Downtown Trails as Community & Economic Development Engines

The BRIDGE Series
Connecticut Main Street Center
November 16, 2018
9:30-11:30 am

Aaron Budris, Senior Regional Planner, Naugatuck Valley Council of Governments
Jack Walsh, Former President and CEO Valley United Way
Laura Brown, Community & Economic Development Educator, UConn Extension
1. Trails as assets
2. Overview of Trail Census
3. NRG - Derby Greenway Case Study
4. NRG Impact Study
5. Capitalizing on your trail
6. Discussion/Questions
Agenda

Downtown Trails as Community & Economic Development Engines

co-hosted by [CT Trail Census & UConn Extension]
November 16, 2018 at CT Main Street Center, Hartford
9:00 am – Networking Breakfast  9:30-11:30 am – Program

TRAILS AS COMMUNITY ASSETS

Laura Brown, Community & Economic Development Educator, UConn Extension

NAUGATUCK RIVER GREENWAY/ DERBY GREENWAY CASE STUDY

Aaron Budris, Senior Regional Planner, Naugatuck Valley Council of Governments
Jack Walsh, former President & CEO, Valley United Way

BEST PRACTICES FOR CAPITALIZING ON A TRAIL

Laura Brown, Community & Economic Development Educator, UConn Extension

Portions of this presentation and photos from some slides are the result of a multistate grant supported by the Northeast Regional Center for Rural Development.
What is a Multi-use or Shared-use Trail?

Supports multiple forms of recreation and transportation such as walking, bicycling, equestrians and users with a diverse range of abilities

Motorized vehicles normally prohibited

Typically surfaced with asphalt, concrete or packed crushed aggregate

Physically separated from motor vehicular traffic with an open space or barrier

Designed to include pedestrians even if the primary anticipated users are cyclists
"Greenway" means a corridor of open space that

(1) may protect natural resources, preserve scenic landscapes and historical resources or offer opportunities for recreation or nonmotorized transportation,

(2) may connect existing protected areas and provide access to the outdoors,

(3) may be located along a defining natural feature, such as a waterway, along a man-made corridor, including an unused right-of-way, traditional trail routes or historic barge canals or (4) may be a greenspace along a highway or around a village. (CGS section 23-100)

https://www.ct.gov/deep/cwp/view.asp?a=2707&q=323858&deepNav_GID=1704
Why Consider Trails as an Asset to Downtowns?

1. Demand for healthy lifestyle, QOL amenities
2. Transportation needs (carless households)
3. Historic routes connected downtowns
4. Case studies demonstrate this can work
5. Demonstrated value - economic, improved health, property valuation, safety benefits, air and water quality benefits, connectivity & access, community engagement
58% OF CONNECTICUT RESIDENTS PARTICIPATE IN OUTDOOR RECREATION EACH YEAR

Communities across Connecticut recognize that outdoor recreation supports health, contributes to a high quality of life and—perhaps most importantly—attracts and sustains employers and families. Investing in outdoor infrastructure attracts employers and active workforces, ensuring those communities thrive economically and socially.

Connecticut residents are more likely to PARTICIPATE IN DAY HIKING AND KAYAKING than the average American.

INTEREST IN OUTDOOR RECREATION, PARTICULARLY NATURE-BASED OUTDOOR RECREATION, IS ON THE RISE.

#PARTICIPANTS
#DAYS

People Want Access to Trails

In the Statewide Survey based on 2,026 responses from the general population, the most popular outdoor land-based activity was walking/hiking, with nearly nine-tenths (86%) of households and two-thirds (65%) of individuals reporting participation in the last twelve months.

Demand for Active Lifestyles

National Association of Homebuilders

“One of NAHB’s latest studies shows which community amenities are the most sought after. The study, Housing Preferences of the Baby Boomer Generation, captures the opinions of more than 4,300 prospective home buyers and compares the wants of Boomers (born between 1946 and 1964) to those of seniors (born before 1946), Gen-Xers (born 1965 to 1979), and Millennials (born after 1979).

Though the priority rankings vary slightly between generations, the results of the study reveal these different age groups actually have very similar tastes. Among the top four most-wanted amenities, three were the same for every age group: They all desire to live in a community that’s typically suburban, with close proximity to a park area, and that has access to walking/jogging trails.”
Demand for Active Lifestyles

From Focus Groups conducted in 2015 with Farmington River Canal Trail Area Business Owners for the Naugatuck River Greenway Economic Impact Study

“A big part of becoming a bicycle-friendly community is not only attracting residents to town but attracting businesses. **Quality of life is important to the younger generation coming in. They want places where they can walk and bike and maybe commute to work three or four miles.** That’s an enormous part of that whole [bicycle friendly community] initiative - it isn’t just about kids in school now, it’s about the businesses.”

“**Leisure is the new amenity in my opinion, from my perspective as a marketing and salesperson.** When I bring people to look at a community ...trying to relocate in the area...I show them the library and the town halls, I also show them the drop off locations on the bike trails, and I have literature that I give them if they’re going back to their hotel at night…”

**Regarding several new housing developments:** “They actually have their own bikes and they are one my [bicycle shop] sponsors. **They know how important it is to be able to attract tenants via the bike story.**”

Demand for Quality of Life Amenities

Area Development Annual Survey:

“Corporate Survey respondents are very concerned with quality of life. They ranked this factor #4, with an 87.2 combined importance rating. On the other hand, the respondents to our Consultants Survey, only placed quality of life in the #20 spot among the site selection factors, with a 71.2 combined importance rating.”

