% for long stretches – avoid excessive grades	Durable option – intensive construction process	Good for location with designated critical resources or difficult crossings (wetlands, habitat)	Crushed stone paths built to ADA accessibility guidelines – unless installed properly with drainage system, will erode	Defer to specialist with experience with trail building guidelines for maintenance and reducing erosion	Defer to specialist with experience with trail building guidelines for maintenance and reducing erosion	Defer to specialist such as conservation districts or other trail builders to avoid erosion and damage
USE	High traffic, high use trails that are part of a multi-modal transportation network - ideal for urban settings	Urban settings or where bike racks can be used for connections to town centers or other ALSPT partner properties	Heavy use, helpful in areas prone to erosion for stabilization of slope	Minimal length applications for bridges and trail areas with sensitive resources or inability to lay pavement	Rails to trails for long distance rural travel and minimal grade-disclosure on tires required for safe passage - multi-use – horse friendly	Applicability for access paths to ALSPT Trail from neighboring partner properties (land trusts, towns, others)	Applicability for special mountain bike areas adjacent to ALSPT	Access from ALSPT to trail business locations or shelters where erosion and slope precludes cycle trail

Where the Air Line State Park Trail travels through rural areas, there is less opportunity to access services, safety connections, emergency services, cell service, food, water and amenities. Road suitability for biking on state roadways, between town centers/services and the trail, is an important component to be addressed for the region.

The diagram in Figure 2B denotes service center locations. Nine miles is an optimal travel segment between service centers. This plan provides analysis and recommendations about how towns can optimize their proximity to the trail for economic growth as trail town service and tourism centers with concepts for linking the trail user to town services. Attractions and amenities via state and local roads are paramount to both the positive experience of the trail user and the town to build economic growth from tourism and visitors.

The population of ALSPT visitors is as diverse as the conditions offered by the ALSPT trail, whether the visitor is a novice or expert cyclist, a mountain bike cyclist, a hiker, a runner, an equestrian, snowshoer, a long-distance walker or a cross-country skier.

This accompanying typology chart and map depict the variety of trail conditions of the Air Line State Park Trail and the connections that trail users may find when accessing adjacent properties of land trusts, state parks or forests, visitor centers, town-owned property or businesses that are adjacent to the trail. These typologies provide the following guidance for constructing the trail to meet standards for safety, accessibility, and reliability for maintenance over the long term (see Figure 2C):

- Map and communicate trail conditions on each segment of the trail to ensure trail-users are utilizing the trail with safety and accessibility as a priority.
- Provide conceptual trail connections to neighboring partner properties showing the best access by trail users to the business or venue via an adjunct trail system.
- Identify safe routes for bikeway connections on local and state highways to town centers.
- Provide a storyboard for shared use between the state, towns, and trail committees to identify, depict and locate appropriate amenities such as bike racks, signage, water stations and rest-repair stations.

FIGURE 2B: Proposed Service Centers Along Trail



Existing and potential service centers on the Air Line State Park Trail at no less than 10 miles between service points (exempting Colchester Spur). Service points denote drinking water, bathroom stops, rest areas, connections to food service options, as well as medical services.

Air Line State Park Trail Region Typology — Trail Use

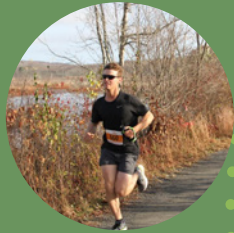
FIGURE 2C



1

Walking

Daily and seasonal walking route provide health benefits and socialization



2

Running

Flat unpaved surface ideal for running, either expert or beginner, and fundraising events



3

Day or Thru Hiking

Connectivity to State Forests and State Parks as well as long distance thru hiking



4

Accessible Outdoors

Surface conditions improvements continue to promote accessibility on trail



5

Cross Country Skiing

Year round options on trail; cross country skiing and snow provide consistent surface

Snowshoeing

Snowshoeing provides family fun and connections to state forests and parks

6



Bicycling

Relatively flat inclines to support short or long distances for beginner to expert cyclists

7



Mountain Biking

Connections to adjacent property mountain bike trail systems

8



Access

Easy access for forest management, emergencies, hunting and fishing, research projects

9



Education

Birding, youth events, public education: geology, ecology systems and archaeology

10



NATIONAL RECREATIONAL TRAILS DESIGNATION



The United States Department of the Interior named the southern section of the Air Line State Park Trail a national recreation trail in 2002.

