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Disclaimer

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I. Introduction

Project Purpose & Background

This Montclair SAFE (Streets Are For Everyone)
Complete Streets Implementation Plan provides a road map for improving the walking and bicycling environment in the Township of Montclair. The purpose of this plan is to provide guidance towards ensuring that Montclair's streets are designed to encourage safe driving, bicycling and walking and to advance the Township's SAFE /

Complete Streets philosophy.



Montclair, a Bronze-Level Bicycle-Friendly community and a Silver Walk Friendly community, is ahead of most

municipalities in improving multi-modal travel within the Township. This plan builds upon those efforts to further enhance bicycle and pedestrian safety and mobility for users of all ages, abilities and socio-economic backgrounds.

Project Background

The Township of Montclair is a six square mile vibrant community located along the Watchung Mountains in Essex County, New Jersey (Map 1). The Township's transportation network consists of six train stations and a system of bus routes and it has an active commercial district and smaller neighborhood commercial areas.

The Township is committed to investing in making bicycling and walking safer and more accessible to all users. Both the Township and Essex County have Complete Streets Policies and the 2015 Land Use and Circulation Element of the Montclair Master Plan recommended that the Township "establish a network for pedestrian and cyclists".

To further those efforts, the Township submitted an application to the NJDOT Local Bicycle/Pedestrian Planning Assistance Program

(LBPPAP) to receive technical assistance in developing a SAFE / Complete Street Implementation Plan. NV5 was selected to provide assistance to the Township in developing this plan.



Map 1: Context Map

Project Objectives

The objectives of this plan are to:

- → Develop and build consensus for Community Priorities for travel in Montclair incorporating a SAFE / Complete Streets philosophy
- → Review and Evaluate the Township's previous planning efforts
- → Identify a SAFE CS Network for enhanced bicycle and pedestrian mobility
- → Facilitate outreach efforts to draw in stakeholders, elected officials, staff and the community at large to help build consensus for a set of street typologies and design guidelines consistent with providing safe access for all street users
- → Be adopted as an element of the Montclair Master Plan and actively used to assist design decision-making as streets are maintained, repaved, and/or otherwise improved.



What is the Montclair S.A.F.E. Streets Initiative?

"Montclair SAFE began in 2011 as an initiative of the Montclair Traffic/Parking Advisory Committee and the Engineering Bureau to raise awareness of the recently adopted Complete Streets policy and begin the process of engaging the community to envision its streets in a more inclusive way so people walking and rolling (on bikes or in wheelchairs or strollers) are comfortable and feel safe using them.

The group outlined five key goals of the initiative, which are:

- → Identify walking paths and routes and ways to encourage more walking by protecting/enhancing our pedestrian spaces
- → Identify bicycling paths and ways to encourage cycling by designating "preferred" routes and protecting/enhancing existing facilities
- → Identify ways to enhance and promote Montclair's many transit options (trains, buses, jitneys, etc.)
- → Implement SAFE plans at little additional cost to the taxpayers of Montclair

Since then we've been able to improve a few streets, the most notable being South Park Street. With its generously portioned sidewalks and traffic-calming, tree-lined median; South Park Street is a great model for how a complete street in the downtown should look and feel."

Source: Montclair Engineering Department





Photos: South Park Street, Credit: Montclair Township & Arterial, LLC

Need for SAFE / Complete Streets

SAFE / Complete Streets help make communities more vibrant and livable. As per Montclair Township – "SAFE stands for "Streets Are For Everyone" and it is the acronym that we believe captures the spirit behind the development of complete streets in Montclair".

SAFE/Complete Streets are streets that are focused on people not just vehicles. They prioritize pedestrian movement with improved sidewalks, safe intersections and crosswalks, ADA accessibility and bicycle facilities that enhance the safety and comfort of those who cycle.

SAFE/Complete Streets have many benefits and are needed in Montclair because:

- → SAFE Streets make walking and bicycling safer for all users
- → SAFE Streets create more <u>equitable</u> communities
- → SAFE Streets help the environment
- → SAFE Streets are good for the economy
- → SAFE Streets support a healthy and active lifestyle
- → SAFE Streets help reduce <u>traffic</u> congestion

Walking and Bicycling Safety

- → Streets become safer by focusing on improving walking and bicycling. Pedestrian improvements, such as bump-outs, high-visibility crosswalks and dedicated bicycle facilities have a traffic calming effect on roadways.
- → From 2006-2015, there were 479 pedestrian injuries, 9 fatalities and 22 incapacitating injuries in Montclair. During the same time, there were 149 bicyclist injuries, 2 incapacitating injuries and no fatalities.

Equitable Communities

→ SAFE Streets help create equitable communities by making it safer for populations (lower-income, minority,

- etc) who are more likely to walk or bike due to lack of access to cars.
- → The income of almost 7% of Montclair's population is below the poverty level.
- → More than 10% of Montclair households have no access to cars and more than 40% have only one car available. In addition, more than 25% of 3 & 4 person households have access to one or no car¹.
- → More than 25% of Montclair's populations identify as Black or African American which is higher than the state (14.8%), more than 5% identify as Asians, and almost 9% identify as Hispanic.
- → Multi-modal travel such as walking and bicycling are the most affordable forms of transportation. According to AAA's Your Driving Costs (2015), a medium size sedan costs 79 cents per mile to own and operate based on driving 10,000 miles annually. By comparison, the League of American Bicyclists estimates that bicycling costs just 10 cents per mile. Walking costs (time and money) far outweigh the benefits.

Environment

→ Walking and bicycling help reduce the amount of gasoline consumed, as well as lower carbon emissions, directly improving air quality.

Economy

- → Active transportation can bring economic benefits to a community, including higher rates of spending in local businesses and an increase in property values.
- → Studies have shown a positive economic impact of walking and bicycling for communities in New Jersey².

¹ As per 2015 American Community Survey, Table B08201: HOUSEHOLD SIZE BY VEHICLES AVAILABLE ² The Economic Impacts of Active Transportation in New Jersey, Alan M. Voorhees Transportation Center



- → Walking and bicycling projects also create jobs and save health care costs.
- → Walkable and bikeable communities typically see an increase in property values. One study found that a 5 to 10 mph reduction in traffic speeds increased adjacent residential property values by roughly 20 percent.
- When residents walk or bike to transit, they spend less money on driving and have extra disposable income to spend locally.

Health

- → Safe walking and bicycling options affects a community's level of physical activity.
- Obesity, diabetes and other diseases have been linked to low levels of physical activity.
- → According to the Pedestrian and Bike Information center, "physical activity can help prevent:
 - Heart disease
 - Obesity
 - High blood pressure
 - Type 2 diabetes
 - Osteoporosis (thinning bones)
 - Mental health problems such as depression"

Traffic Congestion

- → Bicycling and walking for short trips help reduce traffic congestion.
- → Every person that makes a trip by walking or bicycling is one less car on the streets and one fewer car seeking parking.
- → Montclair already has 2.9% of workers walking to work, and 0.6% biking to work; however, these numbers do not include commuters that walk or bicycle to the train station or bus stops. More than 25% take public transit to work.
- → Bicycles (with some restrictions) are allowed on the NJ Transit trains and the Bay Street station has the State's first Bike Depot to provide safe parking

options for bicyclists. All NJ Transit buses have bicycle racks, thus making it easier to make the first/last mile to transit biking-friendly.

How to Use this Plan?

This plan is a policy and planning guide and will help implement the Township's Complete Streets policy and build on the goals and objectives of the Townships' circulation plan.

It will serve as a resource for local boards/committees and advocates supporting and advancing CS efforts and seeking outside funding for such efforts.

It will serve as a decision-making guide with options (herein referred to as 'typologies') for integrating CS measures into street maintenance, paving and improvement projects based on roadway type, width and speed limits.

Plan Organization

This plan is organized into the following three parts:

Part 1: Introduction

Part 2: Planning Process & Outreach

Part 3: Street Typologies & Recommendations

Part 4: Implementation & Funding

Part 5: Next Steps



II. Planning Process and Outreach

Planning Process

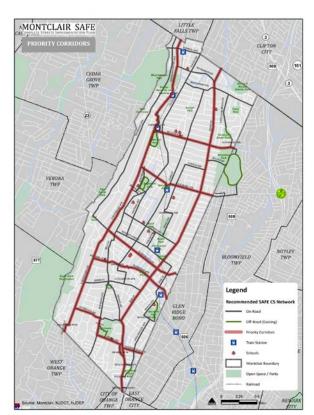
Montclair Township has had an evolving network of proposed bicycle and pedestrian facilities for several years. The project team reviewed the previous planning efforts and developed a recommended SAFE CS network. The desktop exercise of identifying a network was further refined based on outreach and field work. The intent was to develop a network that connects major destinations such as schools, parks; residential neighborhoods; commercial areas in and around Montclair Township.



Map 2: Recommended SAFE CS Network

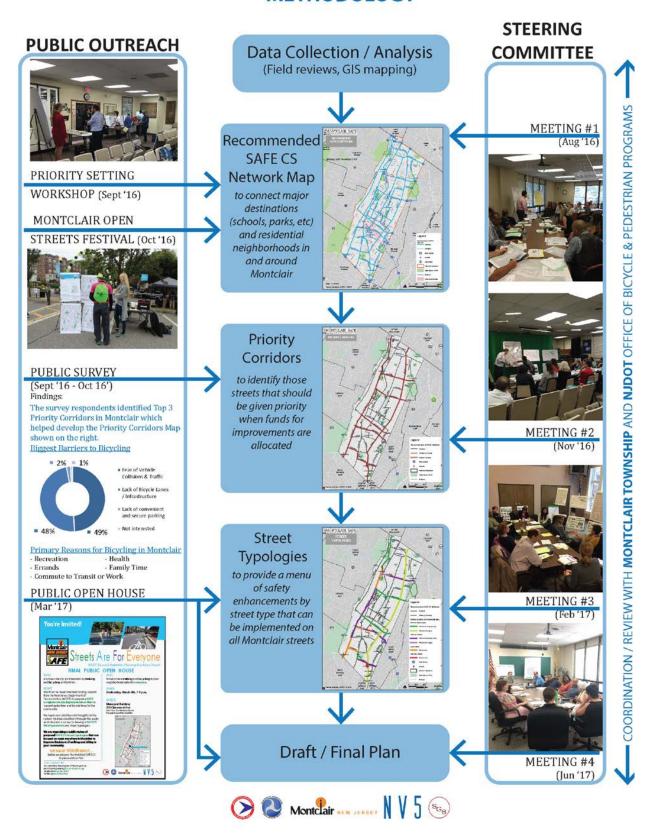
The network was further developed into a priority SAFE CS network based on input provided by the Steering Committee, a community survey and public meetings. While it was agreed that all streets in Montclair must be safe and accessible

for everyone, the priority network identifies those streets that should be given priority investments when opportunity and funds (if necessary) for improvements are allocated. The project team conducted additional field work focused on streets that were included in the priority network. The priority SAFE CS network was then advanced by defining street typologies that include recommendations for pedestrian and bicycle improvements. The street typologies are grouped by roadway functional classification and street width as recommended by the Steering Committee. Street typologies provide a menu of safety enhancements that can be implemented on all Montclair streets.



Map 3: Priority Corridors
Figure 1 on the following page summarizes the overall planning process.

METHODOLOGY



Data Collection / Field Visits

The project team reviewed various plans and recommended bicycle and pedestrian networks that have been developed previously. *Appendix A: Technical Memorandum 1* includes a bibliography of the reports, studies, plans, and maps evaluated as part of this task.



Photo: South Mountain Avenue, Montclair, NJ

The project team conducted a desktop review of on-road and off-road corridors, and targeted field investigations to determine the condition of bicycle and pedestrian accommodations along identified priority corridors throughout the Township. This focused on the refined bicycle and pedestrian network, based on the assessment of the various networks developed over the last ten years throughout Montclair, and used the 2015 Land Use & Circulation Element of the Master Plan – Proposed Conceptual Bicycle Route Network as a starting point, see Table 1. This was further refined as recommended by the project Steering Committee at a priority setting workshop in September 2016.

TABLE 1 - TOWNSHIP FACILITY NETWORK MAPS

Year	Name of Map					
2005	Bicycle Compatible Roadways					
2005	Bicycle Suitability Map					
2007	Desired Conditions Sketch					
2009	SRTS Bike Network Map					
2013	Proposed Conceptual Bicycle Route					
	Network from the 2015 Land Use &					
	Circulation Element of the Master Plan					

Using the information and data collected in previous tasks, we evaluated and analyzed the proposed network in terms of its capability to safely accommodate pedestrian and bicycle travel, and provide connections to major destinations throughout Montclair. With Steering Committee guidance, this evaluation focused on providing connectivity, and enhancing corridors that currently have the potential for enhancing walking or bicycling.



Photo: North Mountain Avenue, Montclair, NJ

Steering Committee Input

A Steering Committee comprising of local community groups, bicycle and pedestrian advocacy organizations and Montclair Township staff was created. A list of Steering Committee members is in *Appendix B*. The Steering Committee members provided their local expertise and knowledge by participating in the following:

- → A Project Kick-Off Meeting to learn more about the scope and timeline of the project, to provide feedback on the bicycle and pedestrian network developed by the project team based on previous efforts and help refine the network.
- → A network review meeting (Steering Committee Meeting #2) to review and refine the network and confirm recommendations for priority corridors based on the community survey results



and local knowledge.

- → A concept review meeting (Steering Committee Meeting #3) to review the draft street typologies and recommendations and provide guidance in planning for the Public Information Center / Public Open House.
- → A draft/final plan review meeting (Steering Committee Meeting #4) to provide feedback and comments to be incorporated in the final plan.

In addition, the project team also coordinated with the Montclair Engineering department throughout the project to get additional insight and local data.

Public Outreach

Public involvement is an important factor in bicycle and pedestrian planning. The outreach efforts included conducting public meetings, developing and administering a community survey, and participating in community events.

Priority Setting Workshop - A Priority Setting Workshop was conducted on September 13, 2016 at the Montclair Municipal building. The Project Team facilitated the open house format meeting that included stations with general background about the project, typical bicycle and pedestrian enhancement techniques, draft route network maps for review and a station for walking through an on-line survey to collect detailed insight on preferences and priorities for walking and bicycling.



Photo: Priority Setting Workshop, Montclair, NJ

The refined bicycle and pedestrian facility network maps (North, Central and South areas of Montclair) are included in *Appendix C: Technical Memorandum 2*.

Public Survey – The public survey was posted on the Montclair website and included detailed questions about top priority corridors in each the North, Central and South areas of Montclair. The survey provided opportunity for detailed input.

Survey respondents were asked to prioritize their top three priorities in southern, central, and northern Montclair by ranking their top segments as graphically represented on a map with a corresponding key that divided the choices into street segments. See *Appendix C: Technical Memorandum 2*.

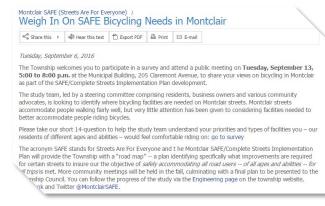


Photo: Survey Announcement on Township's Website

Montclair, NJ

In the southern section of Montclair, the following Segments were most often prioritized:

- → Segment 23 (Claremont Avenue, Valley Road, Walnut Street/Park Drive, Forest Street, Label Street, Depot Square) was most frequently priority 1 or 2 (22.63% - Priority 1 and 22.96% – Priority 2);
- → Segment 19 (Elm Street) ranked next highest with 17.5% of respondents selecting Elm Street as their Priority 1; and,

→ Segment 20 (Park Street, The Crescent, South Fullerton Avenue, Union Street) with the next highest priority, with 16.8% selecting Segment 20 as Priority 1.

In Central Montclair, the following segments were most frequently prioritized:

- → Segment 11/Grove Street (35% Priority 1 and 25% Priority 2);
- → Segment 10/North Mountain Avenue (21.6% Priority 1 and 15.15% Priority 2);
- → Segment 13/Park Street (15% Priority 1 and 22.7% Priority 2); and,
- → Segment 15/Watchung Avenue (10.8% Priority 1, 13.6% Priority 2 and 26% Priority 3).

In Northern Montclair, the following roadways were most frequently prioritized:

- → Segment 4/Grove Street (22% Priority 1, 18% Priority 2, 18% Priority 3);
- → Segment 1/Upper Mountain Avenue (21% Priority 1, 12% Priority 2, 9% Priority 3);
- → Segment 2/Valley Road (19% Priority1, 15% Priority 2, 8% Priority 3);
- → Segment 3/Park Street) at (16% Priority 1, 24% Priority 2, 13% Priority 3); and,
- → Segment 8/Bellevue Avenue (10% Priority 1, 17% Priority 2, 30% Priority 3).

In addition to survey responses, additional factors such as connectivity, proximity to major generators, and geographic distribution were considered when refining the network.

Open Streets Event – The Project Team was able to take advantage of one of the largest pedestrian and bicycling events that occurs in Montclair, the Open Streets event held on Sunday

October 2, 2016. This event is paired with the Tour de Montclair bicycle ride event. During the event, the NV5 team set up an outreach station with surveys to be filled out, and maps to be reviewed and marked up. Many attendees who might not have otherwise known about the project were able to share insights about priorities for walking and bicycling in Montclair and learn more about the survey and participation in the project.



Photo: Open Streets Festival, Montclair, NJ

Network maps were further refined for the event, enhancing display of local connections and other features, see Attachment C – Open Streets Event Maps.

Final Public Open House – A final public open house was held on Wednesday, March 8th, 2017 from 7:00 p.m. to 9:00 p.m. at the Montclair Municipal Building. The purpose of the meeting was to present the methodology, recommended SAFE CS network, and the pedestrian and bicycle recommendations including street typologies and gather feedback from the public.



Photo: Final Public Open House, Montclair, NJ

The format of the meeting was an open house format with presentation boards and comment forms. In addition, to Montclair and NJDOT staff, the meeting was attended by more than 50 people from the community. A sign-in sheet is attached in *Appendix D: Community Outreach* for reference; however please note that the sign-in sheets do not accurately reflect attendance as several attendees did not sign in.

The overall feedback received was positive and many members provided additional comments by filling in the comment forms provided at the open house and via email after the meeting. A copy of the comments is in *Appendix D: Community Outreach*.



Photo: Final Public Open House, Montclair, NJ

III. Street Typologies / Recommendations

Introduction

Based on an analysis of existing conditions and steering committee and public input, the project team developed recommendations for implementing the recommended SAFE CS network in Montclair. The recommendations include pedestrian and bicycle improvements identified in six street typologies.

Street Typologies

Typologies are categorized by functional class (minor arterial, collector, local, and one-way) and roadway width. The width allocated for motorists, buses, trucks, bicyclists, pedestrians, and parked cars is a crucial aspect of street design and effects the applicable treatment of each typology.

The typologies provide options to be considered to enhance pedestrian and bicycle facilities, and will be further advanced during maintenance operations and/or later design phases.

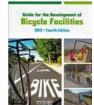


















Sampling of the Best Practice Publications

All proposed design treatments are based on roadway data collected such as traffic volumes, speed limits, roadway widths and developed by utilizing state of the practice publications such as the AASHTO Bicycle Design Guidelines, NACTO Guides and NJDOT CS Design Guide.

Recommended treatments include sidewalk improvements, enhanced crossings, shared lane markings/ "sharrows", bike lanes, traffic calming treatments, striping parking lanes etc. On narrower roadways where space is limited, some of the options will require a restriction of onstreet parking. Any parking impacts will be determined during final design.

The six (6) street typologies are listed below:

- → TYPOLOGY I Minor Arterial Street (up to 37.5' wide)
- → TYPOLOGY II Minor Arterial Street (38' + wide)
- → TYPOLOGY III Collector Street (up to 37.5′ wide)
- → TYPOLOGY IV Collector Street (38' + wide)
- → TYPOLOGY V Local Street
- → TYPOLOGY VI One-Way Street

Please note that Bloomfield Avenue was excluded from this study, due to other ongoing efforts along that road.

An example street from the priority corridors was selected for each street typology to demonstrate how a street typology could be applied.

Design Assumptions

The following design assumptions were used while developing the street typologies and can be used a reference while applying the street typologies to different streets within Montclair.

- \rightarrow Sidewalks (4' 6'+)
- → Crosswalk high visibility "continental" striping pattern near key destinations
- \rightarrow Travel lane widths (10' 11')
- → Bicycle lane widths (5' 6')



- → Buffer between bicycle lanes and motor vehicle travel lanes (1' - 3')
- → Two-way protected bicycle lanes (8' -12') with minimum 1.5' buffer
- → Motor vehicle parking lane widths (7.5′ 9′)

Pedestrian Improvements

The pedestrian network throughout Montclair has had significant investment over the years, yielding a largely, but not 100% complete sidewalk network. However, a complete sidewalk network is one of the elements for creating a safe and accessible walking environment. There a number of additional enhancements that Montclair and other municipalities have utilized to further improve the pedestrian realm.

The pedestrian recommendations can be applied to any street type and vary based on context and land use. The recommendations are categorized improvements into treatments that can be applied to roadway segments, all intersections or signalized intersections. All of the recommended pedestrian improvements are described further with information on typical applications / design and photos showing local and regional examples.