TrOD Trail Oriented Development

The Lafitte Greenway: Guide to Trail-Oriented Development provides a comprehensive set of planning and design principles for new development along the Lafitte Greenway. Community leadership and engagement have been at the center of the Greenway's development. The principles outlined in this report are built upon and codified in the following public documents:


Over 3,000 miles of trails in Connecticut

Recreational Trails Program provided over $14 million since 2007 to design, build and maintain recreational trails in Connecticut.
Historic Routes Connected Downtowns and Amenities

Example: Piqua, Ohio

- antiques
- arts & crafts store
- auto repair
- auto storage
- bakery
- bank
- bar
- barber
- beer garden
- bottling works
- bowling alley
- brewery
- butcher
- cafe
- chocolates store
- clothing store
- cobbler
- coffee shop
- drug store
- furniture
- hotel
- ice cream
- leather store
- local foods store
- paints & varnish
- printing
- public pool
- running store
- sporting goods
- steam laundry
- tin shop
- tire sales

PROPOSED USES ADJACENT TO PARK

- Boutique hotel
- Micro brewery
- Art gallery
- Performance pavilion

Examples to Learn From


We’re the oldest, most successful Trail Town program.

Follow our lead.

We know this works... because we’ve done it.

Tourism potential was rich, but untapped on the Great Allegheny Passage (GAP). The 150-mile trail meets the already popular 185-mile C&O Canal Towpath, which continues to Washington, D.C.

In 2007, The Progress Fund started working to plug the GAP’s rural communities into the economic opportunity the trail created.

In its pioneering 10 years, The Trail Town Program® has become a model for trail community revitalization.

Building on the same model, we’ve grown economies on other trails, too. Every trail and every town needs a personal touch, but with these ideals as a backbone, we’ve set towns all across our region on the path to prosperity.

65 new businesses
270+ jobs created
10x more visitors
$50M economic impact
Bolton Greenway Extension Project Area

Need to Demonstrate Value

Estimates of $200,000 to over $1,000,000/mile
Need to understand the returns on our investment

Opinion of Probable Construction Cost:

<table>
<thead>
<tr>
<th>SUMMARY</th>
<th>Cost</th>
</tr>
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<tbody>
<tr>
<td>Bolton Greenway Extension Construction</td>
<td>$1,830,000</td>
</tr>
<tr>
<td>Right-of-Way Impacts</td>
<td>$490,000</td>
</tr>
<tr>
<td>Legal Expenses</td>
<td>$200,000</td>
</tr>
<tr>
<td>Final Design, Surveying, and Permitting</td>
<td>$100,000</td>
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<tr>
<td>Geotechnical Investigations of Rock Slopes</td>
<td>$20,000</td>
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<td>Environmental Investigations – Screening Level</td>
<td>$22,000</td>
</tr>
<tr>
<td>(Archaeological / Historic / Hazardous Material / Wetland Delineation)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>$2,662,000</td>
</tr>
</tbody>
</table>

## Cost Benefit Calculations

### Existing Facility (preservation or non-routine maintenance required)

<table>
<thead>
<tr>
<th>Cost Per Mile (March 2011 $) (see notes below)</th>
<th>Separate-Alignment Shared-Use Path</th>
<th>Rail-Trail (RR to path conversion)</th>
<th>Shared-Use Paths (both sides of street)</th>
<th>Sidewalks (both sides of street)</th>
<th>Shoulders (both sides of roadway)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE (Project Development Costs)</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$10,000</td>
<td>$5,000</td>
<td>$5,000</td>
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<tr>
<td>RW (Right-of-Way Acquisition Costs)</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
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<td>CN (Construction Costs)</td>
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<td>$110,000</td>
<td>$180,000</td>
<td>$70,000</td>
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<td><strong>Total Cost</strong></td>
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<td>$115,000</td>
<td>$190,000</td>
<td>$75,000</td>
<td>$145,000</td>
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</table>

### New/Proposed Facility (construction or reconstruction required)

<table>
<thead>
<tr>
<th>Cost Per Mile (March 2011 $) (see notes below)</th>
<th>Separate-Alignment Shared-Use Path</th>
<th>Rail-Trail (RR to path conversion)</th>
<th>Shared-Use Paths (both sides of street)</th>
<th>Sidewalks (both sides of street)</th>
<th>Shoulders (both sides of roadway)</th>
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</thead>
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<td>$55,000</td>
<td>$90,000</td>
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<td>RW (Right-of-Way Acquisition Costs)</td>
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<td>$250,000</td>
<td>$100,000</td>
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<tr>
<td>CN (Construction Costs)</td>
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<td><strong>Total Cost</strong></td>
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Understanding the Value of Trails as Assets

How do we understand/quantify the value of a trail to the community?

How do we make the best case for our trail?

How do we leverage the trail to increase impact?
Trails Create Value

Economic Impacts
Direct, Indirect, Induced

Health impacts

Property valuation

Safety benefits

Environmental

Connectivity & access

Community engagement

Economic Value

While walking on the trail, Kristina pays $3 for an ice cream cone.
Economic Value

When we include direct, indirect, and induced spending that $3 for an ice cream cone may be worth $5-$8 to the local economy.

