



CT Trails Symposium

October 19, 2017



How and why the City has dedicated time towards planning, construction and maintenance of its trail system.

Carl J. Gandza

City of New Britain

Engineering Project Manager

defacto City Traffic Engineer
& Bike Coordinator

Vice President of ITS-CT
Secretary of Bike New Britain
Little League Coach



How— New Britain's Approach to Building a Bicycle Network

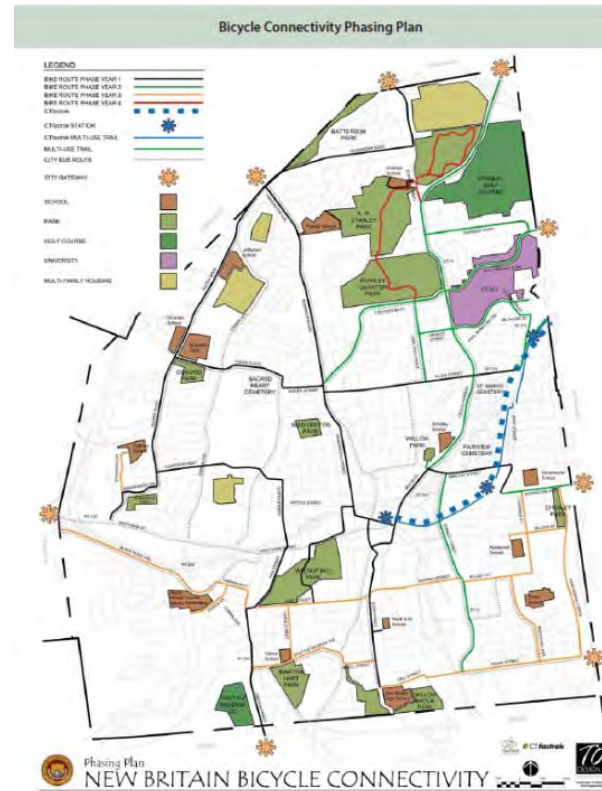


New Britain's Approach to Building a Bicycle Network

Start with a Plan...



Developed Bicycle Connectivity Plan in 2013



A GOAL
WITHOUT A
PLAN IS JUST
A DREAM

New Britain's Approach to Building a Bicycle Network

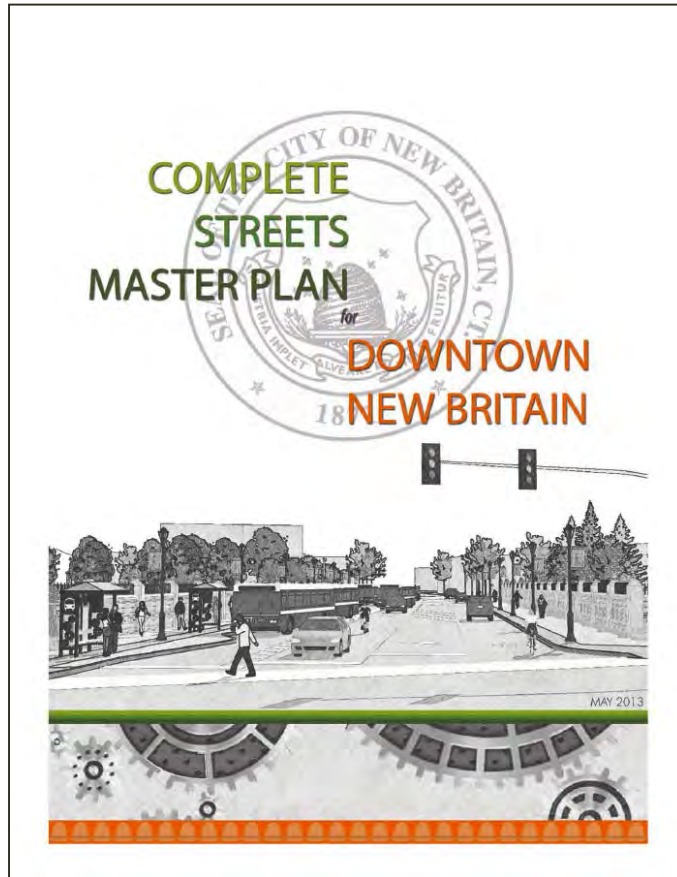
Key Factors for New Britain's Success

- Supportive Mayor
- Active PW Director – (avid cyclist, bike advocate)
- Cooperative Legal Traffic Authority (LTA)
- Establish Policy
- Passionate grass roots bike advocate group
- Funding
- Existing wide roads
- Lack of previous efforts (blank slate)