The pedestrian improvements identified include:

- → Roadway Segments
 - Sidewalks and Curb Ramps
 - Pedestrian-Scale Lighting
 - Parklets
 - Mid-block crossings
 - Gateways
- → All Intersections
 - Crosswalks
 - Mini-traffic circles
 - Curb Extensions
 - Pedestrian refuge islands
 - RRFB (Flashing warning lights)
 - In-Street Crossing Sign
- → Signalized Intersections Only
 - Pedestrian Countdown Signals

Bicycle Facilities

The street typologies provide options for bicycle facilities for each of the street types. The various bicycle facilities recommended include:

- → Conventional Bicycle Lanes
- → Buffered Bicycle Lanes
- → Two-way protected bicycle lanes
- → Climbing Lanes
- → Contraflow Bicycle Lanes
- → Bicycle Boulevard
- → Advisory Bicycle Lanes
- → Sharrows or Shared Lane Markings
- → Shared Use Path

Each typology includes additional descriptions on the recommended facility highlighting the benefits and considerations for each option.

MONTCLAIR SAFE COMPLETE STREETS IMPLEMENTATION PLAN

KEY ELEMENTS OF A MONTCLAIR SAFE / CS STREET TYPOLOGY

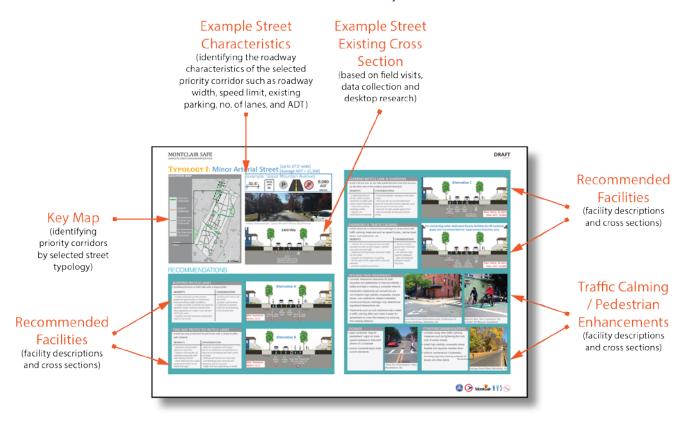
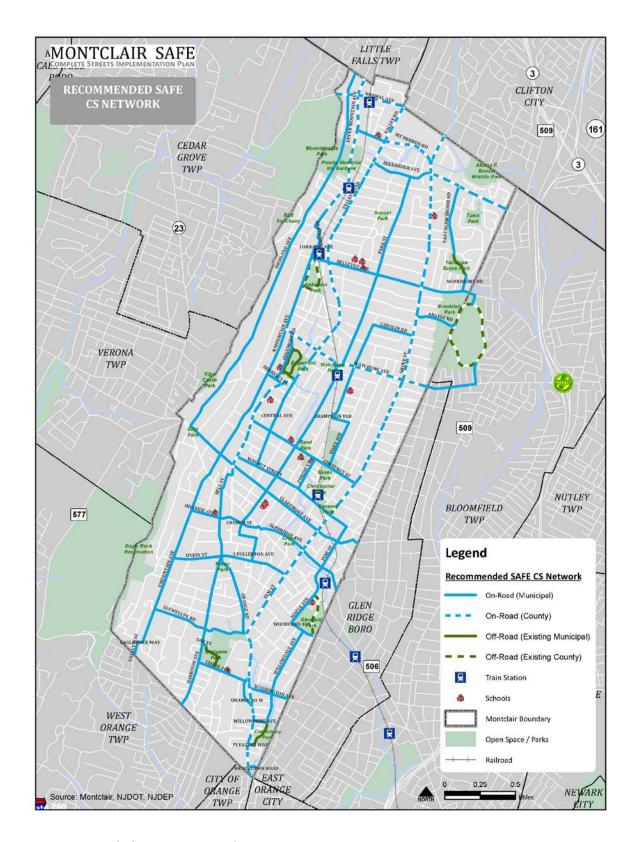
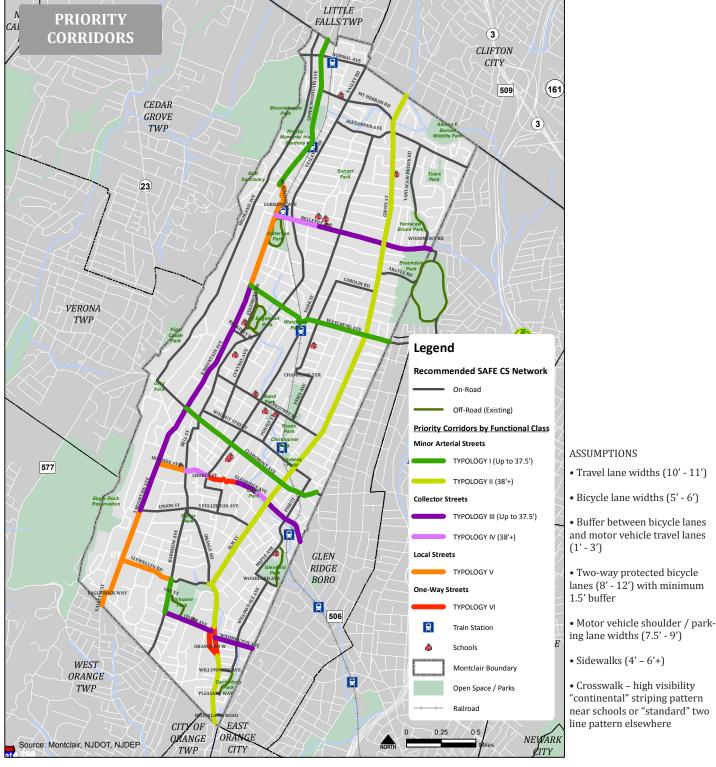


Figure 2: Key Elements of a Montclair SAFE / CS Street Typology



Map 3: Recommended SAFE CS Network

COMPLETE STREETS IMPLEMENTATION PLAN



STREET TYPOLOGIES:

TYPOLOGY I - Minor Arterial Street (Up to 37.5')

TYPOLOGY II - Minor Arterial Street (38'+)

TYPOLOGY III - Collector Street (Up to 37.5')

TYPOLOGY IV - Collector Street (38'+)

TYPOLOGY V - Local Street

TYPOLOGY VI - One-Way Street

Legend for Typologies



PEDESTRIAN IMPROVEMENTS: Recommendations

PEDESTRIAN	RECOMMENDATIONS FOR ALL STREET TYPOLOGIES (I, II, III, IV, V & VI)						
IMPROVEMENTS	Commercial / Retail	Residential	<1/4 Mile of Parks, Schools, Transit	History of Frequent Speeding	History of Ped / Bike Crashes		
	\$		<1/4 m	ile			
ROADWAY SEGMENTS							
Sidewalks and Curb Ramps	V	V	✓		V		
Pedestrian-Scale Lighting	V		✓	V	V		
Parklets	V			V			
Mid-Block Crossings	V		✓		✓		
Gateways	V		▽	V	V		
ALL INTERSECTIONS							
Crosswalks	V	V	✓	V	✓		
Mini-Traffic Circles	V	V	✓	V	V		
Curb Extensions*	V	V	✓	V	√		
Pedestrian Refuge Islands*	V			V	√		
RRFB (Flashing warning lights)*	V		✓	V	V		
In-Street Crossing Sign*	V		V	✓	√		
AT SIGNALIZED INTERSECTIONS ONLY							
Pedestrian Countdown Signals	V	V	✓	V	V		

Notes: This planning level table is developed primarily to recommend pedestrian improvements for Montclair and should not be followed without additional design and engineering analysis. Please refer to NACTO Guides, AASHTO and other state of the practice publications for additional guidance. * Except on local roads (Typology V)

SIDEWALKS

- "Backbone" of the pedestrian travel network
- Vary in their design / configuration in relationship to surrounding context (downtown, residential, commercial, etc.)
- Should be designed for universal access and ADA accessibility guidelines
- Require upkeep, maintenance, and snow or ice removal <u>TYPICAL APPLICATIONS / DESIGN</u>
- Should be at least 5' wide (FHWA Recommended Guidelines/ Priorities for Sidewalks & Walkways)
- A sidewalk (8'-10'+) should be provided near parks, schools, and other major pedestrian generators sidewalks
- A minimum 2' buffer (4' is preferred) for street furniture, utilities, etc should be provided



Sidewalk near school / residential, Montclair, NJ



Sidewalk in downtown, Montclair, NJ

PEDESTRIAN IMPROVEMENTS: Recommendations (Continued)

PEDESTRIAN-SCALE LIGHTING

- Appropriate and adequate lighting activity is a vital measure for pedestrian safety
- · Should work in concert with roadway lighting
- Should be implemented at intersections, important points of interest, and along sidewalk corridors

TYPICAL APPLICATIONS / DESIGN

- Should be carefully placed so as to illuminate crosswalks and reduce glare to motorists
- · Should utilize uniform lighting levels



Pedestrian-scale lighting, Montclair, NJ Credit: Arterial, LLC

PARKLETS

- Re-purpose a portion of the street next to the sidewalk -- usually 1-2 parallel parking spaces-- as public space suitable for people to use and enjoy
- Provide amenities like seating, planting, bicycle parking, WiFi, and public art

TYPICAL APPLICATIONS / DESIGN

Can be temporary or permanent in their design, materials and applications



Parklet in Montclair, NJ Credit: Bike&Walk Montclair

MID-BLOCK CROSSINGS

- Provide safe crossing opportunities to destinations or places that are not near controlled intersections
- May incorporate additional features such as actuated warning beacons (RRFBs), signage, curb extensions, medians, etc.

TYPICAL APPLICATIONS / DESIGN

- In areas where there is significant pedestrian activity
- Stop lines should be setback 20-50 feet to ensure that a pedestrian is visible to motorists
- Raised crossings can also increase visibility and encourage motorists to stop
- Can also include dedicated markings (such as crossbike) for bicycle crossings



Mid-Block Crossing with curb extensions and signal actuation in Bayhead, NJ

GATEWAYS

- A signing and/or landscaping treatment to alert motorists that they are entering a lower speed environment and to expect pedestrians and bicyclists.
- Can be as simple as signs and landscaping <u>TYPICAL APPLICATIONS / DESIGN</u>
- Usually supplemented with other traffic calming measures such as curb extensions or bulb-outs, public art and crosswalks
- Recommended for entrances to school zones, commercial areas or busy places of activity



Gateway to Forest Hill School, Camden, NJ

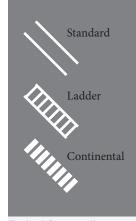
PEDESTRIAN IMPROVEMENTS: Recommendations (Continued)

HIGH-VISIBILITY / RAISED CROSSWALKS

- Crosswalk striping that creates a high level of visual contrast with the surface of the roadway is most effective for pedestrians (including those with low vision) as well as drivers
- Raised crosswalks are elongated speed humps that feature a marked crosswalk at the same elevation as the adjacent sidewalks TYPICAL APPLICATIONS / DESIGN
- At roadway intersections where sidewalks or other pathways are present on both sides of the roadway
- Should be designed to minimize crossing distances and should be straight, to make them easier for people with visual impairments to navigate
- Minimum width is 6' but can be up to 15' wide at crossings with a high number of pedestrians



High-Visibility Ladder Crosswalk, Montclair. NJ



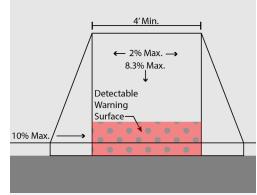
Typical Crosswalk
Patterns

CURB RAMPS

- Provide pedestrians with a means of negotiating a change of elevation between the sidewalk and roadway
- Are especially important for people using wheelchairs, strollers, walkers, crutches, handcarts, and pedestrians who have trouble stepping up and down high curbs TYPICAL APPLICATIONS
- At all intersections with marked or unmarked crosswalks
- · At all mid-block crossing locations
- · At on-street accessible parking spaces



Curb Ramps, Montclair, NJ



Standard dimensions for curb ramps

MINI-TRAFFIC CIRCLES

- · Typically help reduce speeds at minor intersections
- Can be installed using markings and raised islands and typically have plantings
 / landscaping
- Landscaping must be regularly maintained so it does not affect visibilty <u>TYPICAL APPLICATIONS / DESIGN</u>
- Crosswalks should be marked clearly to specify where pedestrians can cross.
- Minimum 15 ft clearance should be provided from the corner to the widest point on the circle
- Adequate signage should be installed



Mini-Traffic Circle, Princeton, NJ, Credit: WalkBikeNJ.com

CURB EXTENSIONS (Bumpouts)

- Narrow the roadway by extending the curb at key intersections and midblock locations
- Can either be "constructed", with curbs and concrete surface, or "painted" over existing roadway pavement
- TYPICAL APPLICATIONS / DESIGN
- Can be implemented at intersections, mid-block crossings, and transit stops on all types of streets
- Should focus on areas of high pedestrian demand where traffic calming is also a priority





Quick Build Curb Extensions, Princeton, NJ, Credit: WalkBikeNJ.com

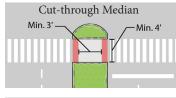
PEDESTRIAN IMPROVEMENTS: Recommendations (Continued)

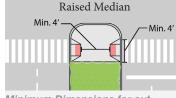
PEDESTRIAN REFUGE ISLANDS

- Also known as crossing islands: Are protected spaces placed on a street at intersections or mid-block crossing locations to separate crossing pedestrians from motor vehicles
- Split the crossing distance into manageable portions TYPICAL APPLICATIONS / DESIGN
- Can be used at wide intersections, irregularly shaped intersections or at intersections where two roads converge into one
- Provide a cut-through median level with roadway grade, offering a more efficient design in comparison to raised median islands



Planted median, Austin, TX Credit: NACTO





Minimum Dimensions for cutthrough and raised medians

RRFB (FLASHING WARNING LIGHTS)

- Rectangular rapid flashing beacons (RRFBs) are active warning devices used to alert motorists of crossing pedestrians at uncontrolled crossings
- Remain dark until activated by pedestrians, at which point they
 emit a bright, rapidly flashing yellow light, which cautions drivers
 that pedestrians are attempting to cross the roadway
 TYPICAL APPLICATIONS / DESIGN
- Should be installed on both the right and left sides of the crosswalk, or in a median if available, on the approach to important pedestrian crossings



RRFB in Glassboro, NJ



RRFB in Glassboro, NJ

IN-STREET CROSSING SIGNS

- · Makes it easier for pedestrian to cross at an unsignalized crossing
- Alerts motorists of the laws regarding the pedestrian right-of-way at an unsignalized pedestrian crossing
- Can be used in conjunction with other measures such as pavement markings, etc TYPICAL APPLICATIONS / DESIGN
- · At unsignalized intersections and crossings
- Typically used near schools, parks and access to trails etc
- Roadway signs need to be selected and placed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD)



In-Street Pedestrian Crossing Sign, Montclair, NJ

PEDESTRIAN COUNTDOWN SIGNALS

- Displays the number of seconds remaining in the pedestrian crossing phase
- Help pedestrians accurately decide when it is safe to cross and when they should wait

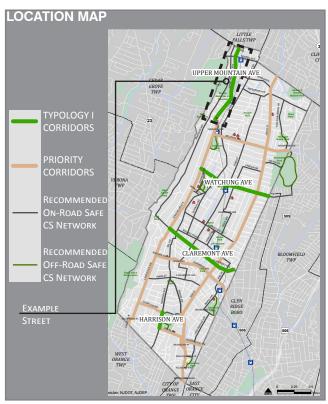
TYPICAL APPLICATIONS / DESIGN

- At intersections with complex signal phasing (e.g. there is a dedicated left turn phase for motorists)
- When an exclusive pedestrian signal phase is provided
- At school zone crossings
- At intersections with pedestrian refuge



Pedestrian Countdown Signal, Hoboken, NJ

Typology I: Minor Arterial Street (Up to 37'wide) (Average ADT = 12,200)







Existing street example - Upper Mountain Avenue (Southbound)



RECOMMENDATIONS

BUFFERED BICYCLE LANES

• install bicycle lanes on both sides with a striped buffer

BENEFITS

- enables bicyclists to ride at their preferred speed without interference from prevailing traffic conditions
- a buffer provides a greater shy distance between motor vehicles and bicyclists thus appealing to a wider cross-section of bicycle users
- visually reminds motorists of bicyclists' right to the street

CONSIDERATIONS

- parking will need to be restricted
- greater enforcement is required to prevent motorists from parking in the bicycle lane

TWO-WAY PROTECTED BICYCLE LANES

 install two-way protected bicycle lanes with a striped buffer with bollards

BENEFITS

- dedicates and protects space for bicyclists
- reduces risk and fear of collisions especially with over-taking vehicles
- more attractive to a wide range of bicyclists at all levels and ages

CONSIDERATIONS

- ideal for roadways with longer blocks as additional considerations is required at driveways and side-street crossings

- parking will need to be restricted
- coordinating snow removal and sweeping will be required
- buffer will vary depending on width



COMPLETE STREETS IMPLEMENTATION PLAN

TYPOLOGY I: Recommendations (Continued)

CLIMBING BICYCLE LANE & SHARROWS

 install a bicycle lane on one side (uphill direction) and add sharrows on the other side of the roadway (downhill direction)

BENEFITS

CONSIDERATIONS

- a dedicated bicycle facility uphill enables motorists to safely pass slower-speed bicyclists
- maximizes existing roadway widths
- requires no restrictions on parking
- recommended for roadways with steep slopes
- sharrows do not provide dedicated space for bicyclists and are typically used only by experienced bicyclists
- requires 25 mph posted speed limit
- may encourage wrong-way bicycle ridina

SHARROWS & TRAFFIC CALMING

 install sharrows or shared lane markings in conjunction with traffic calming measures such as speed humps, narrow travel lanes, curb extensions, etc.

BENEFITS

- indicate the most appropriate and safe locations to ride on with respect parked cars and moving traffic

- reinforces the legitimacy of bicycle traffic on the street
- requires no restrictions on parking
- can be used to fill a gap within a bicycle network
- provide wayfinding guidance

CONSIDERATIONS

- requires posted speed limit reduction to 25 mph
- not ideal for high volume roadways
- does not dedicate exclusive use for bicyclists



INTERSECTION TREATMENTS

- consider intersection treaments for both bicyclists and pedestrians to improve visibility / safety and help in creating a complete network
- intersection treatments can include but are not limited to high-visibility crosswalks, bicycle boxes, curb extensions, raised crosswalks, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.



Low-Cost Curb Extensions and continuous bicycle markings, Hoboken, NJ



Bicycle Box, San Francisco, CA (Credit: SF Bicycle Coalition)

SIGNAGE

- place centerline "stop for pedestrians" signs on lower speed roadways to help alert drivers of a crosswalk
- ensure crosswalk signs meet current standards



"Stop For Pedestrians" Sign, Morristown, NJ

OTHER RECOMMENDATIONS

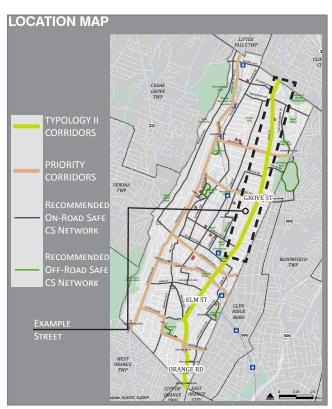
- consider using other traffic calming measures such as tightening the curb radii of certain streets
- install high-visibility crosswalks where feasible and regularly maintain them
- enforce maintenance of sidewalks, including regularly clearing sidewalk of leaves and other debris



Orange Road West, Montclair, NJ

Typology II: Minor Arterial Street (38'+ wide)

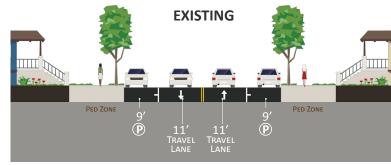
(Average ADT = 12,200)







Existing street example - Grove Street (Northbound)



RECOMMENDATIONS

BUFFERED BICYCLE LANES

• install bicycle lanes on both sides with a striped buffer

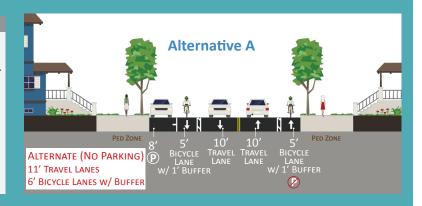
BENEFITS

CONSIDERATIONS

- enables bicyclists to ride at their preferred speed without interference from prevailing traffic conditions - a buffer provides a greater shy distance between motor vehicles
- and bicyclists thus appealing to a wider cross-section of bicycle users - visually reminds motorists of bicyclists' right to the street

parking will need to be restricted on one side greater enforcement is required to prevent motorists from parking in the bicycle lane

- buffers can also be placed between the bicycle lane and the parking lane



TWO-WAY PROTECTED BICYCLE LANES

 install two-way protected bicycle lanes with a striped buffer with bollards

BENEFITS

CONSIDERATIONS

- dedicates and protects space for bicyclists
- reduces risk and fear of collisions especially with over-taking vehicles - more attractive to a wide range of bicyclists at all levels and ages

longer blocks as additional considerations is required at driveways and side-street crossinas

ideal for roadways with

- parking will need to be restricted on one side or both sides for narrow roads



TYPOLOGY II: Recommendations (Continued)

CLIMBING BICYCLE LANE & SHARROWS

 install a bicycle lane on one side (uphill direction) and add sharrows on the other side of the roadway (downhill direction)

BENEFITS

CONSIDERATIONS

- a dedicated bicycle facility uphill enables motorists to safely pass slowerspeed bicyclists

- maximizes existing

roadway widths

- sharrows do not provide dedicated space for bicyclists and are typically used only by experienced bicyclists
- parking may need to be restricted on one side on narrow roadways
- may encourage wrong-way bicycle riding - recommended for roadways with steep

Alternative C MAX. SPEED: 25 MPH Max. ADT: 10,000

SHARROWS & TRAFFIC CALMING

• install sharrows or shared lane markings in conjunction with traffic calming measures such as speed humps, narrow travel lanes, striped medians, curb extensions, etc.

