

Complete Streets for Connecticut Municipalities: What, Why, and How?

“EVERY TRIP BEGINS AND ENDS ON FOOT.”....“TO MAINTAIN INDEPENDENCE AND EQUITY AMONG CITIZENS, IT IS IMPORTANT TO FACILITATE ALTERNATIVE TRAVEL MODES”.

2012 CRCOG ROUTE 10 CORRIDOR STUDY

Presenters

- Neil Pade, Director of Planning and Community Development
 - ▣ Town of Canton and CT Bike-Ped Advisory Board
- Sandy Fry, Grants and Procurement Program Coordinator
 - ▣ Greater Hartford Transit District and CT Bike-Ped Advisory Board
- Kevin Tedesco, Office of Intermodal Planning
 - ▣ Bureau Of Policy and Planning, CT DOT
- Melanie Zimyeski, Transportation Supervising Planner
 - ▣ Bureau of Policy and Planning, CT DOT

Objectives

- Who is the CTBPAB and how do they help municipalities?
- How does the Complete Streets Law and related CT DOT policies affect municipalities
- The benefits of complete streets (Community health, quality of life, economics, and funding benefits)
- Tools for municipalities (how to integrate complete streets into your processes, model checklists, policies and standards)
- What kind of financial assistance is available
- Technical assistance provided by the CT DOT

Connecticut Bicycle and Pedestrian Advisory Board

Volunteer board members advising agencies of the state on
policies, programs, and facilities for bicycles and
pedestrians.

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Connecticut Bicycle and Pedestrian Advisory Board

- CGS Sec. 13b-13a. Connecticut Bicycle and Pedestrian Advisory Board.
 - (a) There is established a **Connecticut Bicycle and Pedestrian Advisory Board** which shall be **within the Department of Transportation** for **administrative** purposes



Connecticut Bicycle and Pedestrian Advisory Board

- The 11 members appointed by the Governor (5), House speaker, Senate president pro tempore, House majority and minority leaders, and Senate majority and minority leaders.
- Board members shall represent:
 - **Bicycle advocacy group**
 - **Walking advocacy group**
 - **Bike shop manager**
 - **The mobility-impaired**
 - **The visually-impaired**
 - **Transit workers**
 - **Persons over sixty years old**



CT Bicycle Pedestrian Advisory Board Responsibilities

- The board is tasked with:
 - ▣ examining the need for bicycle and pedestrian transportation,
 - ▣ promoting programs and facilities for bicycles and pedestrians in this state, and
 - ▣ advising appropriate agencies of the state on policies, programs and facilities for bicycles and pedestrians.”

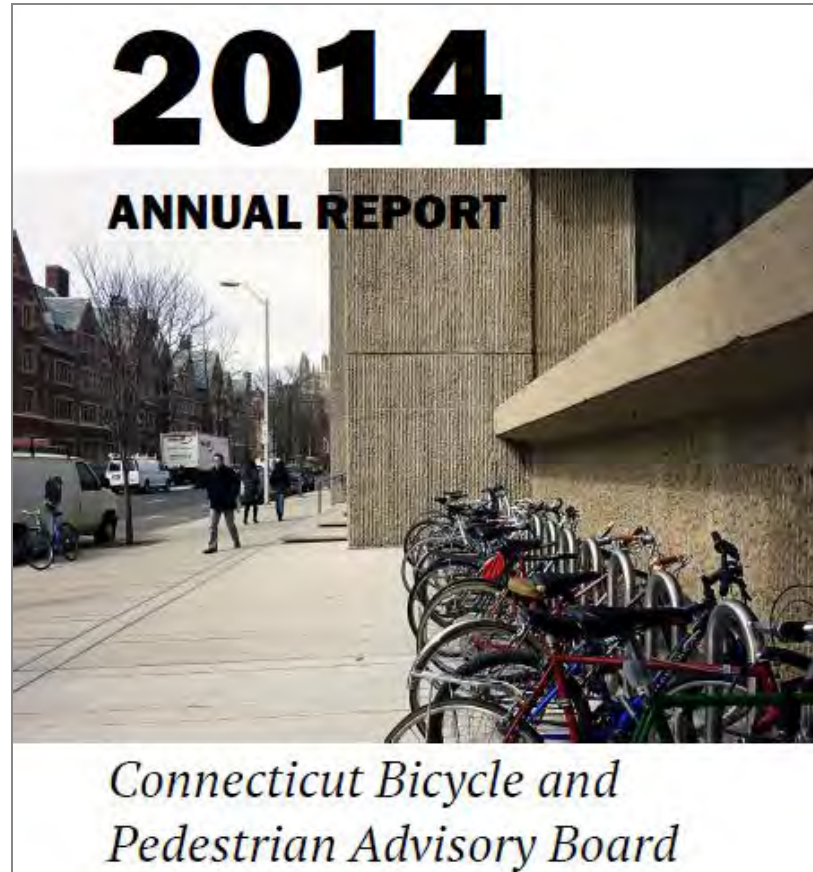


CT Bicycle Pedestrian Advisory Board Responsibilities

- **The Board must submit a report annually to the Governor, Commissioner of the Department, and the Transportation Committee, on:**
 - ▣ **Progress made by State agencies**
 - ▣ **Recommendations for improvements to State policies and procedures, and**
 - ▣ **Specific actions taken by the Department of Transportation.**



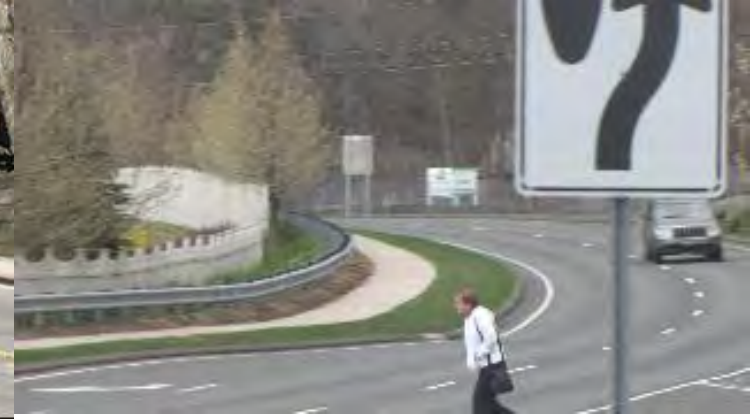
CT Bicycle Pedestrian Advisory Board Annual Report



www.ct.gov/dot/lib/dot/plng_plans/cbpab/2014/cbpab_2014_annual_report_final.pdf

Board Goals

- Advance the inclusion of non-motorized transportation design elements.
- Encourage pedestrian and bicycle connections.
- Integrate pedestrian and bicycle systems with other transportation systems (roads, rail, bus, etc.).
- Support policies and funding initiatives that favor transit and non-motorized transportation.
- Facilitate the implementation of the Complete Streets Law.



- CGS Sec. 13a-153f(b) requires that accommodations for all **users** shall be a **routine part** of the planning, design, construction and operating activities of all **highways**, as defined in section 14-1, in this State.
- "**User**" is defined by CGS Section 13a-153f to be “a **motorist, transit user, pedestrian or bicyclist;**”



Complete Streets Law Responsibilities

- CGS Section 13a-153f(d) provides that **Accommodations** pursuant to subsection (b) shall not be **required** if:
 - ▣ the **Commissioner of Transportation** or
 - ▣ a **municipal legislative body** determines:
 - Nonmotorized usage is prohibited;
 - There is a demonstrated absence of need;
 - The accommodation of all users would be an excessively expensive component of the total project cost; or
 - The accommodation of all users is not consistent with the state's or such municipality's, respectively, program of construction, maintenance and repair.



Complete Streets Law Responsibilities

- CGS Sec. 13a-153f(b) requires that accommodations for all **users shall be a routine part** of the planning, design, construction and operating activities of all highways, as defined in section 14-1, in this State.
- Section 13a-153f(b), after 6 years, has not yet been fully implemented into the **routine** practices of would be “**implementers**” of the law.



Complete Streets Law Responsibilities

- “Complete Street design should be understood as a process, not a specific product.”
- “But the Scope of the Project is to just add a left turn lane”
- “When projects are scoped and programmed without consideration for Complete Streets, there could be extra cost over the original estimate in order to later address pedestrian, bike, and bus features.”



Complete Streets for Connecticut Municipalities: What, Why, and How?

Complete Streets Defined

“Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street.”

– *National Complete Streets Coalition*



Elements of Complete Streets

- ❑ Sidewalks
- ❑ Crosswalks
- ❑ Lighting
- ❑ Bike lanes or shoulders; bike racks
- ❑ On-street parking
- ❑ Transit stops, shelters, information
- ❑ Plazas, parks, public spaces
- ❑ Street “furniture” – benches, planters, kiosks
- ❑ Landscaping/street art
- ❑ Outdoor dining, retail, or entertainment
- ❑ Traffic lanes and controls – downscaled or “calmed”
- ❑ And more
- ❑ Or less



What Do Road Users Need?

□ Five Keys to Success:

- ▣ Security
- ▣ Convenience
- ▣ Efficiency
- ▣ Comfort
- ▣ Welcome



Walkability Principles



- Well designed network
- Safe crossings
- Convenient crossings
- Effective communication
 - ▣ Drivers understand intent
 - ▣ Pedestrians see vehicles

Sidewalk design criteria



Continuous

4 foot minimum width

Accessible

In good repair

Buffered from traffic if possible

Safe Crossings



Safe Crossings

- ❑ Shorten Distance
- ❑ Lower speeds
- ❑ Reduce turning conflicts



Traffic Calming

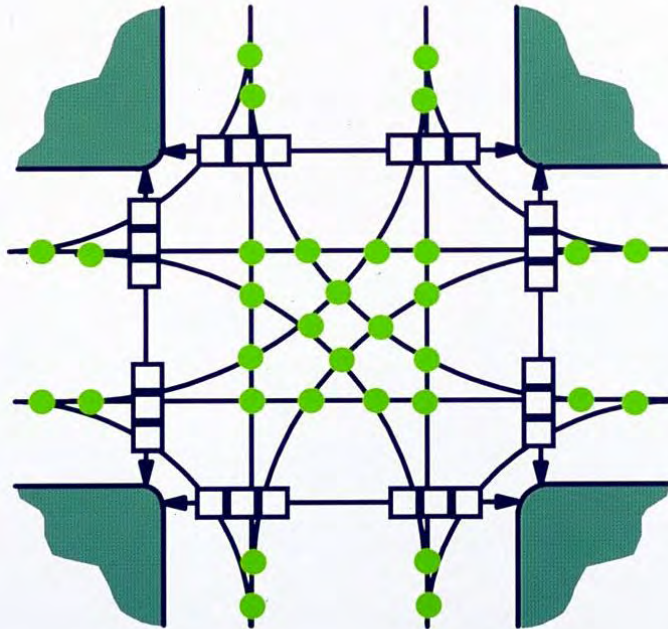


Intersection Conflict Points

Four-way intersection

32 vehicle to vehicle

24 vehicle to pedestrian

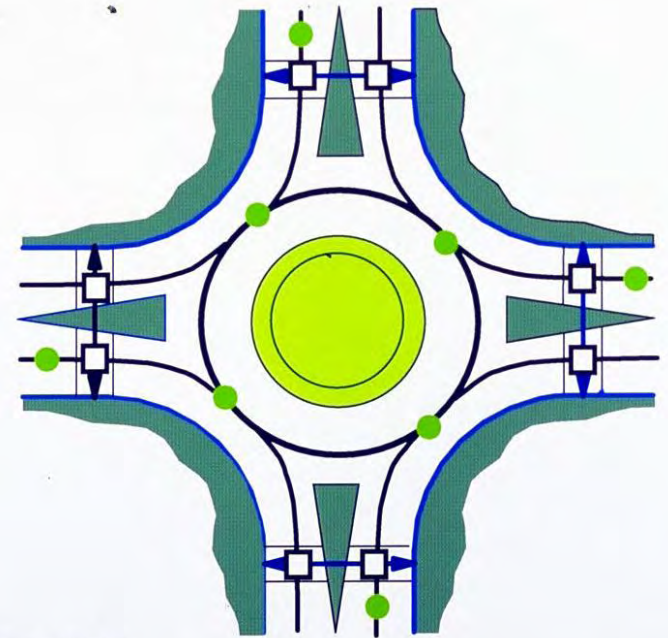


Walkable Communities, Inc.
Burden and Wallwork, P. E.

