

# City of Watervliet Complete Streets Implementation Workshop September 7, 2018



PLANNING 4 PLACES

Sam  
Schwartz

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This workshop was sponsored by the Capital District Transportation Committee.



## Introduction & Background

CDTC is the federally-designated Metropolitan Planning Organization (MPO) for Albany, Rensselaer, Saratoga, and Schenectady counties, and 78 municipalities including the cities of Albany, Schenectady, Troy and Saratoga Springs. In late 2017, the CDTC released its second RFP seeking consultant assistance (the first round of workshops was completed in 2016) to develop and implement a Complete Streets educational and technical assistance workshop series for local jurisdictions looking to develop and implement Complete Streets policies.

On behalf of local member jurisdictions, the CDTC workshop series offered to administer the consultant contract and serve as project manager for workshop development and implementation. The CDTC developed a competitive selection process to award four workshops, and then partnered with the City of Watervliet, the three other municipalities, county officials, CDTA, NYSDOT, and nonprofit organizations, business and community groups, and interested residents to ensure that all those with a stake in the outcome would have the opportunity to be actively involved in the Complete Streets workshop.

The workshop provided attendees who are new to Complete Streets with discussions of completed and potential Complete Streets implementation efforts, an open discussion of some obstacles identified since the 2016 Workshop, and ideas to overcome them.

## Workshop Development Process

The Workshop was a collaborative development process that included City Staff, CDTC Staff, and the Consultant Team. City and CDTC Staff sent invitations to representatives from the City, County, NYSDOT, CDTA, County Health Department, Non-Profits and other interested organizations. In all, over 20 attendees participated in the Workshop, held at the Watervliet Senior Center.

## Workshop Agenda

The Workshop agenda was developed based on identified needs outlined in the Workshop request application as well as discussions with City Staff, a short online survey provided to attendees, and a detailed survey completed by the City Manager. The Workshop focused on potential future project opportunities, design options and opportunities, and coordination opportunities developed through discussions with the City Manager, a review of prior studies, and information obtained from the recently adopted Complete Streets Policy.

## Workshop Notes

The following pages provide a summary of the discussions undertaken at the Workshop. The Workshop began at 10am with a welcome from Chris Bauer, CDTC and Jeremy Smith, City of Watervliet and included introductions by everyone in attendance.

### Overview of Complete Streets

- Even with winter conditions, we have more cyclists now than we used to riding throughout the City. We need to think about flexible approaches to deliver Complete Streets while still allowing for snow clearance.
- Watervliet is using a proactive approach to Complete Streets and has worked hard to keep the City safe for pedestrians over the years.
  - Mike noted that the City's street grid is old and compact, and not filled with too many dangerous arterials, which helps provide a safer non-vehicular environment.
- Broadway adjacent to the Armory is in the planning stages for a bike lane on one side of the road and bikes & pedestrians on the other (a sidewalk /cycle track combination).
- It was pointed out that the Oakland example of a transit boarding island material has been very durable and CDTA is looking at a site in Albany to test the product with potential for expansion to other areas thereafter. The modular pads were estimates to be approximately 1/7 (or less) than the cost of a permanent raised curb improvement.
  - One test will be to assess the durability for winter weather, maintenance, etc.

### Where have we been, and where are we going?

- The 2<sup>nd</sup> Avenue demonstration project will be implemented in approximately 1 week.
- In addition to Watervliet's Bike Master Plan, there is another bike master plan being developed now (Mohawk Hudson Bike-Hike Connection Master Plan). Watervliet is the intersection of the Mohawk Hudson Bike-Hike Trail + Champlain Canal bike trails (connection to Green Island and Cohoes) and is an important location for the regional network.
  - The 4<sup>th</sup> Street Tunnel from the Mohawk Hudson Bike-Hike Trail will have bike lanes/cycle tracks. This project is funded by NYSDOT.
- Along CDTA's Route 32 (2<sup>nd</sup> Ave) BRT route, some preliminary designs for 2<sup>nd</sup> Ave as a corridor-wide, BRT-focused Complete Street are being developed.
- We want to look at the "low hanging fruit" where space is available, and where it makes sense to make some changes, potentially via pilot projects.
- The Albany County Health Dept has been developing a "lending library" of supplies and materials that communities such as Watervliet can borrow for use in their pilot projects. Capital Roots can assist in a similar manner and is engaged in the 2<sup>nd</sup> Avenue Demonstration Project.
- A Complete Streets Advisory Committee is currently being formed in Watervliet.

- Watervliet is working toward developing a local business association so that their voices are heard and that the economic development benefits of Complete Streets, among other items, can be discussed in an effective and efficient manner with the business community.

#### Presentation of CDTA BRT Route Concept Plan

- Jeremy Smith provided an overview of the project details. Sample cross sections of sections of 2<sup>nd</sup> Avenue were displayed showing the preliminary concepts between 13<sup>th</sup> and 16<sup>th</sup> Streets.
  - It was noted that these designs do not differ too much from what will be put in place with the pilot project on 2<sup>nd</sup> Avenue.
- A sample cross section from 16<sup>th</sup> Street through 23<sup>rd</sup> Street show a shared bus/bike lane along the curbs due to a more constrained right-of-way.
- Beyond 23<sup>rd</sup> Street to 25<sup>th</sup> Street, with more room available, parking and bike lanes can be provided.
- Beyond 25<sup>th</sup> Street, the National Grid property may be required to provide the necessary sidewalk space, and they have indicated that the necessary acquisition is likely ok.
- Intersection concepts have not yet been developed.
- If a bike facility can be continued past this concept to the City line, it could help bridge a key gap in the regional trail network.
- It was noted that a significant next step will be looking at turning movements and volumes, to see where dedicated turn lanes will be required.
- While typically it's not ideal to create a bus/bike shared lane, the section is fairly short in length and conflicts should be relatively rare with 15-minute bus headways.
- The main BRT bus stop in Watervliet will feature a BRT-style shelter and bus bump-outs of the sidewalk at station stops.

#### CDTC Trails Presentation

- Watervliet staff asked about how the 4<sup>th</sup> Street trail location counts compare to others in the region, and CDTC reported that it is somewhere in the middle.
- Jeremy asked how Watervliet's ridership compares to other locations. Jennifer Ceponis noted that in terms of ridership it is in middle amongst Capital Region locations.
- Watervliet would like to connect the regional trail network to Hudson Shores Park where facilities such as restaurants and restrooms are located.
  - CDTC responded that trail users typically want to refresh themselves and spend money along trails, and appropriate signage and connections are critical to creating identifiable and desirable destinations.