BENEFITS

CONSIDERATIONS

- indicates the most appropriate and safe locations to ride on with respect to parked cars and moving traffic
- reinforces the legitimacy of bicycle traffic on the street
- requires no restrictions on parking
- can be used to fill a gap within a bicycle network
- provide wayfinding guidance

- does not dedicate exclusive use for bicyclists
- not ideal for high volume roadways



INTERSECTION TREATMENTS

- · consider intersection treaments for both bicyclists and pedestrians to improve visibility / safety and help in creating a complete network
- · intersection treatments can include but are not limited to high-visibility crosswalks, bicycle boxes, curb extensions, raised crosswalks, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.



Low-Cost Curb Extensions and continuous bicycle markings, Hoboken, NJ



Bicycle Box, San Francisco, CA (Credit: SF Bicvcle Coalition)

SIGNAGE

- place centerline "stop for pedestrians" signs on lower speed roadways to help alert drivers of a crosswalk
- ensure crosswalk signs meet current standards



"Stop For Pedestrians" Sign, Morristown, NJ

OTHER RECOMMENDATIONS

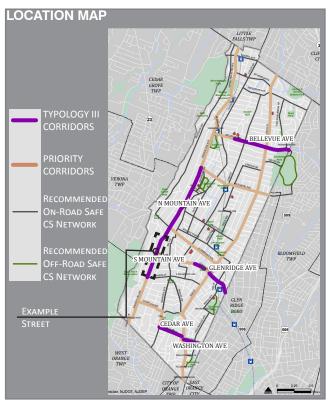
- consider using other traffic calming measures such as tightening the curb radii of certain streets
- install high-visibility crosswalks where feasible and regularly maintain them
- enforce maintenance of sidewalks, including regularly clearing sidewalk of leaves and other debris



Orange Road West, Montclair, NJ

OMPLETE STREETS IMPLEMENTATION PLAN

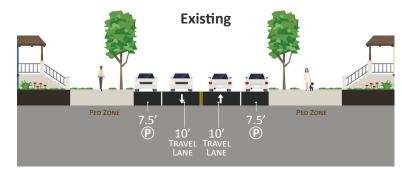
Typology III: Collector Street (Up to 37' wide) (Average ADT = 5,600)







Existing street example - South Mountain Ave (Southbound)



RECOMMENDATIONS

BUFFERED BICYCLE LANES

install bicycle lanes on both sides with a striped buffer

BENEFITS

CONSIDERATIONS

- enables bicyclists to ride at their preferred speed without interference from prevailing traffic conditions
- a buffer provides a greater shy distance between motor vehicles and bicyclists thus appealing to a wider cross-section of bicycle users
- visually reminds motorists of bicyclists' right to the street
- parking will need to be restricted on both sides
 greater enforcement is required to prevent
- greater enforcement is required to prevent motorists from parking in the bicycle lane

Alternative A PED ZONE S' BICYCLE LANE W/ 2.5' BUFFER TRAVEL TRAVEL TRAVEL LANE LANE LANE Alternative A PED ZONE BICYCLE LANE W/ 2.5' BUFFER W/ 2.5' BUFFER LANE LANE LANE LANE DUFFER D

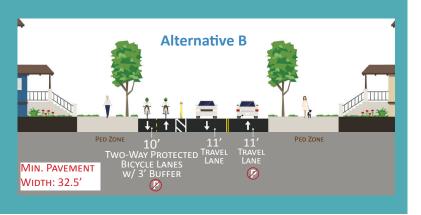
TWO-WAY PROTECTED BICYCLE LANES

 install two-way protected bicycle lanes with a striped buffer with bollards

BENEFITS

CONSIDERATIONS

- dedicates and protects space for bicyclists
- reduces risk and fear of collisions especially with over-taking vehicles
- more attractive to a wide range of bicyclists at all levels and ages
- ideal for roadways with longer blocks as additional considerations is required at driveways and side-street crossings
- parking will need to be restricted on both sides



TYPOLOGY III: Recommendations (Continued)

SHARED USE PATH

· add a two-way shared use path especially in locations with large landscape buffers, longer blocks and where public rightof-way is available

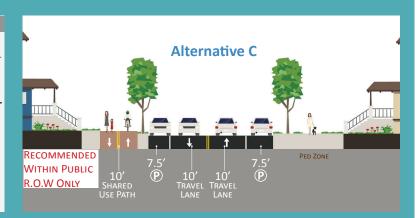
BENEFITS

- completely separated from motor vehicle traffic and potentially with fewer intersections and as a result are safer than other facilities

- can provide an enjoyable recreational onnortunity
- appeals to users of all ages and abilities
- parking does not need to be restricted

CONSIDERATIONS

- ideal for roadways with longer blocks as additional considerations is required at driveways - attract a variety of user groups who often have conflicting needs



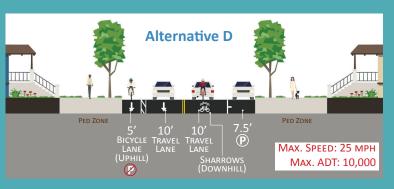
CLIMBING BICYCLE LANE & SHARROWS

• install a bicycle lane on one side (uphill direction) and add sharrows on the other side of the roadway (downhill direction)

BENEFITS

CONSIDERATIONS

- a dedicated bicycle facility uphill enables motorists to safely pass slower-
- speed bicyclists - maximizes existing roadway widths
- sharrows do not provide dedicated space for bicyclists and are typically used only by experienced bicyclists
- parking needs to be restricted on one side may encourage wrong-way bicycle riding
- recommended for roadways with steep



SHARROWS & TRAFFIC CALMING

• install sharrows or shared lane markings in conjunction with traffic calming measures such as speed humps, narrow travel lanes, adding curb extensions, etc.

BENEFITS

- indicates the most appropriate and safe locations to ride on with respect to parked cars and moving traffic
- reinforces the legitimacy of bicycle traffic on the street
- requires no restrictions on parking
- can be used to fill a gap within a bicycle
- provide wayfinding guidance

CONSIDERATIONS

does not dedicate exclusive use for bicyclists



MAX. SPEED: 25 MPH Max. ADT: 10,000

INTERSECTION TREATMENTS

- · consider intersection treaments for both bicyclists and pedestrians to improve visibility / safety and help in creating a complete network
- intersection treatments can include but are not limited to high-visibility crosswalks, bicycle boxes, curb extensions, raised crosswalks, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.



Low-Cost Curb Extensions and continuous bicycle markings, Hoboken, NJ

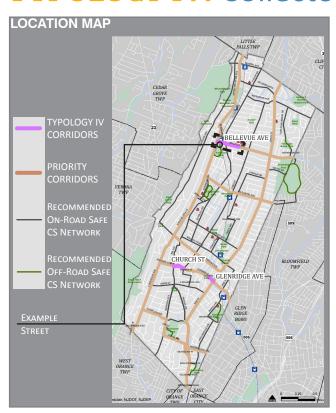


Bicycle Box, San Francisco, CA (Credit: SF Bicvcle Coalition)

COMPLETE STREETS IMPLEMENTATION PLAN

Typology IV: Collector Street (38'+ wide)

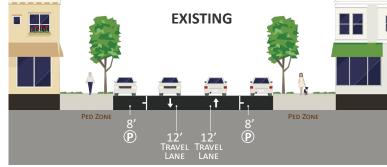
(Average ADT = 5,600)







Existing street example - Bellevue Avenue (Eastbound)



RECOMMENDATIONS

TWO-WAY PROTECTED BICYCLE LANES

 install two-way protected bicycle lanes with a striped buffer with bollards

BENEFITS

- dedicates and protects space for

- bicyclists
 reduces risk and fear of collisions
 especially with over-taking vehicles
- more attractive to a wide range of bicyclists at all levels and ages

CONSIDERATIONS

- ideal for roadways with longer blocks as additional considerations is required at driveways and side-street crossings
- parking will need to be restricted on one side



BUFFERED BICYCLE LANES

install bicycle lanes on both sides with a striped buffer

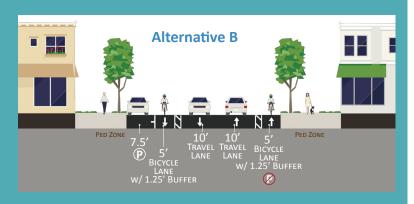
BENEFITS

- enables bicyclists to ride at their preferred speed without interference from prevailing traffic conditions

- a buffer provides a greater shy distance between motor vehicles and bicyclists thus appealing to a wider cross-section of bicycle users
- visually reminds motorists of bicyclists' right to the street

CONSIDERATIONS

- parking will need to be restricted
- greater enforcement is required to prevent motorists from parking in the bicycle lane



TYPOLOGY IV: Recommendations (Continued)

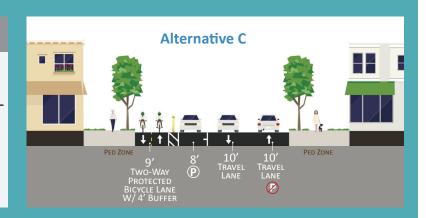
TWO-WAY PROTECTED BICYCLE LANES ADJACENT TO PARKING

• install two-way protected bicycle lanes with a striped buffer in between the sidewalk and on-street parking

BENEFITS

CONSIDERATIONS

- dedicates and protects space for bicyclists
- eliminates risk and fear of collisions especially with over-taking
- more attractive to a wide range of bicyclists at all levels and ages
- ideal for roadways with longer blocks as additional considerations is required at driveways and side-street crossinas
- parking will need to be restricted on one side



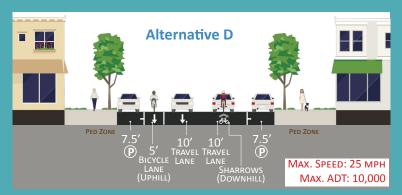
CLIMBING BICYCLE LANE & SHARROWS

• install a bicycle lane on one side (uphill direction) and add sharrows on the other side of the roadway (downhill direction)

- a dedicated bicycle facility uphill enables motorists to safely pass slower-speed bicyclists
- maximizes existing roadway widths
- does not need restrictions on parking

CONSIDERATIONS

- sharrows do not provide dedicated space for bicyclists and are typically used only by experienced bicyclists
- may encourage wrong-way bicycle riding
- recommended for roadways with steep slopes



SHARROWS & TRAFFIC CALMING

• install sharrows or shared lane markings in conjunction with traffic calming measures such as speed humps, narrow travel lanes, striped medians, curb extensions, etc.

BENEFITS

- indicates the most appropriate and safe locations to ride on with respect to parked cars and moving traffic
- reinforces the legitimacy of bicycle traffic on the street
- requires no restrictions on parking
- can be used to fill a gap within a bicycle network
- provide wayfinding guidance

CONSIDERATIONS

does not dedicate exclusive use for bicyclists



INTERSECTION TREATMENTS

- · consider intersection treaments for both bicyclists and pedestrians to improve visibility / safety and help in creating a complete network
- intersection treatments can include but are not limited to high-visibility crosswalks, bicycle boxes, curb extensions, raised crosswalks, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.

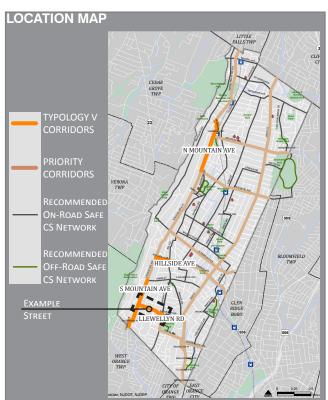


Low-Cost Curb Extensions and continuous bicycle markings, Hoboken, NJ



Bicycle Box, San Francisco, CA (Credit: SF Bicvcle Coalition)

Typology V: Local Street (Average ADT = 1,600)







Existing street example - Llewellyn Rd (Eastbound)



RECOMMENDATIONS

CLIMBING BICYCLE LANE & SHARROWS

• install a bicycle lane on one side (uphill direction) and add sharrows on the other side of the roadway (downhill direction)

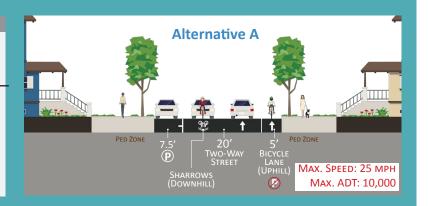
BENEFITS

- a dedicated bicvcle

- facility uphill enables motorists to safely pass slower-speed bicyclists
- maximizes existing roadway widths

CONSIDERATIONS

- sharrows do not provide dedicated space for bicyclists and are typically used only by experienced bicyclists
- parking may need to be restricted on
- may encourage wrong-way bicycle riding - recommended for roadways with steep
- slopes



BICYCLE ROUTE

• install signage on low-volume /low-speed streets where exclusive bicycle facilities are not necessary

BENEFITS

- reinforces the legitimacy of bicycle traffic on the street

- requires no additional space or restrictions on parking
- can provide wayfinding guidance
- can discourage sidewalk riding

CONSIDERATIONS

- does not dedicate exclusive use for bicyclists



TYPOLOGY V: Recommendations (Continued)

ADVISORY BICYCLE LANES

• install dashed white lines on both sides of a low traffic volume roadway (no centerline) to delineate bicycle areas

BENEFITS

- striping offers visual separation and reminds people that the road is a shared space

- have a traffic calming effect as motorists tend to travel slower - provides a viable option for bicycle facilities on narrow roadways

CONSIDERATIONS

less protection for cyclists than a conventional bicycle lane - unfamiliarity with the treatment can lead to confusion - may require restrictions on parking

Alternative C PED ZONE MAX. SPEED: 25 MPH Max. ADT: 2,500

SHARROWS & TRAFFIC CALMING

• install sharrows or shared lane markings in conjunction with traffic calming measures such as installing speed humps, adding curb extensions, etc.

BENEFITS

CONSIDERATIONS

- indicate the most appropriate and safe locations to ride on with respect parked cars and moving traffic
- reinforces the legitimacy of bicycle traffic on the street
- requires no restrictions on parking
- can be used to fill a gap within a bicycle network
- provide wayfinding guidance

- does not dedicate exclusive use for bicyclists



BICYCLE BOULEVARD / GREENWAY

- · consider a bicycle boulevard / greenway treatment by optimizing bicycle travel along low-volume and low-speed streets using treatments such as traffic calming, signage, and pavement markings, and intersection crossings
- can be achieved with minor changes to the street configuration and no additional width is required
- typical deisgn elements along a bicycle boulevard include forced-turn islands. centerline medians with bicycle/pedestrian pass throughs, raised crossings / intersections, minitraffic circles, pedestrian refuges etc.



Bicycle Boulevard, Portland, OR (Credit: NACTO)



Mini-Traffic Circle, Westfield, NJ

INTERSECTION TREATMENTS

- · consider intersection treaments for both bicyclists and pedestrians to improve visibility / safety and help in creating a complete network
- · intersection treatments can include but are not limited to high-visibility crosswalks, bicycle boxes, curb extensions, raised crosswalks, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.

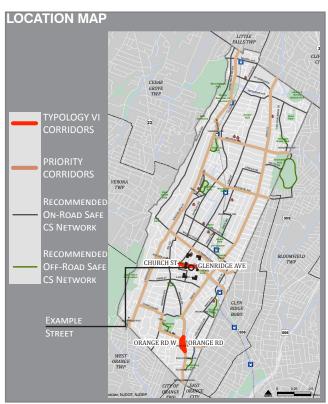


Low-Cost Curb Extensions and continuous bicycle markings, Hoboken, NJ



Bicycle Box, San Francisco, CA (Credit: SF Bicycle Coalition)

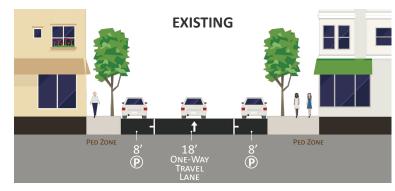
Typology VI: One-Way Streets







Existing street example - Glenridge Ave (Eastbound)



RECOMMENDATIONS

CONTRAFLOW BICYCLE LANE & SHARROWS

 install a contraflow bicycle lane in the opposite direction of motor vehicle traffic with a striped buffer and sharrows on the other side

BENEFITS

- provides direct access and connectivity for bicycles traveling in both directions
- Bicyclists do not have to make a detour as a result of one-way traffic
- limits dangerous wrong-way riding by allowing cyclists to safely ride in the opposite direction of cars

CONSIDERATIONS

- use only where bicyclists can effectively and conveniently make transitions at the terminus of the bicycle lane
- ideal for a few blocks to complete a proposed or existing bicycle network
- relevant signage is important
- buffers are needed for safe movement of the bicyclists

Alternative A PED ZONE 7.5' CONTRAFLOW P BICYCLE LANE W/ 3' BUFFER W/ 3' BUFFER Alternative A PED ZONE PED ZONE MAX. SPEED: 25 MPH MAX. ADT: 10,000

BUFFERED BICYCLE LANE (ONE-WAY TRAVEL)

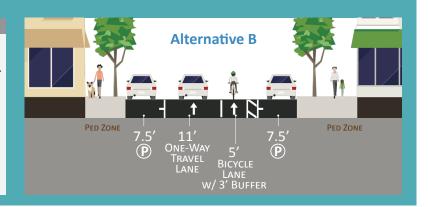
· install bicycle lane with a buffer

BENEFITS

- enables bicyclists to ride at their preferred speed without interference from prevailing traffic conditions
- a buffer provides a greater shy distance between motor vehicles and bicyclists thus appealing to a wider cross-section of bicycle users
- visually reminds motorists of bicyclists' right to the street

CONSIDERATIONS

- only accommodates one-way travel for bicyclists
- to discourage wrong-way riding a bicycle facility should be provided for the opposite direction on a neighboring street



COMPLETE STREETS IMPLEMENTATION PLAN

TYPOLOGY VI: Recommendations (Continued)

BICYCLE BOULEVARD / GREENWAY

- consider a bicycle boulevard / greenway treatment by optimizing bicycle travel along low-volume and low-speed streets using treatments such as traffic calming, signage, and pavement markings, and intersection crossings
- can be achieved with minor changes to the street configuration and no additional width is required
- typical deisgn elements along a bicycle boulevard include forced-turn islands, centerline medians with bicycle/pedestrian pass throughs, raised crossings / intersections, minitraffic circles, pedestrian refuges etc.



Bicycle Boulevard, Portland, OR (Credit: NACTO)



Mini-Traffic Circle, Westfield, NJ

INTERSECTION TREATMENTS

- consider intersection treaments for both bicyclists and pedestrians to improve visibility / safety and help in creating a complete network
- intersection treatments can include but are not limited to high-visibility crosswalks, bicycle boxes, curb extensions, raised crosswalks, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.



Low-Cost Curb Extensions and continuous bicycle markings, Hoboken, NJ



Bicycle Box, San Francisco, CA (Credit: SF Bicycle Coalition)

SIGNAGE

 consider placing centerline "stop for pedestrians" signs on lower speed roadways to help alert drivers of a crosswalk



"Stop For Pedestrians" Sign, Morristown, NJ

OTHER RECOMMENDATIONS

- consider using other traffic calming measures such as installing speed humps, tightening the curb radii of certain streets
- install high-visibility crosswalks where feasible and regularly maintain them
- enforce maintenance of sidewalks, including regularly clearing sidewalk of leaves and other debris



Orange Road West, Montclair, NJ



BLANK



IV. Implementation Guide

Introduction

The Township of Montclair's Complete Streets policy (see *Appendix F*) specifies actions to be taken to support its implementation that recognize, integrate, accommodate, and balance the needs of all road users in all projects and make Complete Streets a routine part of everyday operations.

Policy Implementation Priorities

The power of a Complete Streets policy to change the roadway environment and positively impact mobility for all users depends upon the quality of its implementation strategy and execution. Implementation of a Complete Streets policy varies widely by organization (municipality, county, state) and context (roadway conditions, traffic volumes, jurisdiction, transit, socioeconomics, etc.), yet successful implementation is known to include certain common components: (1) a thorough understanding and acceptance by staff, elected officials, and local stakeholders; (2) consistency with other policies, procedures, guidelines, and ordinances; and (3), a comprehensive and systematic relationship to administrative operations.

To achieve full acceptance by staff, elected officials, and local stakeholders, it would be desirable to initiate a program of education and engagement that explains the Complete Streets policy, along with associated planning techniques, design elements, and approaches. In addition, implementation of the Complete Streets policy should be consistent with and supported by other existing policies, procedures, guidelines, and ordinances. These may need to be revised to achieve this consistency.

To integrate the Complete Streets policy into the administrative operations of Montclair, the policy should be deployed strategically in a way that is comprehensive and systematic, operating consistently within the normal course of business and affecting all aspects of transportation planning, design, maintenance, and operations.