Roundabouts

8 Vehicle to vehicle

8 Vehicle to pedestrian



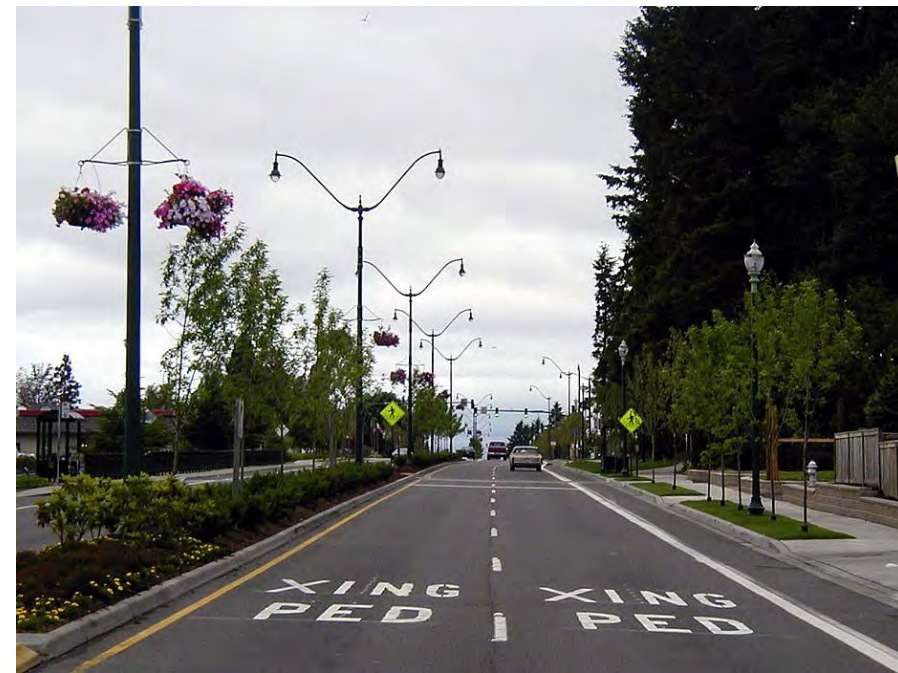
Walkable Communities, Inc.
Burden and Wallwork, P. E.

Convenient Crossings





Boulevard Mid-block Crossings



Effective Communication



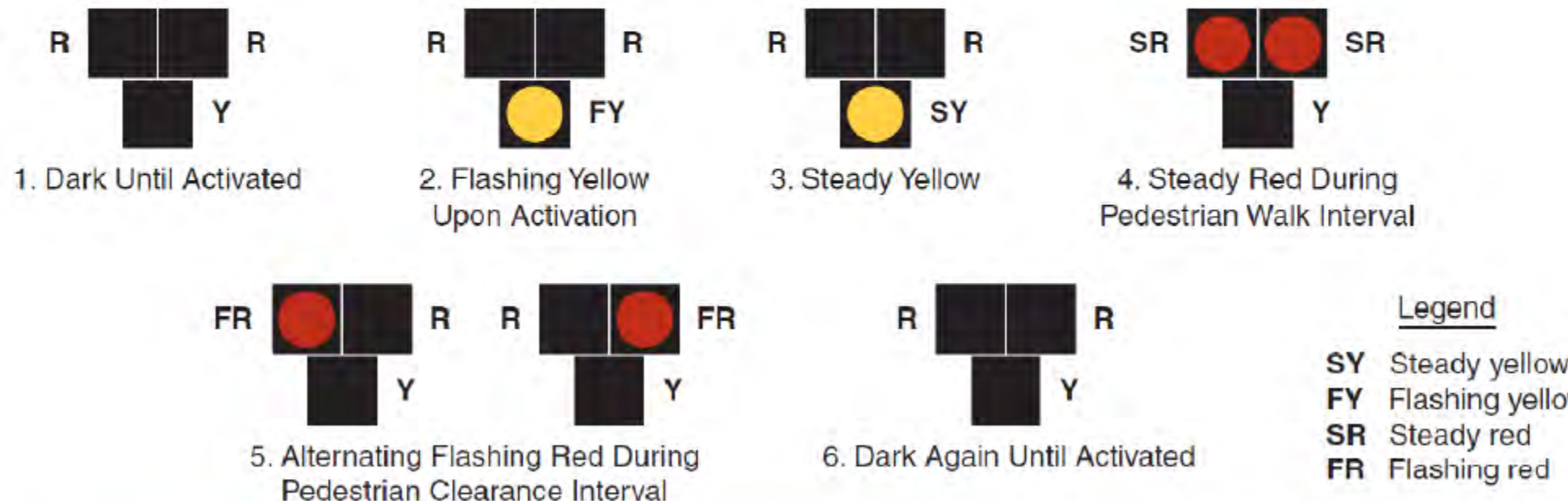
Effective Communication

□ Traffic Signals



Chapter 4F – new pedestrian hybrid beacon

Figure 4F-3. Sequence for a Pedestrian Hybrid Beacon



**Should not be installed at or within 100 feet of
an intersection**



CROSSWALK
STOP
ON
RED



PEDESTRIAN
CROSSWALK

4300
Glenrosa



6-9 A.M. Do Not Use
MON-FRI
4-6 P.M. Thru Traffic
MON-FRI
OTHER TIMES 2 WAY LEFT

The Pick
ARIZONA LOTTERY
POWERBALL
138
WATCH 15
\$33
Million

PROMO
SIGN

TV

Patented
Birds

800-848-1000
1st Way



Pedestrian Signals

- Accessible
- Clear sight lines
 - ▣ Pedestrians need to be visible
 - ▣ Signal heads need to be visible
- Convenient
- Exclusive pedestrian phase is not the solution in all places



Bikeability Principles



- Treats bicyclists as operators of vehicles
- Encourages operation in accordance with traffic flow and traffic law
- Connect destinations in a continuous network
- Accommodates cyclists without inconvenience or extra travel/distance/time

Bicycle Facilities Include:

- On-Roadway:
 - ▣ Bike Route
 - ▣ Bike boulevards
 - ▣ Shoulders
 - ▣ Bike lanes/cycle tracks
 - ▣ Shared lanes
 - ▣ Bike boxes
- Off-Roadway
 - ▣ Pathways/ multi use trails
- Bike racks



Bicycle Facilities



Any roadway not specifically prohibited to cycling **is** a bicycle facility

Bicycle Route

- Identification of pleasant routes
- Effective way-finding signage
- Useful cross town and inter-city routes



- AVOID: Missing or confusing navigation signs

Bike Boulevards

- ▣ Low traffic routes
- ▣ Give priority to bicyclists



Shoulders

- ▣ 4 ft minimum clear width
- ▣ A place for cyclists to operate adjacent to traffic
- ▣ Not typically used in urban areas
- ▣ Can accumulate debris, parked vehicles, etc.
- ▣ Can create conflicts between cyclists and turning vehicles



Bike Lanes

- ❑ 4 ft minimum clear width
- ❑ Create defined road space for cyclists
- ❑ Typically used in urban/suburban areas
- ❑ Can accumulate debris, gravel, etc.
- ❑ Should not be placed in “door zone”
- ❑ Requires careful planning at intersections



Cycle Tracks/Buffered Bike Lane

Might be 2 way or one way

- ▣ Buffering requires careful design at intersections, usually bike specific signals
- ▣ Typically used in urban/suburban areas
- ▣ Can present maintenance issues



Sharrows/Signage

- Sharrow helps bicyclist to position in the lane
- Sharrow notifies motorist that bicyclists are likely users of the road
- Share the road signage has proven ineffective, bikes may use full lane signage is clearer



Why Invest in Bike/Ped Facilities?



- IT'S THE LAW!! COMPLETE STREETS LAW PASSED IN 2009

Why Invest in Complete Streets?

- Mobility/Safety
- Balanced Transportation System
- Climate and Environment
- Economic Vitality
- Community/Public Health



A Complete Streets Ethic:

- ❑ Provides direction for all transportation projects
- ❑ Applies to all phases of projects



Why Complete Streets?

□ Mobility/Safety



Pedestrian/Bicyclist Safety: The Statistics

- Motor vehicle crashes are the leading cause of injury death in the United States.
- About 13 percent of all traffic fatalities are pedestrians or cyclists, although less than 6 percent of all trips are made by foot or bicycle.
- Pedestrian injury remains the second leading cause of death among children ages 5 to 14.

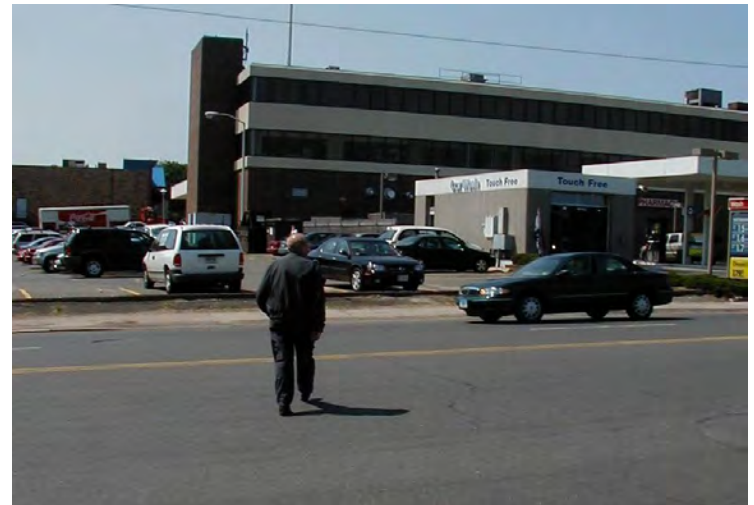


Pedestrian/Bicyclist Safety: The Statistics

- In a motor vehicle crash in CT, a Pedestrian is
 - ▣ Over 25 times more likely to be killed
 - ▣ Over 12 times more likely to have a disabling injury
 - ▣ 7 times more likely to have a visible injurythan a motor vehicle driver or passenger
- Nationally, pedestrian and bicycle crashes are estimated to result in \$16 billion in economic costs and \$87 billion in comprehensive costs

Why Complete Streets?

- Balanced Transportation System



Access to transit depends upon a walkable environment



Why Complete Streets?

- Climate and Environment
 - ▣ Of all trips taken in metro areas:
 - **50%** *are three miles or less*
 - **28%** *are one mile or less*
 - **65%** *of trips under one mile are now taken by automobile*
- 2001 NHTS*
- ▣ Over 40 % of air toxics are from mobile on road sources



Why Complete Streets?

□ Economic Vitality

- ▣ For more than 75% of the population, having sidewalks and places to walk is an important factor in buying a home
- ▣ Local surveys show strong majorities want more places to walk
- ▣ Walkable neighborhoods increase property values



Why Complete Streets?

□ Economic Vitality

- Millennials prefer walking over driving by 12%
- A recent study (*Safer Streets, Stronger Economies*, Smart Growth America) found that complete streets result in increased private business investments

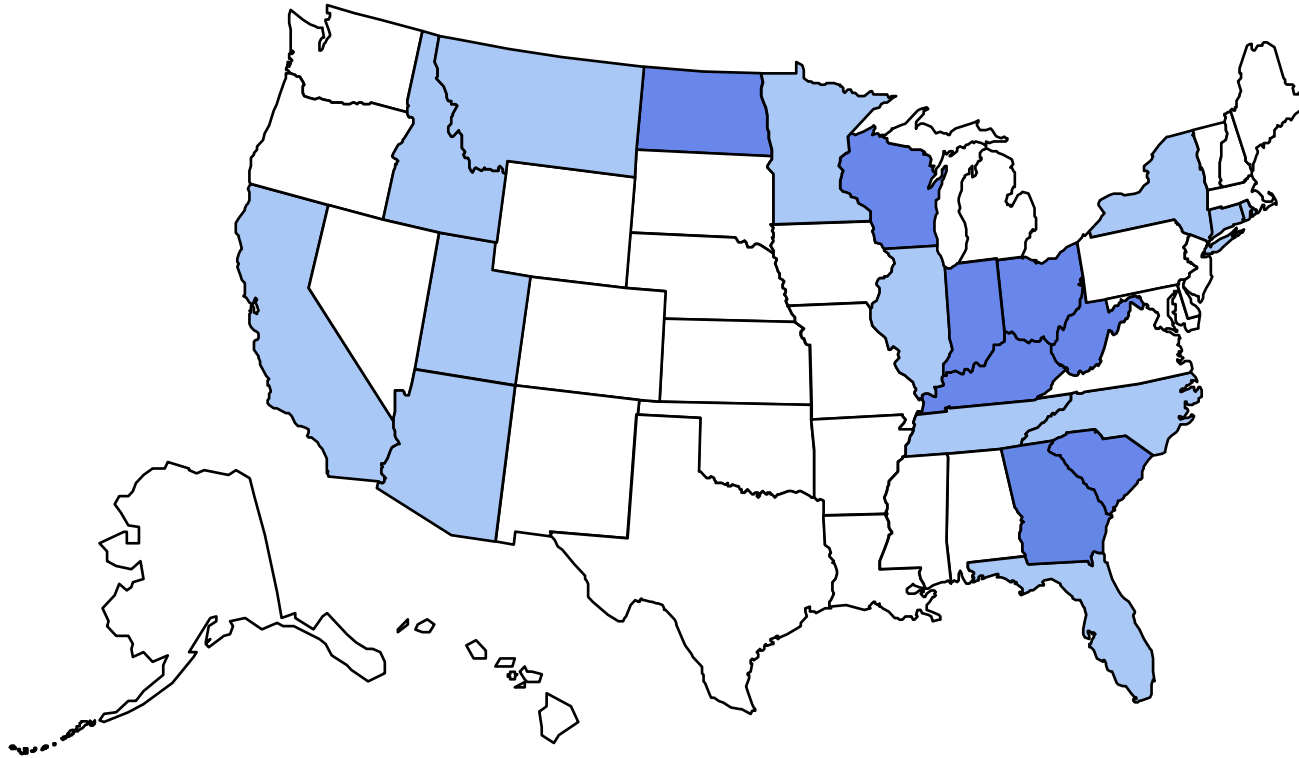


Why Complete Streets?