To complete this designation for the full length of the sixty-four miles of the Air Line State Park Trail, including the section in Portland, the trail must be complete and fully maintained for passage to receive funding toward programming and infrastructure.

Each National Recreational Trail (NRT) must demonstrate that it represents its region, supports a diverse community, and is among America's best trails. NRTs can be nominated by anyone, but must be supported by the State of Connecticut, which owns the property, and be endorsed by the state's State Trail Administrator, CT DEEP. The trail must be open to public use, have no gaps, and be designed, constructed, and maintained according to best management practices, in keeping with the use anticipated. Trails that demonstrate state-of-the-art design and management are especially encouraged to apply for NRT designation. The advantage of designation includes promotion, technical assistance, and networking to increase use and support of the trail.

The goal is to promote the use and care of existing trails and stimulate the development of

new trails to create a national network of trails and realize the vision of "Trails for All Americans." The designation of the full extent of the Air Line State Park Trail and the Portland connector trail is a goal of the completion from the Arrigoni Bridge in Portland to the Tri-State Marker in Thompson.

As an example of the benefits of National Recreational Trail Designation or designated as a region or trail nationally, the Town of Thompson worked closely with the Rivers, Trails and Conservation Assistance program (RTCA)

of the National Park Service. RTCA supports community-led, close to home outdoor recreation and natural resource conservation projects across the nation. They provide technical assistance to environmental and outdoor recreation projects in New England (primarily Massachusetts, Maine, and Connecticut). Their Boston office assisted the Town of Thompson, CT toward trail and town enhancements, with a historic education signs and development plans at "The East Thompson Great Train Wreck" site on the ALSPT.



To complete this designation for the full length of the 64 miles of the Air Line State Park Trail, the trail must be complete and fully maintained for passage to receive funding toward programming and infrastructure.

DATA COLLECTION AND FIELD INVESTIGATION

The planning process was fortunate to have a great team of firms and individuals dedicated to the future of the trail. The data collection and field research involved four separate engagement subsets to bring together data that would inform the full findings and recommendations of the Air Line State Park Trail Region Master Plan. Integration of the four subsets of research between the four research teams was managed by the project planner with support from consulting team and CT DEEP (see Figure 2D).

The process involved numerous interviews with each of the towns, the CT DEEP, stakeholders, trail committees, virtual roundtables, field and site tours of the trail towns and influence areas. More detailed data from the research is located within the appendices of this plan. Based on a reader's interest, there is more in-depth analysis of conservation, land use, resources, economics, town information and infrastructure in the appendices as well.

The main Air Line State Park Trail Region Master Plan document presents an executive summary of the process and findings for each segment. The effort was also fortunate to have the services of the UConn Extension Service Trail Census program, which provided extensive data counts and conducted surveys with visitors on the trail.

While this plan provides a compendium of research and findings, there remains significant work to fully engage the public and government agencies in supporting the buildout and marketing of the Air Line State Park Trail Region. As awareness and popularity of the trail increases, trail usage and feedback from visitors will provide additional information to the Air Line State Park Trail Region Stakeholder Committee.