One way to approach this is by making use of a series of Complete Streets checklists similar to those within the Essex County Complete Streets Implementation Plan that supports a comprehensive, cooperative and systematic Complete Streets implementation among the various departments operating within the Township. Consistent and systematic utilization of the checklists will empower the Township's planners, engineers, maintenance staff, and contracted agents (including consultants and construction companies) to identify, design, construct, maintain, or operate a transportation network with that provides mobility for all users, consistent with the Complete Streets policy.

Project Development and Delivery

A key to Complete Streets implementation is the timely and effective translation of good policy intentions into real world improvements, including capital projects, maintenance and operational procedures, resurfacing, and access considerations during construction or repair work.

An effective project development and delivery process must be explicit, directional, and critical. It is explicit in that it is clearly and purposefully developed, communicated, and implemented throughout the Township. It is directional in that it encompasses a flow of communication from conception to completion. It is critical in that it subjects improvement concepts to scrutiny, review, revision, and/ or approval by an appropriate body. The approving body may be a department within the Township, or a review committee, such as the Traffic and Transportation Committee, with informed members from a cross



section of departments (such as planning, engineering, public works, or code enforcement) and elected officials (such as planning board or council members).

It is anticipated that the Township would receive project ideas from a variety of sources. These sources may include public input, staff input, formal planning efforts, and others. Project ideas can be screened by appropriate Township staff to offer an initial assessment of validity.

Once approved, the project would be assigned to the appropriate Township department. Once assigned to appropriate department, the Complete Streets implementation checklists are completed, to determine whether the proposed work complies with the Complete Streets policy, are completed by the project manager and submitted for evaluation by a review Committee.

Implementation of Complete Streets elements on roadways under the jurisdiction of other transportation agencies requires coordination with these agencies. This includes the preparation and transmittal of project needs statements to the relevant agencies requesting the implementation of Complete Streets improvements on the subject roadways. It is fortuitous that Essex County and NJDOT have already adopted their own Complete Streets policies.

Implementation Matrix

Table 2: Implementation Matrix Identifies the limits, jurisdictional responsibility, time-frame for completion and preliminary cost estimate for each link in the Recommended SAFE / CS Network and each proposed pedestrian network enhancement.

Funding Sources

There are a variety of funding sources available for the development of bicycle and pedestrian facilities including: federal, state and local government, capital funding from the municipality, private and non-profit grants.

The following is a compilation of funding sources that have been, or could be used to fund pedestrian and bicycle improvements. It is important to note that funding available for bicycle and pedestrian related projects does change and the Township of Montclair should work closely with NJTPA, Essex County and NJDOT to monitor and take advantage of the new funding opportunities.

→ FEDERAL FUNDING OPPORTUNITIES

- Transportation Alternatives Program (TAP)
- Safe Routes to School Program (SRTS)
- Local Safety Program
- Recreational Trails Program (RTP)
- STATE FUNDING OPPORTUNITIES
- NJDOT Municipal Aid
- NJDOT Bikeway Grant Program
- NJDOT Safe Streets to Transit (SSTT)
- NJ Division of Highway Traffic Safety Grants
- New Jersey Healthy Communities
 Network Grants

→ PRIVATE AND NON-PROFIT FUNDING SOURCES

- Sustainable Jersey
- People for Bikes Community Grants
- The Robert Wood Johnson Foundation

→ OTHER POTENTIAL FUNDING SOURCES

- Municipal Allocations
- Impact Fees
- Local Private-Sector Funding
- Adopt-A-Trail Programs
- Membership campaigns

See Appendix G: Funding Programs and Sources for descriptions of the funding sources.



Table 2: Implementation Matrix						
FACILITY TYPE		COSTS	RESPONSIBILITY	TIME-FRAME Short Term: 1 year Medium Term: 1-2 years Long Term: 2 years +		
Sidewalks		\$50/ LF	Explore shared responsibility for sidewalk maintenance between Township and property owners	Short		
Curb Ramps		\$500 - \$1,500	DPW	Long		
Pedestrian-Sca	ale Lighting	\$1,000 - \$2,000/unit Spaced 50' on center	DPW	Long		
Parklets		\$500 – \$5,000	Private sponsor/ public partnership	Short		
Mid-block cros	ssings	\$500	DPW	Short		
Gateways		\$500 - \$5,000	DPW	Mid		
Crosswalks	A. Striped	\$1,000 - \$2,000	DPW	Short		
	B. Paver Style	\$2,000 - \$10,000	DPW	Short		
Mini-traffic cir	cles	\$2,000 - \$10,000	DPW	Mid		
Curb Extensions	A. No Drainage	\$2,000 - \$5,000	DPW	Mid		
	B. Drainage Required	\$5,000 - \$10,000	DPW	Mid		
Pedestrian ref	uge islands	\$5,000 - \$10,000	DPW	Mid		
RRFB (Flashing lights)	g warning	\$5,000	DPW	Short		



Table 2: Implementation Matrix (continued)									
FACILITY TYPE	COSTS	RESPONSIBILITY	TIME-FRAME Short Term: 1 year Medium Term: 1-2 years Long Term: 2 years +						
In-Street Crossing Sign	\$200	DPW	Short						
Pedestrian Countdown Signals	\$10,000 - \$20,000* (May require new traffic signal- \$200,000)	DPW/ County	Mid						
Conventional Bicycle Lanes	\$~10,000 - \$15,000/mile	DPW	Short						
Buffered Bicycle Lanes	\$15,000 - \$20,000/mile	DPW	Short						
Two-way protected bicycle lanes	\$15,000 - \$20,000/mile	DPW	Short						
Bicycle Lanes/ Shared Lane Combo	\$5,000/mile	DPW	Short						
Contraflow Bicycle Lanes	\$15,000 - \$20,000/mile	DPW							
Bicycle Boulevard (Speed humps/tables, Shared Lanes)	\$5,000 - \$20,000/mile	DPW	Mid						
Advisory Bicycle Lanes	\$10,000 - \$15,000/mile	DPW	Short						
Sharrows or Shared Lane Markings	\$2,000 - \$5,000/mile	DPW	Short						
Shared Use Path	\$1-2,000,000/mile	DPW	Long						



V. Next Steps

We recommend this plan be adopted as an amendment to the Circulation Element of the Master Plan of the Township. It will serve as a guide for future improvements as funds are available and specific roads are evaluated / repaved.

As specific roads are evaluated for improvements, focused public outreach efforts will guide the decision-making on specific typologies and final options selected. This plan is a technical and policy resource for that process.





Appendix

- A. Technical Memorandum 1: Data Review and Bibliography
- B. Steering Committee Members
- C. Technical Memorandum 2: Network Maps
- D. Community Outreach
- E. Recommended SAFE CS Street Inventory w/ Street Typologies
- F. Implementation Matrix
- G. Funding Sources



Appendix A:

TECHNICAL MEMORANDUM 1: DATA REVIEW AND BIBLIOGRAPHY

DRAFT Technical Memorandum 1: Data Review and Bibliography

Project #J4666.20

Prepared for:

The New Jersey Department of Transportation



Prepared by:

The RBA Group

An **∥**|**∥**|**∫** Company

Submitted:

November 3 2016

Contents

Introduction	1
Data Reviewed	
Elements of Prior Plans	
Bicycle and Pedestrian Network with Recommendations Overlay	2
Next Steps	3
Attachment A – Montclair Bicycle and Pedestrian Recommendation Inventory (2005-2016)	
Attachment B - Potential Facilities List	
Attachment C – Montclair Recommendations Overlay Map	

Introduction

This data collection effort review included the review of plans, studies, reports, resources, and mapping provided by Montclair Township. The purpose was to review and build upon bicycle and pedestrian recommendations from prior planning efforts to assist in the refinement of a priority bicycle and pedestrian network. This desktop exercise will further be refined based on outreach and field work.

Data Reviewed / Bibliography

The RBA Team reviewed plans and bicycle and pedestrian networks that have been developed previously. The following tables highlight reports, studies, plans, and maps evaluated as part of this task, each of these documents were provided by Montclair Township.

TABLE 1 - TOWNSHIP REPORTS, STUDIES, AND PLANS

Year	Name of Report, Study, Plan					
2005	Montclair Bicycle & Pedestrian Local Assistance Study (NJDOT, Baker)					
2009	Safe Routes to School District Wide Engineering, Enforcement & Encouragement Grant including					
	10 SRTS Workshops and Travel Plans (NJDOT, RBA)					
2009	Montclair Complete Streets Policy (Montclair Township)					
2012	Bronze Bicycle Friendly Community Recommendations (League of American Bicyclists) [Bicycle					
	Friend Community Feedback Report, 2-13]					
2012	Eat. Play. Live Better Community Survey (MSU CREEHS, Partners for Health)					
2012	Essex County Complete Streets Policy (Essex County)					
2013	Safe Routes to School Action Plans for Montclair's 10 Middle and Elementary Schools					
2014	Pedestrian Safety Report (Montclair, VTC)					
2014	Montclair Senior Walkability Report					
2014	Lifelong Montclair Guide to Public Transportation					
2015	Unified Land Use and Circulation Element of the Master Plan (Montclair, TCNJ)					
2015	Bloomfield Ave. Complete Corridor Plan (Together North Jersey)					
2015	Bloomfield Ave. Corridor Health Impact Assessment (HIA) (NJ Health Impact Collaborative)					
2015	Montclair Redevelopment Plans (Montclair)					

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TABLE 2 - TOWNSHIP MAPS

Year	Name of Map
2005	Bicycle Compatible Roadways
2005	Bicycle Suitability Map
2007	Desired Conditions Sketch
2009	SRTS Bike Network Map
2013	Proposed Conceptual Bicycle Route Network from the 2015 Land Use & Circulation Element of
	the Master Plan
2015	Bloomfield Avenue Complete Corridor Bike Network Map
2015	Montclair Redevelopment Map

Elements of Prior Plans

The Project Team developed an inventory of bicycle and pedestrian recommendations from prior plans based on 24 locations. The recommendations are color coded by type. See *Attachment A – Montclair Bicycle and Pedestrian Recommendation Inventory* (2005-2016).

The Township's application to the NJDOT Local Bicycle and Pedestrian Planning Assistance Program included a summary of many years' discussion and planning for bicycle and pedestrian design considerations for municipal and County roads in Montclair. As part of the summary, the Township listed recommendations for treatments based on previous studies, including:

- Location
- Study Recommendation
- Study/ Source
- Author
- Year
- Type
- Status

. See Attachment B - Potential Facilities List.

Bicycle and Pedestrian Network with Recommendations Overlay

This project is using the 2013 Proposed Conceptual Bicycle Route Network included as part of the 2015 Land Use & Circulation Element of the Master Plan as a starting point for the priority bicycle and pedestrian network. This map was developed by the Township as a modification to the 2007 Desired Conditions Sketch Map, and represents the 2007 approach on where bicycle routes may be appropriate, but does not specify the type of bicycle facility.

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The *Proposed Conceptual Bicycle Route Network* was compared to the inventory of recommendations reviewed as part of this task. The result is an overlay map of previous bicycle and pedestrian facility recommendations on the *2013 Proposed Conceptual Bicycle Route Network Map*. See *Attachment C – Montclair Recommendations Overlay Map*. Per discussion at the April 20, 2016 Scoping Meeting, Bloomfield Avenue will be excluded from this project's network.

Next Steps

This assessment, along with the information from the outreach tasks, will result in the development of a Proposed Bicycle and Pedestrian Network Map.

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Legend (color coded by shaded cells)

Parking Restriction Changes
One-way Changes
Sidewalk/Path (Add/Widen)
Signage, Striping, & Signals
Curbing & Roadway Changes

Location	Study Recommendation	Study/ Source	<u>Author</u>	<u>Year</u>	<u>Түре</u>	<u>Status</u>	Notes	Available PDF/Link
			T	Г				
								No. of the Control of
								https://files.acrobat.com/a/p
		MONTCLAIR BICYCLE & PEDESTRIAN LOCAL		l		L		review/752b02df-c618-4dae-
1 Rail Line - Normal Ave - Mt. Hebron Ave. Rail Line - 3.5 mile town wide	Rail Trail, rail with trail shared use path Rail Trail, rail with trail shared use path	ASSISTANCE STUDY	NJDOT, Baker	2005	Engineering	Planning	Ice & Iron Greenway	88e7-5f7abdfecdc7
Rail Lille - 3.5 fille town wide	2.) Kali Itali, tali witi tiali shared use patri		L				ice & iron Greenway	
						T		
								https://files.acrobat.com/a/p
Elm St - b/w Elmwood & Fulton St	1.) Provide a longitudinal (ladder striped) crosswalk across	MONTCLAIR BICYCLE & PEDESTRIAN LOCAL						review/752b02df-c618-4dae-
2 (Short Term)	Elm St at Elmwood Ave	ASSISTANCE STUDY	NJDOT, Baker	2005	Engineering			88e7-5f7abdfecdc7
	2.) Install W11-2, pedestrian warning signs, at the							
	northbound and southbound approaches to the proposed							1
	crosswalks							
	1.) Provide a longitudinal (ladder striped) crosswalk across							
Elm St - b/w Elmwood & Fulton St (Alternative 1)		ASSISTANCE STUDY	NJDOT, Baker	2005	Engineering			
	 Install W11-2, pedestrian warning signs, at the northbound and southbound approaches to the proposed 							
	crosswalks							1
	3.) Install raised crosswalks at Union St, Fulton St,							
	Elmwood Ave, & Lexington Ave							
	Install W11-2, Pedestrian Warning Sign Install 1 Speed Table with 2 Concrete Chokers between	MONTCLAIR BICYCLE & PEDESTRIAN LOCAL						
Elm St - b/w Elmwood & Fulton St (Alternative 2)	Elmwood Ave and Fulton St	ASSISTANCE STUDY	NJDOT, Baker	2005	Engineering			
Emise by w Emission of Chicemative 2)	2.) Install 2 W11-2 Pedestrian Warning Sign	ASSISTANCE STOD!	143001, Baker	2003	Linginicering	 		
	3.) Install 2 painted bicycle lane symbols with Text "BIKE							
	LANE"							
	4.) Install 2 R9-6 "Bicyclists Yield to Pedestrians							
	5.) Install 1 Raised crosswalk							
								https://files.acrobat.com/a/p
Intersection of Grove St & Glenridge Ave		MONTCLAIR BICYCLE & PEDESTRIAN LOCAL						review/752b02df-c618-4dae-
3 Short Term:	Install 4 countdown signal heads Install 4 high visability crosswalks	ASSISTANCE STUDY	NJDOT, Baker	2005	Engineering			88e7-5f7abdfecdc7
laternation of Court Ct C Classides Ass	2.) Install 4 figh visability crosswarks							
Intersection of Grove St & Glenridge Ave Long Term:	1.) Relocate stop bar back 50' on Grove St							
Long Term:	2.) Install 2 R10-11a "No Turn on Red" signs							
	3.) Install 4 R7-1 "No Parking Any Time" signs			-				
	27, 2 2 2							
								https://files.acrobat.com/a/p
		MONTCLAIR BICYCLE & PEDESTRIAN LOCAL				l		review/752b02df-c618-4dae-
4 Grove St - Short Term:	1.) Install 8 (eight) W16-1 "Share the Road" signs	ASSISTANCE STUDY	NJDOT, Baker	2005	Engineering	l		88e7-5f7abdfecdc7
	2.) Stripe 8' shoulders northbound & Southbound							
	3.) Install 3,100' of 5' wide concrete sidewalk between							
	Cooper and Watching Aves							

Concept

Legend (color coded by shaded cells)

Parking Restriction Changes
One-way Changes
Sidewalk/Path (Add/Widen)
Signage, Striping, & Signals
Curbing & Roadway Changes

Curbing & Roadway Changes Concept								
Location	Study Recommendation	Study/ Source	Author	Year	Туре	Status	Notes	Available PDF/Link
		<u> </u>		1001		310100	110100	
	4.) Upgrade pedestrian signals to countdown signal heads							
	5.)Restripe standard crosswalks to longitudinal (ladder						Continental striping	
	striped) crosswalks						pattern?	
	Resurface Grove St Install a landscaped median barrier							
	Install a landscaped median barrier Install a crosswalk with In-pavement lighting at							
	Bellevue Ave							
	believue Ave							
					1			https://files.acrobat.com/a/p
Intersection of Watchung Ave & Park St (@Watchung		MONTCLAIR BICYCLE & PEDESTRIAN LOCAL						review/752b02df-c618-4dae-
	1.) Upgrade 3 crosswalks to longitudinal (ladder striped)	ASSISTANCE STUDY	NJDOT, Baker	2005	Engineering			88e7-5f7abdfecdc7
	2.) Install 3 (three) W11-2, Pedestrian warning signs, at all							
	approaches to intersection							
Intersection of Watchung Ave & Park St (@Watchung								
	1.) Relocate Bus Stop to Watchung Plaza West							
	2.) a. Install Refuge island for pedestrians							
	b. With supporting (4) stamped crosswalks and (3)							
	warning signs							
								https://files.acrobat.com/a/p
	1.) Eliminate on-street parking in sections with limited	MONTCLAIR BICYCLE & PEDESTRIAN LOCAL						review/752b02df-c618-4dae-
6 Valley Rd - Short Term:	sight distance	ASSISTANCE STUDY	NJDOT, Baker	2005	Engineering			88e7-5f7abdfecdc7
	2.) Restripe to provide bicycle lanes or 6' shoulders with							
	"Share the Road" signs							
	3.) Install a longitudinal crosswalk between Alvin Place & Cooper Ave, supplemented w a Pedestrian Channelizer							
	(SPCCD)							
	4. Install W11-2 Pedestrian Warning Signs & Actuated							
	Flashing Warring Beacons							
	Install an infared detection crosswalk w signal & push							
	buttons between Alvin Place & Cooper Ave							
,								
	1.)Create a school pavement "quilt" to define the	SRTS TRAVEL PLAN- BRADFORD ELEMENTARY						
	drop-off zone along College Avenue	SCHOOL	RBA	2013	Engineering			
	2.) Construct sidewalk across railroad tracks on Mt.			l				
	Hebron along the southern (eastbound) side							
	3.)Install "Pull Up" signage in the red zone to reinforce							
	use of the entire curb length							
	4.)Conduct a parking utilization and circulation study and							
	investigate options for school staff and student drop-			I	1			
	off and pick-up procedures							

Legend (color coded by shaded cells)

Parking Restriction Changes
One-way Changes
Sidewalk/Path (Add/Widen)
Signage, Striping, & Signals
Curbing & Roadway Changes

		Concept							
Loc	ation	Study Recommendation	Study/ Source	Author	Year	Туре	Status	Notes	Available PDF/Link
_									
8		1.)Install roadway striping to define the drop-off area							
- 1		along the driveway and Washington Street including:			1			1	
- 1		Restripe stop line, crosswalk, align the stop sign with the	SRTS TRAVEL PLAN- CHARLES H. BULLOCK		1			1	
Cha	irles H. Bullock Elementary School	stop line	ELEMENTARY SCHOOL	RBA	2013	Engineering		1	
- 1		2.) Update current drop off/pick up procedures with:							
- 1		Map, rules, & procedures along local streets within school			1			1	
- 1		campus & any school driceway acces; signs on street;							
(Wa	ashington St)	signs for cell phone free zones			1			1	
		3.)Order and install "No Idling Zone" signs around the							
- 1		school							
_						•	•		•
9		1.) Investigate driveway circulation and potential for							
- 1		widening or changes to Edgemont Road in front of the	SRTS TRAVEL PLAN- EDGEMONT ELEMENTARY		1			1	
Edg	emont Elementary School	school	SCHOOL	RBA	2013	Engineering			
(Ed	gemont Rd, N. Mountain Ave)	2.) Install additional state-of-the-art bike racks							
- 1		3.)Plan alternative drop-off/ pick-up area, potentially							
		along North Mountain Avenue behind the school							
10									
- 1		1.) Install permanent roadway centerline "Stop for			1			1	
- 1		Pedestrian" signs along Orange Road and Hillside Avenue			1			1	
- 1		and install push button actuated Rectangular Rapid			1			1	
I		Flash Beacon pedestrian crossing signs (RRFB) at the mid-	SRTS TRAVEL PLAN- HILLSIDE ELEMENTARY						
Hills	side Elementary School	block crossing on Orange Road	SCHOOL	RBA	2013	Engineering			
		2.)Define and sign an area along St. Luke's Place for drop-			1			1	
(Ora	ange Rd, Hillside Ave, St. Luke's PI)	off or pick-up							
- 1		3.)Paint "School Zone" pavement legends on the			1			1	
- 1		roadways approaching the school							
- 1									
- 1		4.)Create a school pavement "quilt" along Orange Road			1			1	
- 1		between Hillside School and Montclair Community Pre-K							
- 1		5.)Evaluate restricting Right Turn on Red at the			1			1	
- 1		Orange Road & Hillside Ave/ Church Street signalized							
		intersection (during school hours)							
11		1 Nevertigate driveway circulation and student dree off			1		1		
CI-		Investigate driveway circulation and student drop-off and pick up procedures around the school campus	SRTS TRAVEL PLAN- GLENFIELD MIDDLE SCHOOL	DRA	2013	Engineering	1		
	nfield Middle School	2.)Install additional state-of-the-art bike racks	SK13 TRAVEL PLANT GLENTIELD WIIDDLE SCHOOL	NDA	2013	Engineering			
(Ma		3.)Install "No U-Turn" signs along Maple Avenue around							
- 1		the school property			1		1		
		the school property							
12		1.) Change parking restrictions on the southside of						1	
12		Cedar Avenue to "No Stopping, Standing or Parking"	SRTS TRAVEL PLAN- NISHUANE ELEMENTARY		1	1	1		
Nice	huana Elementary School	during school days (8am-4pm)	SCHOOL	RBA	2012	Engineering	1		
INISI	huane Elementary School	during school days (oant-4pin)	SCHOOL	NUA	2013	Engineering			