Community/Public Health



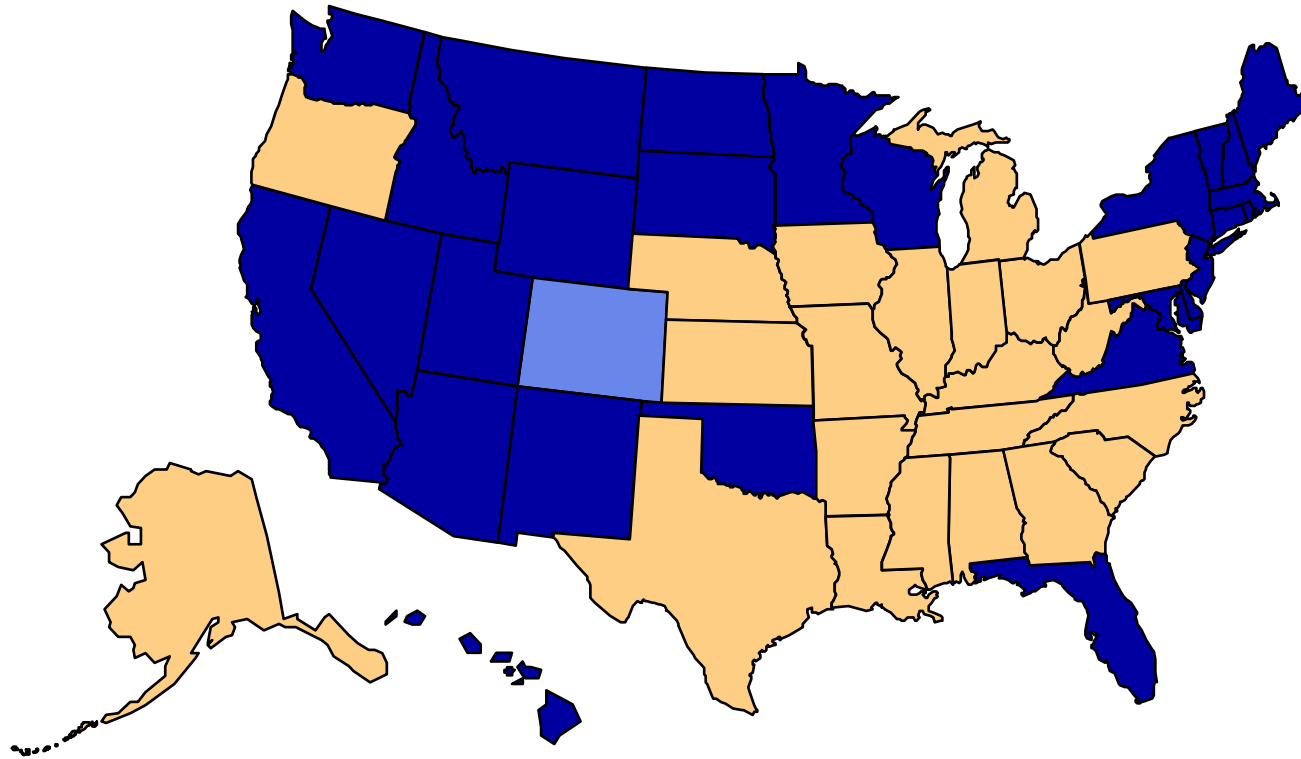
The Inactivity Epidemic: Obesity Trends* Among U.S. Adults 1985



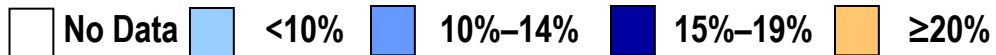
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



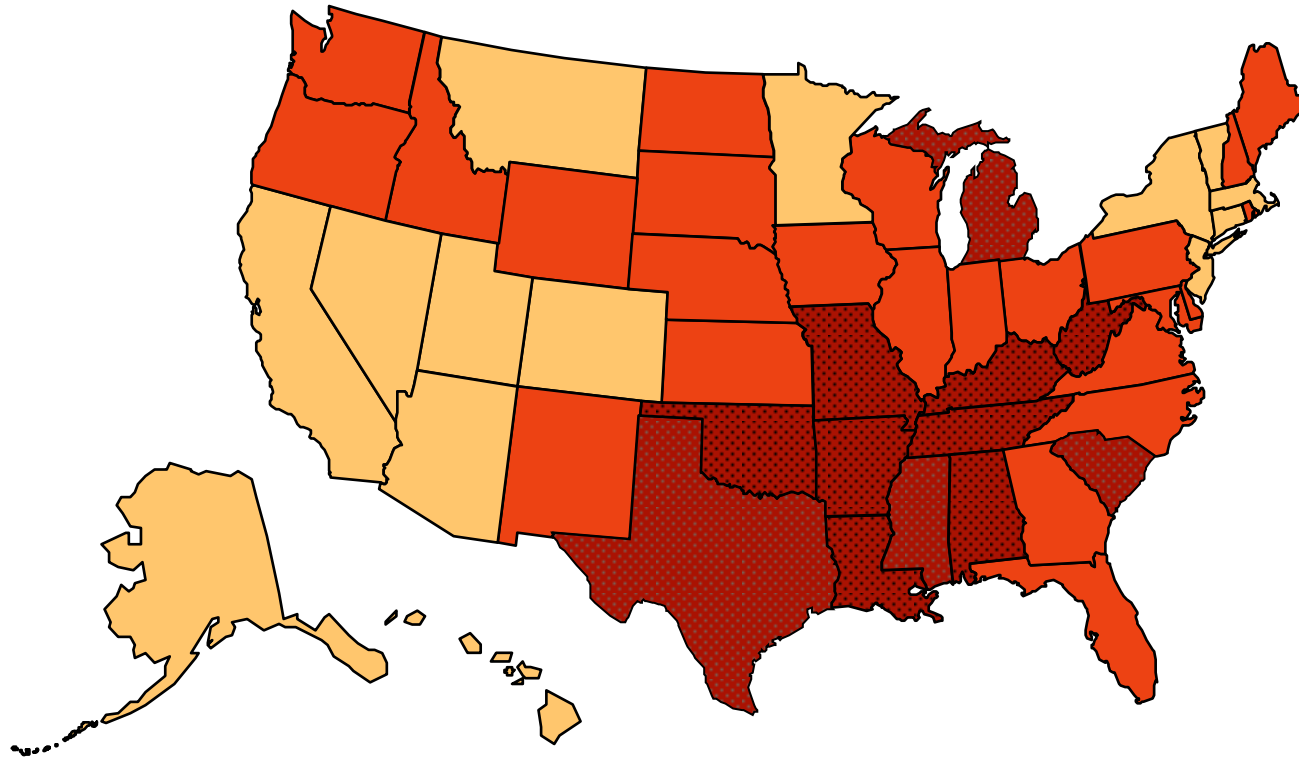
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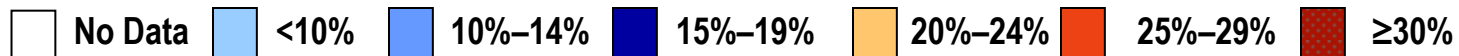
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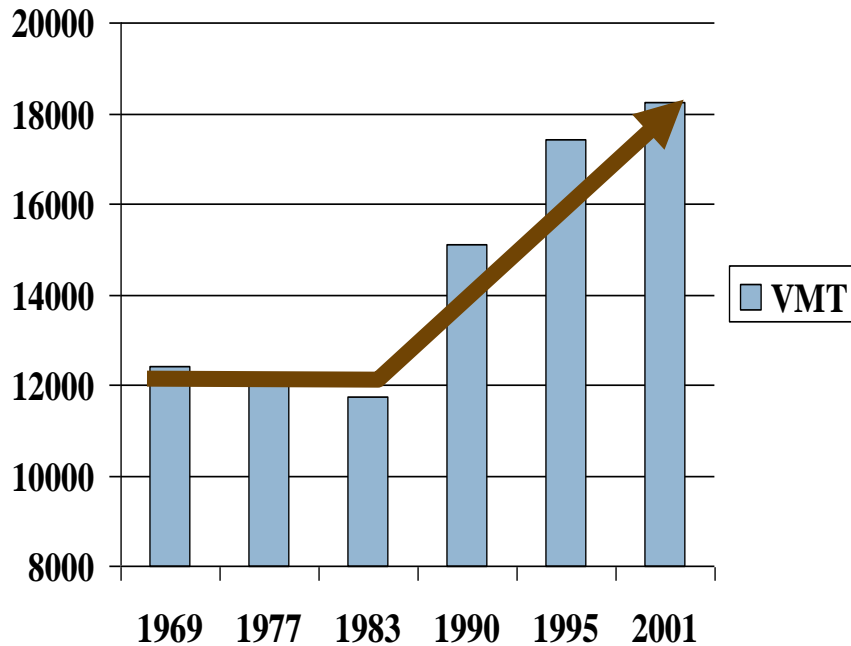
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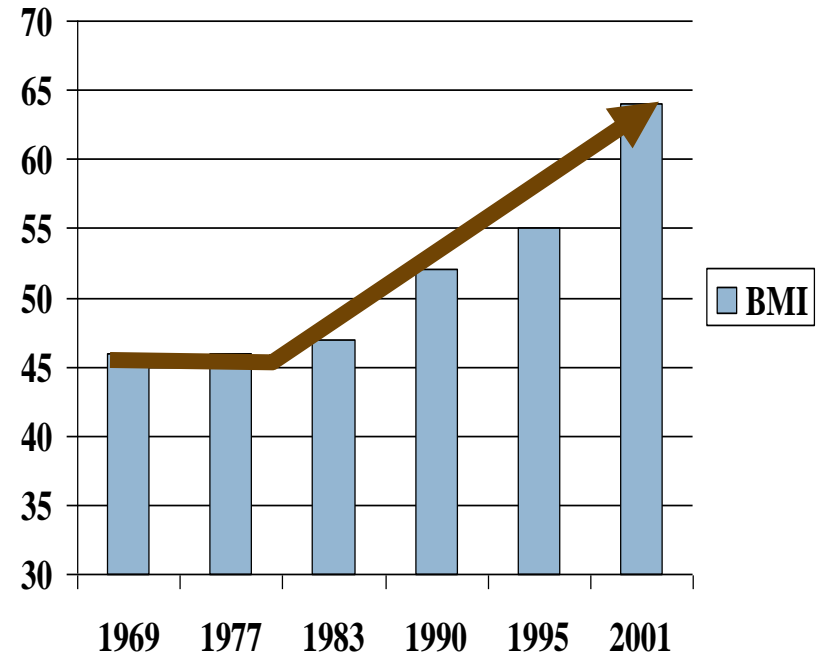


Public Health



Growth trend for annual household
vehicle miles of travel

(50% overall growth)

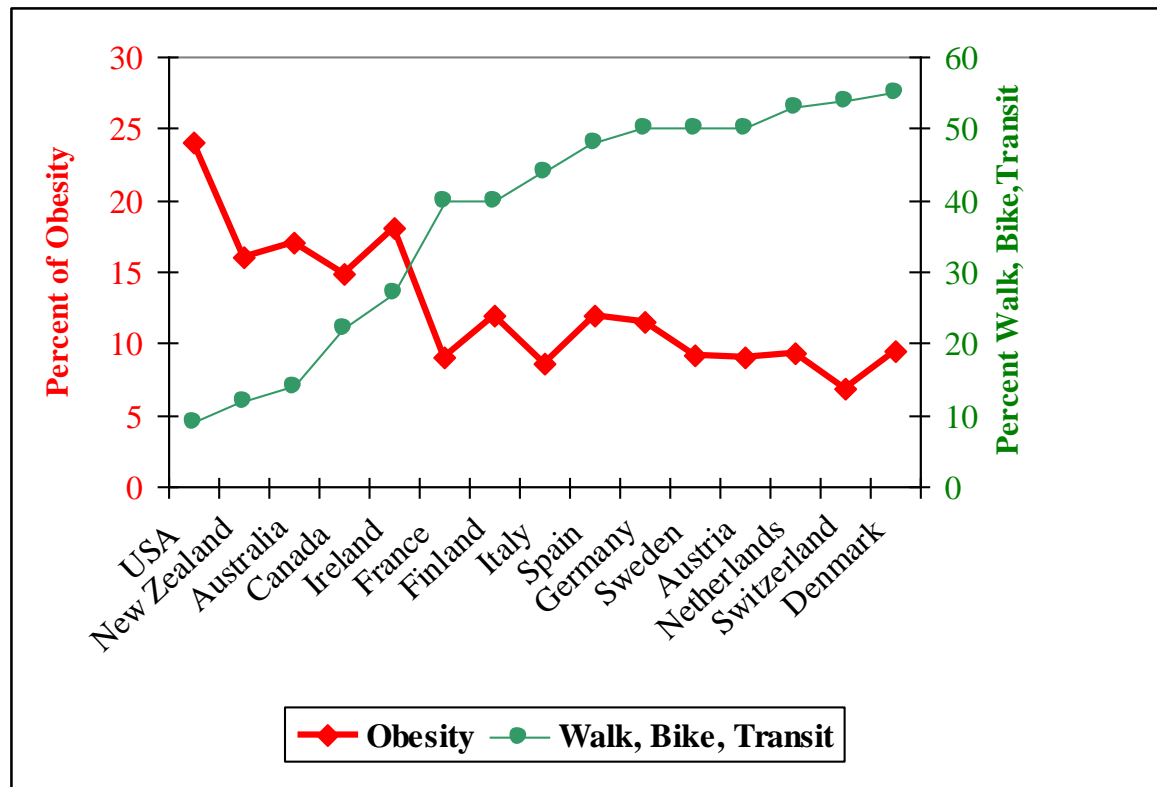


Growth trend for percent of
Americans 'overweight'