FIGURE 2D:

Four Engagement Subsets for the Air Line State Park Trail Region



CONSERVATION

- Identify community and state conservation goals for the trail system, adjoining forests, open space
- Analysis of conservation based infrastructure required for trail maintenance and new builds.
- Inventory of archaeology, access, watershed, farming, fisheries, forest continuity, wildlife, herpetology, pollinator pathways, and invasive species



INFRASTRUCTURE

- Survey of trail conditions, road suitability and connections to town centers and services
- Analysis for stormwater management, watershed protection, ADA accessibility, and parking
- Research on optimal locations for restrooms, drinking water, cell service and wayfinding



ECONOMICS AND LAND USE

- Research and analysis of demographics, business sectors, workforce, tourism data
- Review of land use policies, zoning, and regional and state policies
- Evaluation of similar economic based trail corridor plans, success and challenges



LEADERSHIP & GOVERNANCE

- Review of municipal capabilities to support regional leadership of twelve town alliance
- Interview with trail committees and partner organizations to assess commitment to an alliance
- Outline CT DEEP guidance and relationship with towns and partner organizations

PUBLIC ENGAGEMENT IN THE PLANNING PROCESS

In addition to the first meeting between the 12 towns of the Air Line State Park Trail, partners and CT DEEP, a project overview meeting was conducted with CT DEEP leadership to ensure participation as the property owner. All interested stakeholders participated and contributed to various concepts of an Air Line State Park Trail Region Master Plan prior to submitting an application for a Recreational Trails Grant.

Once Recreational Trails Grant funding was awarded by CT DEEP for the project, the newly formed Air Line State Park Trail Region Stakeholder Committee held its first meeting in February 2020, one month before the Covid-19 pandemic closed town halls, schools, and workplaces. The ensuing challenges to public involvement were mitigated by ongoing communication with the committee and a growing stakeholder group. Emails and virtual meetings were utilized to update the committee about ongoing research and new developments. The project team created a newsletter to formalize awareness of the master plan process and unify readers, towns, and stakeholders toward a common purpose. A logo and webpage were created for the project with social media posts and emails directing interested parties to information about the master plan and how to contribute content and concepts.

The initial project planning scope sought to engage youth from both high school and colleges near the Air Line State Park Trail as an educational experience. While there was interest by several high school educators in creating curriculum around research associated with the Air Line State Park Trail,

KICK OFF MEETING
TWELVE TOWN AIR LINE STATE PARK TRAIL REGIONAL MASTER PLAN
 02.20.2020 12-2PM
 COLUMBIA, CHAPLIN, COLCHESTER, EAST HAMPTON, HAMPTON, HEBRON, LEBANON, PORTFRET, PORTLAND, WENHAM, WINDHAM, THOMPSON
 Connecticut Department of Energy & Environmental Protection
 Connecticut Department of Transportation
 Douglas Library
 22 Main St., Hebron, CT 06448

Introduction
Goals
Economics
Motivate
Inform
Support
Outcome

COMPONENTS OF THE MASTER PLAN
PLANNING AND POLITICS
 Framework of government and land use support to enable implementation of a regional template/framework
REGIONAL CONSERVATION
 Environmental asset protection to enhance eco-tourism and marketability of 12 town region as a destination
INFRASTRUCTURE & CAPITAL
 Identifying issues, roles and responsibilities and opportunities for cost efficiency and collaboration with CTDEEP
SUSTAINABLE ECONOMIC GROWTH
 Expanding on the work of existing business organizations toward cross promotion/partnerships
REGIONAL ADVOCACY, MEDIA & OUTREACH
 Create strategies: wayfinding (physical & web-based), build a regional website, logo, advertising, build the buzz campaign
SUSTAINABLE PROJECT IMPLEMENTATION
 Creating a regional entity to fund/coordinate marketing, website, trail events, government/stakeholder partnership and build liaison with CTDEEP

REGISTER AND RECEIVE THE ZOOM INVITE
<https://www.airlinetrail.com/012-2020-air-line-state-workshop-series>
 4344469373