Legend (color coded by shaded cells)

Parking Restriction Changes
One-way Changes
Sidewalk/Path (Add/Widen)
Signage, Striping, & Signals
Curbing & Roadway Changes

	Curbing & Roadway Changes Concept								
Lo	ocation	Study Recommendation	Study/ Source	Author	<u>Year</u>	Туре	<u>Status</u>	<u>Notes</u>	Available PDF/Link
_									
(0		2.)Create and sign "Park and Walk" locations at the South End Municipal Parking Lot and the Nishuane Park Parking Lot							
		3.)Use paint and signs to better define drop-off areas. Create a school pavement "quilt" to define the drop-off zone on the school-side of Cedar Avenue							
13								T	1
R		1.) Revise drcp-off procedures to separate cars and buses. Have buses only in front of school along N. Fullerton Ave, and two options for cars:Chestnut Street on the side of the school and with students using the side doorRand Place across from the school	SRTS TRAVEL PLAN- RENAISSANCE AT RAND MIDDLE SCHOOL	RBA	2013	Engineering			
(1)	N. Fullerton Ave, Chestnut St, Rand PI)	2.)Reverse the direction of traffic along Rand Place to flow westbound from Forrest Street to N. Fullerton Ave and prohibit right turns onto N. Fullerton Avenue by adding a "No Right Turn" sign							
ľ		3.)Widen the sidewalk along Rand Place							
		4.)Install "Pull Up Here" signage along Chestnut Street to reinforce the proper location for curbside drop-off							
14							1	1	
w		1.) Change the parking restriction along N. Fullerton Avenue between Fairfield Street and Garden Street along the southbound (west) side to "No Stopping or Standing." Possibly 7:00 am –9:30 am School Days	SRTS TRAVEL PLAN- WATCHUNG ELEMENTARY SCHOOL	RBA	2013	Engineering			
(1)	N. Fullerton Ave, Fairfield St, Garden St, Watchung Ave)	Consider installing a 4-Way STOP at N. Fullerton Avenue and Fairfield Street							
ľ		3.)Install a "No Turn on Red" sign at the intersection of N. Fullerton Avenue and Watchung Avenue, a: least during school commute hours							
1		4.)Stripe "STAND BACK" lines on the curb ramps around the school							
Ξ									•
15 M	Iontclair Township	Provide a holistic planning framework involving development within zones bordering train stations and within the downtown and commercial areas of the Township.	UNIFIED LAND USE & CIRCULATION ELEMENT	Montclair, TCNJ	2015	General			https://files.acrobat.com/a/p review/27683b07-5a18-43fd- 88e7-79ed4e603746
_									
16 La	ackawana Plaza	Redevelopment of C-1 Central Business zone property- with a transportation focus on connectivity and improved safety for all modes of travel.	LACKAWANNA PLAZA REDEVELOPMENT PLAN VISIONING	Phillips Preiss Grygiel LLC	2015	General			https://files.acrobat.com/a/p review/e92a65c0-ffe0-4b67- 82c2-5bd1ee8b4881

Legend (color coded by shaded cells)

Parking Restriction Changes
One-way Changes
Sidewalk/Path (Add/Widen)
Signage, Striping, & Signals
Curbing & Roadway Changes

		Curbing & Roadway Changes	S		Concept				
	Location	Study Recommendation	Study/ Source	Author	Year	Туре	Status	Notes	Available PDF/Link
									1-1
17			AMMENDMENT TO THE LU & CIRCULATION	Montclair Township Department of Planning and Community Development	2016	General			https://files.acrobat.com/a/p review/4e44cf02-e12f-4a82- b58c-2b53cec87a3c
18		Educational workshops throughout the state in an effort to raise awareness and help decision make's better understand the unique mobility needs of senior citizens.	MONTCLAIR SENIOR WALKABILITY REPORT	NJDOT, PB, RBA	2014	Programmatic			https://files.acrobat.com/a/p review/cd11abe0-daff-472d- 8f85-a81d8533b788
19	Montclair Township	Inform senior citizens on available public transportation resources.	LIFELONG MONTCLAIR GUIDE TO PUBLIC TRANSPO	NJTIP	2014	Programmatic			https://files.acrobat.com/a/p review/c0a3e92e-70f3-4dc8- a6b2-b1604e705fea
20		Identify and eliminate unsafe conditions on Montclair streets for pedestrians and bicyclists of all ages and abilities.	PEDESTRIAN SAFETY REPORT	Montcalir, VTC	2015	Engineering			https://files.acrobat.com/a/p review/8e0b5f26-b9b6-495c- ab03-e9704be23cc0
21	Montclair Center Gateway	1.) Create an inviting and attractive pedestrian-oreiented atmosphere at the sidewalk level that seamlessly connects to Montclair Center. 2.) Facilitate a safe and integrated pedestrian and		Phillips Preiss Grygiel LLC	2011	General			PHASE 1: https://files.acrobat.com/a/p review/c2f53177-0655-4f25- b643-984b2f4ee419 PHASE 2: https://files.acrobat.com/a/p review/260d626d-cc40-4fc8-
		vehicular circultion network.							9231-e1962846aae9
22		Create a regional arts and entertainment district in Montclair center.		Phillips Preiss Grygiel LLC	2016	General			https://files.acrobat.com/a/p review/fc9be6c8-8223-47c6- 8b5a-ad95d2e6bc8c
23		Evaluation of the traffic impacts of the redevelopment of the parcels set forth in the preliminary conceptual plan. Under the redevelopment plan, Seymour St would be permanatly closed to vehicular traffic at Bloomfield Avenue.		Klein Traffic Consulting, LLC	2016	General			
24		To build upon the understanding of exisiting parking conditions and how new development and land uses will effect parking demand and supply in the next few years.	TOWN-WIDE COMPREHENSIVE PARKING STUDY	Montclair, Nelson Nygaard	To Be Completed - 2016	General			

Note: RBA 2009 SRTS Plans were superceeded by the 2013 SRTS Travel plans for each school

Attachment B - Potential Facilities List

This list is developed from Montclair Township's January 15, 2015 application for the NJDOT Local Bicycle/Pedestrian Planning Assistance Program. It is categorized by facility type.

Bicycle Facilities

Designated Bike Routes

- North Fullerton Avenue from Chestnut Street to Wildwood Avenue
- Wildwood Avenue from North Fullerton Avenue to Park Street (to connect to Watchung Avenue, Rand Place and High Schools)
- Norwood Avenue from Bellevue Avenue to Alexander Avenue
- Alexander Avenue from Norwood Avenue to Grove Avenue (to connect to Mt. Hebron School)
- Clinton Avenue from Llewellyn Road to Myrtle Avenue
- Myrtle Avenue from Orange Road to S. Mountain Avenue (pleasant bicycling)
- Yantacaw Brook Road from Alexander Avenue through Yantacaw Brook Park
- Glenside Terrace from Yantacaw Brook Park to Bellevue Avenue
- Orange Road from Llewellyn Road to S. Fullerton Avenue
- S. Fullerton Avenue from Orange Road to Bloomfield Avenue (To connect to MKA/Nishuane)

Designated Bike Routes with Signage and Shared Lane Markings (SLM) or Shoulder Striping

- Highland Avenue from Mt. Hebron Road to Edgewood Road (SLM + bike route)
- Edgewood Road from Highland Avenue to Upper Mountain Avenue (bike route only)
- Upper Mountain Avenue from Edgewood Road to Alpine Street (shoulder, SLM, bike route)
- Alpine Street from Upper Mountain Avenue to North Mountain Avenue (bike route only)
- North Mountain Avenue from Bellevue Avenue to Bloomfield Avenue (shoulder + bike route)
- South Mountain Avenue from Bloomfield Avenue to Stonebridge Road (shoulder + bike route)

Install Shared Lane Markings

- Bradford Avenue from Upper Mountain Avenue to Highland Avenue (connecting to Bradford School)
- Montclair from Watchung Avenue to Walnut Station
- McDonough Street from Montclair Avenue to Grove Avenue (per SRTS Application)
- Claremont Avenue from Valley Road to Pine Street(for immediate use before Bloomfield gets "road diet", and more direct connection to Munip. Bldg. & Bay Street Station than Walnut Avenue)
- Hillside Avenue from Orange Road to South Mountain Avenue (to connect to from "bike route" Hillside School)

Install Share the Road Signs with Shoulder Striping (like Harrison)

- Valley Road from Clifton City to Loraine Avenue (where it transitions to Shoulder/SLM combo until Bloomfield Avenue)
- Park Street from Mt. Hebron Avenue to Watchung Plaza Center (where it transitions to SLMs)
- Bellevue Avenue from Bloomfield Town to Norwood Avenue (where it transitions to SLMs)
- Chestnut Street from Grove Street to Valley Road

Install Climbing Bike Lane uphill (westbound) and SLM downhill (eastbound)

- Normal Avenue from Valley Road to Cedar Grove Town
- Mt. Hebron Avenue from Grove Street to Valley Road
- Bellevue Avenue from Valley Road to Upper Mountain Avenue
- Cedar Avenue from Orange Road to Harrison Avenue

Special Considerations for Facility Implementation

Road Diet - Bloomfield Ave

Reduce 4 lanes to 2 with center turn lane, reduce lane width to max necessary for bus. (Design
pending results of Bloomfield Avenue Corridor Cost/Benefit Analysis (to be completed 2016, NJDOT,
VTC.)

Reduced Lane Width to calm traffic and install Bike Lanes

- Grove Street
- Watchung Avenue
- Alexander Avenue.
- Mt. Hebron Avenue
- Normal Avenue
- Elm Street
- Orange Road
- Cedar Avenue
- Washington Avenue

Reduced Lane width to calm traffic and install Striped Shoulders

- Valley Road
- Park Street (north end can look a lot like Ridgewood Avenue)

Transition Areas (junctions of Bike Lanes, Shoulders, SLMs)

- Grove Street at Oxford Street
- Elm Street at Union Street
- Harrison Avenue/Orange Road at Union Street
- Valley Road at Lorraine Avenue
- Park Street just north of Watchung Avenue

Intersections

Add preferred Bicycle movements at signalized intersections where bike lanes are proposed May include Bike Boxes, preferred turning lanes, bicycle actuation (loop detectors), and other treatments for bicycle preference.

- Grove Street & Mt. Hebron Avenue
- Grove Street & Alexander Avenue
- Grove Street & Bellevue Avenue
- Grove Street & Watchung Avenue
- Grove Street & Chestnut Street Avenue
- Grove Street /Elm Street & Bloomfield Avenue
- Elm Street & Union Avenue/Washington
- Orange Road & Cedar Avenue
- Orange Road & Washington Avenue
- Valley Road & Bloomfield Avenue
- Valley Road & Watchung Avenue
- N. Mountain Avenue & Watchung Avenue
- Normal Avenue & Valley Road
- Valley Road & Mt. Hebron Avenue
- Bloomfield Avenue entire length

Lighted Crosswalks

Improve mid-block or non-signalized pedestrian crossings with motion activated or push button lighting such as in-pavement, "hawk" or Rectangular Rapid Flashing Beacons.

- Bloomfield Avenue & Midland Av.
- Upper Mountain Avenue at Mountainside Pool
- Valley Road at Cooper Avenue (Starbucks)
- Valley Road at Church mini circle
- Valley Road at Alvin Place
- Others....Grove Street /Elm Street

Other Opportunities

Rail with Trail Opportunities

Explore the feasibility of active rail with trail from Little Falls Station at MSU along the Boonton Line to Upper Montclair Station at Bellevue Ave (as outlined in the Montclair Bike/Ped Action Plan, 2005).

Bicycle Boulevard Opportunities

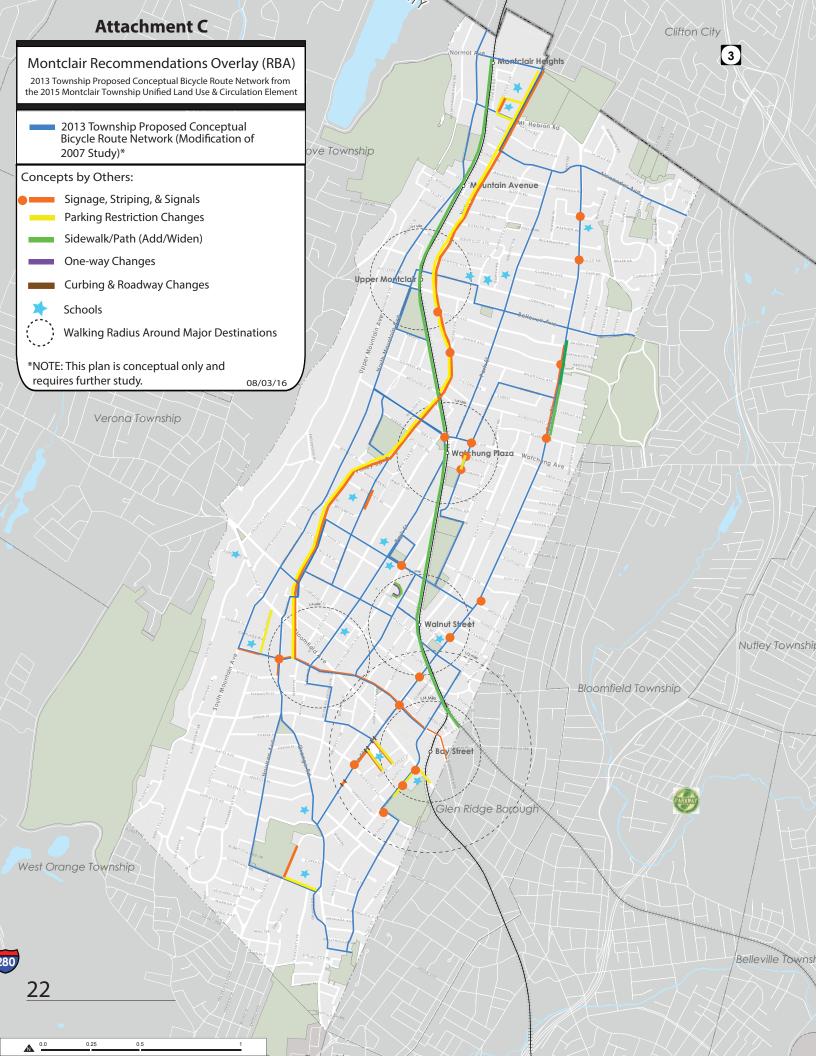
A bike-priority roadway that allows motor vehicles but uses traffic calming, diverters mini roundabouts, and reduced speeds to give priority to bikes. A great NJ example is Ocean City, NJ's Haven Ave Corridor.

 North Mountain Avenue from Bellevue Avenue to Claremont Avenue (would be key connector from MSU/rail with trail to Montclair Center and the proposed Ice & Iron Trail along the unused rail corridor)

Protected Cycle Track Opportunities

As defined in the NACTO guide, a cycle track is "an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane." Cycle tracks can be one-way or bi-directional but are separated or "protected" from motor vehicles. Protected cycle tracks should be explored – or even implemented temporarily – to connect major cycling destinations

• Claremont Ave between Park St and Pine Street to accommodate bike share transit users between Valley & Bloom and Bay Street and/or Walnut Street train stations.





Appendix B:

Steering Committee Members



Alex Kent, Pedestrian Safety Committee

Steering Committee Members

Alfred Davis, South End Business District of Montclair
Ann Lippel, Senior Citizen Advisory Committee
Ben Selby, Board of Education Transportation Manager
Brendan Gill, Essex County Freeholders
Carmel Loughman, Planning Board
Carole Willis, Planning Board / Traffic & Parking Advisory Committee
Cyndi Steiner, New Jersey Bike / Walk Coalition
Gerry Tobin, Upper Montclair Business Association
Israel Cronk, Montclair Center BID

Janice Talley, Montclair Planning

John Herrmann, Montclair Fire Chief

Katie York, Montclair Senior Services

Katya Wow, *Montclair Communications*

Kim Craft, *Montclair Engineering*

Laura Torchio, Montclair Traffic & Parking Advisory Committee/ Bike Walk Montclair

Rachel Crampsey, Walnut Business

Renee Baskerville, 4th Ward Councilor / Traffic & Parking Advisory Committee / Pedestrian Safety

Rich McMahon, Councilor-At-Large / Traffic & Parking Advisory Committee / Planning Board

Sanjeev Varghese, Essex County Engineer

Scott Pollack, *Watchung Business*

Stephanie Egnezzo, *Montclair Police & Traffic*

Appendix C:

TECHNICAL MEMORANDUM 2: NETWORK Maps

DRAFT Technical Memorandum 2: Network Maps

Project #J4666.20

Prepared for:

The New Jersey Department of Transportation



Prepared by:

The RBA Group

An **∥∥√∫** Company

Submitted:

November 3 2016

Contents

Introduction	
Mapping Reviewed	
Steering Committee	
Public Outreach	2
Priority Setting Workshop	2
Public Survey	:
Open Streets Event	:
Bicycle and Pedestrian Network	
Next Steps	

Attachment A – Steering Committee Kickoff – Recommended Facility Map

Attachment B – Priority Setting and Public Survey Refined Maps

Attachment C – Open Streets Event Maps

Introduction

Montclair Township has had an evolving map of proposed bicycle facilities. The purpose of this task was to review and build upon previous planning efforts to assist in the refinement of a priority bicycle and pedestrian network. This initial desktop exercise has been further refined based on outreach and field work.

Steering Committee

The project developed an initial network of potential bicycle facilities and conducted a network review exercise with the Steering Committee during the project kickoff meeting held on August 3, 2016. See Attachment A – Steering Committee Kickoff – Recommended Facility Map. One of the major items that was reinforced by the Steering Committee members was the need to connect whatever network of facilities is created within Montclair to its neighboring communities. Connections to other regional trails, existing or planned, are also major considerations for routing the Montclair priority network. The Liberty Water Gap Trail and the emerging September 11th National Memorial Trail are good examples of this, as they both traverse Montclair.

Mapping Reviewed

The RBA Team reviewed plans and recommended bicycle and pedestrian networks that have been developed previously. The following tables highlight reports, studies, plans, and maps evaluated as part of this task.

The RBA Team will conducted a desktop review of roadway and off-road corridors, complimented with targeted field investigations to determine the condition of bicycle and pedestrian accommodations along identified priority corridors throughout the Township. This focused on the refined bicycle and pedestrian network, based on the assessment of the various networks developed over the last ten years throughout Montclair, and used the 2015 Land Use & Circulation Element of the Master Plan – Proposed Conceptual Bicycle Route Network as a starting point. This was further refined as recommended by the project Steering Committee.

Using the information and data collected in previous tasks, we evaluated and analyzed the proposed network in terms of its capability to safely accommodate pedestrian and bicycle travel, and provide connection to major destinations throughout Montclair. This evaluation focused on providing connectivity, and enhancing corridors that currently have substandard conditions for walking or bicycle riding.

TABLE 1 – TOWNSHIP FACILITY NETWORK MAPS

Year	Name of Map
2005	Bicycle Compatible Roadways
2005	Bicycle Suitability Map
2007	Desired Conditions Sketch
2009	SRTS Bike Network Map
2013	Proposed Conceptual Bicycle Route Network from the 2015 Land Use & Circulation Element of the Master Plan

Tech Memo 2 Page 1









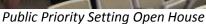
Steering Committee Network Review Exercise

Public Outreach

Priority Setting Workshop - A Priority Setting Workshop was conducted on September 13, 2016 at the Montclair Municipal building. The Project Team facilitated the open house format meeting, that included stations with general background about the project, typical bicycle and pedestrian enhancement techniques, draft route network maps for review and a station for walking through an on-line survey to collect detailed insight on preferences and priorities for walking and bicycling. The refined bicycle facility network maps (North, Central and South) are included in *Attachment B – Priority Setting and Public Survey Refined Maps*

Tech Memo 2 Page 2







Survey Walk Through on Computers

Public Survey – The public survey posted on the Montclair web site at: (https://www.surveymonkey.com/r/Y6SHWFL) included detailed questions about top priority corridors in each the North, Central and South areas of Montclair. Participants were asked to rank their top three priority corridors for each area, or provide input about additional connections that should be made or entire corridors to be added. Links to the survey were provided for detailed input.

Survey respondents were asked to prioritize their top three priorities in southern, central, and northern Montclair by ranking their top segments as graphically represented on a map with a corresponding key that broke the choices into street segments.