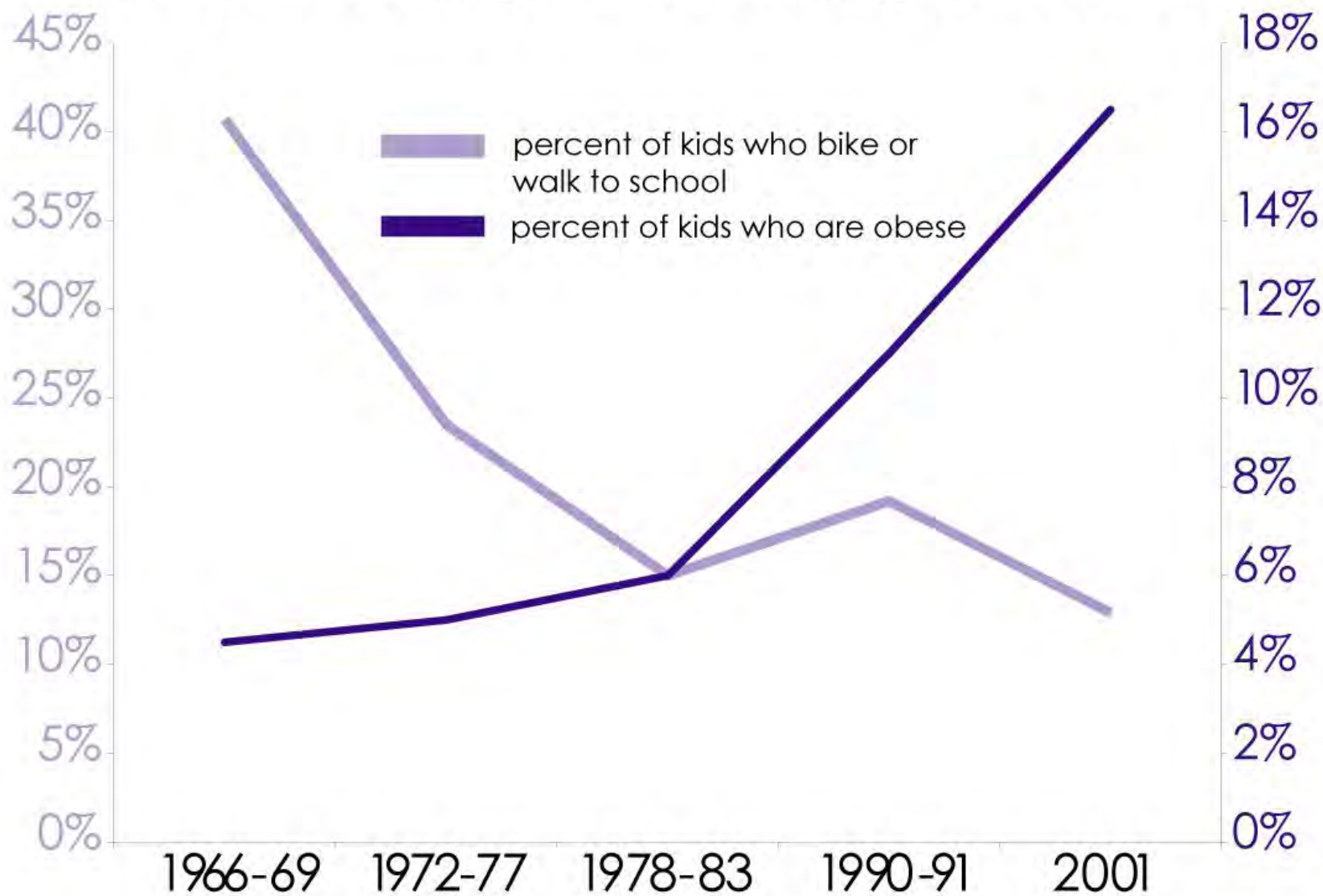
(40% overall growth)

Public Health

Obesity is lower in places where people use bicycles, public transportation, and their feet.



Trend in Obese Children vs. Rate of Biking and Walking to School



Source: John Pucher, Walking and Cycling for Health

active kids learn better

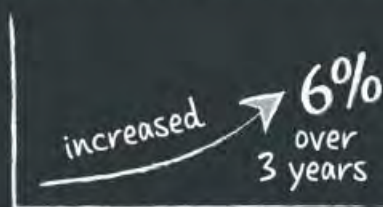


physical activity at school is a win-win for students and teachers

GRADES:



STANDARDIZED TEST SCORES:



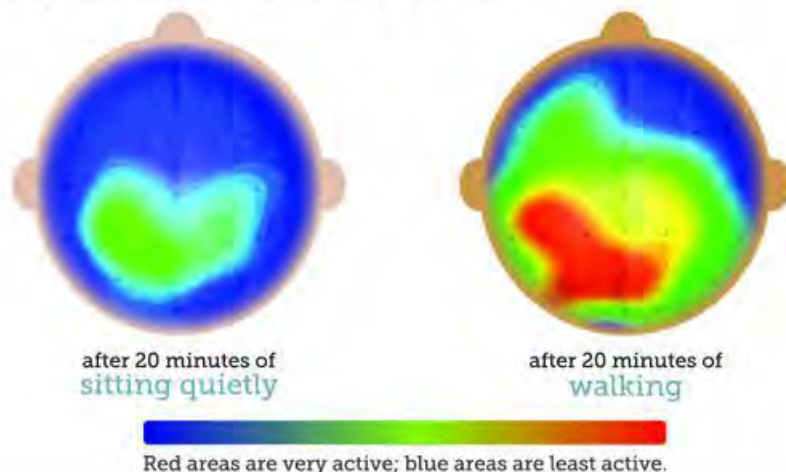
JUST ONE PHYSICALLY ACTIVE LESSON CREATES:



21% decrease in teachers' time managing behavior

physically active kids have more active brains

BRAIN SCANS OF STUDENTS TAKING A TEST:



MORE RESULTS:

after 20 minutes of physical activity:

students tested better in reading, spelling & math and were more likely to read above their grade level

after being in a physically active afterschool program for 9 months:

memory tasks improved 16%



SOURCES: Donnelly J.E. and Lambourne K. (2011). Classroom-based physical activity, cognition, and academic achievement. *Prev Med.* 52(Suppl 1):S36-S42. Hillman C.H. et al. (2009). The effect of acute treadmill walking on cognitive control and academic achievement in preadolescent children. *Neuroscience.* 159(3):1044-1054. Kamijo K. et al. (2011). The effects of an afterschool physical activity program on working memory in preadolescent children. *Dev Sci.* 14(5):1046-1058. Kibbe D.L. et al. (2011). Ten years of TAKE 10!: integrating physical activity with academic concepts in elementary school classrooms. *Prev Med.* 52(Suppl 1):S43-S50. Nelson M.C. and Gordon-Larson P. (2006). Physical activity and sedentary behavior patterns are associated with selected adolescent health risk behaviors. *Pediatrics.* 117(4): 1281-1290.

The Cost of Inactivity

- It is estimated that public costs in the state of Connecticut attributable to overweight and obesity are in excess of \$650 million per year



Source: Finkelstein, EZ, Fiebelkorn, IC, Wang, G. State-level estimates of annual medical expenditures attributable to obesity. *Obesity Research*, 2004; 12 (1):18-24

The Results of Complete Streets

- Kids going to school or the ice cream shop on their own
- Seniors comfortably strolling and safely crossing the street
- More bikes used for utility and recreational trips
- Fewer accidents and less serious injuries
- A more smoothly functioning road network



Some Sources for More Information

- The Benefits of Complete Streets: Fact Sheets

<http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals/factsheets>

- *Safer Streets, Stronger Economies*

<http://www.smartgrowthamerica.org/research/safer-streets-stronger-economies/>

- FHWA Proven Safety Countermeasures for Bicyclists and Pedestrians

http://safety.fhwa.dot.gov/ped_bike/

Some Sources for More Information

- FHWA Recommended Design Guides for Bicycle and Pedestrian Design Flexibility:

http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_guidance/design_flexibility.cfm

This includes the AASHTO and NACTO Guides

- FHWA Bicycle and Pedestrian Design Guidance

http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/design_guidance/

Complete Streets for Connecticut Municipalities: What, Why, and How?



INTEGRATION OF COMPLETE STREETS

Examples for Connecticut Municipalities

CANTON

2014 – 2024 Plan of Conservation & Development

STRATEGIC PLAN

Planning and Zoning Commission



CANTON

2014 - 2024 Plan of Conservation and Development

IMPLEMENTATION PLAN

Planning and Zoning Commission

Public Desires = Quality of Life

- “Do you people really want to live in a town where your children are walking and biking to school?”

□ **“YES!”**



The transportation aspiration of this POCD is to enhance service to the community through the development of multi-modal facilities and connections that improve circulation, access, and safety, reduce the reliance and dependence on the auto-mobile, and promote healthy activities while effectively managing the costs to the taxpayers.

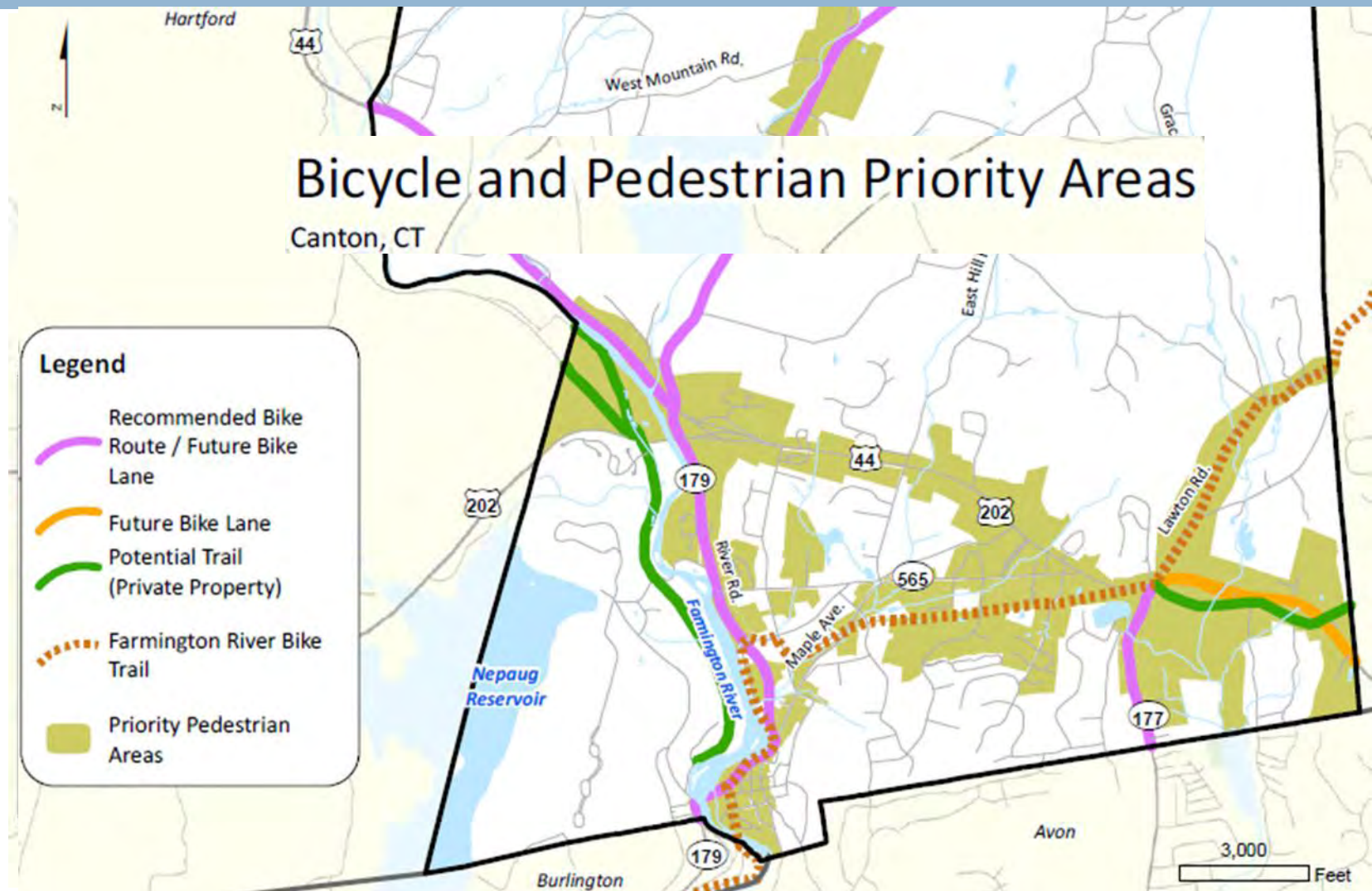


We intend to see that transportation facilities and services are developed to best serve the entire community, including those who do not travel via automobile.



B.

Provide for improved systems and facilities for pedestrian, bicycle, and public transit.