Multi-Use Trail Day User Spending Ranges

- Rails to Trails Conservancy Study (2009) Average: $9.31
- Virginia Creeper (2004) Average: $12.00-17.00
- American Tobacco Trail (2016) $27.00
- Burlington Waterfront Path (2010) in Vermont estimated that in-state day users $60.20 per trip and out-of-state domestic day users spent $67.16.
- CT Trail Census User Intercept Survey (2017) Average: $5.64

## Trail User Spending Ranges - In State Day Trip

Table 18. In-state Day Trip Spending per Trip  
(Dimensions: 2 event types by 16 activity groups by 6 items)

<table>
<thead>
<tr>
<th>Activity</th>
<th>entrance</th>
<th>food</th>
<th>other</th>
<th>recreate</th>
<th>souvenir</th>
<th>transport</th>
<th>TOTAL</th>
<th>N</th>
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<tbody>
<tr>
<td>Overall</td>
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<td>per</td>
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</table>

### Table 19. Out-of-state Day Trip Spending per Trip

(Dimensions: 2 event types by 16 activity groups by 6 items)

<table>
<thead>
<tr>
<th>Activity</th>
<th>entrance</th>
<th>food</th>
<th>other</th>
<th>recreate</th>
<th>souvenir</th>
<th>transport</th>
<th>TOTAL</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Spending per Participant Trip</td>
<td></td>
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<td></td>
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<td>$80</td>
<td>$250</td>
<td>361</td>
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<table>
<thead>
<tr>
<th>Expenditure</th>
<th>% Trips with Expenditures</th>
<th>Average Expense</th>
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<tbody>
<tr>
<td>Beverages</td>
<td>55.50%</td>
<td>$3.16</td>
</tr>
<tr>
<td>Food</td>
<td>28.71%</td>
<td>$1.79</td>
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<tr>
<td>Meals at a restaurant</td>
<td>24.64%</td>
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<tr>
<td>Gas</td>
<td>42.11%</td>
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<tr>
<td>Retail (gifts, clothing, etc)</td>
<td>4.83%</td>
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<td>Equipment rental</td>
<td>0.00%</td>
<td>$0.00</td>
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<td>Lodging</td>
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<td>Nearby activities</td>
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<td>Total</td>
<td>21.14%</td>
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### Table 20. In-state Overnight Trip Spending per Trip

(Dimensions: 2 event types by 16 activity groups by 7 items)

<table>
<thead>
<tr>
<th>Activity</th>
<th>entrance</th>
<th>food</th>
<th>lodge</th>
<th>other</th>
<th>recreate</th>
<th>souvenir</th>
<th>transport</th>
<th>TOTAL</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Spending per Participant Trip</td>
<td></td>
<td></td>
<td></td>
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Heads in Beds!
Trail User Spending Ranges - Out of State Overnight

Table 21. Out-of-State Overnight Trip Spending per Trip (Dimensions: 2 event types by 16 activity groups by 7 items)

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Heads in Beds!
### Table 21. Out-of-State Overnight Trip Spending per Trip

(Dimensions: 2 event types by 16 activity groups by 7 items)

<table>
<thead>
<tr>
<th>Activity</th>
<th>entrance</th>
<th>food</th>
<th>lodge</th>
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<th>recreate</th>
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Heads in Beds!
Calculating Impacts

Direct, indirect, induced impacts can be impacts to businesses as well as impacts to the overall economy from capital and operational expenditures.
Calculating Impacts

Methods vary widely from study to study
Based on average user spending and number of annual users
Involves extrapolation to all users
Usually $1-$20 million

- Vasa Pathway Study - Regular Trail Users Provide $23.5 million of direct spending annual in Michigan with 6,200 trail users spending $3,700 on equipment each on average

- American Tobacco Trail - After construction of a pedestrian bridge trail use rose by 133% and direct expenditures rose from $2.4 million to $6.1 million

- Paved trail network in Ohio estimates that 13% of trail users use the trail as tourists spending $13 million annually.

What does this mean for communities & businesses?

“Studies have shown that trails and greenways support local business development as a result of increased visitation to the area or to “gateway communities.” Following trail openings, communities have documented increases in businesses such as lodging and restaurant facilities, bike rental establishments, and bed and breakfasts.”

Economic Value

Trails Create Value

Economic Impacts
Direct, Indirect, Induced

Health impacts

Property valuation

Safety benefits

Environmental

Connectivity & access

Community engagement

Health Values

- Healthcare cost savings
- Reduced burden of disease
- Reduced absenteeism
- Air pollution and transportation related health costs
- Avoidable deaths

MODELS-
ITHIM- Integrated transport and Healthy Impact Model
HEAT- Health Economic Impact Assessment Tool - if X number of people walk or cycle for Y amount of time, what is the economic value of the health benefits that occur as a reduction in mortality as a result of their physical activity?

Property Values

- Along a greenway in Austin Texas the price premium for a home along the greenway ranged from 6-20%, translating into a estimated $59,000 per year in additional tax revenue or 5% of the annual cost of construction and maintenance.

- A 2011 study by the Connecticut Center for Economic Analysis identified a valuation bonus of $41,961 to $50,124 for properties overlooking green spaces.

- In rural Methow Valley Washington, homes within a quarter mile of trails benefited from a 10% price premium.

- In Indianapolis, researchers found a high-profile destination trail was associated with an 11% price premium for homes within a ½ mile. Other trails demonstrated no premium.
Social, Environmental, and Community Value

- Net safety benefits provided by switching from auto to active forms of travel are estimated to be 5 cents/urban mile and 3 cents/rural mile.

- Switching from driving to walking or biking lowers costs on society. Estimated commute costs associated with driving are 2 cents per rural mile and 9 cents/urban mile.

- In the Connecticut Trail Census 2017 Intercept Survey (n=999) respondents' primary purpose on the trail was overwhelmingly Exercise (89.5%), followed by Relaxation (40.9%), Recreation (39.3%), and Dog Walking 18.6%. 3.6% of respondents said their primary purpose was Tourism and 1.1% had a primary purpose of Commuting to work. Less than 1% had a primary purpose of trail use for travel to school or shopping.