## Detailed Design Module

- Regarding the question put to attendees about what they saw in a picture (from a location outside Watervliet) of shopping carts surrounding a bus stop - Watervliet found that customers from Price Chopper were bringing shopping carts off site to a bus stop and they worked with Price Chopper to allow for the purchase of carts that could be taken off-site and with CDTA to address the cart issue.
- Bike share (CDPHP Cycle!) is expanding and hopefully will be in Watervliet in the future. Current usage shows that some people are bringing bikes out of the service area through Watervliet and thus latent demand likely exists. Watervliet is interested in a bike share hub.
- The current stormwater management program in Watervliet is a \$1.2 million pilot project to address combined sewer overflows. Related to Complete Streets – pictures and discussion focused on the green infrastructure along 3<sup>rd</sup> Avenue. Results have been positive in reducing runoff. There may be future projects to reduce stormwater runoff into rivers, and to provide filtration benefits to reservoir water.
- Regarding functional classification, Watervliet has control of streets within the City boundaries. There are a couple of State (NYSDOT) routes such as Route 2 leading into the City on the hill, I-787 and the associated ramps which are under NYSDOT jurisdiction. Other routes are signed state routes but are under the jurisdiction of the City.
- Lead Pedestrian Interval signals (LPI's) are being used at 19<sup>th</sup> Street and 2<sup>nd</sup> Avenue.
- Watervliet is interested in using the HAWK technology.
- Some questions about the green paint for bike lanes and the cost of maintenance were discussed as well as cost and use of paint vs. thermoplastic. It was stated that there are studies and statistics available regarding costs for particular locations/cities and PeopleforBikes was referenced as a potential resource for answers to some of these questions – they have some cost comparisons and specifications available.
  - It was suggested that City Staff could also talk to other upstate cities such as Syracuse, where they used green paint over the last few years, to learn about material choices, maintenance and cost considerations.
- While bump-outs have resulted in a number of complaints from the public, the experience on 19<sup>th</sup> Street has shown positive outcomes overall.
- Back-in angled parking along 19<sup>th</sup> Street has also been a challenge to get public buy-in but some businesses along the corridor have expressed interest trying to do the same in their stretch of the corridor. Unfortunately, the width required to do this is not generally available along other blocks.
  - It was suggested that developing a pamphlet or presentation showing before and after data could be helpful in making the case that these improvements are in fact beneficial to the City, residents and businesses.

## Design discussions

- MHBHT Access road – The narrow area under the underpass makes road widening challenging so a concept that assumes the underpass will not be widened is realistic.
- 2<sup>nd</sup> Avenue and 23<sup>rd</sup> Street – The right side of the photo is a potential redevelopment parcel, so perhaps something could be incorporated to remove parking on right side and free up more street width for better bike facilities and/or sidewalk extensions.
- 19<sup>th</sup> Street at 5<sup>th</sup> Avenue – Moving north from 19<sup>th</sup> Street, we could perhaps instead use 23<sup>rd</sup> or 24<sup>th</sup> or 25<sup>th</sup> Streets as a one-way pair, in order to allow 19<sup>th</sup> St to function as a primary vehicular traffic thoroughfare.
  - There are pros and cons. The concept of Complete Networks is relevant here as not every street needs to do everything – if there is a calmer and safer option on parallel streets, 19<sup>th</sup> Street might not need a bike lane. Wayfinding could be used to direct cyclists to 19<sup>th</sup> Street at appropriate locations in order still promote access to the businesses along 19<sup>th</sup> Street.
- Route 2 within Watervliet – The idea of refuge islands would definitely aid crossing opportunities. There are regularly pedestrians running across the street, especially around the Fenimore Trace apartment complex.
  - There is also a religious center and a school in close proximity which also generate/could generate pedestrian volume.
  - The Route 2 NYSDOT paving project, if done outside Watervliet on a NYSDOT jurisdiction segment, could be coordinated with plans within the City limits, via cooperation between Watervliet and NYSDOT.
- Paving alleys – The alley image was shown as paved for the purposes of highlighting the use as a bicycle boulevard, however, they don't necessarily need to be paved. Paving was noted as being a challenge due to stormwater runoff with questions regarding how this issue could potentially be addressed.
  - Chicago tried a pilot project - the "Green Alleys" program - with a few options that were tested, including permeable pavement.
  - Could also pave just short sections near intersections to minimize impervious area.
- 787 Ramp @ 23<sup>rd</sup> Street –
  - The current "goat path" in the park will be a link in formal connections for the bike network in the future. One option would be to install a sidepath.
  - There is no signal at this intersection, it has only a flashing yellow light for traffic on 23<sup>rd</sup> Street that is basically ignored. The crosswalk is 30 to 40 feet into the ramp, which means that cars are already accelerating as they approach the crossing.
    - The crosswalk location itself may need to be addressed and moved closer to intersection, along with a decreased lane width for vehicles to the extent allowable to slow speeds as they enter the on-ramp.
    - A pedestrian refuge island is also a possibility.
    - There are design specifications and safety considerations with any element in the public right-of-way and this location is no different in that regard.

The City of Boulder, CO has examples of crossings that may be applicable in this situation.

- A safety assessment on prior crash data could be useful but may not really show the real story because perhaps pedestrians simply are not crossing because of perceived danger. It was suggested that using professional judgement will be equally if not more useful in this situation.
- There is a conceptual design for a bike/ped bridge over I-787 in the MHBHT master plan, plus a connection to Troy to connect the MHBHT with the Uncle Sam Trail.

### Next Steps/Projects:

- Distribute the toolkit. It can be noted that it is posted online often and in different forums to encourage residents and others to better understand what Complete Streets are and why they are important to Watervliet.
- Implementation of the 2<sup>nd</sup> Avenue long-term demonstration project (which will be done in a few weeks) as well as the related data collection (traffic counts, public opinion tracking, etc.).
- Assess opportunities and needs for changes to the 23<sup>rd</sup> Street/I-787 ramp pedestrian crossing and approaches (or alternative options) to improve access to the waterfront.
- Determine a desirable design option for potential development of a Bicycle Boulevard in the alleys. If it requires minimal paving or changes, it may be a near-term, lower-cost opportunity vs. a longer-term, higher-cost opportunity.
- Initiate discussions with NYSDOT regarding the potential for crosswalks and a pedestrian refuge on Route 2.
- Implement the Complete Streets plan for Route 32.
- Create tasks for the Complete Streets Committee.
- Update the ADA Transition Plan.
- Undertake a public input survey and/or other outreach efforts to increase public participation in Complete Streets activities.



## Referenced Resources & Links

Throughout the workshop different resources and guides were discussed or noted. There are many publicly available resources that can be consulted and organizations that can be contacted for assistance with Complete Streets. Please note: some of the following resources/guides must be purchased.

- Capital District Transportation Committee (CDTC)  
*New Visions 2040 Plan*  
<http://www.cdtcmpo.org/rtp2040/2040.htm>  
*Complete Streets Advisory Committee*  
<http://www.cdtcmpo.org/compst/compst.htm>  
*Bicycle and Pedestrian Committee*  
<http://www.cdtcmpo.org/bkpedtf.htm>
- New York State Department of Transportation Complete Streets:  
<https://www.dot.ny.gov/programs/completestreets>
- National Complete Streets Coalition  
<http://www.smartgrowthamerica.org/complete-streets>
- City of Philadelphia Green Streets Program  
[http://www.phillywatersheds.org/what\\_were\\_doing/green\\_infrastructure/programs/green\\_streets](http://www.phillywatersheds.org/what_were_doing/green_infrastructure/programs/green_streets)
- FHWA Small Town and Rural Multimodal Networks  
[www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/small\\_towns/](http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/)
- AARP – Planning Complete Streets For an Aging America  
[https://www.aarp.org/home-garden/livable-communities/info-08-2009/Planning\\_Complete\\_Streets\\_for\\_an\\_Aging\\_America.html](https://www.aarp.org/home-garden/livable-communities/info-08-2009/Planning_Complete_Streets_for_an_Aging_America.html)
- American Association of Highway Traffic Officials (AASHTO) – Green Book, Guide for the Planning, Design, and Operation of Pedestrian Facilities, Guide for the Development of Bicycle Facilities, Roadside Design Guide  
<https://www.transportation.org>
- American Planning Association (APA) – Complete Streets  
<https://www.planning.org/research/streets/>
- Federal Highway Administration (FHWA) – Manual on Uniform Traffic Control Devices (MUTCD)  
<https://mutcd.fhwa.dot.gov>
- Institute of Transportation Engineers (ITE) – Designing Walkable Urban Thoroughfares  
<https://www.ite.org/pub/?id=e1cff43c%2D2354%2Dd714%2D51d9%2Dd82b39d4dbad>
- National Association of City Transportation Officials (NACTO) – Urban Street Design Guide, Urban Bikeway Design Guide, Other Guides  
<https://nacto.org/publications/design-guides/>
- Transportation Research Board (TRB) – Highway Capacity Manual  
<http://www.trb.org/Main/Blurbs/175169.aspx>