Hopmeadow Street



Urban*Advantage*

Canton POCD Reference - Simsbury Route 10 Corridor Study

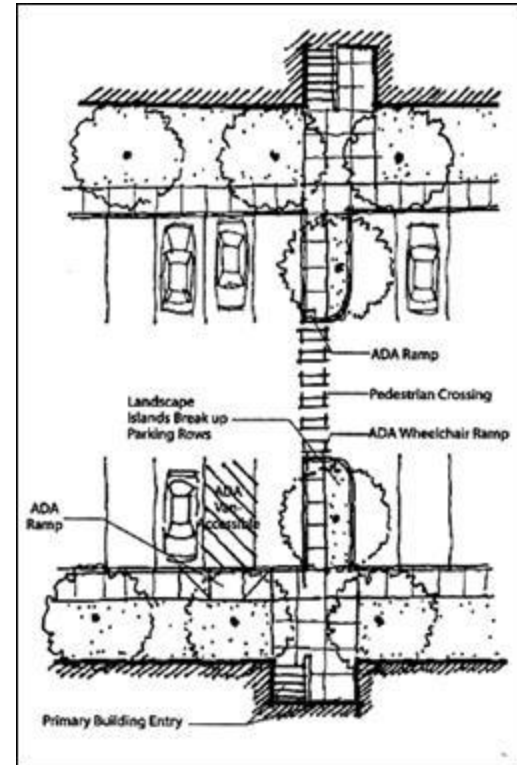
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| 7.9.D. | Bicycle Parking Design Standards | 165 |
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All development shall be designed to provide safe and convenient pedestrian and bicycle access as part of any site design, including safe and convenient pedestrian and bicycle movement to and from public walkways and/ or bikeways or streets, and between developed lots



Pedestrian Access

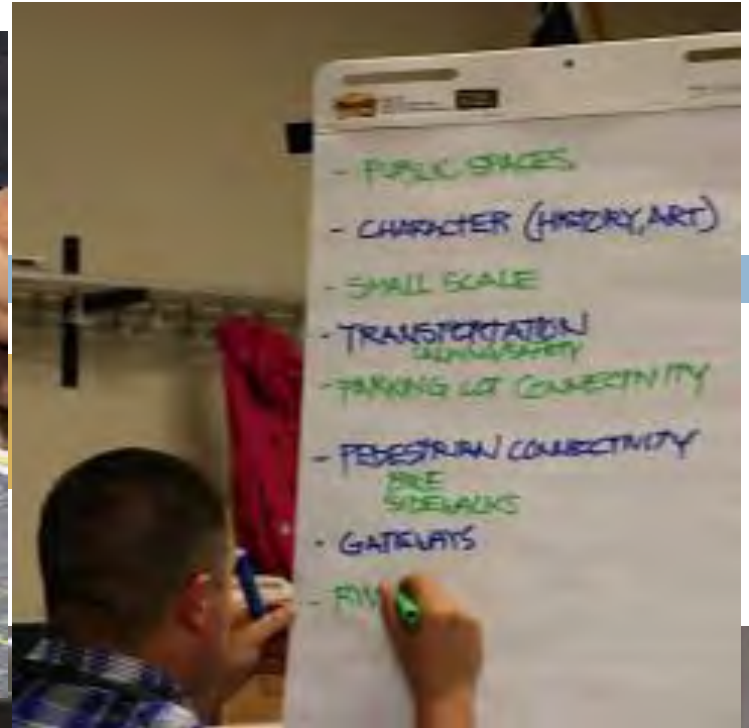
- Pedestrian access standards from the street to the building
- Widths
- Materials, Landscaping, Lighting, Benches
- Separation
- Connection to public sidewalk required
- Consider possible connections to adjacent lots/ ways/ or neighborhoods
- Maintenance



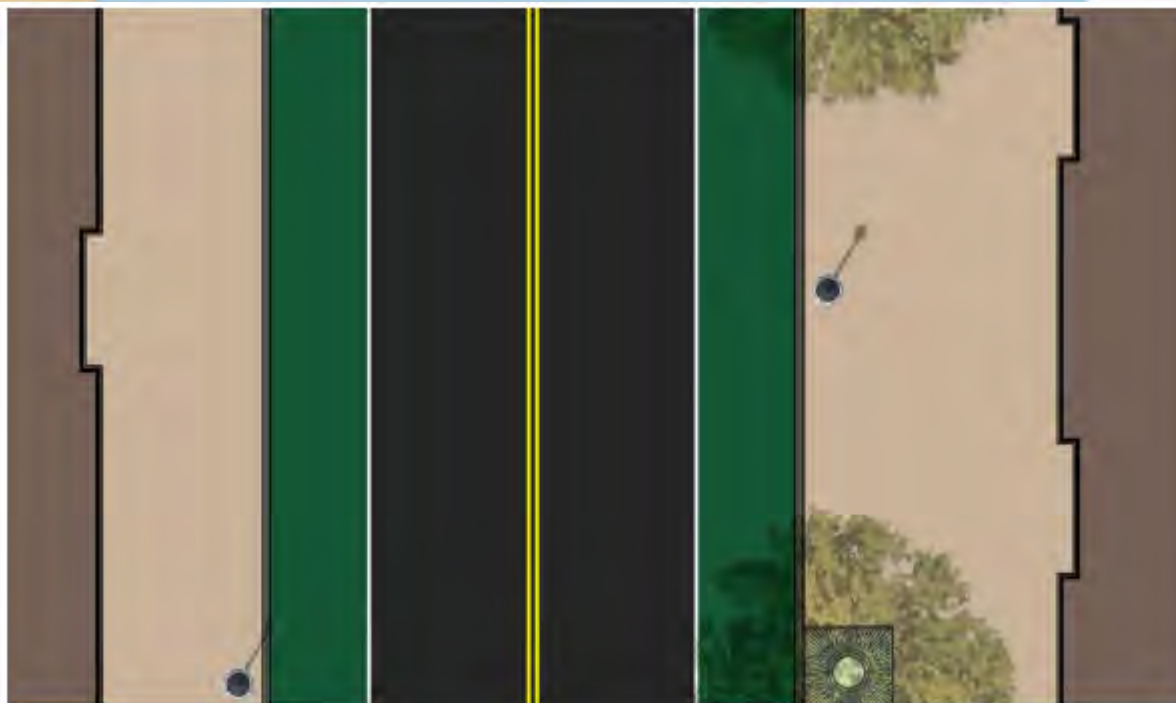
Bicycle Parking

- ❑ Required for business and multi-family
- ❑ Review proximity to active transportation
- ❑ Specify standards –
 - ▣ Secure bar
 - ▣ Illuminated
 - ▣ Covered Ratio
 - ▣ Anchored, Separated
 - ▣ 6'L x 2'W x 7'VC, or Bike Locker
 - ▣ Support frame in an upright position
 - ▣ Within view of entrance or windows





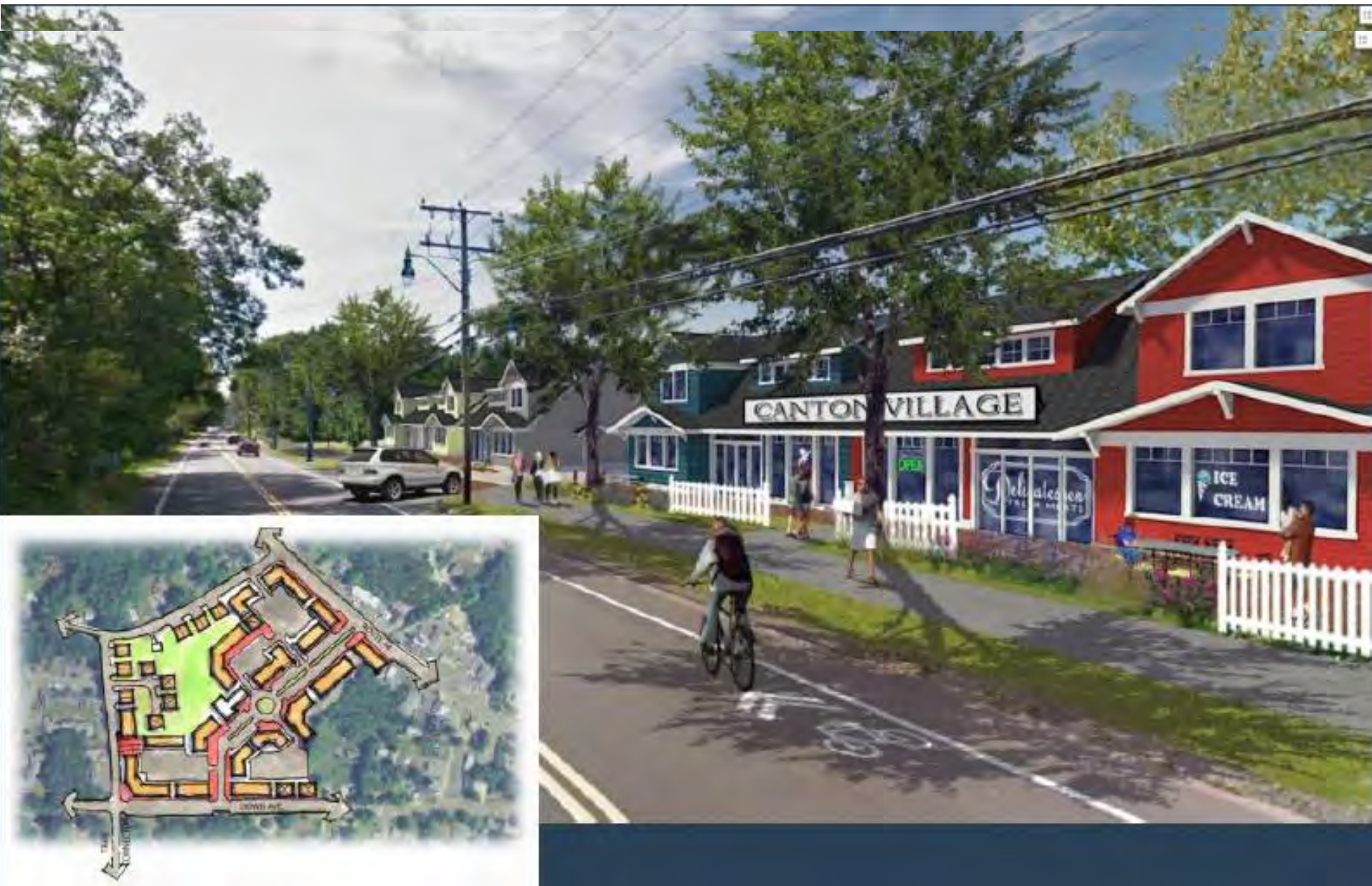
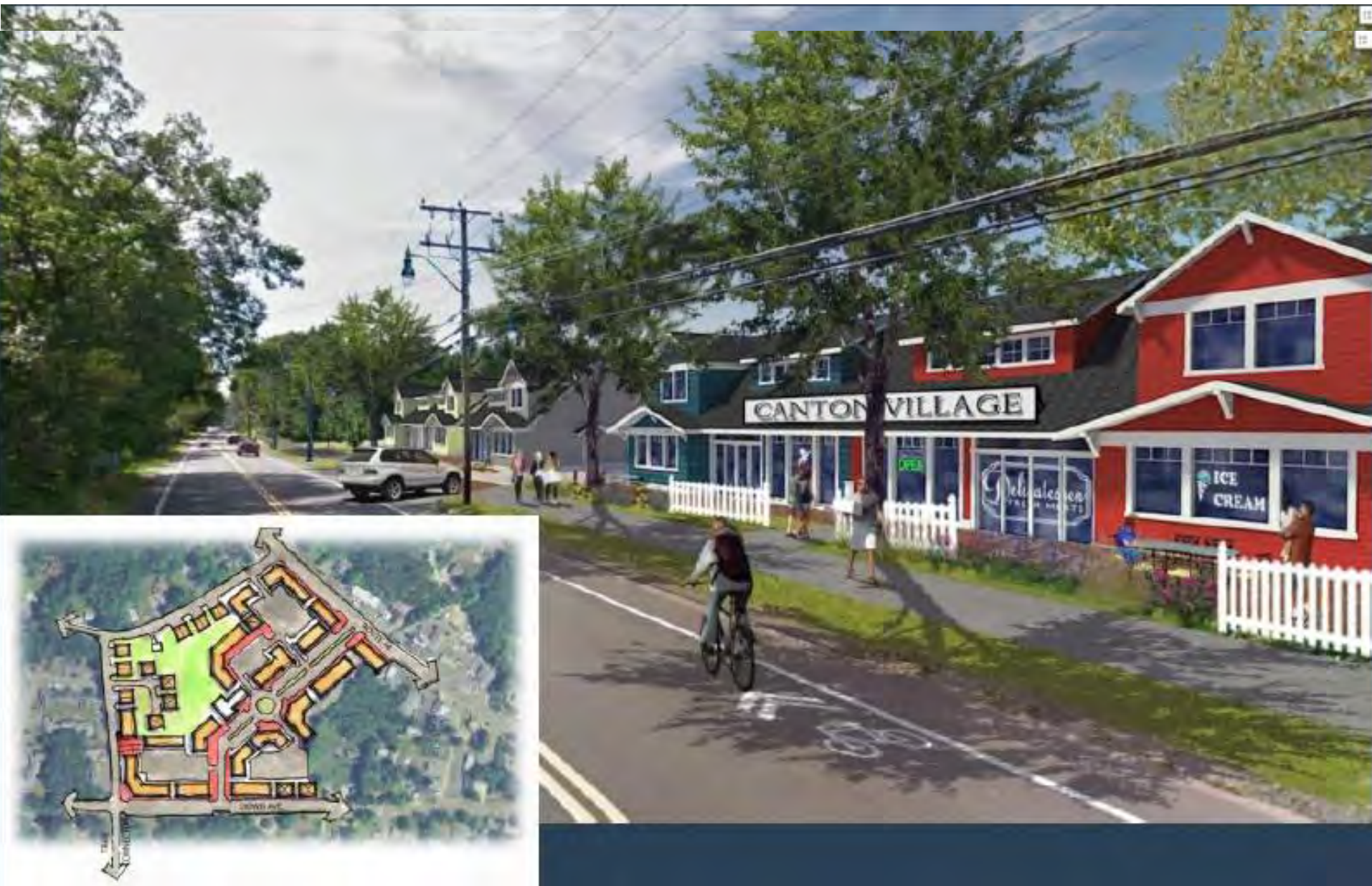