SAVE THE DATES
AIR LINE STATE PARK TRAIL 12 TOWN WORKSHOP SERIES
 5:30 - 6:30PM - CT RC&D ZOOM ROOM

JANUARY 10, 2023 - THE TRAIL
 Existing Conditions & Resources

JANUARY 12, 2023 - BUILDING SYNERGY
 Infrastructure & CTDEEP - Town Partnerships

JANUARY 17, 2023 - COMMON PURPOSE
 Towns by Town Recreational Collaborations

JANUARY 19, 2023 - TRAIL TOWNS
 Layout & Recommendations

May 27 @ 4-5PM
Airline Trail Youth Representatives Info Session
 Let's make our towns green!
 Thank you for applying to join our team of youth volunteers. Learn what it takes to be an Airline Trail Representative for your town during this Zoom info session hosted by CT RC&D.
 Join our Zoom session:
 Topic: Airline Trail Youth Representative Info Session
 Time: May 27, 2023 04:00 PM Eastern Time
 Register in advance for this meeting:
<https://us02.zoom.us/j/96041276041>
 You will receive a confirmation email containing information about joining the meeting.

AIR LINE STATE PARK TRAIL MASTER PLAN PROMOTING A REGIONAL ASSET
 The Master Plan will be developed in collaboration with a task force made up of representatives from the Towns of Chaplin, Colchester, Columbia, East Hampton, Hampton, Hebron, Lebanon, Portfret, Portland, Thompson, and Wenham.

PROJECT GOALS:

- Inventory adjacent town land use, planning, and economic strategies
- Develop regional collaboration options based on best practices
- May lead to off-trail camps, tourist amenities, and concessions
- Market Trail System
- Coordinate strategies to: boost economic development to stimulate and create new small recreational supportive businesses
- Create regional share tandem options and efficiencies for collaborative maintenance and improvements to trail, parking areas, and amenities
- Inventory natural resources to highlight and map critical areas for maintenance concerns, wildlife habitat restoration, as well as providing recreation and education
- Enhance marketing and branding to include town amenities, Air Line Trail events, and trail interpretation
- Create a new website with links to CT DEEP and planning for off-trail based apps
- Coordinate regulatory and design objectives for adjacent land use and protect scenic integrity of the corridor
- Update and develop frameworks for continuing the Twelve Town Air Line Trail Collaborative

For more information, contact Andrea Perea at 860-345-3977 or aperea@ctrcs.org

WINTER 2022 PROJECT NEWSLETTER

the Covid-19 pandemic created difficulties in coordination and attendance at the trail meetings. The Last Green Valley, the Town of Thompson and other partners took the initiative to engage youth through summer camps that based fun and learning on the Air Line State Park Trail. Additionally, diversity and associated statistics were evaluated with potential for creating a welcoming and inclusive trail experience for Black, Indigenous, and People of Color (BIPOC) trail visitors and bilingual sign and wayfinding information for the trail recommendations in the plan were developed to further engage the public. In the future, there is more that can be accomplished with respect to youth and diversity engagement in planning for the trail.

The Air Line State Park Trail Region Stakeholder Committee initially had 24 active participants. To mitigate the inability to gather in-person for public meetings and focus groups, additional participants and stakeholders were sought out. The initial Air Line State Park Trail Stakeholder Committee expanded to a stakeholder group with over 130 participants informing the planning process. This group was regularly updated by email with new developments and research. By 2021, additional outdoor meetings were conducted at specific site locations to talk about conservation resources, partner organizations connections, management issues and infrastructure/maintenance planning.

After the research process concluded in December 2022, project planning staff from CT RC&D with support from the consulting team hosted four separate 1-hour virtual late afternoon workshops in January 2023. The focus of the workshops was to review findings, tentative recommendations and plan structure with the Air Line State Park Trail stakeholders and participating members of the public. The goal was to elicit comments and suggestions from participants to prepare the final draft of the Air Line State Park Trail Region Master Plan. The workshops were videotaped and posted on the project's webpage.

The Air Line State Park Trail Region Stakeholder Committee grew from 24 active participants to more than 130 members, despite the challenges of the pandemic.