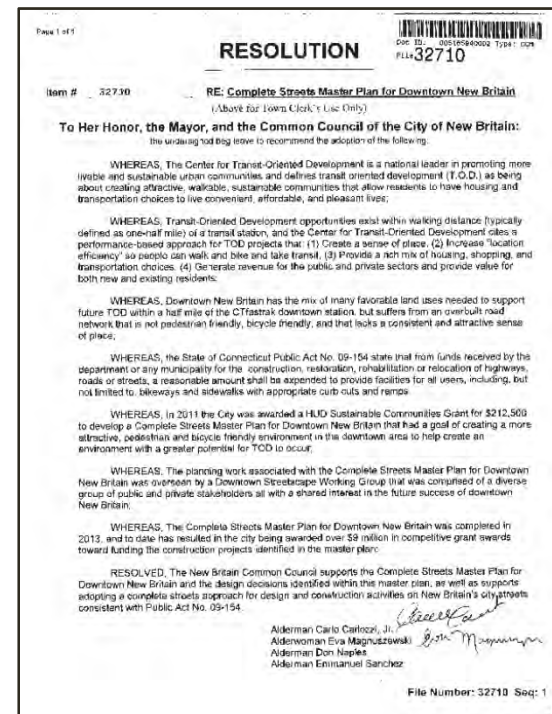


New Britain's Approach to Building a Bicycle Network

Complete Streets Policy

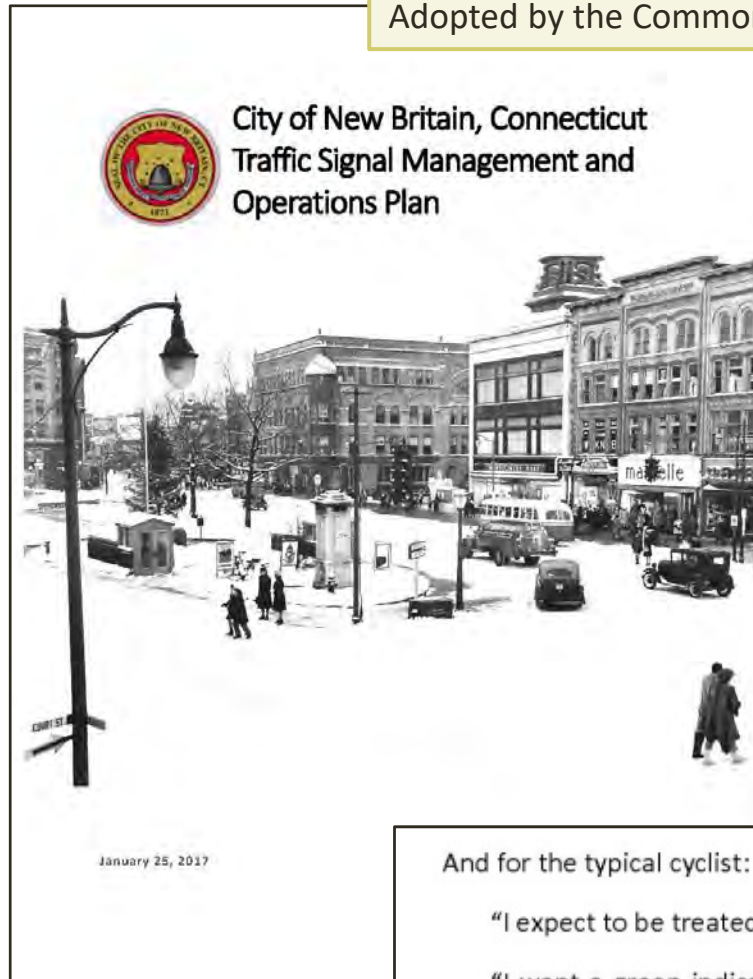


- Funded as part of a HUD Sustainable Communities Planning Grant that was being administered by CRCOG in 2011.
- New Britain was awarded \$212,500 & the grant required an equal match



New Britain's Approach to Building a Bicycle Network

Adopted by the City of New Britain Board of Public Works on February 6, 2017
Adopted by the City of New Britain Board of Police Commissioners on February 21, 2017
Adopted by the Common Council of the City of New Britain on March 9, 2017



Preface

Traffic signals are ideally installed because other forms of traffic control devices are not as effective at efficiently moving traffic throughout the day. Working from this perspective, establishing specific objectives for managing the City's traffic signal infrastructure is critical for ensuring that signals are operating at their most efficient levels. Efficiency at its core is: performing or functioning in the best possible manner with the least waste of time and effort. How should this translate to the City's signals?

What the typical driver expects for signal operations fall into a few central themes:

- "I want signal timings to be as responsive as possible to changing patterns".
- "I'm okay with waiting at a traffic signal, but not if traffic is nonexistent on the other approaches".
- "During peak times, I'm okay with not making it through one full cycle, but not two".
- "I expect the impact on my travel to be predictable".

Similarly, the expectations of the typical pedestrian are:

- "I expect the traffic signal to be responsive to my desire to safely cross the street".
- "At busy intersections I want all the traffic to stop for the pedestrian phase so I can safely cross".
- "I should not have to wait more than one cycle".

And for the typical cyclist:

- "I expect to be treated the same as a motor vehicle/driver with similar expectations".
- "I want a green indication for my phase even if there are no motor vehicles present on the same approach".

Distilled down, the majority of the traveling public desires to be treated equitably, consistently, and in a manner that appears to make sense when they encounter traffic signals.

The goal of this document is to identify what constitutes good basic service to our citizens, and what we need to do to ensure that we provide that good basic service¹. Objectives need to touch on all aspects of traffic signals from intersection control assessment through design, construction, timing development, operations, and maintenance. Traffic signal management by objectives will guide the City toward the vision of treating the traveling public in the most fair and efficient manner possible.

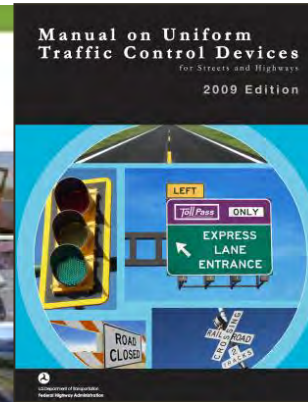
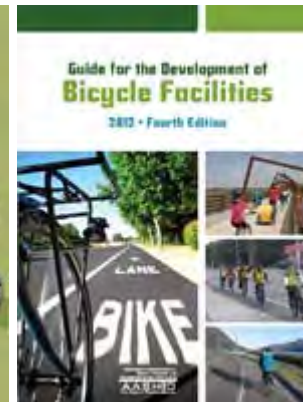
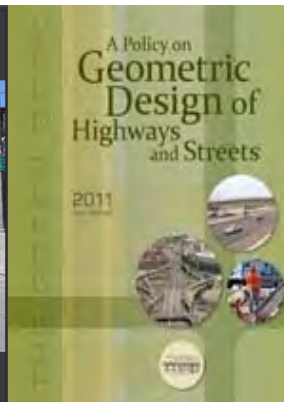
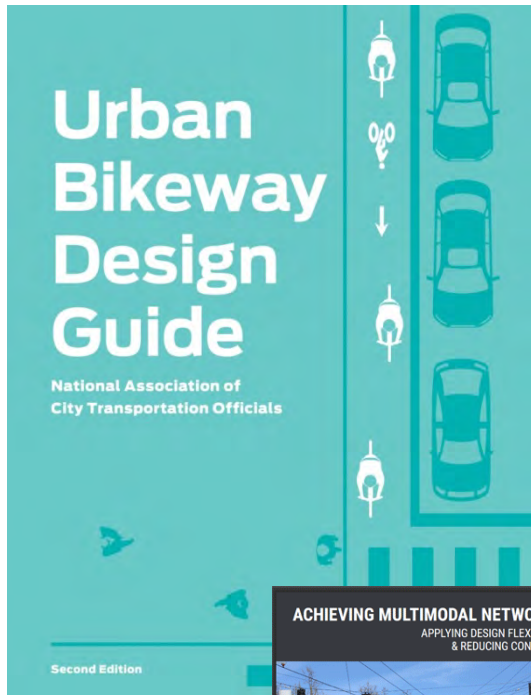
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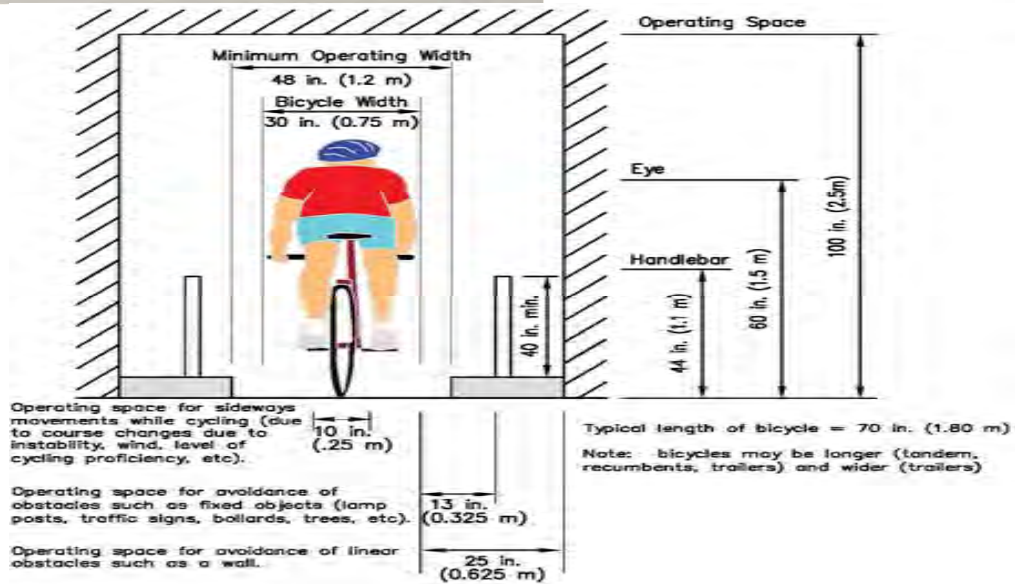
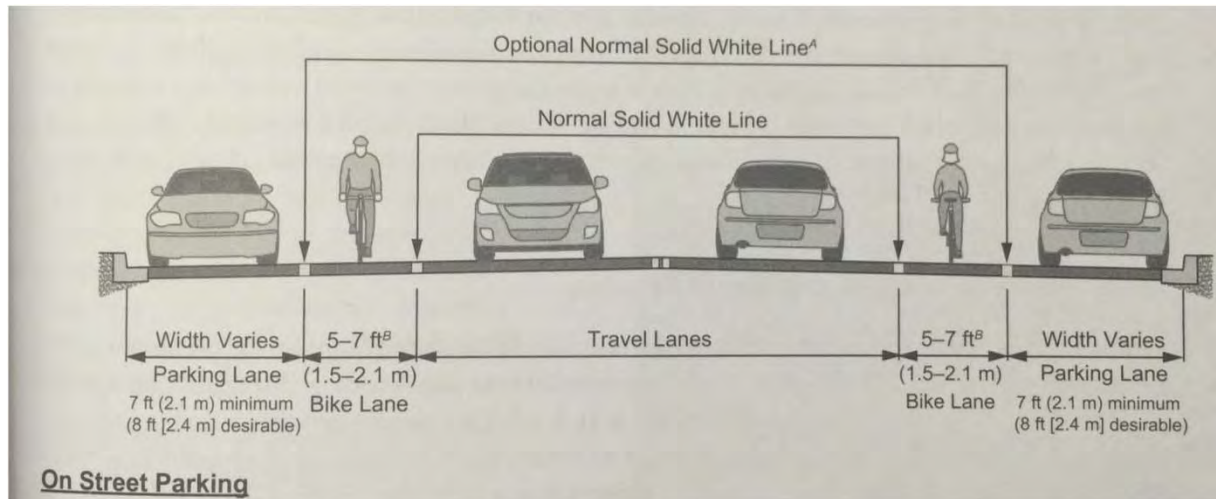
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Consider different standards & guidelines