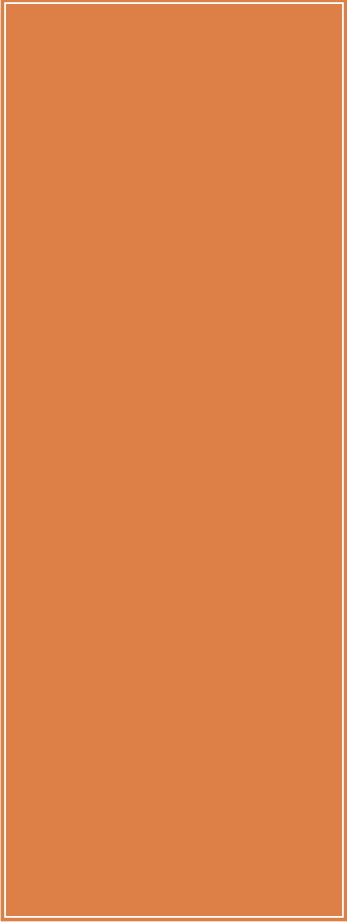








Implementation

- 
- ❑ Working on a Complete Streets Master Plan
 - ❑ Working on New Public Improvement/ Infrastructure Standards
 - ❑ Happening Organically through development and implementation of a POCD
 - ❑ Different approach/ catalyst in different communities

Complete Streets Community Implementation Checklist

What to Evaluate?

- ☐ Vision
- ☐ Planning
- ☐ Regulations and Policies
- ☐ Design Guidance/Standards
- ☐ Maintenance

What/ Who to Evaluate for?

- ☐ Users
 - ☐ Persons with Disabilities
 - ☐ Mature Adults
 - ☐ Young Children
 - ☐ Transit Riders
 - ☐ Millennial's
- ☐ Modes
 - ☐ Motor Vehicles
 - ☐ Transit
 - ☐ Freight
 - ☐ Pedestrians
 - ☐ Bicycles

Complete Streets Community Implementation Checklist

Vision

- ☐ Does our community vision for transportation planning include all users and modes of transportation?

What to Review

- ☐ Long and Short Term Plans
- ☐ Policies
- ☐ Ordinances
- ☐ Regulations
- ☐ Standards
- ☐ Guidance

Complete Streets Community Implementation Checklist

Planning

- Do our Planning documents and Capital Improvement Plans reflect Complete Street Principles that are inclusive of all users and modes of Transportation?

What to Review

- Plan of Conservation and Development
 - ▣ Infrastructure (Transportation Plan/CIP)
 - ▣ ADA Plans
 - ▣ Residential Development
 - ▣ Economic Development
 - ▣ Community Character

Complete Streets Community Implementation Checklist

Regulations / Policies

- ☐ Are our Ordinances, Policies, and Regulations consistent with the Complete Streets Law/ Complete Streets Principles?

What to Review

- ☐ Municipal Roadway, ROW, Sidewalk Ordinances
- ☐ Complete Streets Ordinance
- ☐ Zoning Regulations
- ☐ Subdivision Regulations
- ☐ ADA Plans

Complete Streets Community Implementation Checklist

Design Guidance/ Standards

- Do our local Design Guidelines or Standards comply with Federal, State, requirements/ guidance?

What to Review

- Develop specific design standards (New Haven)
 - ▣ Planning Complete Streets For An Aging America", Jana Lynott, et. al., AARP Public Policy Institute, (2009)
 - ▣ Complete Streets: Best Policy and Implementation Practices (2012)
 - ▣ PEDSAFE: Pedestrian Safety Guide and Countermeasures Selection System
 - ▣ U.S. Architectural and Transportation Barriers Compliance Board Accessible Rights-of-Way: Design Guide

Complete Streets Community Implementation Checklist

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What to Review

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 - ▣ Complete Streets: Best Policy and Implementation Practices (2012)
 - ▣ PEDSAFE: Pedestrian Safety Guide and Countermeasures Selection System
 - ▣ U.S. Architectural and Transportation Barriers Compliance Board Accessible Rights-of-Way: Design Guide
 - ▣ ADA Standards for Accessible Design (2010)

Complete Streets Community Implementation Checklist

Maintenance

- ☐ Do we meet ADA Requirements?
- ☐ Are Accessible Feature in “operable working condition”?
- ☐ Are maintenance projects reviewed for cost effective improvements for other Users and Modes?

What to Review

- ☐ Ordinances pertaining to Maintenance
- ☐ Public Works Policies and Maintenance Schedules
- ☐ Snow Removal Management Plans
- ☐ Maintenance Agreements
- ☐ Maintenance Enforcement for public walk ways

Sample Project Review Checklist

Complete Streets Checklist

Objectives:
The _____ Complete Streets Policy adopted on _____ requires the provision of safe access for all users by providing a comprehensive, integrated, connected multi-modal network of transportation options throughout _____.

This checklist is intended to assist the _____ in achieving its objectives for complete streets.

Project Name: _____ Date: _____

Project Location / Limits: _____

Project Description: _____

Instructions: For each box checked, please provide a brief description for how the item is addressed, not addressed, or not applicable and include supporting documentation.

Street Classification (Identify street or streets within the project area)
Principal arterial ☐ Minor arterial ☐ Mixed use collector ☐ Mixed use local ☐
Residential collector ☐ Residential local ☐ Special use street ☐

| EXISTING CONDITIONS | | | | |
|--|--------------------------|--------------------------|--------------------------|----------------------|
| Item to Be Addressed/ Checklist Consideration | YES | NO | N/A | Required Description |
| Existing Motor Vehicle Operations | | | | |
| Are there existing concerns within the study area, regarding motor vehicle safety, traffic volumes/congestion or access? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Existing Bicycle & Pedestrian Operations | | | | |
| Are there accommodations for bicyclists, pedestrians (including ADA compliance) and transit users? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Do bicycle and pedestrian accommodations exist? (see page _____ for examples) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Has the existing bicycle and pedestrian suitability or level of service been identified? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Have the bicycle and pedestrian conditions within the study area, including pedestrian and/or bicyclist treatments, volumes, important connections and lighting been identified? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Do bicyclists/pedestrians regularly use the transportation facility for commuting or recreation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Are there physical or perceived impediments to bicyclist or pedestrian use of the transportation facility? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is there a higher than normal incidence of bicyclist/pedestrian crashes within the study area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Have the existing volumes of pedestrian and/or bicyclist crossing activity at intersections including midblock and nighttime crossing been collected/provided? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Existing Transit Operations | | | | |
| Do transit facilities exist within the study area, including bus and train stops/stations? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is the project area on a transit route? (see Transit Service Routes) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is the transportation facility within two miles of "park and ride" or other transit node? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Are there bicycle racks, shelters, or parking for transit riders available? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

| | | | |
|---|--------------------------|--------------------------|--------------------------|
| Existing Access and Mobility | | | |
| Are there any existing access or mobility considerations, including ADA compliance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Do connective opportunities exist with schools, hospitals, senior care, or community centers or persons with disabilities within project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are there gaps inhibiting continuous access between schools, hospitals, senior care, or community centers or persons with disabilities within project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Existing Truck/ Freight Operations | | | |
| Are there existing concerns within the study area, regarding truck/freight safety, volumes, or access? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Project Area Context | | | |
| Are there prominent landmarks, recreation, shopping, employment center, cultural centers or other key destinations that offer opportunities to connect this site? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have you identified the predominant land uses and densities within the study area, including any historic districts or special zoning districts? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the transportation facility in a high-density land use area that has pedestrian/bicycle/motor vehicle and transit traffic? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have you identified the major sites, destinations, and trip generators within or proximate to the study area, including prominent landmarks, employment centers, recreation, commercial, cultural and civic institutions, and public spaces? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are there existing street trees, planters, buffer strips, or other environmental enhancements such as drainage swales within the study area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Existing Plans | | | |
| Are there any comprehensive planning documents that address bicyclist, pedestrian or transit user conditions within or proximate to the study area? Examples include (but are not limited to): | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> Safe Routes to School Plans Municipal, Regional, or State Transportation Plan Municipal, Regional and State Bicycle-Pedestrian Plans Slidewalk Inventories Mapped Greenways, Recreational Trails, Cross State Bike Routes Transit Oriented Development Plans | | | |
| Please list and/or describe planning or policy documents addressing bicyclist, pedestrian, transit, or truck/freight use for the project area. Examples can include: | | | |
| <ul style="list-style-type: none"> Plan of Conservation and Development; State, regional, or local Bicycle-Pedestrian Plan; Regional and State Plans of Conservation and Development; OTDOT Mapping of Cross State Bike Routes (ADD LINK); State, regional, or local mapping of greenways/ recreational trails; OT Transit locations (add link); Transportation Committee Bicycle/ Pedestrian Priority Network; Mapped bike routes and transit stops, on Google Earth; Truck/freight routes. | | | |

Project Review Checklist

Existing Conditions

- ☐ Existing Motor Vehicle Operations
- ☐ Existing Bicycle & Pedestrian Operations
- ☐ Existing Transit Operations
- ☐ Existing Access and Mobility
- ☐ Existing Truck/ Freight Operations
- ☐ Project Area Context
- ☐ Existing Plans

Proposed Design/ CS Design

- ☐ Bicyclist accommodations?
- ☐ Pedestrian accommodations?
- ☐ Access and Mobility accommodations?
- ☐ Transit accommodations?
- ☐ Truck/ freight accommodations?
- ☐ Streetscape Elements?
- ☐ Connectivity?

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BICYCLE AND PEDESTRIAN TRAVEL NEEDS ASSESSMENT FORM

In accordance with Connecticut General Statutes, Section 13a-153f, and the Department's focus on accommodating non-motorized travel modes, accommodation of all users shall be a routine part of the planning, design, construction and operating activities of all highways. The need for inclusion of accommodations for bicyclists and pedestrians, including those with disabilities, must be reviewed for every project. This form provides the documentation and information needed to make decisions on the need and extent of bicycle and pedestrian features. This form is not intended to dictate what features should be included in a project design - guidance on those questions can be found in numerous other reference documents. This form should be completed to the extent practical (at least Sections 1-3) during the project scoping phase and fully completed no later than at the completion of the Preliminary Design and attached to the Preliminary Design Statement.