# CITY OF WATERVLIET COMPLETE STREETS TRAINING WORKSHOP

Workshop provided by:



## WHEN:

September 7, 2018  
10:00am – 2:30pm

## WHERE:

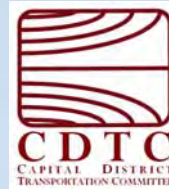
Watervliet Senior Center  
1501 Broadway

## Workshop Objectives

- Understand the multi-faceted effort required to create Complete Streets
- Learn how to plan and create streets that are safe for all users
- Explore best practices for implementation
- Learn how to build active and healthier communities







# Watervliet Complete Streets Implementation Workshop

## Presentations & Discussion Sessions

9:45 am to 10:00 am	Registration/Sign-in ( <i>Light breakfast fare</i> )
10:00 am to 10:15 am	Attendee Introductions
10:15 am to 11:00 am	Complete Streets Overview & Local Implementation Examples Presentation
11:00 am to 11:45 am	Key Complete Streets Elements & Review of Goals/Objectives from Adopted City Resolution & Policy
11:45 am to 12:30 am	Lunch & CDTC Regional Trail Plan Overview Presentation
12:30 am to 1:30 pm	Implementation: Discussion of Goals/Objectives, Opportunities & Best Practices

## Group Design Exercises

1:30 pm to 2:15 pm	Implementation: Moderated Design Discussion or Demonstration Project/Concept Exercise
2:15 pm to 2:30 pm	Wrap-Up & Open Discussion



CITY OF WATERVLIET  
COMPLETE STREETS WORKSHOP  
SEPTEMBER 7, 2018



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CITY OF WATERVLIET  
COMPLETE STREETS WORKSHOP  
SEPTEMBER 7, 2018



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SEPTEMBER 7, 2018

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# **Appendix**

Materials Distributed to Workshop Attendees & Other Reference Material



► WHY IMPLEMENT COMPLETE STREETS NOW?.....2



► LOW/NO-COST OPTIONS AND FUNDING OPPORTUNITIES.....3



► STATE AND FEDERAL FOCUS, LOCAL CONSIDERATIONS AND EXAMPLES.....4

# Complete Streets



A TOOLKIT FOR IMPLEMENTING COMPLETE STREETS IN THE CITY OF WATERVLIET, NY

*Complete Streets are streets for everyone –*

*No matter who they are or how they travel*

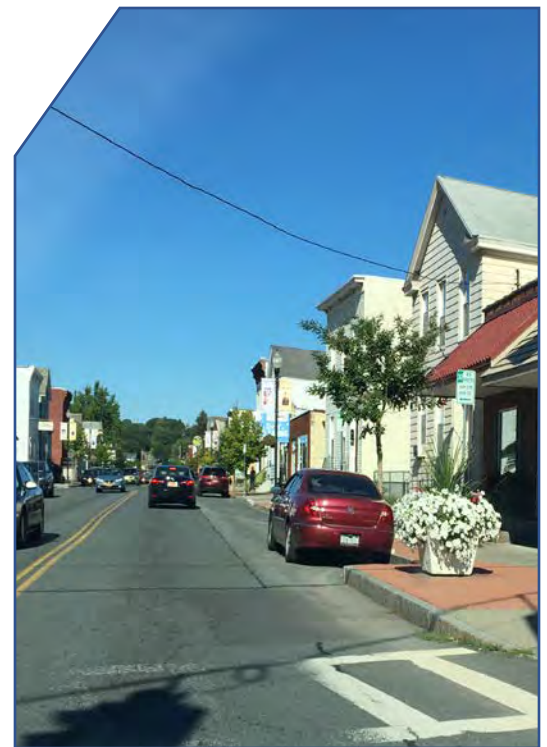
## Why do we need Complete Streets?

Complete Streets take many forms. They refer to a set of street design concepts that ensures that all users – pedestrians, bicyclists, transit users and drivers - are safely accommodated regardless of how they travel or what their special needs may require.

Complete Streets designs can significantly improve safety and reduce pedestrian-related crashes. It can also help reduce congestion, provide more efficient travel within the community, and spur economic development (NYSAMPO Complete Streets Fact Sheet).

Complete Streets improve mobility for the young and old. An AARP study found that 47% of older Americans felt it was unsafe to cross a major street near their home. 56% expressed strong support for adoption of Complete Streets policies.

A 2010 Future of Transportation National Survey found that 66% of Americans wanted more transportation options so that they have the freedom to choose how to get where they need to go - 73% felt that they had no choice but to drive as much as they do while 57% would like to spend less time in their car.



## Who Benefits? *Everyone!*

**Safety:** Pedestrian crashes decrease significantly with complete streets improvements.

**Mobility:** Provides options for everyone.

**Economic Development:** Proven to increase private sector investment and grow the economy.

**Social Equity:** More control over expenses. Transportation is the 2<sup>nd</sup> highest family expense.

**Health:** We are moving without *moving!*





# Why Implement Complete Streets Now?

*To make the needs of all users the default for everyday transportation planning practices and public works efforts.*

People will walk and bike...and some are...but more could.

Whether or not it is designed for a specific mode or action...people are using the infrastructure.

A 2012 CDC study showed that people are willing to walk to nearby destinations:

46% will walk 1 mile to church or school

35% will walk 1 mile to work

Only 1% are willing to walk 3-4 miles to church, school or work.

We are all pedestrians at the beginning and end of our trips!

*Complete Streets increase the opportunity for travel along corridors by all users.*

Implementing Complete Streets now can save money in the long run. In general, infrastructure

improvements and enhancements aren't getting any cheaper and planning/coordinating infrastructure investments across all municipal departments should reduce costs overall.

Case studies show that Complete Streets have a significant positive impact on the local economy.

## What is the **SAFETY** benefit?



Pedestrian Crash analysis findings show that approximately 15% of fatal crashes between 2005 and 2014 involved pedestrians.

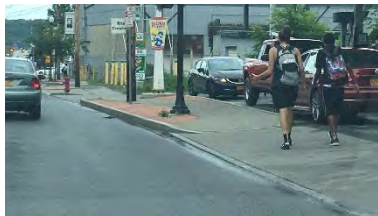
Pedestrian Crash Reduction Potential:

88% with sidewalks  
69% with hybrid beacons  
46% with medians

**Fact:** The CDC recommends 22 minutes of walking daily. The average American gets 6 minutes. The median American transit user gets 19 minutes

(T. Littman, Eval. Of Public Transportation Health Benefits)

## What is the **HEALTH** benefit?



There are wide-ranging benefits from implementing Complete Streets. There is currently a health crisis in this country highlighted by the following statistic:

60% of people are at risk for diseases associated with inactivity including:

- Diabetes
- High Blood Pressure
- Other Chronic Diseases

## Watervliet Statistics:

- 15.8% (716) of occupied housing units do not have access to a vehicle.
- 1,926 residents (~19%) in Watervliet are under 16 years of age meaning they can not drive and must get a ride or find alternative means of transportation.
- 2.7% of workers 16 and over walked to work. This is lower than the County as a whole at 4.6%. Another 7.3% took public transportation or used a mode other than a car, truck or van. (U.S. Census 2016 ACS estimates)



**Fact:** On Average, of all the vehicle trips taken...

~45% are 3 miles or less which are generally bikeable



~21% are 1 mile or less which are generally walkable



2017 FHWA National Household Travel Survey



# Funding Opportunities

*Typical Complete Streets funding sources*

While coordination and planning ahead can provide significant positive impacts and reduce the need for special financing, it isn't always the answer.