- Just because it's hard to quantify doesn't mean we shouldn't measure it!

The primary activity of trails users surveyed in the 2017-2018 Connecticut Trail Census was walking (69%) followed by bicycling (16%), running/jogging (14%), horseback riding (0.6%) and other (0.6%) n=973

Connecticut Trail Census

A statewide volunteer-based data collection and education program on multi-use trails

Encouraging data informed decision-making and promoting resident participation in trail monitoring and advocacy
16 Participating Trail Sites

- Thompson
- E.Hampton
- New Britain
- Cheshire
- New Haven
- Hamden
- Bolton
- Vernon
- Oxford
- Middlebury
- Derby
- Wilton
- Madison
- Brookfield
- Torrington
- *Hartford
Infrared Trail Counters
- How many trail uses?
- When are uses occurring?
- Use patterns?

Intercept Surveys
- Who is using the trails?
- How are the trails being used?
- Local spending?

Quantitative

Qualitative
Trail Use Count Data

- Infrared (IR) pedestrian counters
- Monitored & calibrated by volunteers
## Connecticut Trail Census Manual Count F

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All times Eastern Daylight S
Record multiples passing ce
Record strollers, skateboards
Record activity in comment
Send completed forms to:
Aaron Budris, NVOOG, 49 Li

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<td>7</td>
<td></td>
<td></td>
<td>58</td>
</tr>
</tbody>
</table>

**TOTALS:** 17 8 7 = 32
Data Communication - www.cttrailcensus.uconn.edu

2017: 1,401,415 uses across all trails

Visualizations

Interactive maps & data display

Data download portal

![Image of data visualizations and maps](https://www.cttrailcensus.uconn.edu)
The East Hampton Air Line Trail volunteer team intercepting and surveying. This couple shared that they were using the trail while they visited all the way from MA!

While trail users fill out the surveys, many volunteers report that they enjoy chatting about their shared interest: the trail!
Trail Census Trail User Survey

None of the information gathered will be used to identify you individually. All data will be kept confidential and will be aggregated for analysis.

1. What is your home ZIP code? ___________

2. How are you traveling on the trail today?
   - [ ] Walk
   - [ ] Equestrian
   - [ ] Run/Jog
   - [ ] In-line skate
   - [ ] Bike
   - [ ] Other ___________

3. If there are children age 18 or under using the trail with you today list how many ___________

4. How many minutes do you plan to spend on the trail? ___________ # minutes

5. What is your purpose? (select all that apply)
   - [ ] Recreation
   - [ ] Relaxation
   - [ ] Dog walking
   - [ ] Travel to school
   - [ ] Travel to shopping
   - [ ] Travel to work
   - [ ] Tourism/sightseeing
   - [ ] Exercise - Manage weight
   - [ ] Exercise - Preventative
   - [ ] Exercise - Endurance
   - [ ] Exercise - Prescribed
   - [ ] Family time
   - [ ] Socializing
   - [ ] Other ___________

6. Does the availability of this trail impact your decision to exercise or the frequency at which you exercise? ___________
   - [ ] Yes
   - [ ] No

7. How did you get to the trail today?
   - [ ] Car/Motorcycle (alone)
   - [ ] Car/Motorcycle (with someone else)
   - [ ] Public Transit (bus/train)
   - [ ] Bicycle
   - [ ] Walk
   - [ ] Run/Jog
   - [ ] Other ___________

8. How often do you use the trail at this location?
   - [ ] First time
   - [ ] 5 or more times/week
   - [ ] 2-4 times/week
   - [ ] Every month
   - [ ] Every few months

9. During which seasons do you generally use the trail? (Select all that apply)
   - [ ] Summer
   - [ ] Fall
   - [ ] Winter
   - [ ] Spring

10. On this trip to the trail only, if you have spent or plan to spend money, please write how much you will spend on the following in whole dollars (If nothing write "0"): Beverages $__________

11. How much do you spend each year on goods or services related to trail use? Include gear, clothing, equipment rental, repairs, auto accessories, $____________

12. What are your favorite things about this trail? ____________________________________________

13. What would improve your trail experience? ____________________________________________

14. In the past week, how many days did you get in 30 minutes of extra activity that was NOT part of your daily routine? Includes things like jogging, playing soccer, fitness or dance classes, or exercise videos. The 30 minutes could be all at once or 10 minutes or more at a time. Do not count housework, taking care of kids, or walking from place to place. ___________ # days/week

15. How many of these days included vigorous exercise? Causing increase in breathing or heart rate ___________ # days/week

16. What is your age range?
   - [ ] Under 18
   - [ ] 18-24
   - [ ] 25-34
   - [ ] 35-44
   - [ ] 45-54
   - [ ] 55-64
   - [ ] 65-74
   - [ ] 75 or over

17. What best represents your household income?
   - [ ] Under $24,999
   - [ ] $25,000 - $49,999
   - [ ] $50,000 - $99,999
   - [ ] $100,000 - $199,999
   - [ ] Over $200,000

18. What is your race or ethnicity? (Select all that apply)
   - [ ] White
   - [ ] Black or African American
   - [ ] American Indian
   - [ ] Asian
   - [ ] Pacific Islander
   - [ ] Spanish, Hispanic
   - [ ] Other ___________ or Latino

19. What is your gender?
   - [ ] Male
   - [ ] Female
   - [ ] Prefer to self describe ___________
Volunteers involved in surveying trail users contributed to 34 survey trips in 4 months.
CT Multi-Use Trail User Profile

Purpose and Activities

☑ The average group size was 2.3 people (n=1003).