New Britain's Approach to Building a Bicycle Network

Use the appropriate standards



New Britain's Approach to Building a Bicycle Network

Start with the easy stuff...

low-hanging fruit

a course of action that can be undertaken quickly and easily as part of a wider range of changes or solutions to a problem: first pick the low-hanging fruit



WHY NOT ?



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Start with the easy stuff...



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Start with the easy stuff...



**Paul Manafort Drive, adjacent to CCSU
—after installing bike lanes**

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Start with the easy stuff...



Black Rock Ave.—after installing bike lanes

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Start with the easy stuff...



Eddy Glover Blvd.—after installing bike lanes

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Start with the easy stuff...



Farmington Avenue—after installing edge lines (parking lane)

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Start with the easy stuff...



Carlton Street—after installing sharrows

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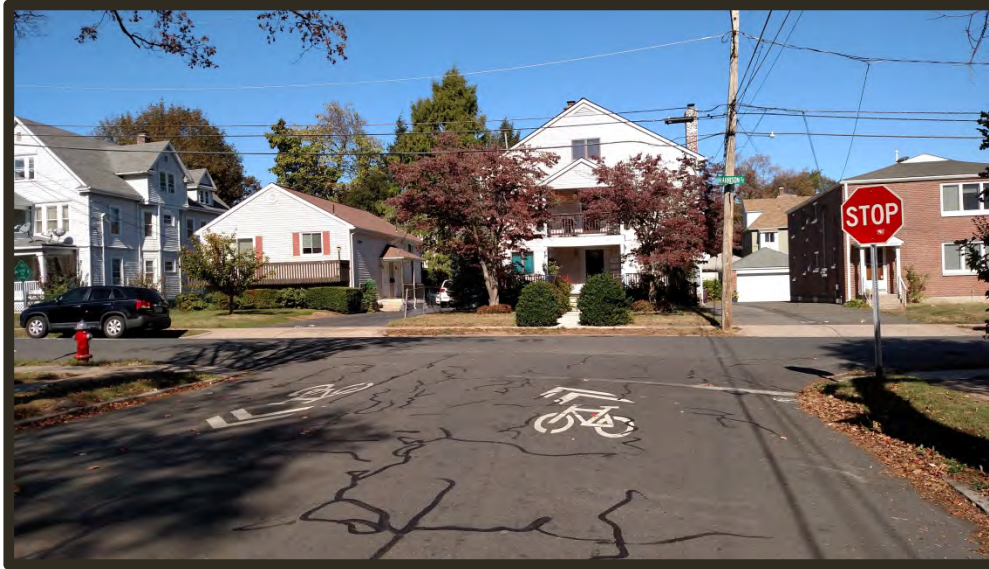
Start with the easy stuff...



Shuttle Meadow Ave & Reservoir Rd
Share The Road

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Start with the easy stuff...