There are several funding sources typically used for Complete Streets projects including the following:

Regional Economic Development Councils (REDC):

<https://regionalcouncils.ny.gov/content/capital-region>

Consolidated Funding Application (CFA):

<https://apps.cio.ny.gov/apps/cfa/>

NYSDOT Transportation

Alternatives Program (TAP) & Congestion Mitigation and Air Quality Improvement Program:  
<https://www.dot.ny.gov/TAP-CMAQ>

Highway Safety Improvement Program (HSIP):

<https://www.dot.ny.gov/divisions/operating/osss/highway/improvement-program?nd=nysdot>

# Low/No-Cost Options

*Complete Streets is about using existing resources differently!*

Special funding is not necessarily needed. Thinking ahead and coordinating efforts can result in noticeable changes and improvements with little to no additional funding needed.

- Work with local agencies & utilize existing expertise: the Capital District Transportation Committee, New York State Department of Transportation, Capital District Regional Planning Commission, and Albany County.
- Attempt to find efficiencies using municipal staff - for example staff could do some of the work typically done by contractors (clearing, grading or seeding).
- Intersection improvements are often lower cost upgrades that can be easily implemented (crosswalk striping, crosswalk buttons & timers, etc.).
- Restripe roadways to provide adequate width for bike lanes.
- Plan for, design, and construct sidewalks as part of planned drainage, grading roadway widening, or development projects.
- Leverage planned development projects: Municipalities work with developers to bring about the best project(s) possible all the time, often implementing Complete Streets elements. With known expectations and a well conceived plan, implementing comprehensive Complete Streets policies can be seamlessly integrated.
- Business Improvement District (BID) or similar operation: While a BID itself is a specific taxing authority that can be difficult to establish, there is nothing saying that local government and businesses who want to see Complete Streets (and other) changes progress can't work together to plan, fund, and implement specific improvements on a voluntary basis.

## COMPLETE STREETS Policies

Policies ensure that the right-of-way is planned, designed, constructed, operated, and maintained to provide safe access for all users.

There are many examples of policies that have been adopted and implemented throughout the Capital Region and New York State.

### • City of Watervliet, NY

- City of Cohoes, NY
- City of Troy, NY
- City of Saratoga Springs, NY
- Town of Bethlehem, NY
- Town of Niskayuna, NY

Copies of policies in NYS have been collated and are available on the NYSDOT website:

<https://www.dot.ny.gov/programs/completestreets>

CDTC has an active Complete Streets Advisory Committee. Information on this Committee can be found on their website:

[www.cdtcmppo.org/page/66-project-programs/complete-streets/52-complete-streets-advisory-committee](http://www.cdtcmppo.org/page/66-project-programs/complete-streets/52-complete-streets-advisory-committee)

Additional information on where policies have been developed across the U.S. can be found at: [www.smartgrowthamerica.org](http://www.smartgrowthamerica.org)

## Online & Print Resources

**CDTC Committee(s): Complete Streets; Bicycle & Pedestrian:**

<http://www.cdtcmppo.org/committees/advisory-committees-2>

**NYSDOT Complete Streets Webpage:**

<https://www.dot.ny.gov/programs/completestreets>

**NYSAMPO Fact Sheets:**

[http://nysmpo.org/wordpress/?page\\_id=1548](http://nysmpo.org/wordpress/?page_id=1548)

**National Complete Streets Coalition:**

<https://smartgrowthamerica.org/program/national-complete-streets-coalition/>

**American Planning Association Complete Streets Resource Database:**

<https://www.planning.org/research/streets>

**Institute of Transportation Engineers (Designing Walkable Urban Thoroughfares):**

[library.ite.org/pub/e1cff43c-2354-d714-51d9-d82b39d4dbad](http://library.ite.org/pub/e1cff43c-2354-d714-51d9-d82b39d4dbad)

**NYS Complete Streets Act:**

<https://www.nysenate.gov/legislation/bills/2011/s5411/amendment/a>

**USDOT (A Residents Guide for Creating Safe and Walkable Communities):**

[https://safety.fhwa.dot.gov/PED/BIKE/ped\\_cmnty/ped\\_walkguide/residents\\_guide2014\\_final.pdf](https://safety.fhwa.dot.gov/PED/BIKE/ped_cmnty/ped_walkguide/residents_guide2014_final.pdf)

- AASHTO/FHWA Green Book; Guide for the Development of Bicycle Facilities
- FHWA Flexibility in Highway Design
- ITE Urban Street Geometric Design Handbook
- NACTO Urban Street Design Guide; Urban Bikeway Design Guide
- AARP Public Policy Institute: Planning Complete Streets for an Aging America
- APA Complete Streets: Best Policy and Implementation Practices
- NCHRP Report 616: Multimodal Level of Service Analysis for Urban Streets
- NYC Street Design Manual



# Complete Streets Focus at the State and Federal Levels

*CDTC is leading the way on Complete Streets in the Capital Region. NYS and the federal government are also advocating for a change in how we design our transportation corridors.*

## New York State

Senate Bill S5411A created the NYS Complete Streets Act in 2011.

Among other things, this act requires consideration of the convenient access and mobility on the road network by all users of all ages, including motorists, pedestrians, bicyclists, and public transportation users for projects that receive state and federal funding. It also calls for design features to accommodate and facilitate convenient access and mobility by all users.

## Federal Highway Administration

In 2013 the FHWA released a memo stating that the agency supports "...taking a flexible approach to bicycle and pedestrian facility design."

It also recommends using AASHTO, ITE and NACTO guidance.

## US Department of Transportation

A 2010 Policy Statement noted that "...DOT encourages transportation agencies to go beyond the minimum requirements, and proactively provide convenient, safe, and context-sensitive facilities that foster increased use by bicyclists and pedestrians of all ages and abilities, and utilize universal design characteristics when appropriate."

About  
**CDTC**



The **Capital District Transportation Committee (CDTC)**, the funding agency for development of this Toolkit and the associated Complete Streets Workshop Series, is the designated Metropolitan Planning Organization (MPO) for the Capital District. The CDTC carries out federal requirements for cooperative transportation planning and programming within the metropolitan area surrounding the Albany-Schenectady-Troy and Saratoga Springs urbanized areas.

[www.cdtcmpo.org](http://www.cdtcmpo.org)

## Complete Streets Considerations & Examples



Sometimes just paint and restriping are needed.



Public transit is an integral component.



Simple changes can make a big impact.



Separated facilities require significant expenditure but provide significant benefits.



Side paths can be an effective option for bicyclists and pedestrians when constraints limit work adjacent to the road.



Not every location can provide everything ...some improvements are better than none.