☑ The primary activity on these trails is Walking (68.7%) followed by Bicycling (16.1%), Running/Jogging (14.0%), Horseback Riding (0.6%) and Other (0.6%) (n=973).

☑ Respondents’ primary purpose on the trail was overwhelmingly Exercise (89.5%), followed by Relaxation (40.9%), Recreation (39.3%), and Dog Walking 18.6%. 3.6% of respondents said their primary purpose was Tourism and 1.1% had a primary purpose of Commuting to work. Less than 1% indicated a primary purpose of trail use for Travel to

The majority of users got the trail by car or motorcycle alone (48.5%) but an encouraging 30.5% traveled in a car with someone else. 7.2% of users biked to the trail and 12.6% walked or jogged (n=983).

☑ Respondents represented 165 unique zip codes. While most users were from the state of Connecticut, there were multiple users from Massachusetts, New Jersey, New York, and Vermont.

1,003 trail users intercepted on 11 of the 15 trails
Of the 983 respondents:

- 48.5% travelled alone,
- 30.5% carpooled

Respondents represented 165 unique zip codes.
Community comparisons

Hop River Trail Vernon
n=171

- Total recorded uses: 133,016
- Total surveys collected: 181

30 Unique Zip Codes

Naugatuck River Greenway
n=160

- Total recorded uses: 303,550
- Total surveys collected: 163

23 Unique Zip Codes
Survey Data Reports

Demographics of Trail Users
✓ The majority, (65.2%) of household incomes were reported as between $50,000 and $200,000.

**Household Income - Percent of Total**
All Trails n=837 This Trail n = 145

<table>
<thead>
<tr>
<th>Income Level</th>
<th>All Trails</th>
<th>This Trail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over $300,000</td>
<td>5.5%</td>
<td>12.1%</td>
</tr>
<tr>
<td>$100,000-149,999</td>
<td>24.5%</td>
<td>24.5%</td>
</tr>
<tr>
<td>$50,000-99,999</td>
<td>31.9%</td>
<td>12.3%</td>
</tr>
<tr>
<td>$25,000-49,999</td>
<td>14.2%</td>
<td>17.7%</td>
</tr>
<tr>
<td>Under $24,000</td>
<td>10.4%</td>
<td>17.7%</td>
</tr>
</tbody>
</table>

Frequency of Use
✓ Trail users use this trail often! 72.3% of all users reported using the Naugatuck River Greenway at this location at least once per week. 50.3% of respondents use the trail 3 or more times per week, including daily users which account for 11.2% (n=161).
✓ Summer and Spring are the seasons of highest use. 91.3% of respondents indicated they use the trail in the summer followed closely by Spring, (90.7%), and Fall, (81.9%). A surprising 31.6% of respondents indicated they use the trail in the Winter (n=161). Note: respondents could select more than one season.

How often, on average do you use this trail?
All Trails n=992, This Trail n = 161

<table>
<thead>
<tr>
<th>Frequency</th>
<th>All Trails</th>
<th>This Trail</th>
</tr>
</thead>
<tbody>
<tr>
<td>5+ times/week</td>
<td>6.0%</td>
<td>7.7%</td>
</tr>
<tr>
<td>2-4 times/week</td>
<td>21.0%</td>
<td>21.0%</td>
</tr>
<tr>
<td>1 time/week</td>
<td>23.7%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Semi-regular users</td>
<td>23.7%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Rare users</td>
<td>35.1%</td>
<td>13.2%</td>
</tr>
</tbody>
</table>

Spending
✓ A surprising 84.4% of all respondents reported annual spending related to this trail with an average of $166 per year (outliers not excluded).
✓ 26.4% of respondents indicated spending on that particular visit to the trail. This was greater than the 21% who reported any spending overall. Proximity of shopping at this location may have impacted this for the Naugatuck River Greenway compared to other trails in the Census.
✓ Respondents provided additional detail about their spending on that particular visit in various categories below averaging a total of $6.23 which was also higher than the average of $5.84 for trails across the Census.

How much will you spend on the following categories on this visit to the trail?
All Trails n = 971 This Trail n = 159

- Meals
- Gas
- Other
- Beverages
- Retail
- Snacks
- Nearby activities

Note: Respondents were asked if they spent any money on lodging or rentals but no one in census reported spending in these categories.

Suggested Improvements
✓ Most cited suggested improvements included: nothing (9) as well as concerns about dogs (9), geese (7) and graffiti (4).

Favorite Thing About the Trail
✓ Most cited favorite things about this trail included the view (25), scenery (16), the river (13) and cleanliness (12).
Volunteer Opportunities and Training

- Trafx IR Counter
- Manual Count Forms
- Paper Surveys
- Stamped Return Envelopes
- Instructions
- Branded Vests
- Informational Handouts
- Face to Face Training
- Webinars

In 2017 63 community volunteers donated over 818 volunteer hours to the program!
## Program Update: Second Year