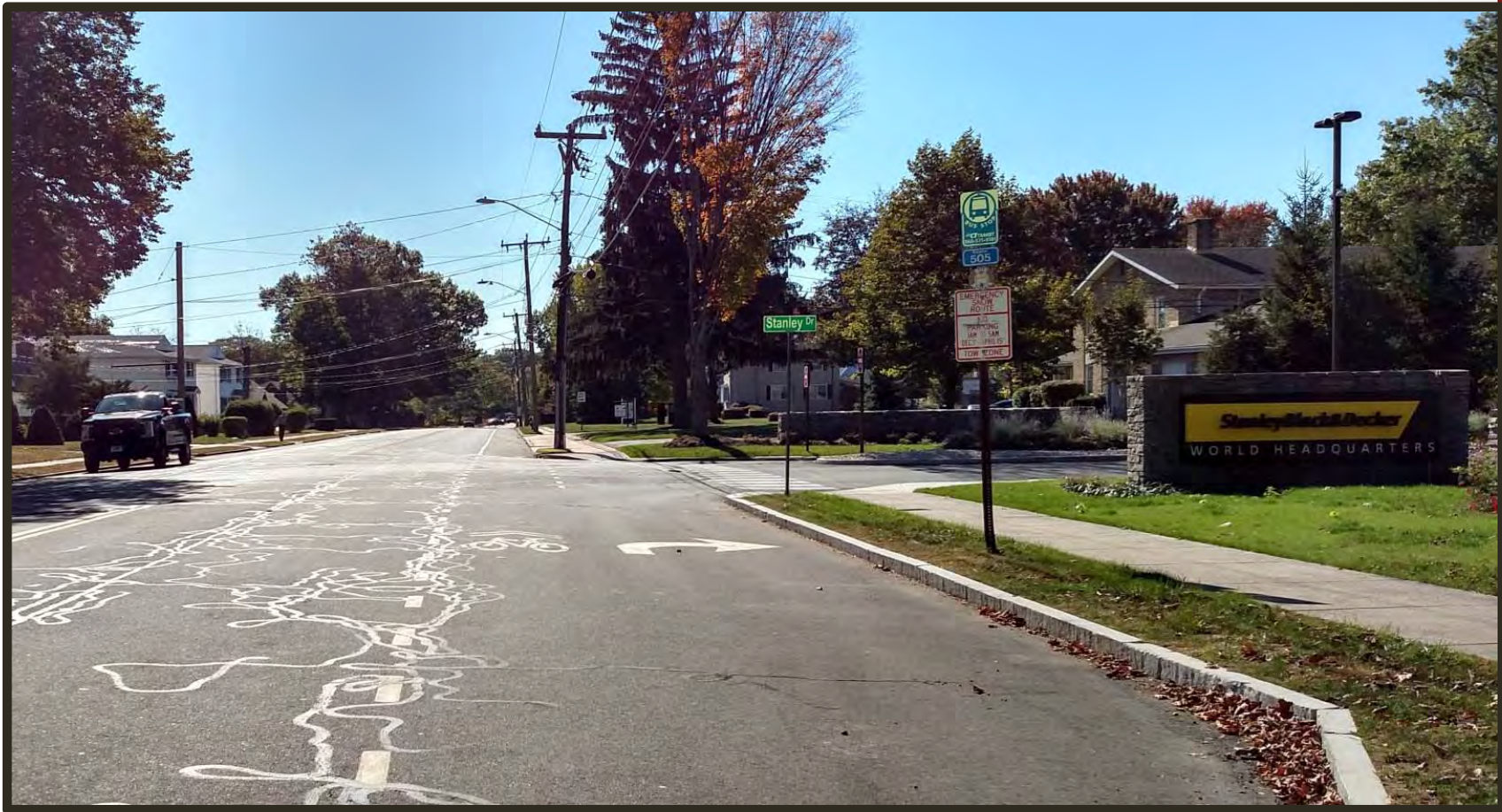
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Do what you can...



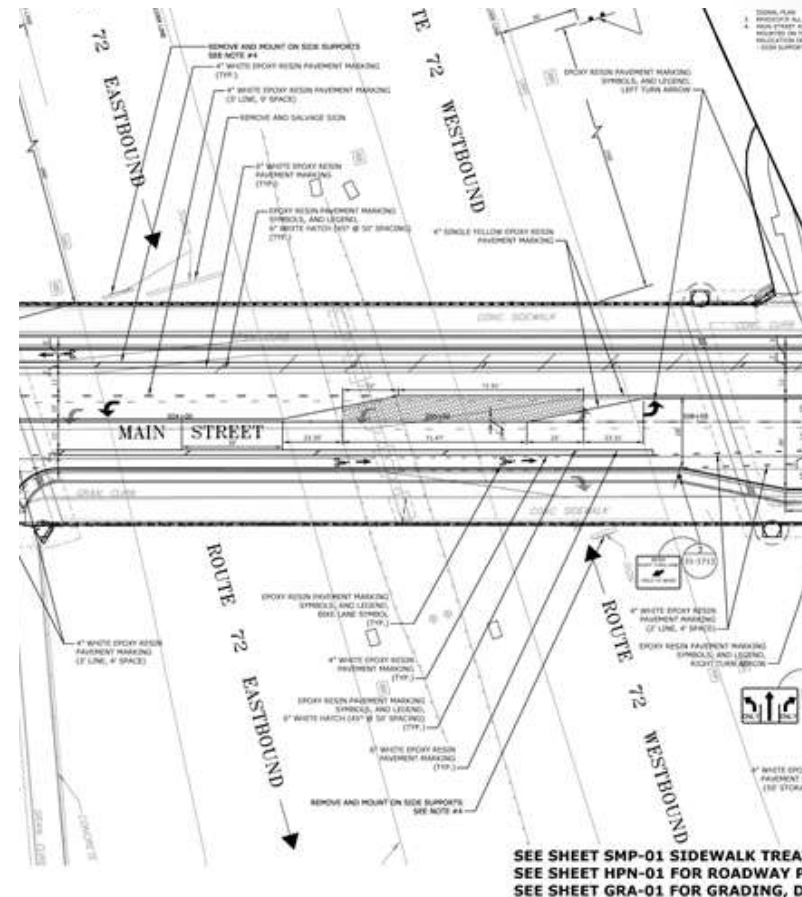
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Do what you can...



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Consider Bike Facilities in Capital Improvement Projects...



SEE SHEET SMP-01 SIDEWALK TREAT
SEE SHEET HPN-01 FOR ROADWAY PI
SEE SHEET GRA-01 FOR GRADING, DI

| | | | | |
|--|-----------------------|----------------|---|-----------|
| NEW BRITAIN PUBLIC WORKS UN STREET CONNECTIVITY | Richter Cegan Inc. | PUSS & O'NEILL | PROJECT NO. | 1470 |
| | | | DATE | 8/20/2017 |
| | | | CITY OF NEW BRITAIN MAIN STREET ROUTE 72 OVERPASS (PHASE V) ROADWAY & BRIDGE WORK BID No. 3928 | |

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Incorporate Bike Facilities when restriping (mill & pave)...