2<sup>nd</sup> Ave/Route 32



# City of Watervliet Complete Streets Workshop

Moderated Discussion, Demonstration & Potential Projects

19<sup>th</sup> St. Back-in Angled Parking

PLANNING  PLACES

Sam  
Schwartz







Schenectady – CDTC Linkage Study Demonstration Project



Niskayuna – CDTC Funded – Bike Safety Event

# Demonstration Projects & Conceptual Improvement Ideas



DRAFT for presentation  
use and discussion

# MHBHT Access Road

Signage & Markings from Broadway





DRAFT for presentation  
use and discussion

Bike Lanes  
or Sharrows  
to 3<sup>rd</sup> Ave.  
Intersection

Sharrows  
to 3<sup>rd</sup> Ave

4th St

Maintenance of and  
along sidewalk  
needed

Crosswalks  
Needed

Better Signage  
needed, Consider  
a gateway  
treatment for  
entrance drive

Sharrows  
Needed

Sharrows  
needed

Broadway

Broadway

399

787

11th

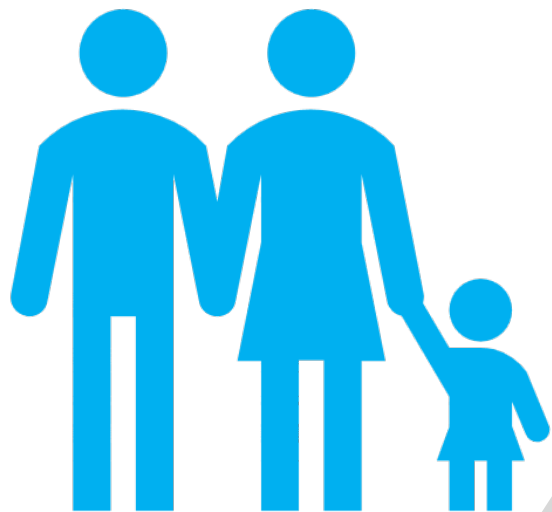


- ~23.5' wide paved area
- *Not enough width for separate bike lanes. Widening would cost \$ and still run into a narrow underpass. Cost effective method - Sharrows.*
- *Rehab sidewalk and improve signage*

DRAFT for presentation  
use and discussion







DRAFT for presentation  
use and discussion

# 2<sup>nd</sup> Ave @ 23<sup>rd</sup> St

Bike Lanes (Proposed in Bicycle Master Plan)  
& Cycle Track

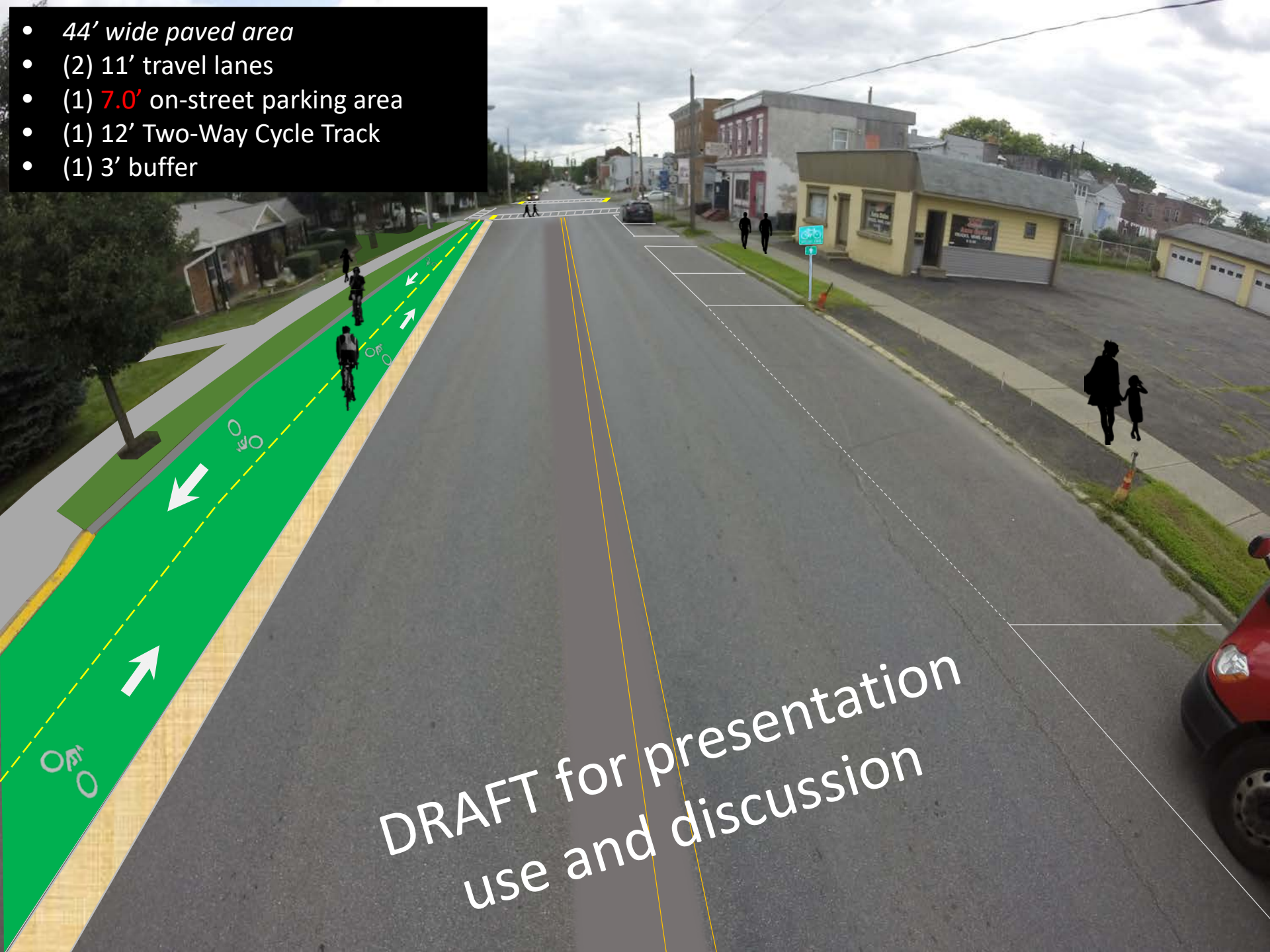




DRAFT for presentation  
use and discussion



- 44' wide paved area
- (2) 11' travel lanes
- (1) 7.0' on-street parking area
- (1) 12' Two-Way Cycle Track
- (1) 3' buffer



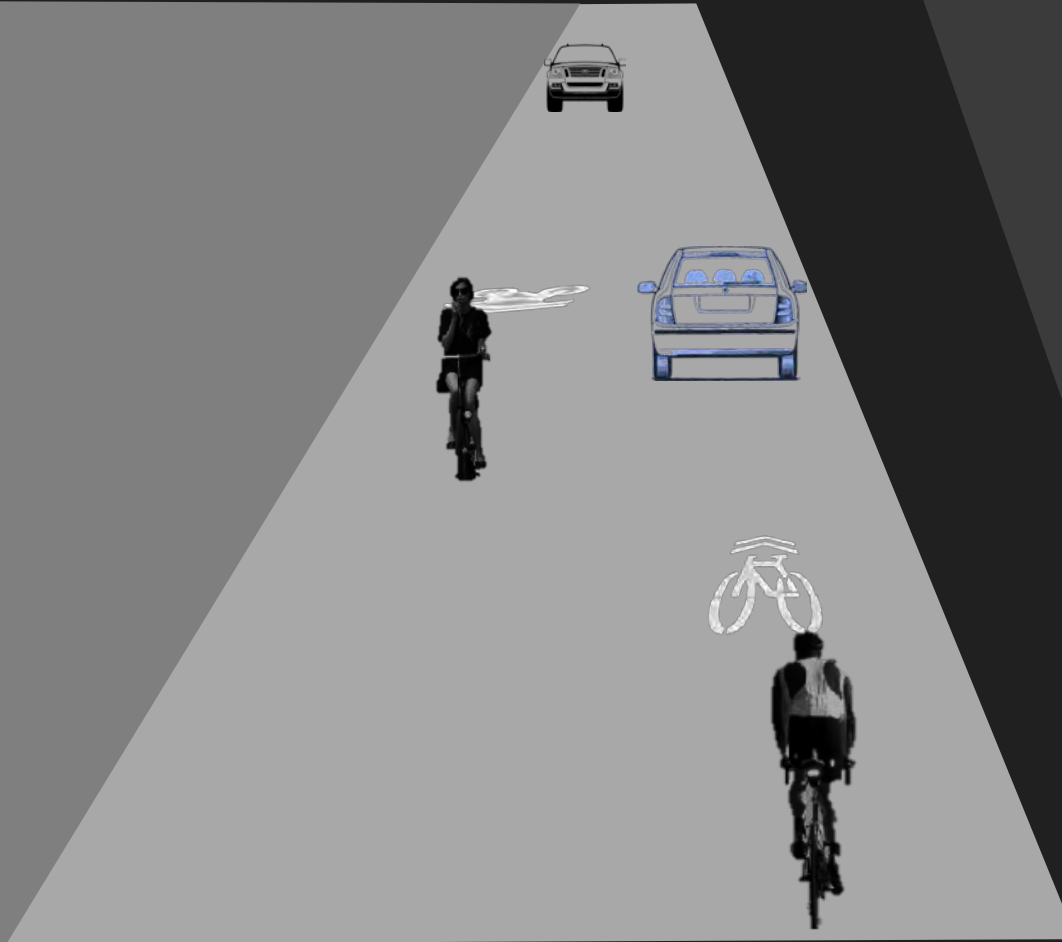
DRAFT for presentation  
use and discussion