In the southern section of Montclair, the following Segments were most often prioritized:

- Segment 23 (Claremont Ave, Valley Road, Walnut St/Park Dr., Forest St, Label St., Depot Sq.) was most frequently priority 1 or 2 (22.63% Priority 1 and 22.96% Priority 2);
- Segment 19 (Elm Street) ranked next highest with 17.5% of respondents selecting Elm Street as their Priority 1; and,
- Segment 20 (Park Street, The Crescent, South Fullerton Avenue, Union Street) with the next highest priority, with 16.8% selecting Segment 20 as Priority 1.

In Central Montclair, the following segments were most frequently prioritized:

- Segment 11/Grove St. (35% Priority 1 and 25% Priority 2);
- Segment 10/North Mountain Avenue (21.6% Priority 1 and 15.15% Priority 2);
- Segment 13/Park Street (15% Priority 1 and 22.7% Priority 2); and,
- Segment 15/Watchung Ave (10.8% Priority 1, 13.6% Priority 2 and 26% Priority 3).

In Northern Montclair, the following roadways were most frequently prioritized:

- Segment 4/Grove St. (22% Priority 1, 18% Priority 2, 18% Priority 3);
- Segment 1/Upper Mountain Ave (21% Priority 1, 12% Priority 2, 9% Priority 3);
- Segment 2/Valley Road (19% Priority1, 15% Priority 2, 8% Priority 3);
- Segment 3/Park St.) at (16% Priority 1, 24% Priority 2, 13% Priority 3); and,
- Segment 8/Bellevue Avenue (10% Priority 1, 17% Priority 2, 30% Priority 3).

In addition to survey responses, additional factors such as connectivity, proximity to major generators, and geographic distribution

Open Streets Event – The Project Team was able to take advantage of one of the largest pedestrian and bicycling events that occurs in Montclair, the Open Streets event held on Sunday October 2, 2016. During this event, the team set up an outreach station with flyers to be filled out, and maps to be reviewed and marked up. Many attendees who might not have otherwise known about the project were able to share insights about priorities for walking and bicycling in Montclair and learn more about the survey and participation in the project. Network maps were further refined for the event, enhancing display of local connections and other features, see *Attachment C – Open Streets Event Maps*





Bicycle and Pedestrian Network

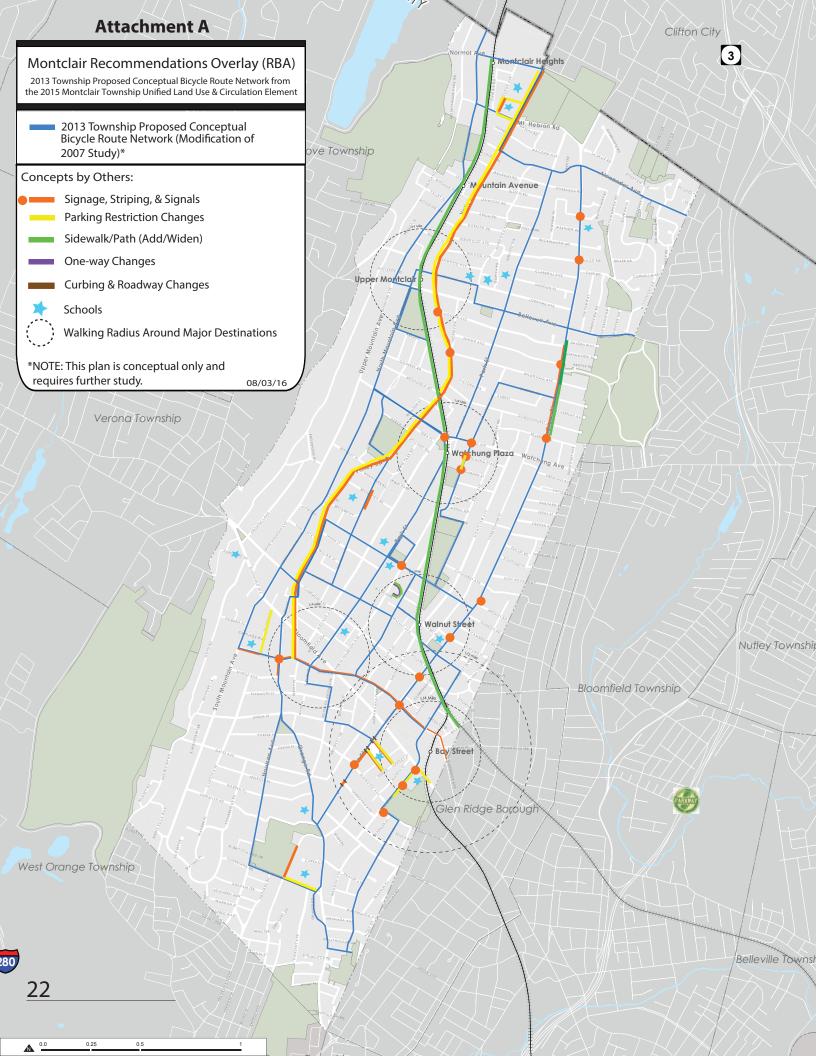
The network of bicycle and pedestrian priority corridors will continue to evolve, both through this project, and afterwards as Montclair implements its Complete Streets policy by continuing to enhance the walking and bicycling conditions throughout town.

This project is using the 2013 Proposed Conceptual Bicycle Route Network included as part of the 2015 Land Use & Circulation Element of the Master Plan as a starting point for the priority bicycle and pedestrian network. This map was developed by the Township as a modification to the 2007 Desired Conditions Sketch Map, and represents the most current thinking on where bicycle routes may be appropriate, but does not specify the type of bicycle facility. Detailed maps for Northern, Central and Southern Montclair detailing each street and the recommended priority bicycle network were created and shared as part of the outreach exercises.

Next Steps

This assessment, along with the information from future outreach tasks, will result in the development of a Proposed Bicycle and Pedestrian Network Map, and targeted Street Typologies that will apply to specific roadways throughout Montclair.

Attachment A – Steering Committee Kickoff – Recommended Facility Map



Attachment B – Priority Setting and Public Survey Refined Maps

NORTHERN MONTCLAIR

August 2016

NETWORK SEGMENTS

- 1. Upper Mountain Avenue
- 2. Valley Road
- 3. Park Street
- 4. Grove Street
- 5. Normal Ave
- 6. Mount Hebron Road
- 7. Alexander Avenue
- 8. Bellevue Avenue
- 9. Gordonhurst Avenue, North Fullerton Ave, Carolin Road





CENTRAL MONTCLAIR

August 2016

NETWORK SEGMENTS

10. North Mountain Avenue

11. Grove Street

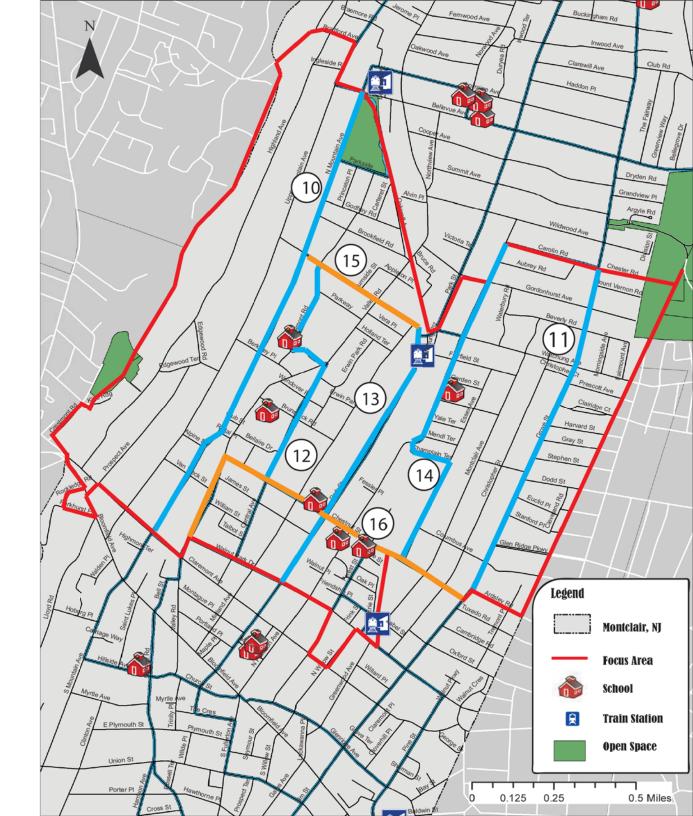
12. Central Ave, Edgemont Memorial Park

13. Park Street

14. Essex Avenue, Champlain Terrace, North Fullerton Avenue

15. Watchung Avenue

16. Chestnut Street





SOUTHERN MONTCLAIR

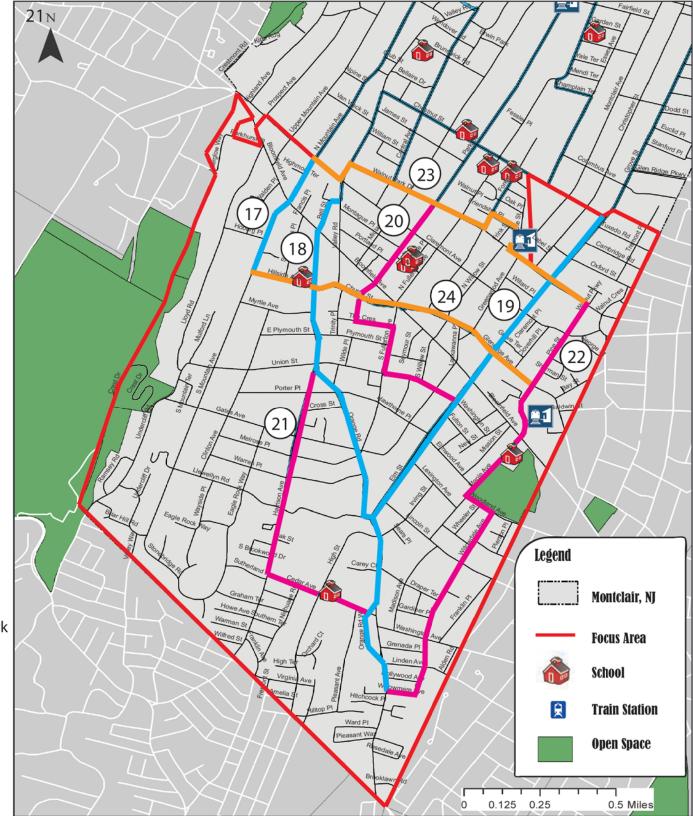
August 2016

NETWORK SEGMENTS

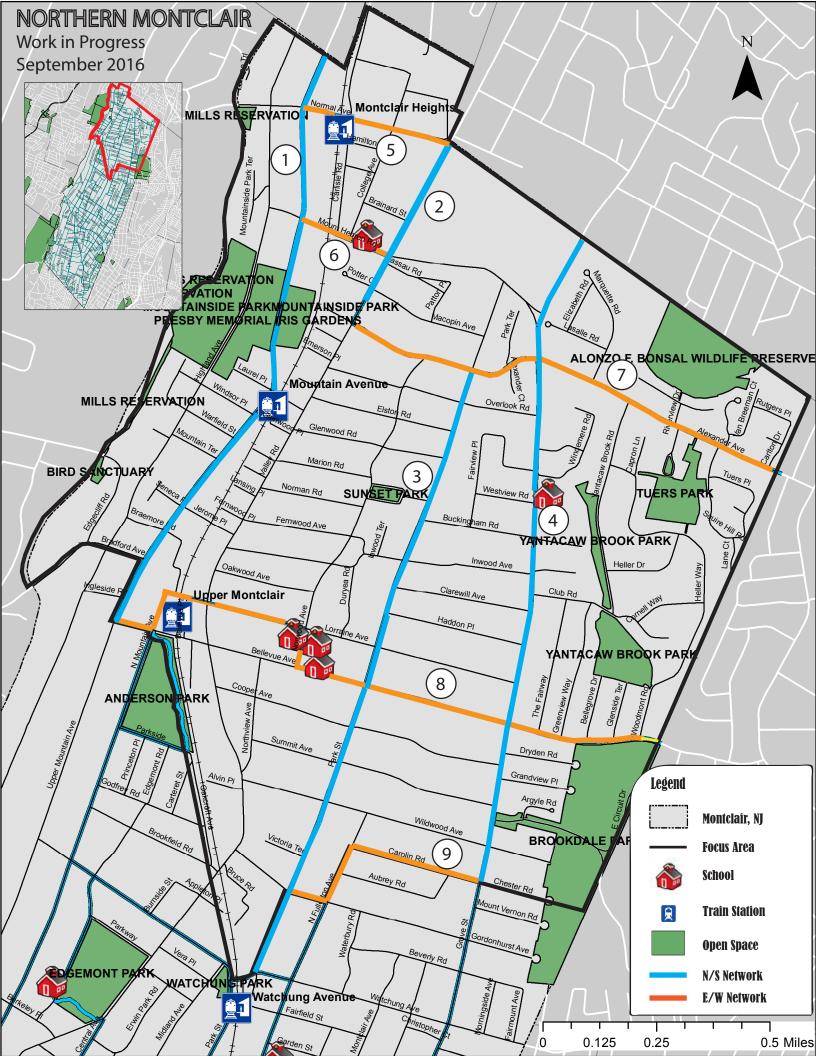
- 17. North Mountain Avenue, South Mountain Avenue
- 18. Bell Street, Orange Road, Orange Road West
- 19. Elm Street
- 20. Park Street, The Crescent, South Fullerton Avenue, Union Street
- 21. Harrison Ave, Cedar Ave
- 22. Pine Street, Maple Ave, Woodland Ave, Willowdale Ave, Willowmere Ave
- 23. Claremont Avenue, Valley Road, Walnut Street/Park Drive, Forest Street, Label Street, Depot Square
- 24. Hillside Avenue, Church Street, Glenridge Avenue

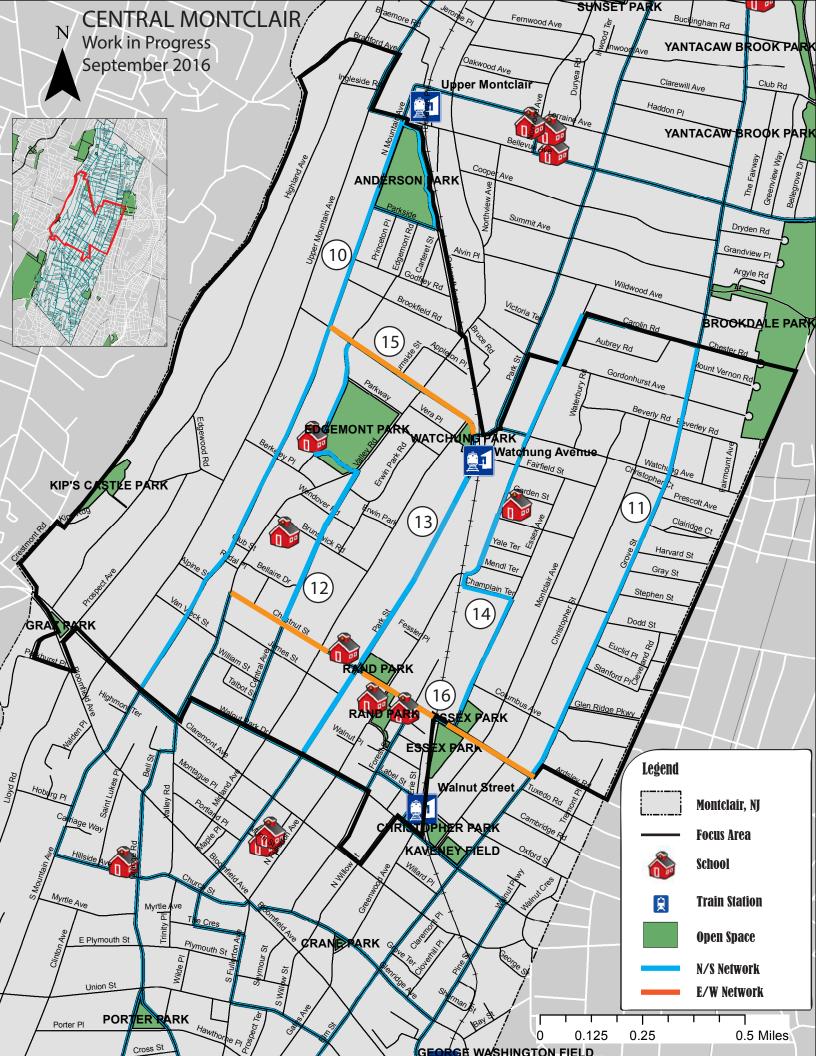


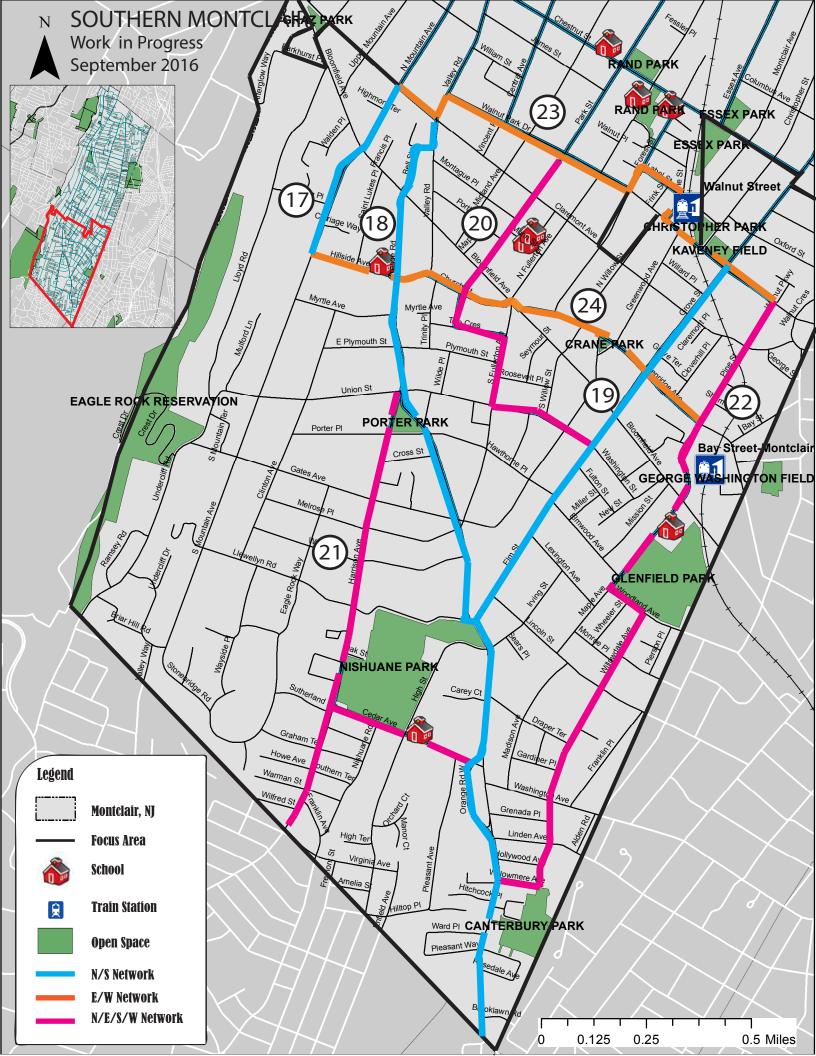
Attachment B Page 3 of 3



Attachment C – Open Streets Event Maps







Appendix D:

COMMUNITY OUTREACH

- 1. Steering Committee Kick-Off Meeting (8.3.2016)
- 2. PRIORITY SETTING WORKSHOP (09.14.2016)
- 3. Steering Committee Meeting (11.14.2016)
- 4. Steering Committee Meeting (01.31.207)
- 5. Final Public Open House (03.08.2017)
- 6. Final Steering Committee Meeting (06.13.2017)



MEMORANDUM OF MEETING

TO: Kimberli Craft

FROM: Mike Dannemiller, Dede Murray

DATE: 08/03/2016

SUBJECT: Montclair SAFE Steering Committee Kick-off

RBA Project # J4666.20

Montclair SAFE/Complete Streets Technical Assistance Steering Committee met with RBA to discuss the project scope and schedule, to gather consensus on priorities, to discuss methods for community outreach, and receive committee member input on concept design. The following summarizes the major items of discussion from the kick-off meeting. The attendee list and meeting agenda are attached.

The Steering Committee performed a Network Mapping exercise to prioritize each member's top five locations for treatment. They were provided a draft network map and a matrix of recommendations from past studies conducted in Montclair to guide their decision making.

There are several immediate action items to be addressed by members of the Steering Committee. These include:

Immediate Action Items:

- RBA will email the Bicycle and Pedestrian Recommendation Inventory to the Steering Committee.
- Montclair Township will be responsible for announcing/publicizing the priority setting workshop and the Public Information Center
- Montclair Township to post project updates/flyers onto their Facebook and Township websites.
- Civic Eye/Blickstein will create an online public survey with an application such as Survey Monkey to gain insight on priority cross sections of residents and visitors of Montclair. They will also provide hard copies of the survey for senior residents.
- RBA will provide a Bicycle and Pedestrian Network Map displaying priority areas.
- RBA will obtain crash data from Charles Brown and Pedestrian Safety Information from Partners for Health.

General notes and clarifications:

- The Steering Committee was informed that no direct action will be taken on Bloomfield Avenue for this project.
- Tour de Montclair will be held on October 02, 2016 and is a public outreach opportunity.