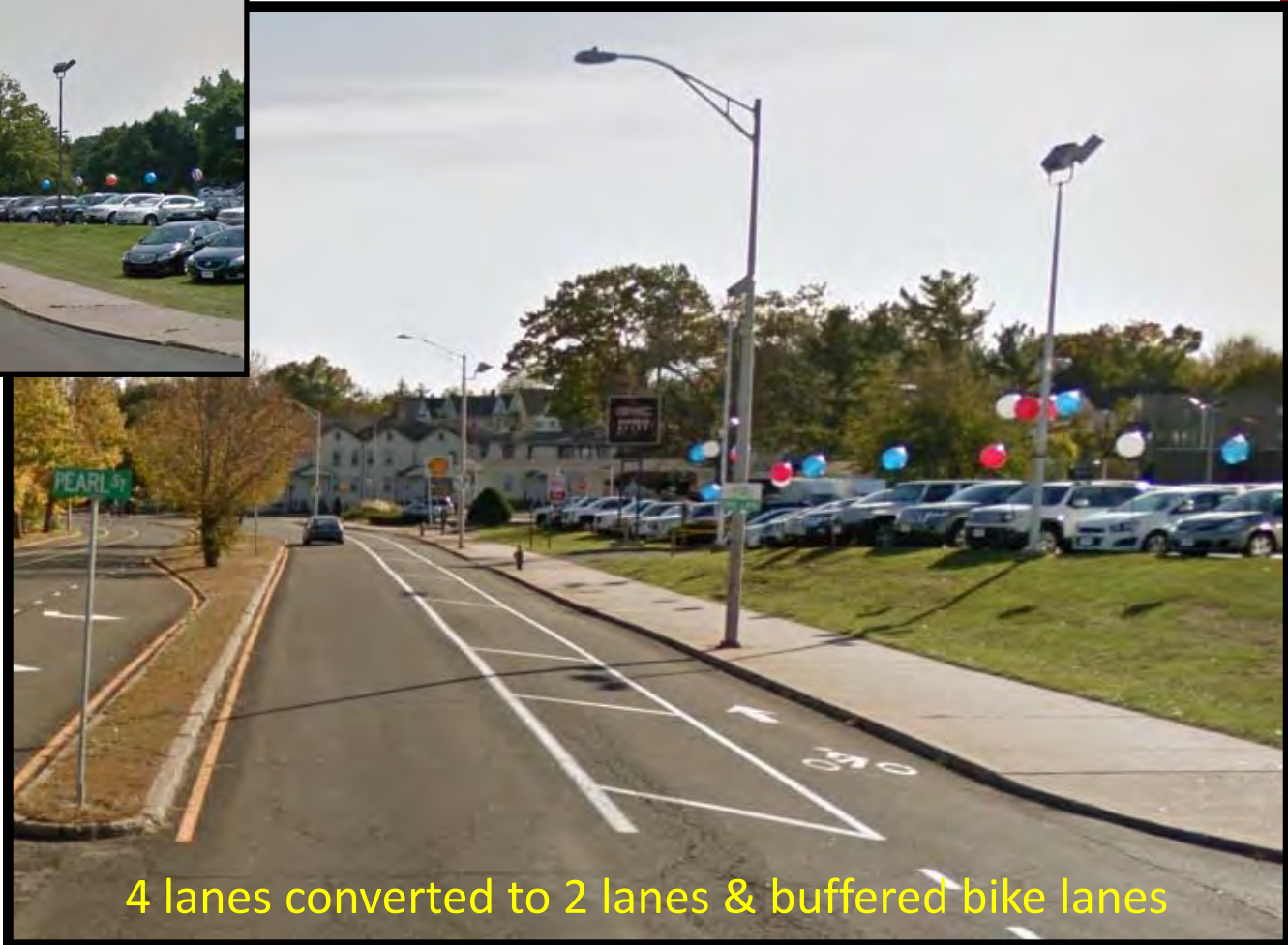
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Move on to the easier challenges...



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Move on to the easier challenges...



4 lanes converted to 2 lanes & buffered bike lanes

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Then try the more difficult challenges...



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Try something new...



Chestnut Street—parking

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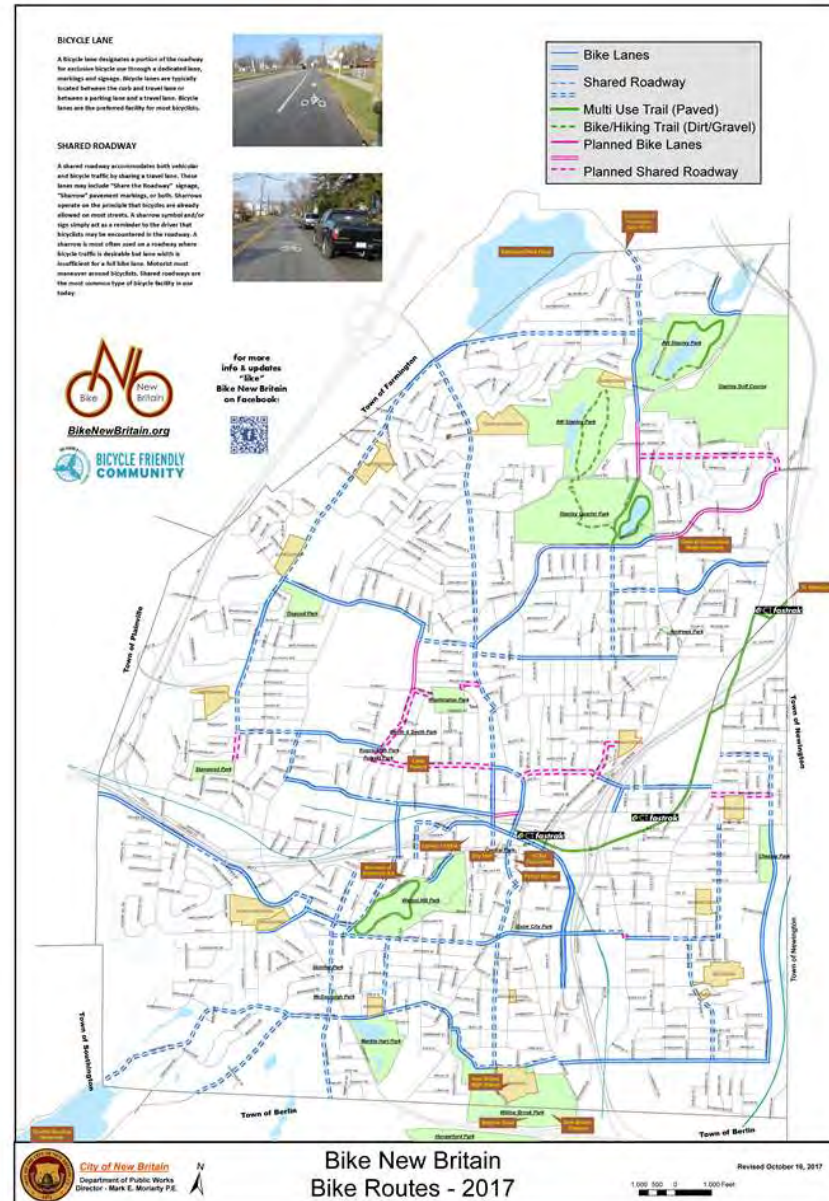
Where we are now...

46 Mile Bike Network

- 5.5 miles of Trails
 - 2.2 miles within City's Parks
 - 2.3 miles of CTfastrak MUT
- 19 miles of Bike Lanes
 - 2.5 miles of buffered bike lanes
- 22 miles of Shared Roadway

Bicycle Friendly Community

The League of American Bicyclists



New Britain's Approach to Building a Bicycle Network

What's Next...