DRAFT for presentation  
use and discussion

# 19<sup>th</sup> St. @ 5<sup>th</sup> Ave.

Sharrows

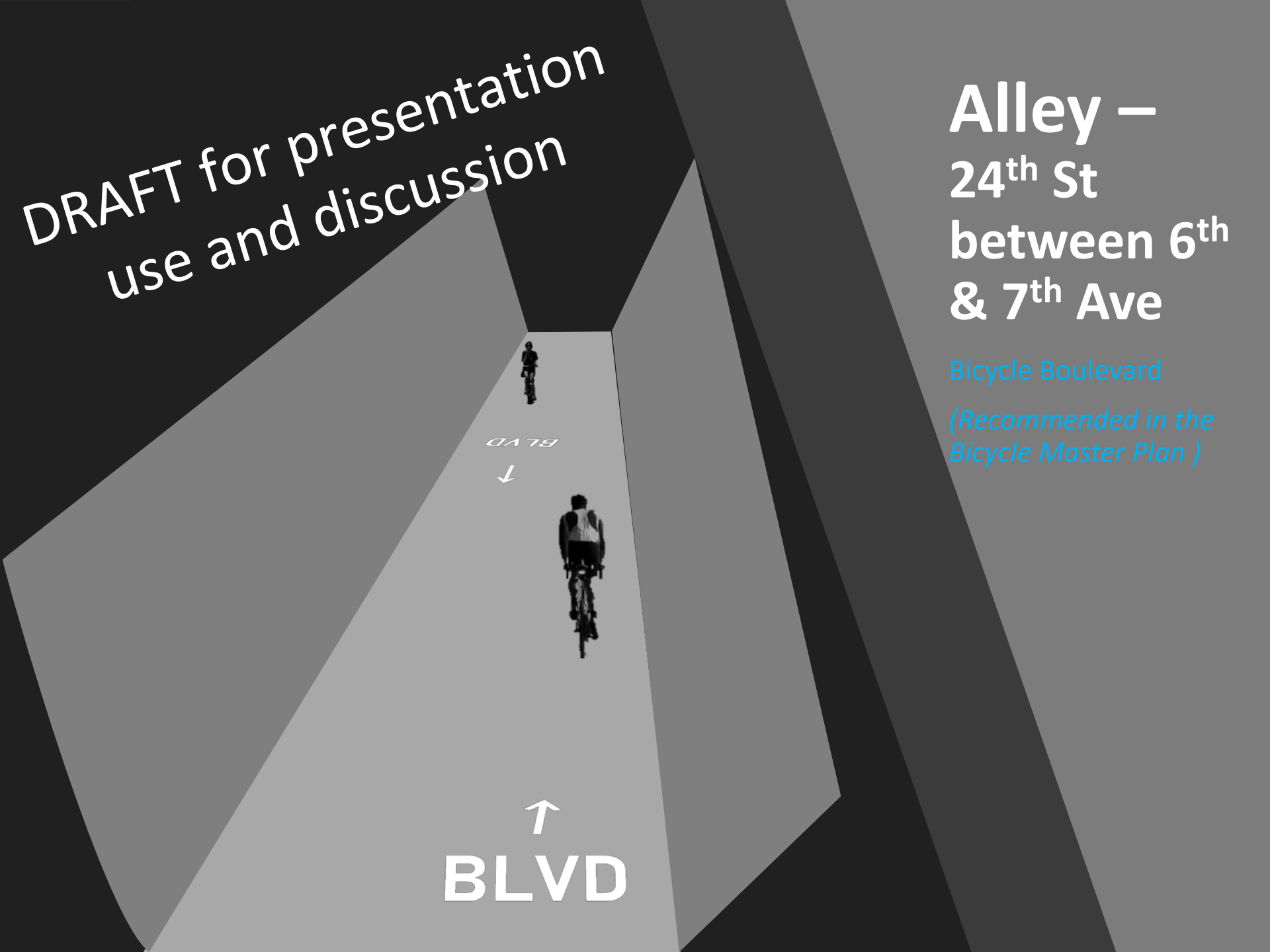
*(Proposed in the Bicycle  
Master Plan)*







DRAFT for presentation  
use and discussion



DRAFT for presentation  
use and discussion

# Alley – 24<sup>th</sup> St between 6<sup>th</sup> & 7<sup>th</sup> Ave

Bicycle Boulevard

*(Recommended in the  
Bicycle Master Plan )*

↑  
BLVD

BLVD  
↓





DRAFT for presentation  
use and discussion





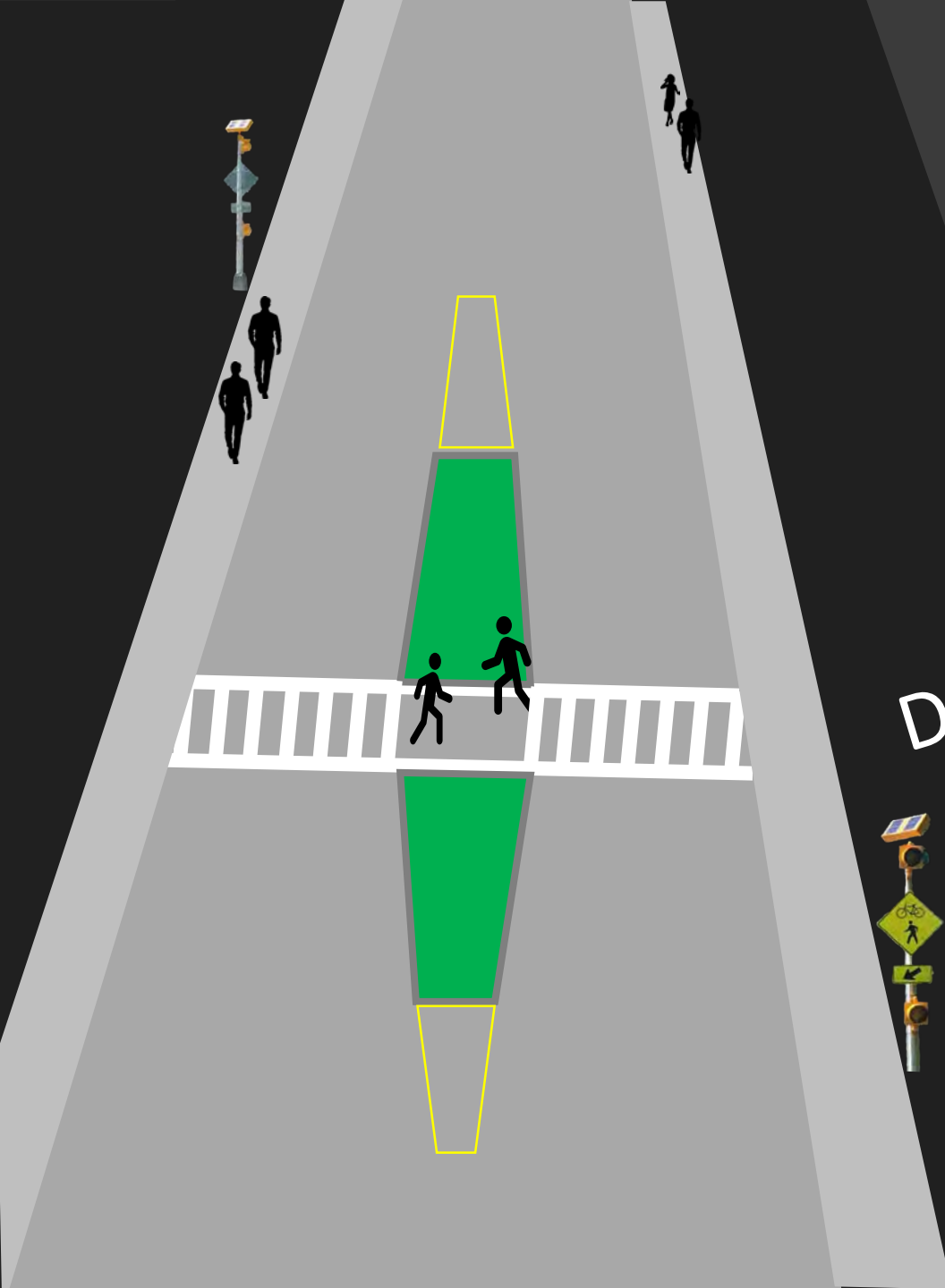
DRAFT for presentation  
use and discussion