Project Number(s): _____

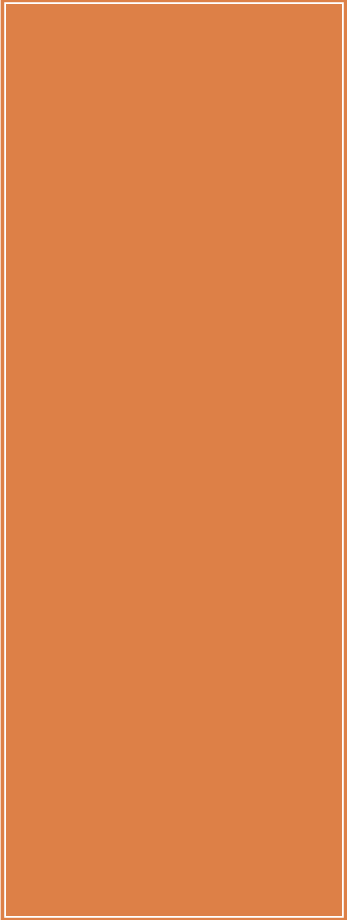
Type of work: _____

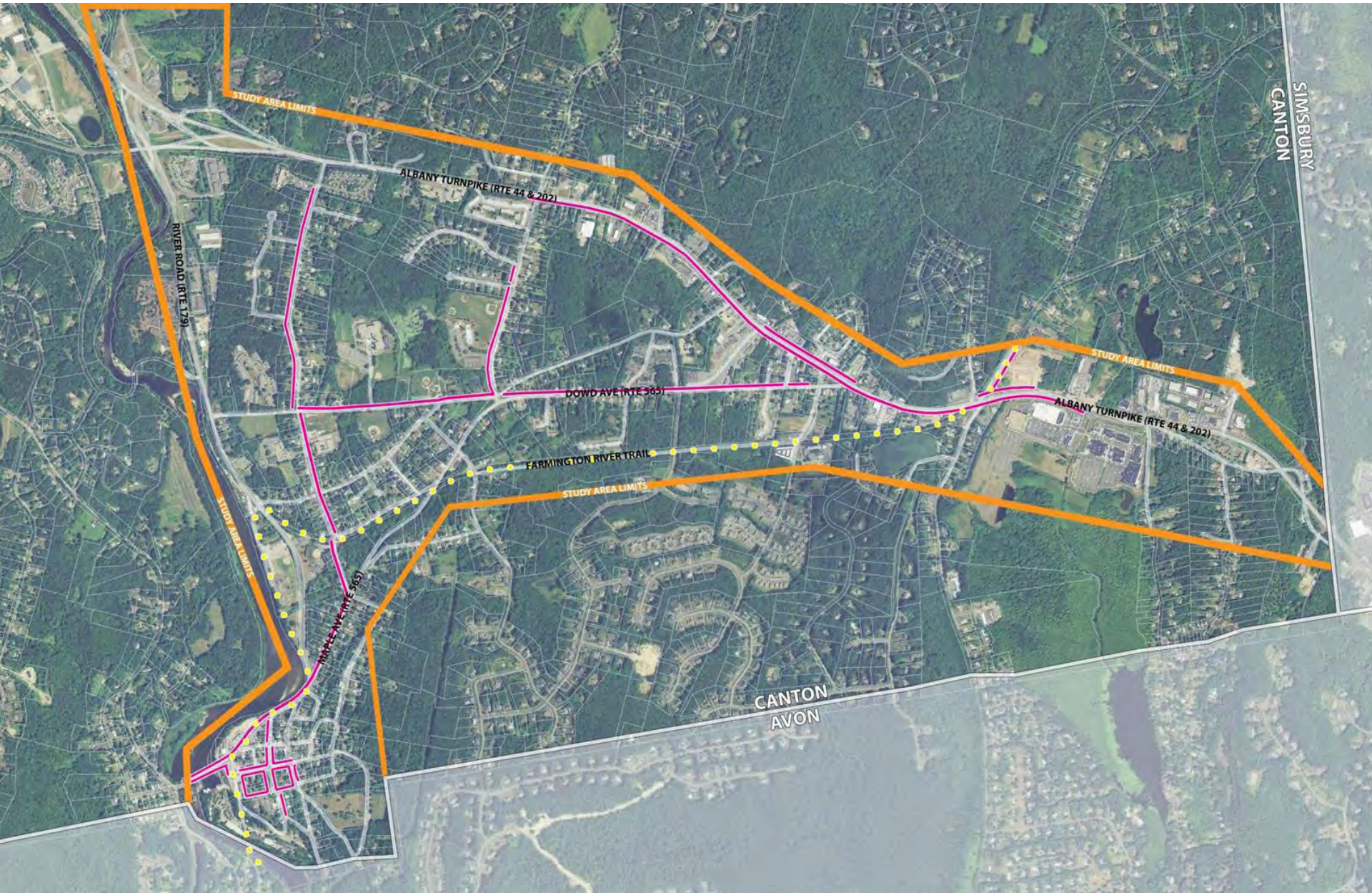
Municipality(s): _____

Route(s): _____

Planning Region(s): _____

DOT Bike-Ped Needs Assessment

- 
- ❑ Existing Conditions
 - ❑ Assessment of Current and Future Need
 - ❑ Bicycle Pedestrian Inclusions and Coordination
 - ❑ Inclusions or Reasons for Non-Inclusions
 - ❑ Guidance



SIMSBURY
CANTON

ALBANY TURNPIKE (RTE 44 & 202)

RIVER ROAD (RTE 129)

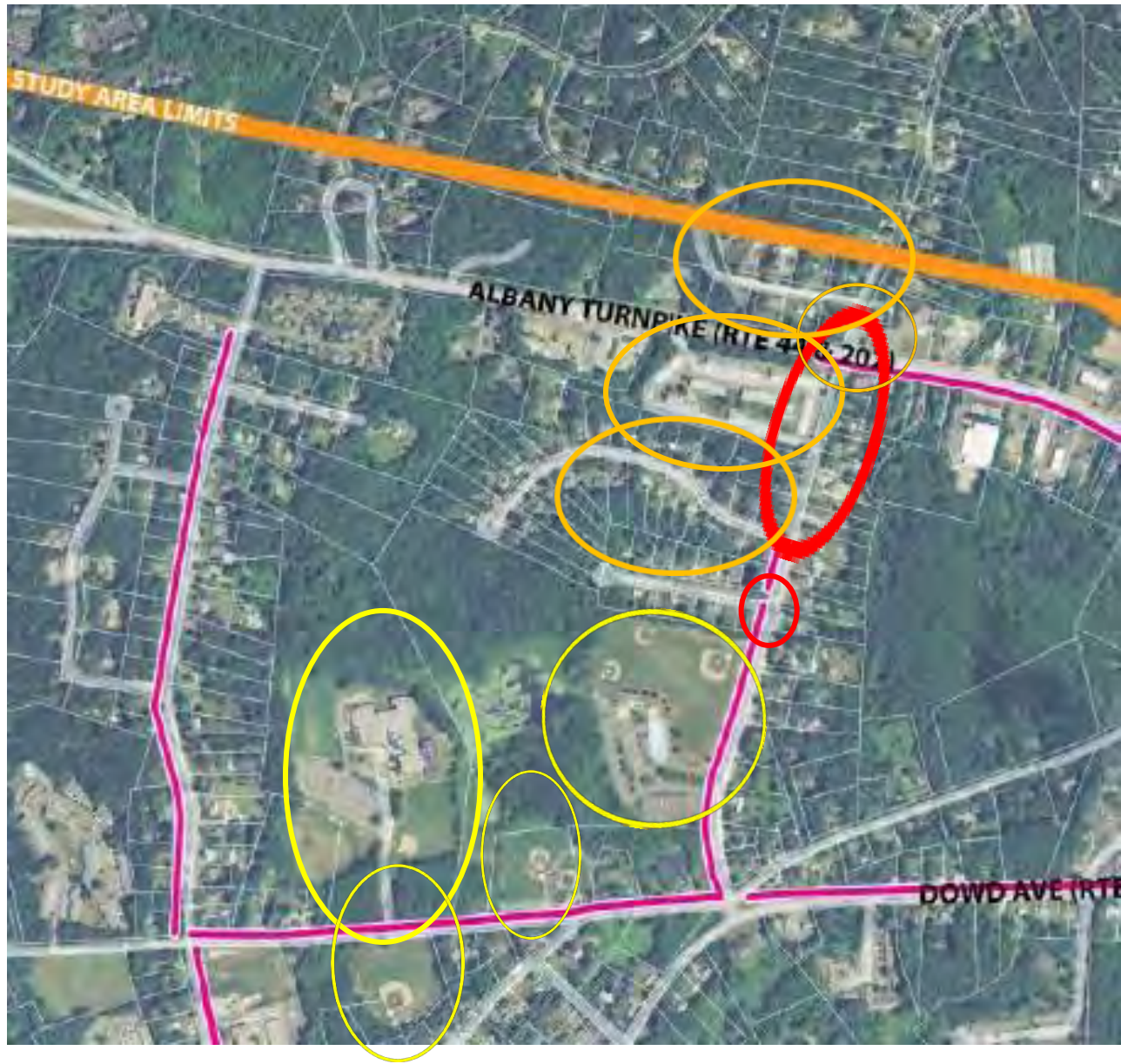
DOWD AVE (RTE 365)

FARMINGTON RIVER TRAIL

ALBANY TURNPIKE (RTE 44 & 202)

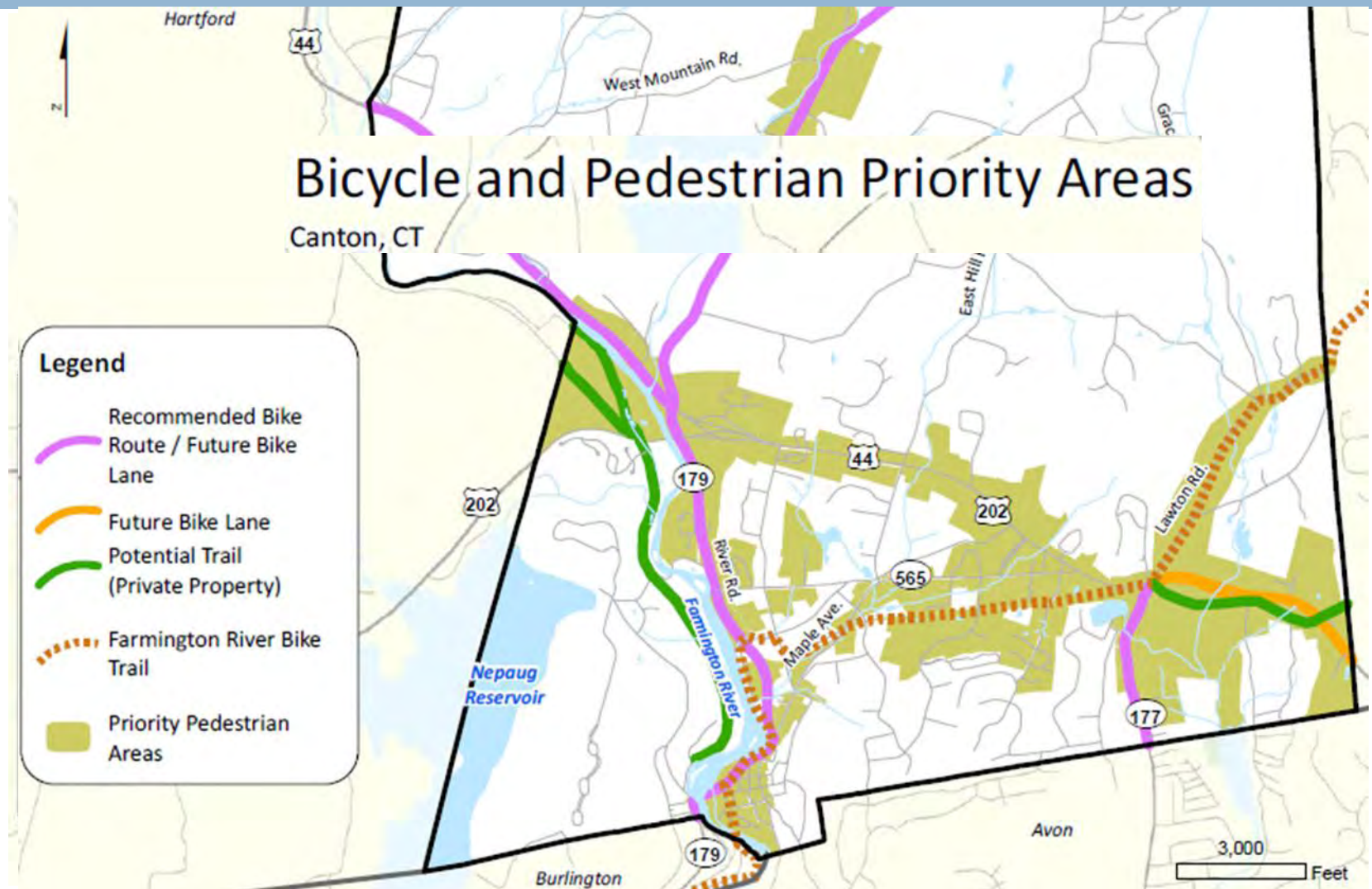
DOWD AVE (RTE 365)

CANTON
AVON



B.

Provide for improved systems and facilities for pedestrian, bicycle, and public transit.









DOT Complete Streets Policy:

http://www.ct.gov/dot/lib/dot/plng_plans/bikepedplan/cs-exo31-signed.pdf

DOT Bicycle Pedestrian Needs Assessment Form

[http://www.ct.gov/dot/lib/dot/bicycle_pedestrian_needs_assessment_version_2.0 %287-3-2013%29.pdf](http://www.ct.gov/dot/lib/dot/bicycle_pedestrian_needs_assessment_version_2.0_%287-3-2013%29.pdf)

Sample CS Ordinance:

<http://ccm-ct.org/Plugs/home.aspx>

Sample CS Project Review Checklist:

<http://ccm-ct.org/Plugs/home.aspx>

Sample CS Zoning/ Subdivision Regulations:

<http://ccm-ct.org/Plugs/home.aspx>

Sample CS POCD Statements

<http://ccm-ct.org/Plugs/home.aspx>

Complete Streets for Connecticut Municipalities: What, Why, and How?



DEPARTMENT OF TRANSPORTATION

Complete Streets Central

CONNECTICUT DEPARTMENT OF TRANSPORTATION

Policy/Funding/Technical tools

Section Outline



- DOT Complete Streets Policy
- Review flexible Federal and State funding sources
- Technical Tools

DOT Signs 'Complete Streets' Policy

- ❑ October 23, 2014
- ❑ designed to promote safe access for all users by providing a comprehensive, integrated, connected multi-modal network of transportation options



www.ct.gov/dot/lib/dot/plng_plans/bikepedplan/cs-exo31-signed.pdf

DOT Complete Streets Policy Objectives

- Improve safety and mobility for pedestrians of all ages and abilities, bicyclists, the mobility challenged and those who choose to live vehicle free
- Develop and support a transportation system that accommodates active transportation modes that promote healthier lifestyles
- Develop and support a transportation system that accommodates compact, sustainable and livable communities

DOT Complete Streets Policy Objectives

- Provide safe access for all users by providing a comprehensive, integrated, connected multi-modal network of transportation options
- Improve mobility and accessibility to activity centers, including: employers, commercial centers, schools, transit, and trails
- Support the state's Transit-Oriented Development (TOD) efforts through the provision of integrated transportation networks
- Enhance Connecticut's economic competitiveness by enabling communities to become livable, walkable, bikeable, drivable, efficient, safe and desirable.