Current total uses: 618,062
January 1 – June 24, 2018

<table>
<thead>
<tr>
<th>Participating Trail</th>
<th>Total</th>
<th>Uses/Week</th>
<th>Uses/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naugatuck River Greenway Derby</td>
<td>174,128</td>
<td>6,697</td>
<td>957</td>
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<tr>
<td>Hop River Trail Vernon</td>
<td>56,170</td>
<td>2,160</td>
<td>309</td>
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<tr>
<td>Still River Greenway Brookfield</td>
<td>54,937</td>
<td>2,113</td>
<td>302</td>
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<tr>
<td>Farmington Canal Heritage Trail New Haven</td>
<td>51,189</td>
<td>1,969</td>
<td>281</td>
</tr>
<tr>
<td>Shoreline Trail Madison</td>
<td>40,845</td>
<td>1,571</td>
<td>224</td>
</tr>
<tr>
<td>Sue Grossman Trail Torrington</td>
<td>38,812</td>
<td>1,493</td>
<td>213</td>
</tr>
<tr>
<td>Farmington Canal Heritage Trail Cheshire</td>
<td>36,197</td>
<td>1,392</td>
<td>199</td>
</tr>
<tr>
<td>Norwalk River Valley Trail Wilton</td>
<td>33,285</td>
<td>1,280</td>
<td>183</td>
</tr>
<tr>
<td>Farmington Canal Heritage Trail Hamden</td>
<td>29,221</td>
<td>1,124</td>
<td>161</td>
</tr>
<tr>
<td>Airline Trail East Hampton</td>
<td>28,401</td>
<td>1,092</td>
<td>156</td>
</tr>
<tr>
<td>Hop River Trail Bolton</td>
<td>22,497</td>
<td>865</td>
<td>124</td>
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<tr>
<td>Middlebury Greenway</td>
<td>19,456</td>
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<tr>
<td>CTFastrak Trail New Britain</td>
<td>18,565</td>
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<tr>
<td>Larkin Trail Oxford</td>
<td>13,245</td>
<td>509</td>
<td>73</td>
</tr>
<tr>
<td>Airline Trail Thompson</td>
<td>1,113</td>
<td>43</td>
<td>6</td>
</tr>
</tbody>
</table>
Development of Derby Greenway

Linking two rivers, three cities and six bridges
Who Had the Original Idea?

**Housatonic Valley Association (HVA)** was planning a Greenway to extend from Long Island Sound to the MA border along the Housatonic River.

**Olde Birmingham Business Association (OBBA)** started to work with HVA with an eye towards revitalization of a decaying downtown (Main Street) which ran along the Housatonic.
Healthy Valley 2000 was a grant-funded community planning initiative that started working on 27 community initiatives.

One of those projects was the hope to develop a linear walking/jogging/biking trail

**Coming Together**

Healthy Valley proposed that a Derby Greenway could be developed on the flood control walls that ran along both the Housatonic and Naugatuck Rivers and framed Derby’s retail areas - and OBBA and HVA agreed!
Greenway Built

A local community foundation grant was received that showed that the proposed Greenway could be built on top of the flood control walls. The city owned the walls, but the Army Corps of Engineers regulated types of usage and would allow the walls to be used.

The city sought and received a grant using federal transportation funds and the trail was built. The formal ribbon cutting was on June 25, 2016, but users flooded to the trail in the fall of 2015 while construction proceeded.
So What Happened?

The trail was an immediate success in terms of usage and image improvement for the city and the entire Valley.

That success led to Phase II and Phase III which added enhancements and an extension to the trail.

Ansonia quickly moved to design and build their own trail connecting to Derby.

The Naugatuck River Greenway Steering Committee was formed to look at extending the trail the length of the Naugatuck River to Torrington.
Economic Development Did Not Happen Immediately!

The infrastructure was not yet in place even if the interest was. Progress seemed to be marked by demolition!

This was the view of the back of Main Street when the trail opened.

This is how things looked as the crumbling buildings on Main Street were torn down.

This was a major loss to the history of Derby!
A Clean Slate!

This is the city’s Center Design Development District Zone. This view is directly from the Derby Greenway which borders the District and the Housatonic River. Main Street is also RT. 34, and its reconstruction is critical to the economic development of the area.
The Future Is Now!

Planning & Zoning has given approval for a Planned Development District Zone allowing planning to move forward for the first new buildings in downtown Derby since the 1960's.

Part of the rationale for the District is to, “promote an attractive pedestrian environment with access to potential greenway and transportation corridors.”
Route 34 (Main Street) Reconstruction
Derby-Shelton Bridge Rehab

Improve Pedestrian Access

Connect to Derby and Shelton Greenways
Derby Downtown Now-2016

DPZ Partners

Public process to envision downtown improvements

Strongest Place = The Greenway

Adjacent area is vacant/ underutilized

Weaknesses

Strengths
The NRG Trail is a planned 44 mile multi-use trail following the Naugatuck River through 11 communities.

- Improve health and quality of life of residents
- Provide a viable transportation option
- Restore river access
- Provide economic opportunities

But...

- No ROW to follow
- Tight Geographies
- Industrial Legacy
- $$$$$
Naugatuck River Greenway Trail Overview

Trail is being constructed at the municipal level with federal, state and local funds.