# Route 2 Pedestrian Enhancements

Sidewalks & Pedestrian  
Refuge at Bus Stop(s)

DRAFT for presentation  
use and discussion



# Pedestrian Refuge Islands



DRAFT for presentation  
use and discussion

- Extend sidewalks to Fenimore Trace and Highland Club apartments, and St. Peter Armenian Church
- Install crosswalk & pedestrian refuge island at bus stop locations adjacent to Fenimore Trace driveway

DRAFT for presentation  
use and discussion





DRAFT for presentation  
use and discussion





DRAFT for presentation  
use and discussion

**I-787 Ramp @  
23<sup>rd</sup> St.**

**DRAFT for presentation  
use and discussion**



- Connection to City Park is in need of improvement(s)
- What will get more people to the Waterfront?

DRAFT for presentation  
use and discussion



# Existing Conditions

DRAFT for presentation  
use and discussion



23<sup>rd</sup> St & Broadway



# Existing Conditions

DRAFT for presentation  
use and discussion



Existing  
Conditions

Ideas for  
Improvement(s)?



DRAFT for presentation  
use and discussion







2nd Ave/Route 32



# City of Watervliet Complete Streets Workshop

Background: Where have we been...where are we going?

19th St. Back-in Angled Parking

PLANNING 4 PLACES

Sam  
Schwartz







Where have we been?  
*Implementation*

# WATERVLIET BICYCLE MASTER PLAN

INTRACITY CONNECTIONS

## 2013 Bicycle Master Plan



# WATERVLIET BICYCLE MASTER PLAN

## INTRACITY CONNECTIONS

### Plan Purpose:

“...to serve as the guiding document for the development of a network of bicycle routes linking activity centers within the City, as well as the larger regional network”





# WATERVLIET BICYCLE MASTER PLAN

## INTRACITY CONNECTIONS

### Plan Highlights:

- Id'd priority routes
- Provides BLOS for all streets in the City
- Provides proposed priority routes through the City - Bicycle Blvd., Shared Lane, Bike Lane, and the Trail
- Provides Facility Design Guidelines



# WATERVLIET BICYCLE MASTER PLAN

## INTRACITY CONNECTIONS

### Plan Highlights:

- Formation of a permanent Bicycle & Pedestrian Advisory Committee
- Improve bikes on buses potential (*CDTA has bike racks on all buses & all routes*)
- Education/Outreach/Enforcement/Engineering Encouragement



# WATERVLIET BICYCLE MASTER PLAN

## INTRACITY CONNECTIONS

### Plan Highlights:

- Bicycle Parking
- Adopt a wayfinding/signage system
- Apply for Bicycle Friendly Community designation
- Develop Performance Measures
- Adopt a policy





# WATERVLIET BICYCLE MASTER PLAN

## INTRACITY CONNECTIONS

## Complete Streets Related Plan Highlights

- Program recommendation:  
Create a Policy
  - Access Management
  - Streetscaping
- Implementation  
recommendation:  
Create a policy