- Complete on-street bike network
- Upgrade existing bike facilities
- Build off-road trails
- Bike wayfinding signage
- Regional connections
- Silver Status



New Britain's Approach to Building a Bicycle Network

What's next...

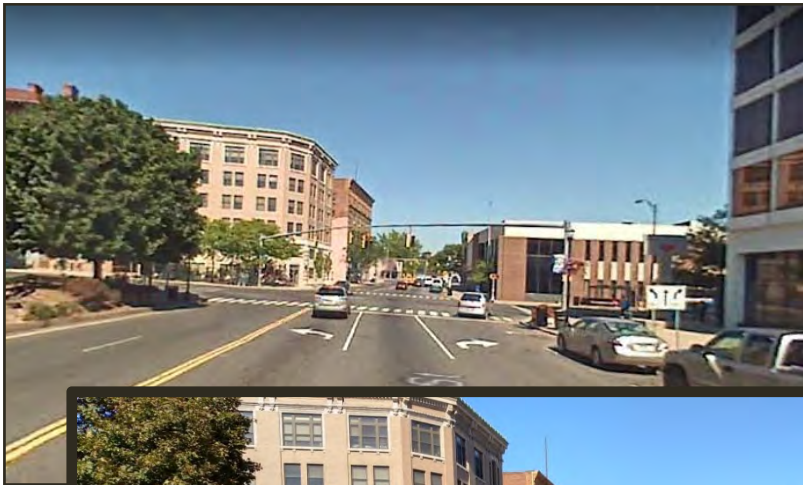
Complete on-street Bike Network

- Provide connections to all schools and parks
- Provide good east-west & north-south connectivity
- Complete any “missing links”
- More bike detection



New Britain's Approach to Building a Bicycle Network

What's next...upgrade existing facilities



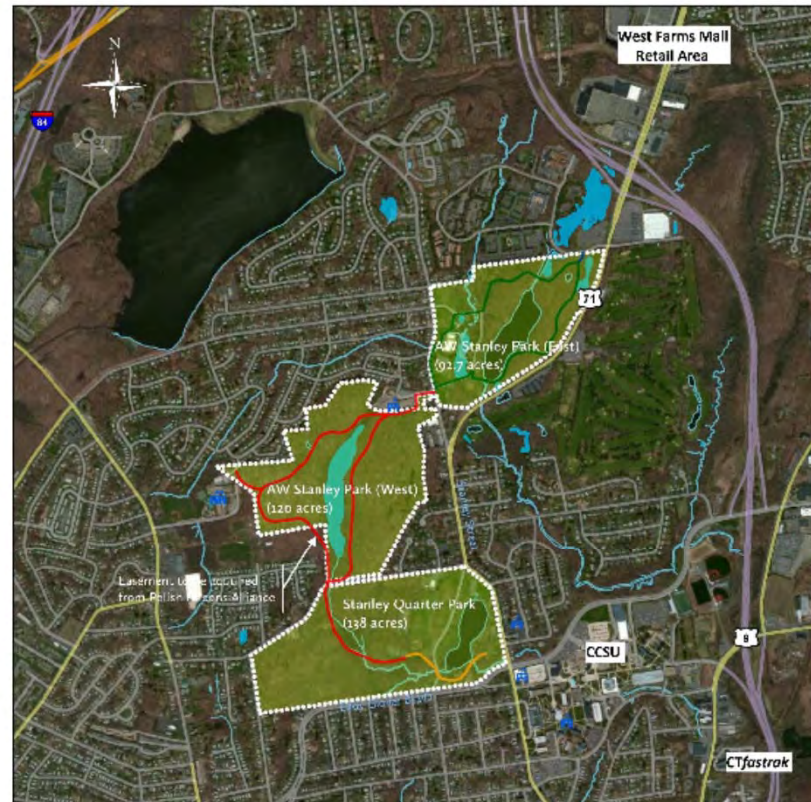
Main Street

New Britain's Approach to Building a Bicycle Network

What's next...build off-road trails

Stanley Loop Trail

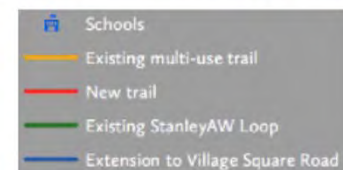
- Starting design phase now
- 1.7 Miles of New Trail
- Phase I: Complete loop in AW Stanley Park
- Phase II: Connect Stanley Quarter Loop with AW Loop
- Funded by DEEP Rec. Trails Grant & Transportation Alternatives (TA) Set-aside Grant (~\$2.2M)



Transportation Alternatives (TA) Set Aside

Location Map

Project Name: "Stanley Loop Trail"
Project Location: Stanley Quarter and AW Stanley Parks, New Britain, CT



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What's next...bicycle wayfinding