Assisted by NVCOG and NHCQOG

Overseen and guided by the NRG Steering Committee (NRGSC) including municipal and stakeholder members

- Find Funding
- Prioritize
- Coordinate
- Provide Guidance
- Research and Data
Routing Studies

Preferred route arrived at through extensive public & stakeholder engagement

Route feasibility AND community benefit

Construction phasing and cost estimates
Naugatuck River Greenway Trail Progress

**Derby**

- 2 miles - mostly on USACE built levees
- Downtown/ Bridge Street to Division Street
- 300,000+ trips taken annually/ +150,000 visits
Naugatuck River Greenway Trail Progress

**Ansonia**

- ¾ mile contiguous to Derby Greenway
- Division Street to Pershing Drive
- New bridge over RR to downtown
- Design underway for sections 2, 3 & 4
Naugatuck River Greenway Trail Progress

Seymour

➔ 1,400ft section opened 2018
➔ Bank Street to Tingue Dam Bypass Park
Naugatuck River Greenway Trail Progress

Beacon Falls

- 1800 ft road diet from Veterans Park to Rte. 42
- Riverbend Park
- Plans to connect them
Naugatuck River Greenway Trail Progress

Naugatuck

➔ 1 mile from Maple St. to Bridge St.
➔ Linden Park
➔ 50,000+ trips annually
Naugatuck River Greenway Trail Progress

Watertown
→ ½ mile from Echo Lake Road to Rail
→ DOT Bus Maintenance Facility
Naugatuck River Greenway Trail Progress

Waterbury
→ Freight Street
→ Complete Street Treatment
→ TIGER Federal Grant
Naugatuck River Greenway
Coming Soon

**Torrington**
- 2 miles Franklin Street to Bogue Road
- Beginning 2019 - awaiting USACE approval

**Thomaston/Watertown**
- ¼ mile trail with trailhead - Spring 2019
- Bridge over Branch Br. to Watertown NRG and Mattatuck Trail

**Waterbury**
- 2.2 miles from Eagle Street to Platts Mill
- Spring 2019
Uniform Signage and Wayfinding Design

Logo and Branding Policy

Get people to and from the trail
So, Are We Capitalizing?

Popular with local users, but...

➔ Sections are short and disconnected

➔ “Easy” sections not necessarily most impactful

➔ Difficult geography makes for expensive trails

➔ Expense can be a really hard sell to a municipality
<table>
<thead>
<tr>
<th>Source</th>
<th>Investment (Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>$15.8</td>
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<tr>
<td>State</td>
<td>$1.6</td>
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<tr>
<td>Local</td>
<td>$3.0</td>
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<tr>
<td>Private</td>
<td>$0.0</td>
</tr>
<tr>
<td>Total</td>
<td>+$20.4</td>
</tr>
</tbody>
</table>
2015-2016 Naugatuck River Greenway Economic Impact Study

Provide municipal officials with data about economic and health benefits of continued construction of the NRG

Partnered with UConn Extension and the CT Center for Economic Analysis to conduct the Study

Report published March 2017

www.nvcogct.org
2015-2016 Naugatuck River Greenway Economic Impact Study

Very little trail use/user data existed for Multi-use Trails in CT

Methods unclear, and data was sometimes misrepresented

In order to conduct the economic study, we needed to collect specific user data on open NRG sections and similar trails:

- IR Trail Counters
- Intercept Surveys
- Focus Groups
  - Business Owners
  - Trail Administrators
  - Health Professionals

“Wouldn’t it be great if we could collect this information statewide on a regular basis?”
2015-2016 Naugatuck River Greenway Economic Impact Study

- Trail Construction & Maintenance Costs
- Direct Spending by trail users – from Intercept Survey
- Consumer Surplus
- Health Benefits
- REMI economic model

- Three Analysis Scenarios:
  - Baseline
  - Current Trends
  - Accelerated Growth
2015-2016 Naugatuck River Greenway Economic Impact Study

## Anticipated Construction Costs

- Additional Expenditures to Complete Entire Trail
- 41.4 miles to complete
- Estimated Timeline
  - Completion by 2030
  - Fully Operational 2031

### $77.2 Million

<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
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<td>$0</td>
<td>$0</td>
<td>$2,347</td>
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<td>$6,029</td>
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<td>Derby [1]</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td><strong>Total Construction Costs</strong></td>
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<td><strong>$7,457</strong></td>
<td><strong>$8,557</strong></td>
<td><strong>$3,200</strong></td>
<td><strong>$20,609</strong></td>
<td><strong>$1,320</strong></td>
<td><strong>$5,680</strong></td>
<td><strong>$77,218</strong></td>
</tr>
</tbody>
</table>
2015-2016 Naugatuck River Greenway Economic Impact Study

Anticipated Direct User Spending

- Travel
- Meals
- Refreshments
- Gear and Equipment
- Retail
- Activities

$42.6 Million Annually (2031)

Based on $14 per visit per day

Cumulative Spending = $323 million

Cumulative Spending = $77 million
Consumer surplus is the value that consumers are willing to pay over and above what they actually pay for consumption of a good or to participate in an activity.

Calculated based on avoided transportation costs

$34.6 Million Annually (2031)
2015-2016 Naugatuck River Greenway Economic Impact Study

Anticipated Monetized Health Benefits

- Lives saved & extended life years
- Reduced incidence:
  - Obesity
  - Diabetes
  - Cardiovascular Disease
- Based on:
  - Regional incidence rates
  - Number of users that use the trail frequently enough to realize health benefits
  - Surgeon General's report

$259.6 Million Incremental (2031)
2015-2016 Naugatuck River Greenway Economic Impact Study

Regional Economic Model Inc. (REMI)

Simulates county level & state economies

Estimates change in economy from base conditions

Based on Direct Expenditures & Construction Costs

+2,500 New & Retained Population

+1,400 New Jobs

+$128m Real GDP

+$206m Personal Income

+$166m Disposable Personal Income

+$40m Income Tax Revenue
2015-2016 Naugatuck River Greenway Economic Impact Study

Community Outreach

The Naugatuck River Greenway (NRG) Trail is a planned 32-mile multiuse trail following the Naugatuck River from Torrington to Derby. When complete, the trail will link 11 municipalities, help sustain the Naugatuck River for recreation, provide a cost-effective method to support human and economic development, and act as an economic engine for the region.