# 2016 Albany County CS Workshop

## 2<sup>nd</sup> Avenue @ 15<sup>th</sup> St Demonstration Project/ Concept

### EXISTING CONDITIONS

#### DETAILS

Residential/Mixed  
Use Neighborhood

Public Library

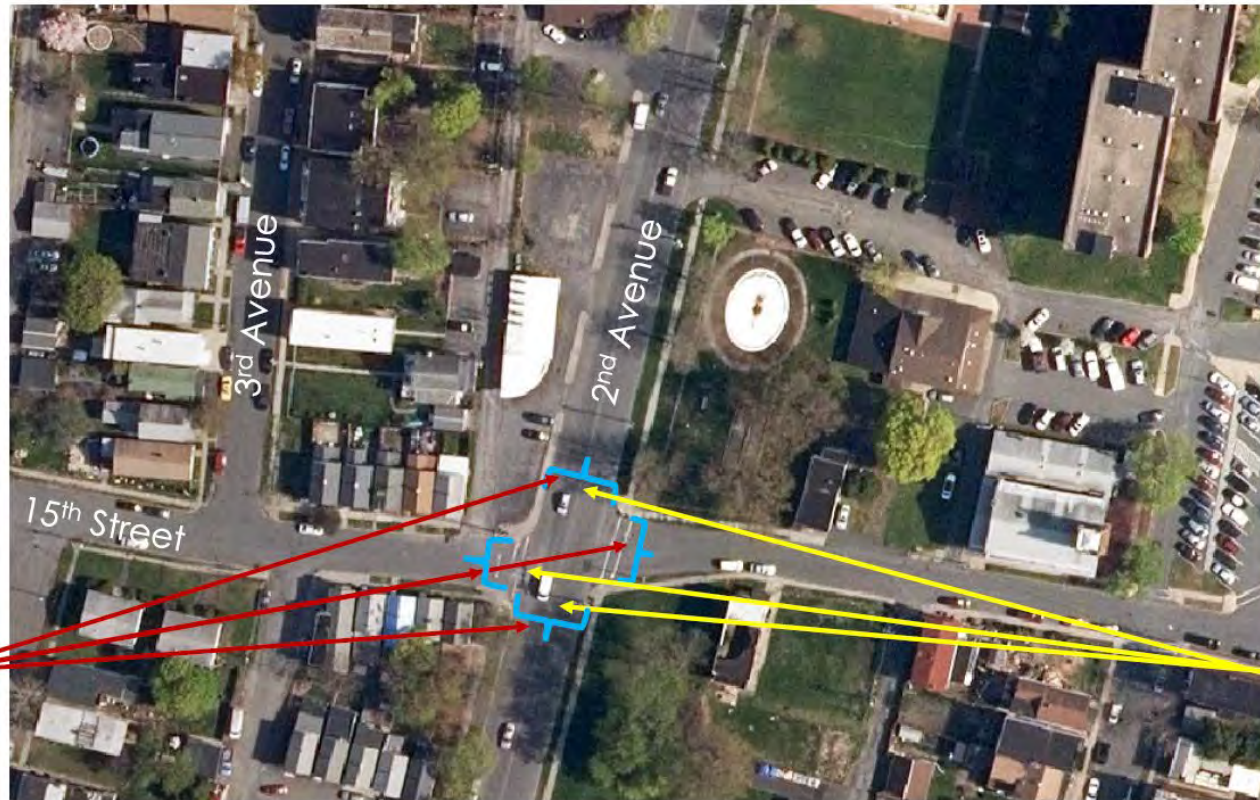
Senior Center

City Hall

15<sup>th</sup> Street Park

On-Street Parking  
on north side of  
2<sup>nd</sup> Avenue

Significant  
Crossing  
Widths



Worn or missing  
Crosswalks

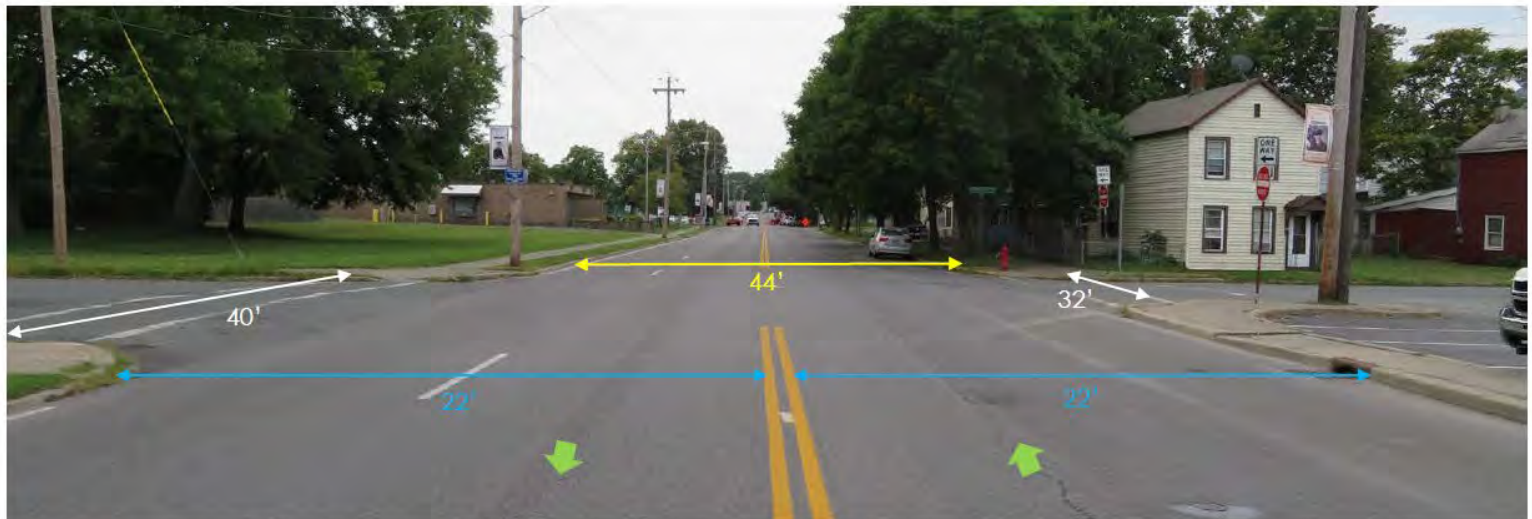
2ND AVENUE @ 15TH STREET

# 2016 Albany County CS Workshop

2<sup>nd</sup> Avenue @ 15<sup>th</sup> St Demonstration Project/ Concept

## EXISTING CONDITIONS

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➡ 2<sup>ND</sup> AVENUE @ 15<sup>TH</sup> STREET



# 2016 Albany County CS Workshop

2<sup>nd</sup> Avenue @ 15<sup>th</sup> St Demonstration Project/ Concept

## IMPLEMENTATION IDEAS



➡ 2<sup>ND</sup> AVENUE @ 15<sup>TH</sup> STREET

# 2016 Albany County CS Workshop

2<sup>nd</sup> Avenue@ 15<sup>th</sup> St Demonstration Project/ Concept

## CONCEPTUAL FUTURE POTENTIAL CROSS SECTION



➡ 2<sup>ND</sup> AVENUE @ 15<sup>TH</sup> STREET

*Note: Lane widths were measured on-site but not by a professional surveyor. All images are concepts for planning purposes only.*

### NACTO Urban Street Design Guide:

- Parking lane widths of 7-9 feet are generally recommended
- Travel lane widths of 10 feet generally provide adequate safety in urban settings while discouraging speeding. Cities may choose to use 11-foot lanes on designated truck and bus routes (one 11-foot lane per direction) or adjacent to lanes in the opposing direction.

**CITY OF WATERVLIET**  
**COMPLETE STREETS POLICY**

**A. DEFINITION OF COMPLETE STREETS**

*“Complete Streets”* means streets that are designed and operated to enable safe access for all users, in that pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities are able to safely move through the transportation network.

**B. COMPLETE STREETS POLICY**

1. The City of Watervliet shall design, build, operate, and maintain a safe, reliable, efficient, integrated, and connected multimodal transportation network that will provide access, mobility, safety, and connectivity for all users. In addition, the city will appoint a Complete Streets Advisory Board to whom quarterly reports on upcoming projects, and previously awarded exceptions, will be furnished.
2. Complete Streets design will promote improved health, economic growth, public safety, recreational opportunity, and social equality throughout the City of Watervliet, and will ensure that the safety and convenience of all users of the transportation system are accommodated, including pedestrians, bicyclists, users of mass transit, people of all ages and abilities, motorists, emergency responders, freight providers, and adjacent land users.

# 2017 – Complete Streets Policy Adoption

*(Copy in your packets)*



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# 2017 – Complete Streets Policy Adoption

## - Applicable to:

- All City-owned transportation facilities
- All privately constructed streets, parking lots, and connecting pathways
- All transportation projects
- Shall require the use of a Complete Streets Checklist form

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# 2017 – Complete Streets Policy Adoption

Compliance with the Policy  
requires the filing of a Complete  
Streets Checklist form  
*(Copy in your packets)*



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# 2017 – Complete Streets Policy Adoption

## - Exceptions:

- Prohibited by law, use by specified users
- Minor Maintenance activities
- Documented exception concluding such infrastructure is unnecessary, cost prohibitive, or contrary to public safety needs
- Other factors indicate absence of need
- *Must be reviewed by the CS Advisory Board and approved by the Building Dept. or Engineer with documentation on the basis for the decision*

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# 2017 – Complete Streets Policy Adoption

## - Other Elements:

- Includes Design Standards requirements
- Requires implementation reporting
- 1,3, & 5 year outcomes
- Includes Performance Measures



Where are we going?  
*Implementation*



What else has been done in  
the last few years?



# What are the “Top 3” Near-Term Priorities & Next Steps



# Who needs to be engaged to ensure implementation?

- Mayor
- General Manager
- City Council Members
- City Planner
- Emergency Services, esp. Police Department
- Highway Department Working Supervisor
- Parks & Recreation Working Supervisor
- Water & Sewer Department Working Supervisor
- Others?





# Key Stakeholders to keep engaged and updated on progress and activities

- All City Departments
- Local Business Association/Chamber of Commerce
- NYSDOT
- Albany County Planning Department
- CDTC
- CDTA
- CDRPC
- School District
- Regional Economic Development Council
- Others?