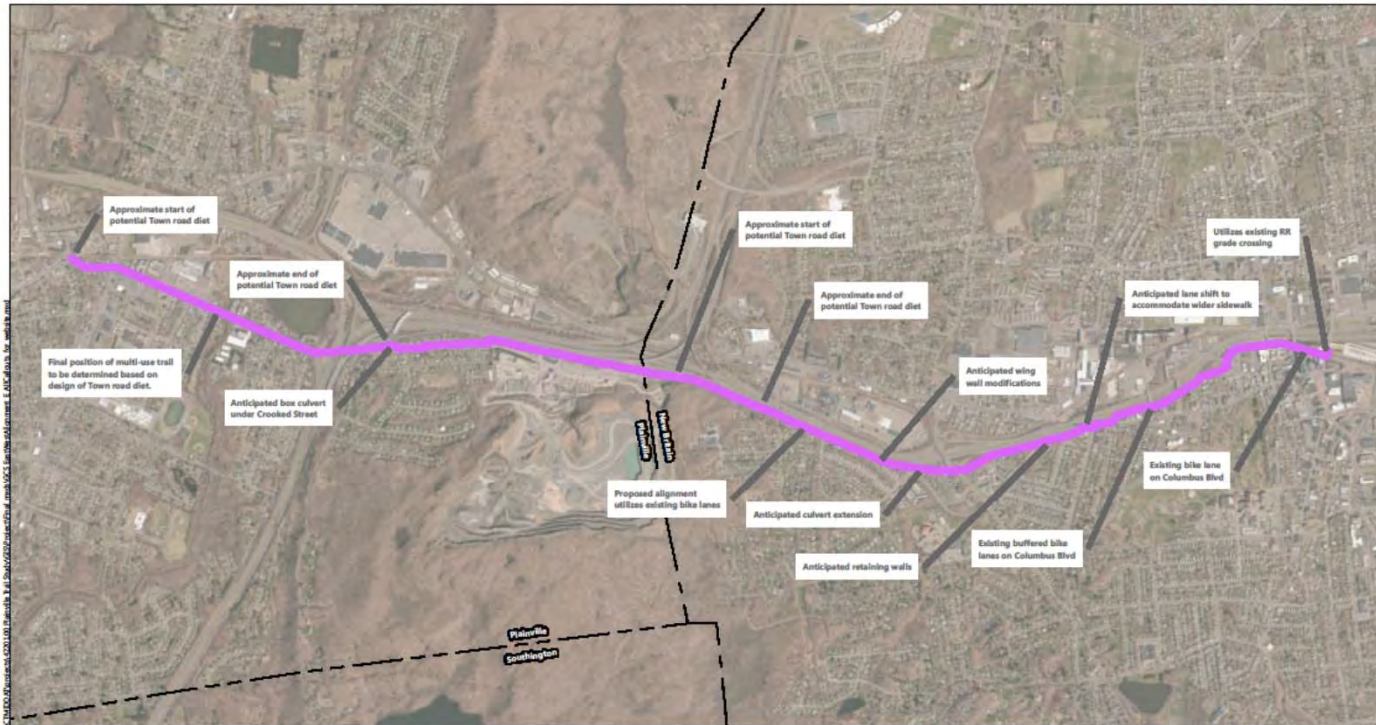


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What's next...build off-road trails



vhb October 13, 2017



0 0.1 0.2 0.4 Miles

Alignment E 4.49 Miles

Town Boundary

Disclaimers: The alignment shown is preliminary and not to scale. It is for planning purposes only. Alignments are subject to change as the planning study progresses. Labels represent potential options for the trail, should it be built. They do not represent a final design and are subject to change during the design process.

Gap Closure Study

Hartford County, CT

Project Statistics

- 4.49 miles long,
- 10-12' wide,
- bituminous,
- 92% off road,
- 72% on DOT property

Alignment E - 4.49 Miles

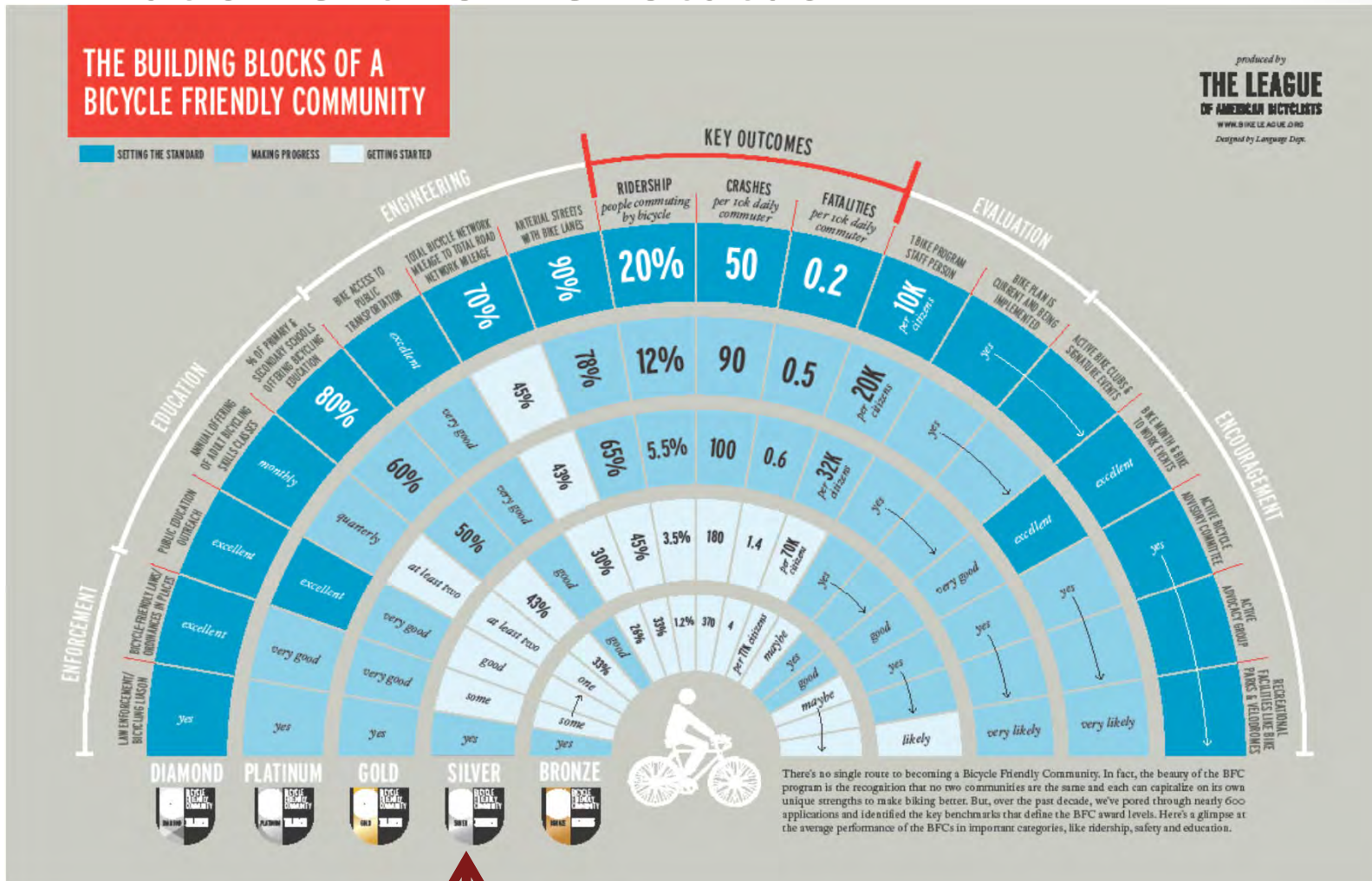
Source Information: Map and Geographic Information Center - University of Connecticut, US Census Bureau
 Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Connection to Farmington Canal Heritage Trail / East coast Greenway

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What's next...Silver Status



New Britain's Approach to Building a Bicycle Network

To summarize...



New Britain's Approach to Building a Bicycle Network

To summarize...

- Start with the easy, less expensive stuff
 - Install bike lanes on wide roads
 - A 6" white line cost is \$0.50/LF – Green Bikes Lanes Cost about \$25/LF*
 - Add awareness to motorists
- Signs and markings where cyclists are riding
- **If you build it, they will come**



Why— Why Build a Bicycle Network

The generic reasons...

Why New Britain began building a Bicycle Network

Bicycling is good for your health

A two-mile commute will burn about 100 calories in 15 minutes. Not only is that competitive with a cardio workout at the gym, it provides an antidote to a long day of sitting in the office. Because some people feel uncomfortable biking in traffic, bike lanes make it easier to enjoy this low-cost form of exercise.



Why New Britain began building a Bicycle Network

Bike lanes reduce automobile congestion

Bicycles are better for the environment

Since the average cyclist isn't inclined to bike more than a few miles anyway, bike lanes would certainly help to facilitate the green choice. Bicycling, like walking, produces no significant carbon emissions



Why New Britain began building a Bicycle Network

It stimulates the local economy

While communities often fight bike lanes out of concern that it will discourage vehicular traffic from coming to the stores, recent studies have shown that bicycle lanes have the opposite effect on sales.