Steering Committee

Network Mapping Exercise Group 1



Network Mapping Exercise Group 2

Network Mapping Exercise Group 3

Attachments:

- -Attendee List
- -Meeting Agenda
- -Network Mapping Exercise Maps



SAFE/CS Implementation Plan Steering Committee Kick-off Meeting Attendees 08/03/16

FirstName	LastName	Organization	Email
1. Andy	Anderson	ECCPSACTSP	anderson158@essex.edu
2. Ann	Lippel	SCAC (Seniors)	annlippel@gmail.com
3. Cyndi	Steiner	NJ Bike/Walk Coalition	steincy@gmail.com
4. Gerry	Tobin	UMBA (Upper Montclair)	gctobin@tobinlawoffices.com
5. Israel	Cronk	Montclair Center BID	israel@montclaircenter.com
6. Janice	Talley	Montclair Planning	jtalley@montclairnjusa.org
7. John	Herrmann	Montclair Fire Chief	jherrmann@montclairnjusa.org
8. Kathy	Smith	Partners for Health	ksmith@partnersfdn.org
9. Katie	York	Montclair Senior Services	kyork@montclairnjusa.org
10. Katya	Wowk	Montclair Communications Director	kwowk@montclairnjusa.org
11. Kim	Craft	Montclair Engineering	kcraft@montclairnjusa.org
12. Paul	Mickiewicz	BikeWalk Montclair	paulmickfit@gmail.com
13. Renee	Baskerville	4 th Ward Councilor/ TPAC/Ped Safety	rbaskerville@montclairnjusa.org
14. Scott	Pollack	Watchung Business	scott.pollack@lpl.com
15. Mike	Dannemiller	The RBA Group/ NV5	mdannemiller@rbagroup.com
16. Dede	Murray	The RBA Group/ NV5	Emurray@rbagroup.com
17. Bill	Riviere	NJDOT	William.Riviere@dot.nj.gov
18. Ranjit	Walia	Civic Eye/ Blickstein	ranjit@civiceyecollaborative.com

SC Attendee List August 03, 2016



AGENDA

Montclair SAFE Complete Streets Technical Assistance STEERING COMMITTEE KICKOFF MEETING

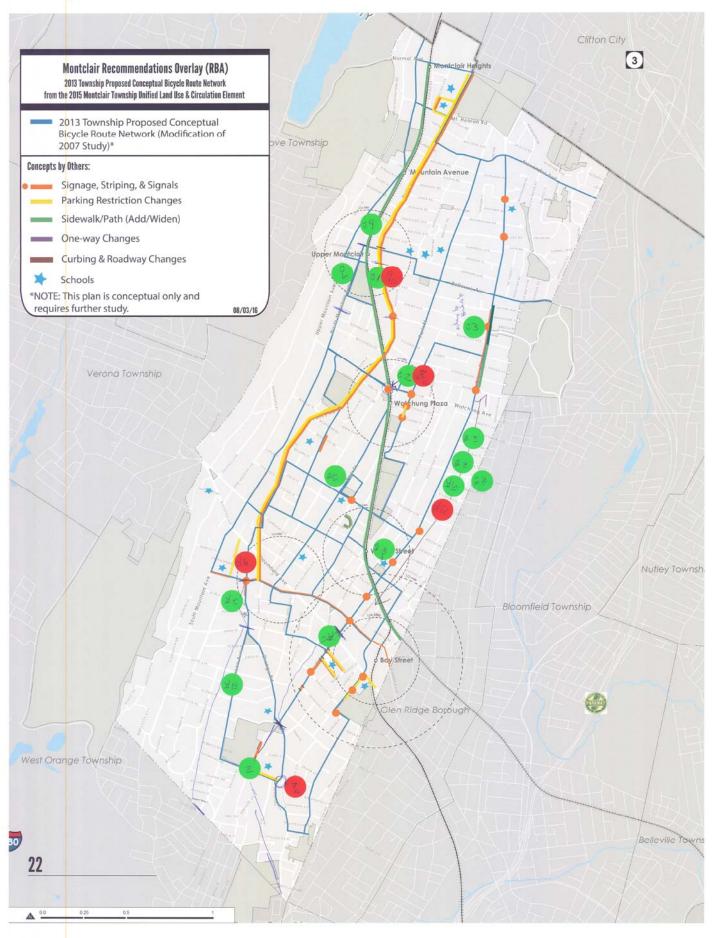
Wednesday, August 3rd, 2016 10:00 a.m. – 11:30 a.m.

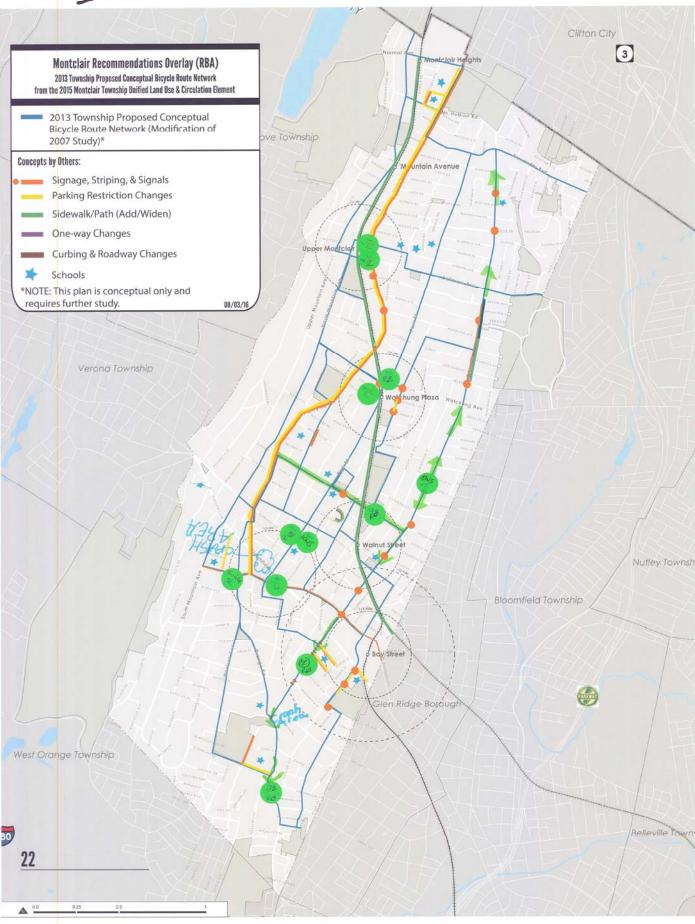
Montclair Municipal Building 205 Claremont Avenue – 2nd Floor Conference Room

Purpose: To present and review the scope, schedule, Steering Committee's role and conduct a mapping exercise to build on previously documented input.

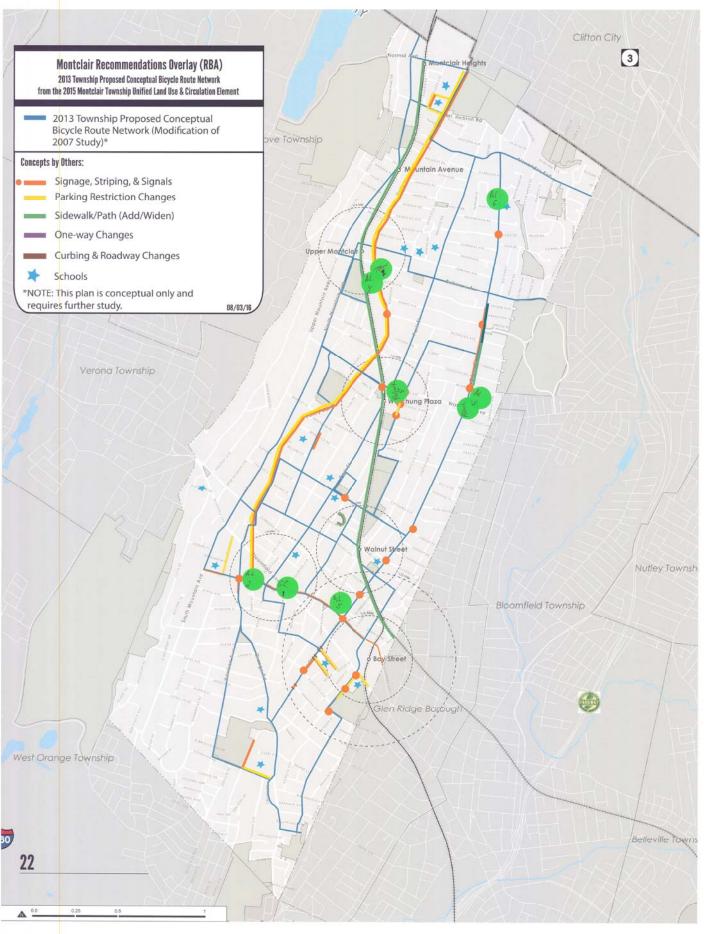
- I. Welcome/Overview of NJDOT's Technical Assistance Program Bill Riviere, NJDOT/ Kim Craft
- II. Scope & Schedule Mike Dannemiller, The RBA Group/ NV5
- III. Community Participation Ranjit Walia, Civic Eye Collaborative/ Susan Blickstein
- IV. Existing Resources Dede Murray, The RBA Group/ NV5
- V. Network Mapping Exercise group activity
- VI. Next Steps Mike Dannemiller/ Kim Craft













MEMORANDUM OF MEETING

TO: Kimberli Craft

FROM: Mike Dannemiller, Dede Murray

DATE: 09/14/2016

SUBJECT: Montclair SAFE Public Workshop

RBA Project # J4666.20

Montclair SAFE/Complete Streets Technical Assistance Steering Committee met with RBA to discuss the project scope and schedule, to gather consensus on priorities, to discuss methods for community outreach, and receive committee member input on concept design. The following summarizes the major items of discussion from the kick-off meeting. The attendee list and meeting agenda are attached.

The Steering Committee performed a Network Mapping exercise to prioritize each member's top five locations for treatment. They were provided a draft network map and a matrix of recommendations from past studies conducted in Montclair to guide their decision making.

There are several immediate action items to be addressed by members of the Steering Committee. These include:

Immediate Action Items:

 RBA will email the Bicycle and Pedestrian Recommendation Inventory to the Steering Committee.

General notes and clarifications:

- The Public Information Center will be scheduled tentatively on Tuesday, October 11 or Wednesday, October 12 from 4-7pm.
- The Town Council briefing will be held tentatively on Tuesday, November 1 at 7pm.
- The Planning Board presentation will be held tentatively on Monday, November 7 at 7:30pm.





Welcome Sign



Station 2 (in background)

Station 3

Attachments:

- -Attendee List
- -Meeting Agenda
- -Comment Form responses





SIGN-IN SHEET

Montclair SAFE/CS Public Workshop September 13, 2016

Name Title / Affiliation	Email Phone
GRAY RUSSELL SUSTAINABILITY OFFECER	GRUSSELLEMONTCLAERNIUSA. ORG 973 509-5721
Sidith Early, greener Bloomfield	earley judith @ gmail, com 862-202-9251
13AME CROUK! Muntdaw BID	isme a mont clair conter. com 973 868 8188
Mona MULLIGAN AN	MONAMULLIGAN EGMAIL 646-462-8284
Mike Martone	Mjmartone@gma:1.com 2013414630
Rathy Smith PFIT	
Councilwoman Dr Baskerville Montdon	RBaskerwille@ montcloor NTUSCION 477 1141
Menia DASSY BUM	TOBILEWALL COMP 973-768-84 rketchem@mac.com 201-506-6533
Ray Ketchem Montclair DIO	rketchem@mac.com 201-506-6533



Streets Are For Everyone

NJDOT Technical Assistance Project

Welcome!

Welcome to the Montclair Bicycle Facility Prioritization Meeting! This meeting is one of two public meetings whose focus is to get feedback from the community on where to get started in Montclair with bicycle facilities. These meetings are part of Montclair's SAFE (Streets Are For Everyone)/Complete Streets Implementation Plan. Thank you for coming and helping the community develop a strategy for developing/redeveloping its streets as safe and comfortable places for everyone!

What's in the Room:

Please come and stop by the different stations in the room. There are three and there will be staff there to talk with you about your thoughts and get your feedback.

STATION 1 –What are the existing conditions in the community and what have past studies recommended



STATION 2 – Help us identify and prioritize roadways for bicycle improvements.



YES

STATION 3 – Where are we headed with this study? See what's next.



Take the Survey!

Montclair SAFE is hosting a bicycle facility prioritization survey. If you haven't done so yet, you can take the survey at home by typing this link into your web browser:

https://www.surveymonkey.com/r/Y6SHWFL

The survey will only take you a few minutes to complete.

If you don't have a computer or prefer to take the survey tonight, there will be two computers you can use at the meeting itself. Please ask someone for assistance.

Stay Connected

You can follow the progress of the study via the Engineering page on the Township website (montclairnjusa.org), Facebook (Montclair SAFE) and Twitter (@MontclairSAFE).









Bicycle Priority(s): Please identify your top priority(s) for bicycle facility improvements and why this area is so important. **Pedestrian Improvements:** Would the area(s) above also benefit from pedestrian improvements? If so, explain what changes you think are important and why.



Bicycle Facility Network
Please list any bicycle facility segments you think should be added to the
bicycle network shown at the meeting tonight.
Have you already taken the on-line bicycle survey?
Yes:
No:
If you have not completed the survey, do you plan to do so soon?
Yes:
No:
Do you have any other comments?
BILTE RACK IN FROM OF EVERY THINK
in MTC - example TO BANK
an Broom Field Al

THANK YOU!



Bicycle Priority(s): Please identify your top priority(s) for bicycle facility improvements and why this area is so important. **Pedestrian Improvements:** Would the area(s) above also benefit from pedestrian improvements? If so, explain what changes you think are important and why.



Bicycle Facility Network

Please list any bicycle facility segments you think should be added to the bicycle network shown at the meeting tonight.

A road I use (which might be a good
choice, but its direct or not hely is velley Rf Sion
about Wolnut to wotchung or Belliver
S S
Have you already taken the on-line bicycle survey?
Yes:
No:
If you have not completed the survey, do you plan to do so soon?
Yes:
No:
Do you have any other comments?
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very deficult to cross, (I think There men an
some pidestrian crossing announcements and
Sometimes care stop + True Ohug Stop. As
drivers get used to This, it will work even letter
THANK YOU!



	y bicycle facility segments you think should be added to the
bicycle netw	fork shown at the meeting tonight.
Yes: No:	ready taken the on-line bicycle survey?
No:	
Do you have	o violating the ADA
(Harman San San San San San San San San San S	

THANK YOU!



Bicycle Priority(s):
Please identify your top priority(s) for bicycle facility improvements and
why this area is so important education and awareness
Iducation and awareness
Pedestrian Improvements:
Would the area(s) above also benefit from pedestrian improvements? If so,
explain what changes you think are important and why.
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to enforce its own
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in accordance with



Sicycle Facility Network
lease list any bicycle facility segments you think should be added to the
picycle network shown at the meeting tonight.
MOVE PHORDM STREET" SELECTEN DO
SMALLER QUEETER RESIDENTER STREET
Have you already taken the on-line bicycle survey? Yes:
No:
f you have not completed the survey, do you plan to do so soon?
Yes:
No:
Do you have any other comments?
WE WANT TO ENCOURAGE REJERST PERS to
INCE THE MANY NONTH/SOUTH ROUTER OFFER THIN
COUNTY ROADS. INITEN OF FOCUSING ATTENTION + FUNDS
MO GODVE PARK +VALLEY, LET'S MOVE THEM TO THE
MANY RESOLUTER STREETS WHICH ARE
THANK YOU! QUIETER, SLOWER, LEAFIER, + SAFER.



Bicycle Priority(s):

Please identify your top priority(s) for bicycle facility improvements and why this area is so important.

I CREATENG AN ON-LINE MAP DISPLAYING
SEVERAL NORTH / SOUTH + SANT/WEET ROUTES
TO: 1) SCHOOLS; 2) BUINESS NOTORICH; AND, 3) COMMUNING
STORIFSTAMONS. IT ACQUERTURE STREET SECUL
+ ROMOWAY PAINTENG + STRIPTING TO INDICATE
BEST ROUPES. III) PUBLICITE + PROMOTE + NEW
"REINVEGORATION" IF BIKE + WALK EMPHAGES IN YOUR
Pedestrian Improvements: Would the area(s) above also benefit from pedestrian improvements? If so, explain what changes you think are important and why.
- ENCOURAGE REPAIR + MADNIENANCE ME
POPH SLATE + CEMENT SIDEWALKS - ADD
STREETS DONAGE DESDONATIONS MONTCLASA AT
A WHALK FOLDENOLY "TOWN - PUBLICITE (A)



Bicycle Priority(s):

Please identify your top priority(s) for bicycle facility improvements and why this area is so important.

tarking on North of John Mornain	
should not be allowed. It wo	uld
be an amazing bike path.)
Pedestrian Improvements:	
Would the area(s) above also benefit from pedestrian improvements?	If so,
explain what changes you think are important and why.	



Bicycle Facility Network
Please list any bicycle facility segments you think should be added to the
bicycle network shown at the meeting tonight.
Have you already taken the on-line bicycle survey?
Yes:
No:
If you have not completed the survey, do you plan to do so soon?
Yes:
No:
Do you have any other comments? Thank you for your efforts on making
Montplain more bile friendly

THANK YOU!



Bicycle Facility Network Please list any bicycle facility segments you think should be added to the bicycle network shown at the meeting tonight.	
Have you already taken the on-line bicycle survey? Yes:	
No: If you have not completed the survey, do you plan to do so soon? Yes: No:	
Do you have any other comments?	
Thunkle you lov Holding these	
THANKYOU! WIGHT There was a pigger promotion of this work	shop.
MONTCLAIR workshopSGB comments form.docx — Ads, Social, Neus,	pulse als



MONTCLAIR PUBLIC WORKSHPOP TUESDAY, SEPTEMBER 13TH, 5 TO 8PM

Bicycle Priority(s):

Please identify your top priority(s) for bicycle facility improvements and why this area is so important.

AND CO	3 treet.				
	1.0				
Valley lox	ad p				
Park	(North to South)				
V					
Pedestrian Improvements:					
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Would the area(s) above al	so benefit from pedestrian improvements? If so,				
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Would the area(s) above al	so benefit from pedestrian improvements? If so,				
Would the area(s) above al	so benefit from pedestrian improvements? If so,				



MEMORANDUM OF MEETING

TO: Kim Craft, Montclair and Bill Riviere, NJDOT

FROM: Mike Dannemiller, Rachana Sheth

DATE: 01/31/2017 at 4:00 pm Montclair Fire HQ

ATTENDEES: See attached Sign-In Sheet

SUBJECT: Montclair SAFE CS Implementation Plan - Steering Committee Meeting

NV5, Inc. Project # J728616.0000095.03

The purpose of the meeting was to review the project scope and schedule, explain the methodology in developing the SAFE Complete Streets typologies and to obtain feedback from the Steering Committee on the six (6) typologies developed in preparation for the public meeting scheduled for March 8th. Handouts were provided (see attached). Presentation boards of background material and each typology were utilized. The sign-in sheet is attached.

Bill Riviere, NJDOT Bicycle and Pedestrian Programs initiated the meeting with introductions and Mike Dannemiller provided background of the project and the schedule. He led a discussion on the typologies for the recommended SAFE CS network. The following summarizes the major items of discussion from the Steering Committee meeting.