DOT Complete Streets Policy Procedures

□ Training

- The Department will provide training for its engineers and planners on Complete Streets best practices.
- This training will also be open for registration to municipal engineers, planners and local traffic authorities, MPO's and RPO's.
- The Complete Streets Standing Committee will schedule annual training opportunities related to Complete Streets.



DOT Complete Streets Policy Procedures

□ Checklist

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BICYCLE AND PEDESTRIAN TRAVEL NEEDS ASSESSMENT FORM

SECTION 4 – EVALUATION OF BICYCLE AND PEDESTRIAN ACCOMMODATION



- The “Connecticut Department of Transportation Bike and Pedestrian Travel Needs Assessment Form” will be regularly updated to ensure compliance with this policy.
- This form shall be used **at the earliest point in project development for all applicable projects** (Project Scoping), the **Office of the State Traffic Administration (OSTA)** **certificate applications** receiving state or federal funding, and **municipal transportation projects** that receive state or federal funding.

DOT Complete Streets Policy Procedures

□ Checklist

- Complete Streets shall be considered in **all projects receiving state or federal funding**.
- The checklist will be integrated into **all Department reviews** including Planning, Engineering, Encroachment Permits, Public Transportation, Ferries and Ports, and OSTA Certificate Applications.
- The checklist will consider **all travel modes**, environmental and social context.

DOT Complete Streets Policy Procedures

□ Design Guidelines

- The Department will amend its design, construction and maintenance guidelines to reflect the routine accommodation of all users.
- The Complete Streets Standing Committee shall provide input on the development guidance documents.
- Department design guidance shall reflect best practices for all users.



Roundabouts
"Five Corners" Roundabout
2011 - Ellington, CT
Roundabout at Routes 74 & 286



DOT Complete Streets Policy Procedures

□ Funding

- The Department shall review eligibility of funding sources to increase flexibility for the funding of Complete Streets.
- The Complete Streets Standing Committee shall work with program managers to refine prioritization criteria in order that all projects reflect complete streets, and projects that focus on bicycles and pedestrian are able to compete with traditional roadway projects for funding appropriately.



DOT Complete Streets Policy Procedures

□ Funding

- Complete Streets shall be considered in **all** projects receiving state or federal funding.



DOT Complete Streets Policy Procedures

□ Data Collection

- The Department will include non-motorized users in traffic counts to the extent possible.
- Turning movement counts associated with OSTA certificate application reviews **shall include counts of non-motorized users** where appropriate.



DOT Complete Streets Policy Procedures

□ Performance



- The Department shall established an annual report performance measures through the Performance Measures Standing Committee.
- These measures shall be developed in line with federal performance measures for safety and mobility of non-motorized users.

PROPOSED

2.2 WEST 34 - SURVEY AVENUE
PART SANFORD CORNER TOWN

REPLACEMENT OF DETERIORATED
SECTIONS OF CONCRETE SIDEWALKS,
DRIVEWAY APRONS AND CONCRETE
CURBS

REPLACEMENT OF DETERIORATED
CONCRETE DRIVEWAY APRONS,
SIDEWALK SLABS AND CURBS

DEDICATED
SHOULDER

RESURFACING
(CURB-TO-CURB)

DEDICATED
BICYCLE
LANE

RESURFACING
(CURB-TO-CURB)

DEDICATED
SHOULDER





Federal Funding

- Safe Routes To School (SRTS)
 - What SRTS is Now:
 - Non-Infrastructure Focus
 - Education
 - Encouragement
 - Encourage Kids From K-8 To Walk And Bike To School Safely!
 - The Funding Is For CTDOT (Through Its Consultant VN Engineers) To Provide The Following Free Services:
 - In School Bike And Pedestrian Training
 - Walk Audit Reports – Focusing On Bike And Ped Issues
 - Free Incentives To Promote The Program And Encourage Participation

- Website: www.walkitbikeitct.org
- Email: info@walkitbikeitct.org
- Contact: Robert Gomez, (VN)
(203) 234-7862
- Contact: Patrick Zapatka (CTDOT)
(860) 594-2047



Federal Funding

- TAP-Transportation Alternatives Program (80/20 Funding)
 - ▣ on- and off-road pedestrian and bicycle facilities
 - ▣ infrastructure projects for improving non-driver access to public transportation and enhanced mobility
 - ▣ community improvement activities
 - ▣ environmental mitigation





Other Federal Funding

- HSIP- Highway Safety Improvement Program
 - ▣ Achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- Surface Transportation Program
 - ▣ Flexible funding on any Federal-aid highway bicycle facilities and pedestrian walkways adjacent to any highway on the National Highway System (NHS)
 - ▣ Non-motorized projects within Interstate corridors
- CMAQ-Congestion Mitigation and Air Quality Improvement Program
 - ▣ Constructing bike/ped support facilities reducing vehicle trips (Not exclusively recreational trails)
 - ▣ Non-construction outreach related to safe bicycle use

State Funding



- LOTCIP – Local Transportation Capital Improvement Program
 - ▣ Provides State monies to urbanized area municipal governments in lieu of Federal funds otherwise available through the Federal transportation legislation
 - ▣ The ability of municipalities to perform capital improvements with less burdensome requirements, i.e. do it their way
 - ▣ COG's are responsible for the solicitation, ranking and prioritization of their municipal members initial project submittals



State Funding

- VIP – Vender In Place
 - ▣ Priority projects put out every year (District Maintenance & LTA)
 - ▣ Road resurfacing (Curb to Curb improvements)



State Funding

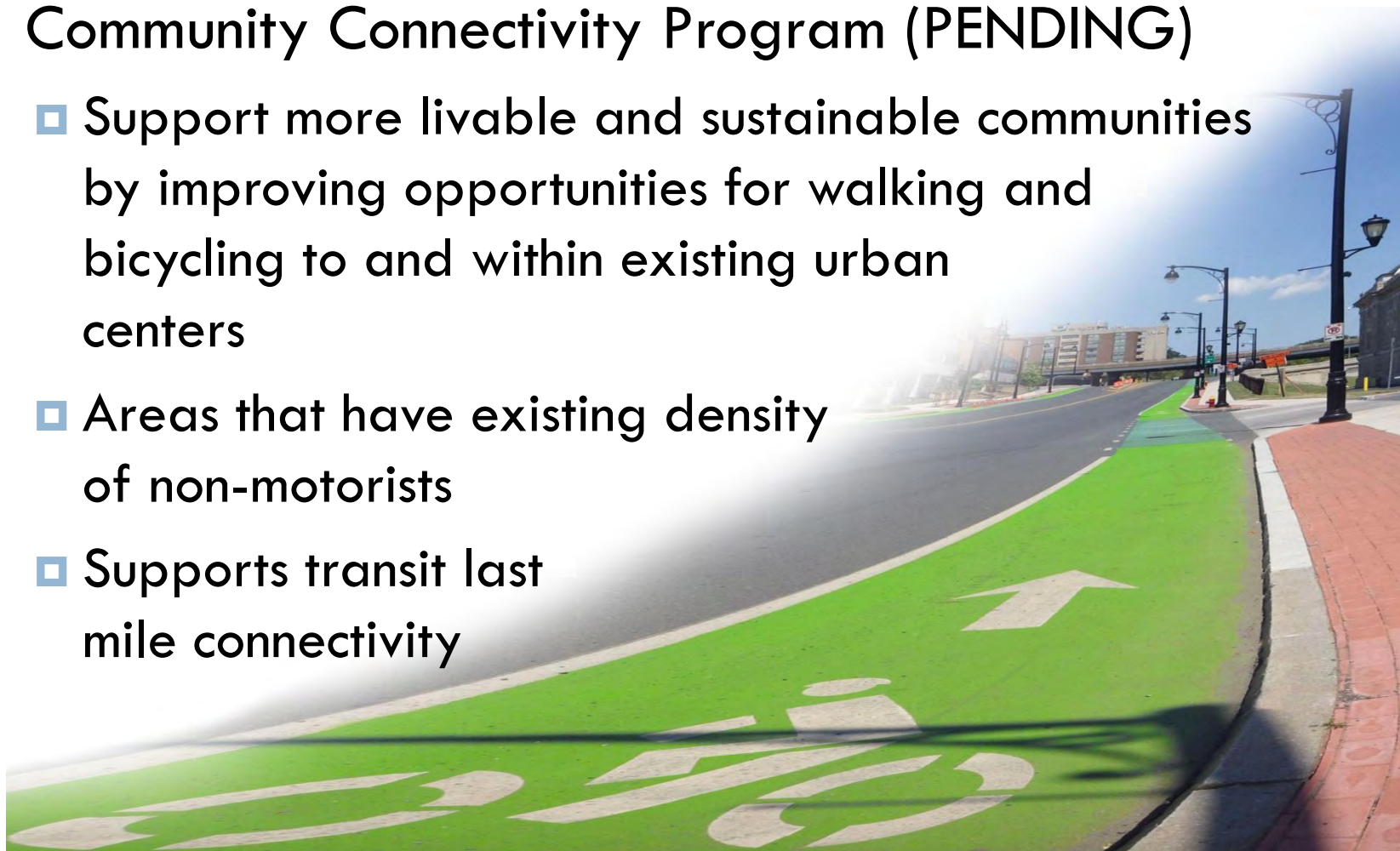


- DEEP state bonding (Rec. Trails Program)
 - ▣ Construction of new trails (motorized and non-motorized)
 - ▣ Maintenance and restoration of existing recreational trails (motorized and non-motorized)
 - ▣ Access to trails by persons with disabilities
 - ▣ trail construction and maintenance equipment
 - ▣ Acquisition of land or easements for a trail
 - ▣ Educational programs



State Funding

- Community Connectivity Program (PENDING)
 - ▣ Support more livable and sustainable communities by improving opportunities for walking and bicycling to and within existing urban centers
 - ▣ Areas that have existing density of non-motorists
 - ▣ Supports transit last mile connectivity



State Funding



□ Community Connectivity Program (PENDING)

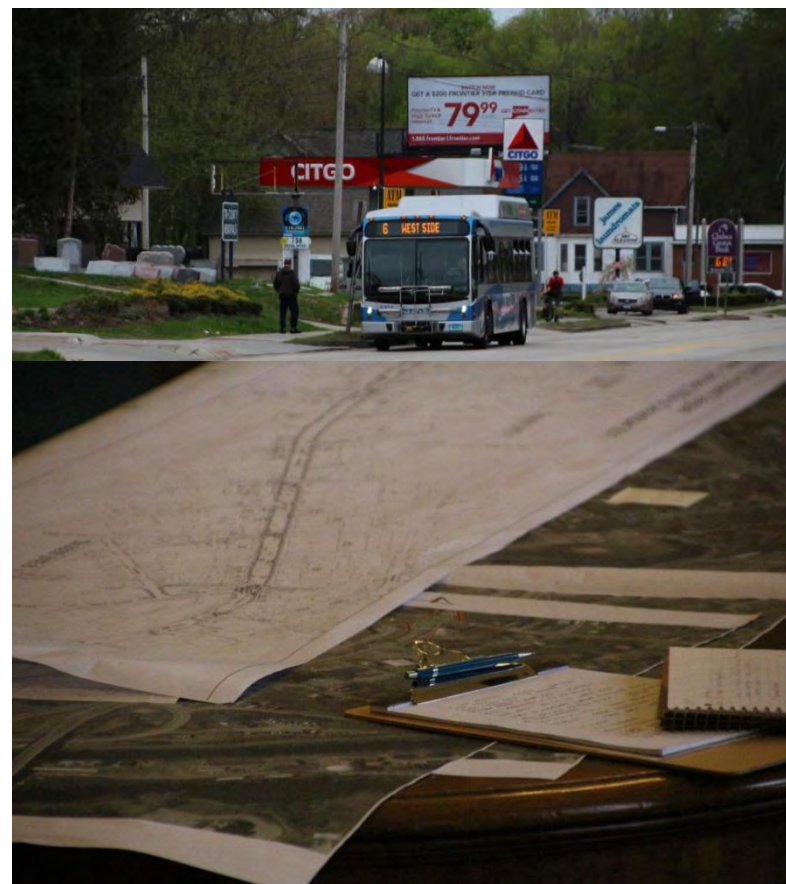


□ Potential Project Examples:

- Road Safety Audit (RSA)
- Sidewalks
- Crosswalks
- Bike lanes
- Cycletraks
- Sharrows
- Urban Bikeways
- Way-finding
- Intersection Improvements
- ADA upgrades
- Shoulder Widening
- Bike/Ped Counters
- Bike Parking
- Bike/Ped Amenities

Technical tool

- Road Safety Assessment (RSA)
 - ▣ Bicycle and Pedestrian focused RSA's
 - ▣ Small group Walking Assessments (4-7 People)
 - Planners
 - Engineers
 - Police/EMS/Fire
 - Key Stakeholders



Technical tool

- Road Safety Assessment (RSA) continued
 - ▣ “Focus on locations that have nonmotorized safety challenges”
 - ▣ Can be done in small or large group efforts



Technical tool

- Road Safety Assessment (RSA) continued
 - ▣ “Boots on ground” approach
 - ▣ Identify short/mid/long term solutions and goals



Technical tool

- Road Safety Assessment (RSA) continued



Technical tool

- Road Safety Assessment (RSA) continued





Additional Information

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Planner

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DOT Bike & Pedestrian
Website:

[http://www.ct.gov/dot/
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Supervising Planner

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Questions ?