Why New Britain began building a Bicycle Network

It's safer for cyclists / It's safer for motorists

Accidents happen, but research illustrates that city streets with bike lanes reduce the rate of cyclist injury by 50%.



Why New Britain began building a Bicycle Network

It inspires more people to ride bicycles

If you build it, they will come. Time and time again, cycling studies have shown that adding bike lanes motivates more people to get out and bike. In a country plagued by obesity, the health benefits of a population that rides bicycles should not be mitigated.



Why New Britain began building a Bicycle Network

21 GOOD REASONS TO MARK BIKE LANES



1. Bike lanes support and encourage bicycling as a means of transportation.
2. Bike lanes remind drivers that bicyclists are roadway users, too.
3. Bike lanes help define road space for bikes and for cars, promoting a more orderly flow of traffic.
4. Bike lanes allow bicyclists to move at their own pace.
5. Bike lanes remove slower-moving bikes from vehicular traffic lanes, reducing delay for drivers.
6. Bike lanes are a visual reminder to drivers to look for bicyclists when turning or opening car doors.
7. Bike lanes enforce the concept that bicyclists are roadway users and should behave like other vehicle operators.
8. Bike lanes encourage bicyclists to obey general traffic rules when roadways are marked to include them.
9. Bike lanes provide an added buffer for pedestrians between sidewalks and thru traffic. This is important when young children are walking, biking, or playing on curbside sidewalks.
10. Bike lanes provide an area for people in wheelchairs to travel where there are no sidewalks, or sidewalks are in need of repair.



11. Bike lanes provide a place for wheelchair users to turn on and off curb cut ramps away from moving traffic.
12. Bike lanes provide emergency vehicles room to maneuver around stopped traffic, decreasing response time.
13. Bike lanes encourage bicyclists to ride in the correct direction – with the flow of traffic.
14. Bike lanes increase the comfort level for bicyclists in traffic.
15. Bike lanes have a “traffic calming” effect – roads that appear narrow result in slower vehicular speeds.
16. Bike lanes increase sight distance for drivers entering the roadway from driveways or side streets.
17. Bike lanes increase the turning radius for large vehicles.
18. Bike lanes make the crossing pedestrian more visible to drivers.
19. Bike lanes increase clear space between parked cars and moving vehicles.
20. Bike lanes help stop global warming by providing a real, healthy option to help reduce greenhouse gas emissions.
21. Each bike on the road means one less car.

New Britain's reasons...



Why New Britain began building a Bicycle Network

All of the above and Connect lower income neighborhoods to mass transit and employment centers

New Britain has a higher than average percentage of residents with no access to a personal vehicle, severely limiting their job prospects and access to recreational opportunities in a state with limited public transportation. In New Britain, nearly 16% of households have no vehicles available to them.



Why New Britain began building a Bicycle Network

“Through our Bike New Britain initiative, we’ve made becoming a bicycle friendly community a high priority in New Britain. This is about bringing a higher and more healthy quality of life to the city, and by doing so making it an even better place to live, work, and play,”

- Mayor Erin Stewart



Why New Britain began building a Bicycle Network



Why New Britain began building a Bicycle Network

Bicycle Crash Statistics

- 1.05% of Reported Crashes Were Fatalities
- 87% of Crashes Occurred on Roadways
- Most Common Hour of Crash 4-5 pm 11.4%
- Most Common Month August 14.4%
- Most Common Day Wednesday 16.7%
- 82.8% During Daylight Hours

Source CTCDR

2016 Pedestrian and Bicycle Fatal Crashes

| | Avg 2003-2015 | Avg 2014-2016 | Percentage Change | 2016 |
|----------------------|---------------|---------------|-------------------|------|
| Fatality Type | | | | |
| Pedestrian | 38.07 | 53.67 | 41.0% | 61 |
| Cyclists | 4.31 | 4.67 | 8.4% | 7 |

Why New Britain began building a Bicycle Network



We are seeing results!!! More riders!!!



Why New Britain began building a Bicycle Network

New Britain is seeing development...

Columbus Commons - \$29M mixed-use development

- Transit Orientated Development adjacent to *CTfastrak*
- Bike friendly community was part of developer's decision on New Britain
- Development includes amenities like indoor bike storage



Why New Britain began building a Bicycle Network

DISCOVER CONNECTICUT BICYCLE TOURS 2015



Bike/Walk Connecticut
Discover New Britain's many miles of bicycle facilities and why New Britain was ranked number three on Bike Walk Connecticut's 2014 Town-By-Town Scorecard and received "Bicycle Friendly Community" status by the League of American Bicyclists. Routes will showcase many of New Britain's landmarks (including historic neighborhoods, parks and other scenic locations).

50, 25 & 10 mile rides
Starting / Ending Point: Walnut Hill Park @ The New Britain Museum of American Art
\$30 Advanced Registration
\$30 BWCCT / NBMAA members
\$45 Day of Event (All Include Brunch)

Proceeds Benefit:
Bike Walk Connecticut,
New Britain Police Athletic League (P.A.L.) and
Bike New Britain's Bike Share Program

Hardware City Bike Tour
Sunday, Sept. 27th
Rides start at 9:30 am — followed by "Sunday Brunch at the Museum"

Come help support our effort to make Connecticut the most bicycle friendly state in the country. visit bikewalkct.org for more information and registration

GOLD SPONSOR: Bic-Cast & Davis, PC
LEADERSHIP SPONSOR: GH Green Hill
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MEMBER: Team Training New England | Healthy | American Cancer Society | American Cancer Society | Connecticut State Police
DESIGN: David Friedman, CPA | Virginia DeWine | Connecticut Commission



TO WORK DAY
Friday May 19th

Free Breakfast Reception in Central Park 7-8:30 AM

BICYCLE FRIENDLY COMMUNITY



Why New Britain began building a Bicycle Network



Mayor Erin E. Stewart, New Britain Police Department and P.A.L. present:

BIKE RODEO 2017

Central Park—Downtown
Saturday, July 8, 2017 11 AM—2 PM

- » Helmet Giveaway
- » Free Lunch
- » Bike Obstacle Courses
- » Kids Zone
- » Bike Stunt Show
- » Bike Safety Checks
- » DJ Entertainment
- » Group Rides
- » Free Bike Raffles
- » Bike Safety Tips

**Board of Education
Summer Passport
Program Event**

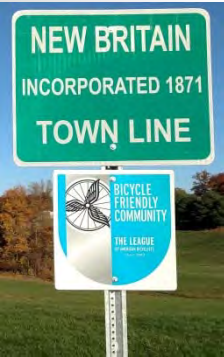
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BikeNewBritain.org





QUESTIONS?