The project is a multi-agency effort coordinated by the Naugatuck River Greenway (NRG) Steering Committee, the Naugatuck Valley Council of Governments (NVCOG), and the Connecticut Center for Economic Analysis (CCEA) at UConn, with support from the state of Connecticut, considered an economic impact study of the development of the NRG. The study addresses the primary question: "How will communities and residents along the Naugatuck River benefit as a result of the construction and completion of the NRGTrail?" The study reviewed a thorough review, collection of new quantitative and qualitative data and through analysis of the Regional Economic Impact Model (REIM) estimated total economic impacts of the NRG Trail. All figures presented are for the complete trail (built in 2015) following on a aggressive construction schedule. The local community impacts presented here were disaggregated from the total trail figures based on an estimated completed trail use.


table

<table>
<thead>
<tr>
<th>Naugatuck River Corridor Impacts</th>
<th>City of Waterbury Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Cost</strong></td>
<td><strong>Construction Cost</strong></td>
</tr>
<tr>
<td>$77m</td>
<td>$266m</td>
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<tr>
<td><strong>Annual Direct Spending</strong></td>
<td><strong>Annual Direct Spending</strong></td>
</tr>
<tr>
<td>$42.6m</td>
<td>$11.8m</td>
</tr>
<tr>
<td><strong>Estimated Annual Visits</strong></td>
<td><strong>Cumulative Health Impact</strong></td>
</tr>
<tr>
<td>2.6m</td>
<td>$259.6m</td>
</tr>
<tr>
<td><strong>Consultant Health Impact</strong></td>
<td><strong>Estimated Annual Visits</strong></td>
</tr>
<tr>
<td>$259.6m</td>
<td>782k</td>
</tr>
<tr>
<td><strong>Employment in 2011</strong></td>
<td><strong>Cumulative Health Impact</strong></td>
</tr>
<tr>
<td>2,830 new jobs</td>
<td>$72.2m</td>
</tr>
<tr>
<td><strong>Annual Consumer Spending</strong></td>
<td><strong>GDP in 2031</strong></td>
</tr>
<tr>
<td>$6.6m</td>
<td>$255.8m</td>
</tr>
<tr>
<td><strong>Personal Income in 2031</strong></td>
<td><strong>Current Annual Spending</strong></td>
</tr>
<tr>
<td>$411.6m</td>
<td>$36.6m</td>
</tr>
</tbody>
</table>

Pathway to Revitalization

For more information, visit NVCOG's website at: www.nvco.org or contact Aaron Buds, Senior Planner, at abuds@nvco.org.
Making the Most of a Trail

How do we balance the needs and interests of local residents with interest in outside investment and economic impact?

Learning from the 2018 Downtowns and Trails Multistate Grant Supported by the Northeast Regional Center for Rural Development.
Does your community CRV BIKERS?

CONNECTIVITY - Connectivity of the trail to the downtown
REGIONAL - Work across municipal borders
VALIDATION - Pursuing certification and validation programs (trails towns) may be useful

BUSINESSES - Engage a diverse range of businesses and create ways to connect them to the trail
INSTITUTIONS - Partners Coalition building, institutional relationships and public engagement
KNOW YOUR ASSETS - Understand economic impacts and users (counts, user and business surveys)
ENGAGE LEADERS - Engaged leadership who can navigate local and regional politics
REGISTERS - You must have places to spend If spending is your measure of success
SYSTEMS VIEW - Holistic and systemic view of trails as a piece of the economic development pie

Making the Most of a Trail

Unpublished notes from the 2018 Kentucky Trail Towns visit - part of a multistate grant supported by the Northeast Regional Center for Rural Development.
Making the Most of a Trail

Critical elements

Signage

Three B’s: Bike Racks, Benches & Bathrooms

Photos courtesy of University of New Hampshire Extension from the 2018 Kentucky Trail Towns visit - part of a multistate grant supported by the Northeast Regional Center for Rural Development.
Making the Most of a Trail

Critical elements

Connectivity to Amenities

Good Design is Good Business

Photos courtesy of University of New Hampshire Extension from the 2018 Kentucky Trail Towns visit - part of a multistate grant supported by the Northeast Regional Center for Rural Development.
Making the Most of a Trail

Critical elements

Not just tourism or economic dev but cultural projects

Use public art to share stories & community history

Photos courtesy of University of New Hampshire Extension from the 2018 Kentucky Trail Towns visit - part of a multistate grant supported by the Northeast Regional Center for Rural Development.
Making the Most of a Trail

Critical elements

Start at the heart of downtown

Photos courtesy of University of New Hampshire Extension from the 2018 Kentucky Trail Towns visit - part of a multistate grant supported by the Northeast Regional Center for Rural Development.
“... set up a committee, start learning what it really takes to become a bike friendly community, and start assembling a collection of people who have very diverse skill sets. For instance, real estate, public works engineer, someone in marketing, someone that’s tied into the economic development commission so that you start getting all of these brains working in the same direction. The police, the board of education, businesses.”
Can’t Get Enough?

Curated Resources

Naugatuck River Greenway 2016 Focus Group Summary
https://nvcogct.org/content/naugatuck-river-greenway-economic-impact-study


The Progress Fund. (2018). The Trail Town Program Trail Town Guide Request online at
https://www.trailtowns.org/guide/

UConn Extension Community & Economic Development Trail Resources
https://communities.extension.uconn.edu/trails/multi-use-trail-resources-and-links/

Connecticut Trail Census https://cttrailcensus.uconn.edu/ Sign up for the newsletter!
Making the Most of a Trail
Thank You!

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References & Resources


References & Resources