Steering Committee Input and Recommendations:

- Pedestrian enhancements / recommendations should be emphasized for the typologies
- The process / methodology in developing the typologies should be clear and clarify how public input via surveys informed the process
- For all typologies, alternatives with sharrows or shared lane markings should at least include traffic calming such as narrower travel lanes by either adding shoulders or a planted or striped median
- A recommendation on pedestrian-scale lighting should be included in the typologies
- A glossary of terms should be included
- Raised crosswalks should be added as one of the traffic calming a recommendation especially for commercial areas, near schools, parks and other amenities
- A shared use path along S. Mountain Avenue and for Washington Street was recommended
- NV5 clarified that the purpose of the typologies was to provide a menu of options for Montclair Township to choose from when needed. Thus, this phase of the project will not provide detailed design plans; but options /concepts that could be applied to any Township street

Immediate Action Items:

- The Public Information Center meeting was rescheduled from 2/22/2017 to 3/8/2017due to scheduling conflicts within the Steering Committee.
- NV5 will add pedestrian enhancements and recommendations for the typologies.
- Typologies will be edited as per recommendations from the Steering Committee

7 CAMPUS DRIVE, SUITE 300 PARSIPPANY, NJ 07054 WWW.NV5.COM OFFICE 973.946.5600 FAX 973.984.5421

NV5 February 21, 2017 Page 2

Attachments:

- Attendee List
- Meeting Agenda
- Boards:
 - Schedule
 - Recommended SAFE CS Network
 - Recommended SAFE CS Network Table
 - Six (6) Typologies

Meeting Photos







Steering Committee Meeting January 31, 2017

SIGN-IN SHEET

Name Title / Affiliation Email Phone
William Riviere NJDOT
CARMEL LOUGHMAN PLANNING BOARD cloughmanogmail-
Katie York Director of Senior Sucs, Twp.of Martclair
Mike Dangemiller Principal Engineer Michael Pannemiller ONV5, con
Susw BLICKSTEIN SGB sblicksteil@gmail.com
Rachaus Shert, Urban Designer, NVS, RACHANA-SHETHONVS-10
Kathy Smith Rit Ksmith@partnersFdn.or
Stephanie Egnezzo Montclair PD-Traffic Buran segnezzo@montclaimjusa.
Alex Kent MR Ped Safety AKent BD comced in
Laura Torchio Bite & Walk Montfolair torchio Come @ gmail. con
Janua Talley Planning Divietor Mort stalleye montelairi) was
BEN SELBY PROE TRANSPORTATION MER belbye Marrilla. KIZ. N.J. U.S.
BEN SELBY PROE TRANSPORTATION MGR bselbye Marrilane. K12. NJ. US Courselcomon Pener Boxen Ne Monklair Tarnship & Montela





STEERING COMMITTEE MEETING Tuesday, January 31, 2017 4:00 – 6:00 pm Montclair Fire Headquarters 1 Pine Street, Montclair, NJ

AGENDA

Introductions	Kimberli Craft / Bill Riviere
Scope Review - Methodology - Schedule	Mike Dannemiller/ Susan Blickstein
Typology Review - Assumptions - Review Exercise	Mike Dannemiller/ Rachana Sheth
Public Meeting	Kimberli Craft / Mike Dannemiller
Next Stens	Kimherli Craft / Mike Dannemiller





Montclair SAFE Complete Streets Implementation Plan

TASK	Description	ост	NOV	DEC	JAN	FEB	MAR
1	Project Administration	Admin.					
2	Steering Committee Meetings and Public Participation		1 Outreach 2 1				
3	Data Review and Analysis		Review & A	Analysis			
4	Review and Planning Concepts				Concepts		3
5	Draft and Final SAFE Complete Streets Implementation Plan						Plan



CLIENT & STEERING COMMITTEE MEETINGS



PUBLIC MEETING

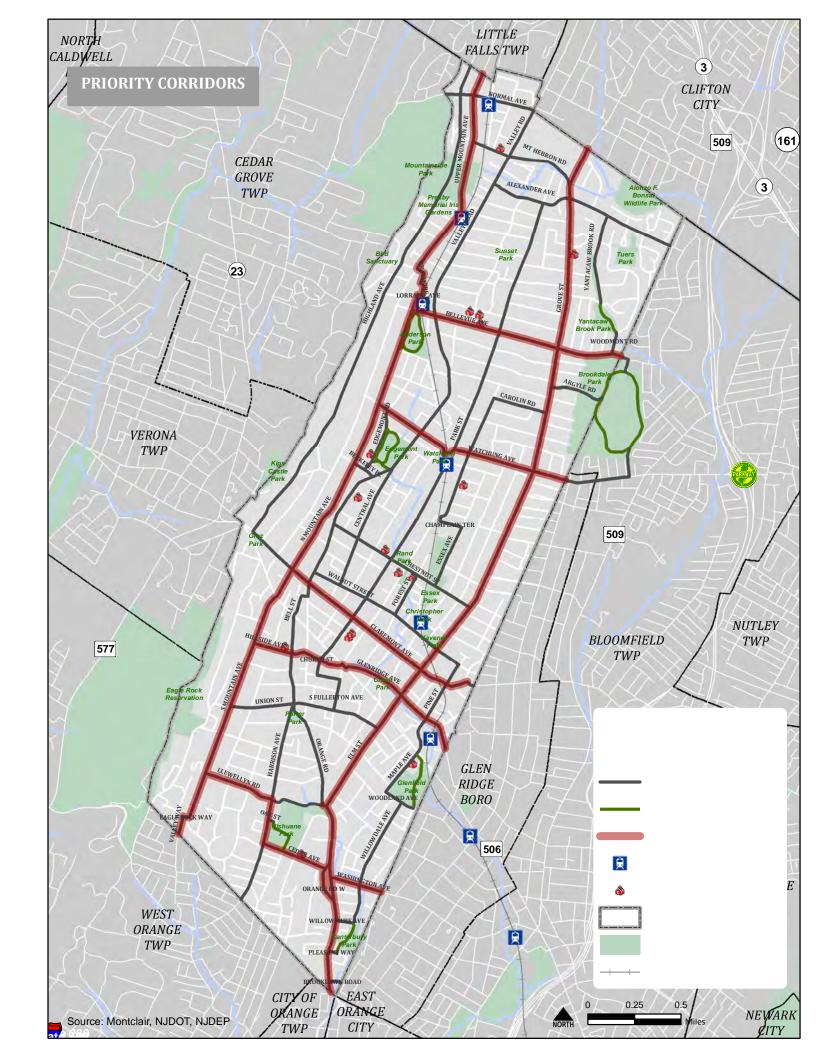
Client & Steering Committee Meetings

- 1. Client / Steering Committee Meeting
- 2. Client / Steering Committee Meeting
- 3. Client / Steering Committee Meeting

Public Meeting

1. Public Information Center





RECOMMENDED SAFE CS NETWORK RECOMMENDATIONS

(ON-ROADLINKS ONLY)

STREET NAME	START	END	JURISDICTION	WIDTH	ADT	COUNT YEAR	FUNCTIONAL CLASS	TYPOLOGY
1 Alexander Ave.	Valley Rd.	Grove St.	Local	28.0	1194	2015	Local	V
2 Alexander Ave.	Grove St.	Bloomfield line	County	28.0	4420	2009	Collector	III
3 Argyle Rd			Local	26.0			Local	V
4 Bell St.	Mountainview Place	Bloomfield Ave.	Local	32.0	6075	2009	Collector	III
5 Bellevue Ave.	Upper Mountain Ave.	Norwood Ave.	Local	40.0	6940	2012	Collector	IV
6 Bellevue Ave.	Norwood Ave.	Grove St.	Local	37.0	8551	2014	Collector	III
7 Bellevue Ave.	Grove St.	Bloomfield line	Local	35.0	9013	2010	Collector	III
8 Berkeley Pl	Upper Mountain Ave.	Valley Rd.	Local	30.0	1136	2010	Local	V
9 Bloomfield Ave.	N. Fullerton Ave.	Glenridge Ave.	County	56.0	17011	2010	Principal Arterial	XXXX
10 Braemore Rd	Lorraine Ave.	Upper Mountain Ave.	Local	22.0	638	2008	Local	٧
11 Brooklawn Rd.			Local	26.0			Local	V
12 Carolin Rd.	N. Fullerton Ave.	Grove St.	Local	26.0			Local	V
13 Cedar Ave.	High St.	Nishuane Rd.	Local	34.0	6625	2015	Collector	III
14 Central Ave.	Walnut St.	Chestnut St.	Local	36.0			Local	V
15 Central Ave.	Chestnut St.	Valley Rd.	Local	36.0	1208	2014	Local	V / VI
16 Champlain Terr.		,,	Local	26.0			Local	V
17 Chestnut St.	Valley Rd.	Midland Ave.	Local	32.0	3913	2009	Collector	III
18 Chestnut St.	Midland Ave.	N. Fullerton Ave.	Local	36.0	4392	2011	Collector	III
19 Chestnut St.	N. Fullerton Ave.	Essex Ave.	Local	35.0	5652	2012	Collector	III
20 Chestnut St.	Essex Ave.	Grove St.	Local	35.0	5545	2012	Collector	III
21 Church St.	Bloomfield Ave.	S. Park St	Local	25.0	4540	2014	Collector	VI
22 Church St.	S. Park St	Orange Rd.	Local	41.5	1003	2011	Collector	III
23 Church St.	Trinity Pl.	South Park St.	Local		4707	2016	Collector	III
24 Claremont Ave.	Crestmont Rd.	Valley Rd.	Local	38.0	14743	2009	Minor Arterial	II
25 Claremont Ave.	Valley Rd.	N. Fullerton Ave.	Local	32.0	12847	2011	Minor Arterial	1
26 Claremont Ave.	N. Fullerton Ave.	Grove St.	Local	35.0	12906	2015	Minor Arterial	1
27 Claremont Ave.	Grove St.	Walnut Crescent	Local	32.0	11028	2016	Minor Arterial	1
28 Eagle Rock Way	Undercliff Rd.	S. Mountain Ave.	Local	31.0	1772	2008	Local	V
29 Edgemont Rd.	Watchung Ave.	Parkside	Local	36.0			Local	V
30 Elm St.	Llewellyn Rd.	Elmwood Ave.	County	40.0	13455	2015	Minor Arterial	II
31 Elm St.	Elmwood Ave.	Bloomfield Ave.	County	40.0	11727	2010	Minor Arterial	II .
32 Essex Ave.	Chestnut St.	Champlain Terr.	Local	26.0			Local	V
33 Forest St.	Claremont Ave.	End	Local	32.0	2006	2012	Local	V
34 Glenridge Ave.	Bloomfield Ave.	N. Willow St.	Local	34.0	4588	2010	Collector	III / VI
35 Glenridge Ave.	N. Willow St.	Grove St.	Local	32.0 / 42.0	5873	2014	Collector	III / IV
36 Glenridge Ave.	Grove St.	Pine St.	Local	35.0	7974	2010	Collector	iii
37 Grove St.	Bloomfield Ave.	Walnut St.	County	40.0	12743	2011	Minor Arterial	II
38 Grove St.	Walnut St.	McDonough St.	County	40.0	17090	2011	Minor Arterial	II
39 Grove St.	McDonough St.	Watchung Ave.	County	40.0	18978	2009	Minor Arterial	II
40 Grove St.	Watchung Ave.	Bellevue Ave.	County	40.0	16181	2011	Minor Arterial	II
40 GIOVE St.								
41 Grove St.	Bellevue Ave.	Alexander Ave.	County	40.0	13919	2010	Minor Arterial	II II

RECOMMENDED SAFE CS NETWORK RECOMMENDATIONS

(ON-ROADLINKS ONLY)

o STREET NAME	START	END	JURISDICTION	WIDTH	ADT	COUNT YEAR	FUNCTIONAL CLASS	TYPOLOGY
43 Harrison Ave.	West Orange line	Cedar Ave.	Local	36.0	10362	2011	Minor Arterial	1
44 Harrison Ave.	Cedar Ave.	Warren Pl.	Local	36.0	11086	2008	Minor Arterial	i
45 Harrison Ave.	Warren Pl.	Union St.	Local	36.0	7383	2010	Minor Arterial	i
46 Highland Ave.	Claremont Ave.	Edgewood Rd.	Local	26.0	771	2010	Local	V
47 Highland Ave.	Edgewood Rd.	Ingleside Rd.	Local	26.0	1120	2010	Local	V
48 Highland Ave.	Ingleside Rd.	Windsor Pl	Local	26.0	1105	2010	Local	V
49 Highland Ave.	Windsor Pl	Little Falls line	Local	26.0	724	2009	Local	V
50 Hillside Ave.	South Mountain Ave.	St. Lukes Place	Local	35.5	701	2009	Local	V
51 Llewellyn Rd.	S. Mountain Ave.	Harrison Ave.	Local	32.0	1832	2008	Local	V
52 Llewellyn Rd.	Harrison Ave.	Elm St.	Local	32.0	3246	2009	Collector	III
53 Lorraine Ave.	N. Mountain Ave.	Duryea Rd.	Local	32.0	3642	2011	Collector	III
54 Maple Ave.	Lincoln St.	Elmwood Ave.	Local	36.0			Local	V
55 Maple Ave.	Elmwood Ave.	Bloomfield Ave.	Local	36.0	3959	2015	Collector	III
56 Mountainview Pl.	Bell St.	Valley Rd.	26	L	5555	2025	Local	v
57 Mt. Hebron Rd.	Highland Ave.	Valley Rd.	Local	35.0	4924	2016	Local	v
58 Mt. Hebron Rd.	Valley Rd.	Grove St.	County	35.0	9519	2009	Collector	III
59 N. Fullerton Ave.	NJT Railroad	Watchung Ave.	Local	32.0	3149	2016	Local	 V
60 N. Fullerton Ave.	Watchung Ave.	Wildwood Ave.	Local	32.0	1305	2008	Local	v
61 N. Mountain Ave.	Bloomfield Ave.	Club St.	Local	33.0	6868	2014	Collector	III
62 N. Mountain Ave.	Club St.	Watchung Ave.	Local	33.0	4073	2014	Collector	III
63 N. Mountain Ave.	Watchung Ave.	Lorraine Ave.	Local	33.0	3105	2009	Local	v
64 Normal Ave.	Trutterium graves	Editalia Att.	County	30.0	10466	2011	Minor Arterial	i
65 Normal Ave.	at NJT RR Xing		oddinty	70.00	6979	2016	Minor Arterial	i
66 Oak St.	at 101 III / III B		Local	28.0	03,3	0	Local	v
67 Orange Rd.	Orange line	Llewellyn Rd.	County	40.0	9499	2015	Minor Arterial	II / VI
68 Orange Rd.	Llewellyn Rd.	Union St.	Local	30.0	745	2009	Local	VI
69 Orange Rd.	Union St.	Bloomfield Ave.	Local	40.0	11811	2009	Minor Arterial	II.
70 Orange Rd. West	Onion St.	biodimeia Ave.	County	0.0	6352	2011	Minor Arterial	VI
71 Park St.	Bloomfield Ave.	Claremont Ave.	Local	40.0	7842	2014	Collector	IV
72 Park St.	Claremont Ave.	Chestnut St.	Local	35.0	5062	2011	Collector	III
73 Park St.	Chestnut St.	Watchung Ave.	Local	35.0	5844	2014	Collector	iii
74 Park St.	Watchung Ave.	Lorraine Ave.	Local	35.0	5882	2014	Collector	III
75 Park St.	Lorraine Ave.	Glenwood Ave.	Local	35.0	4899	2014	Collector	
76 Pine St.	Bloomfield Ave.	Glenridge Ave.	Local	33.0	5177	2016	Collector	III
77 Pine St.	Glenridge Ave.	Claremont Ave.	Local	33.0	3609	2010	Local	V
77 Pine St. 78 Pine St.	Claremont Ave.	Walnut St.	Local	33.0	3003	2011	Local	V
79 Pleasant Way	Ciarellioni Ave.	walliot St.	Local	26.0			Local	V
80 Pleasant Way			Local	26.0			Local	V
81 S. Fullerton Ave.	Union St.	Bloomfield Ave.	Local	30.0	6263	2016	Local	V
82 S. Mountain Ave.	Eagle Rock Way	Union St.	Local	35.0	2893	2016	Local	v
	Union St.	Bloomfield Ave.		35.0	8809	2014	Collector	III
83 S. Mountain Ave. 84 S. Park St.	The Crescent	Church St.	Local Local	35.0 36.0	1970	2014	Collector	IV

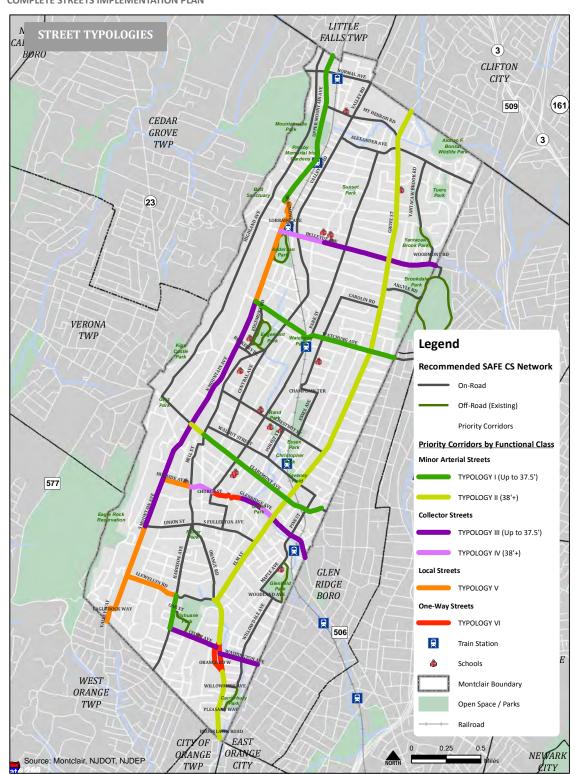
RECOMMENDED SAFE CS NETWORK RECOMMENDATIONS

(ON-ROADLINKS ONLY)

No STREET NAME	START	END	JURISDICTION	WIDTH	ADT	COUNT YEAR	FUNCTIONAL CLASS	TYPOLOGY
85 S. Park St.	Church St.	Bloomfield Ave.	Local	54.0	2711	2014	Collector	IV
86 The Crescent	Trinity Pl.	South Park St.	Local	26.0	1922	2016	Local	V
87 Union St.	Orange Rd.	S. Willow St.	Local	32.0	3617	2016	Collector	III
88 Union St.	S. Willow St.	Elm St.	Local	32.0	3285	2016	Collector	III
89 Upper Mountain Ave.	Bellevue Ave.	Jerome +300 ft.	Local	32.5	15795	2011	Minor Arterial	1
90 Upper Mountain Ave.	Jerome +300 ft.	Mt. Hebron Rd.	County	32.5	9167	2008	Minor Arterial	1
91 Upper Mountain Ave.	Mt. Hebron Rd.	Little Falls line	County	32.5	8132	2015	Minor Arterial	1
92 Valley Rd.	Bloomfield Ave.	Claremont Ave.	County	36.0	15195	2014	Minor Arterial	1
93 Valley Rd.	Claremont Ave.	Watchung Ave.	County	32.0	12965	2011	Minor Arterial	1
94 Valley Rd.	Watchung Ave.	Bellevue Ave.	County	32.0	13212	2009	Minor Arterial	1
95 Valley Rd.	Bellevue Ave.	Mt. Hebron Rd.	County	40.0	12920	2014	Minor Arterial	II
96 Valley Rd.	Mt. Hebron Rd.	Normal Ave.	County	40.0	13359	2009	Minor Arterial	II
97 Valley Way	200 ft. south of Eagle Rock Way		Local	28.0	1849	2013	Local	V
98 Walnut Crescent	Walnut St.	Oxford St.	Local	30.0	6071		Collector	III
99 Walnut St.	Valley Rd.	Park St.	Local	35.0	7751	2009	Collector	III
100 Walnut St.	Park St.	Greenwood Ave.	Local	35.0	8096	2014	Collector	III
101 Walnut St.	Greenwood Ave.	Grove St.	Local	40.0	7377	2011	Collector	IV
102 Walnut St.	Grove St.	Walnut Crescent	Local	36.0	3651	2009	Collector	III
103 Washington Ave.			Local	28.0	3503	2014	Collector	III
104 Watchung Ave.	Upper Mountain Ave.	Valley Rd.	County	36.0	5824	2011	Minor Arterial	ı
105 Watchung Ave.	Valley Rd.	Park St.	County	36.0	12834	2008	Minor Arterial	1
106 Watchung Ave.	Park St.	Grove St.	County	36.0	12517	2014	Minor Arterial	1
107 Watchung Ave.	Grove St.	Glen Ridge line	County	36.0	14791	2011	Minor Arterial	1
108 Willowdale Ave.	Hollywood Ave.	Washington Ave.	Local	26.0			Local	V
109 Willowdale Ave.	Washington Ave.	Lincoln St.	Local	35.0	1253	2008	Local	V
110 Willowdale Ave.	Lincoln St.	Woodland Ave.	Local	36.0			Local	V
111 Willowmere Ave.			Local	26.0	440	2016	Local	V
112 Woodland Ave.			Local	36.0			Local	V
113 Yantacaw Brook Rd			Local	30.0	705	2009	Local	V

MONTCLAIR SAFE





STREET TYPOLOGIES:

TYPOLOGY I - Minor Arterial Street (Up to 37.5')

TYPOLOGY II - Minor Arterial Street (38'+)

TYPOLOGY III - Collector Street (Up to 37.5')

TYPOLOGY IV - Collector Street (38'+)

TYPOLOGY V - Local Street

TYPOLOGY VI - One-Way Street

Legend for Typologies



Width







1,234 ADT (2017)

Limit

On-Street Parking Permitted

Two-lane Roadway

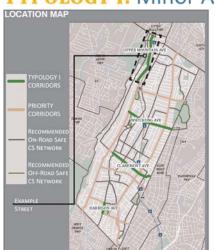
On-Street Average Parking Not Daily Traffic Permitted (Count Year)







Typology I: Minor Arterial Street (Up to 37'wide)



(example: Upper Mountain Avenue)







RECOMMENDATIONS

install bicycle lanes on both sides with a striped buffer

BENEFITS

enables bicyclists to ride at their preferred speed without interference from prevailing traffic conditions a buffer provides a greater shy distance between motor vehicles and bicyclists thus appealing to a wider cross-section

CONSIDERATIONS

parking will need to be estricted greater enforcement s required to prevent notorists from parking n the bicycle lane

of hicycle users visually reminds motorists of bicyclists' right to the street

PROTECTED BICYCLE LANES

· install two-way protected bicycle lanes with a striped buffer with bollards

RENEFITS

- dedicates and protects space for bicyclists - reduces risk and fear of collisions especially with

over-taking vehicles more attractive to a wide range of bicyclists at all

levels and ages

CONSIDERATIONS

ideal for roadways with longer blocks as additional considerations is required at driveways and side-street

parking will need to be restricted coordinating snow removal and weeping will be required

buffer will vary depending on width





CLIMBING BICYCLE LANE & SHARROWS

 install a bicycle lane on one side (uphill direction) and add sharrows on the other side of the roadway (downhill direction)

ADT

- a dedicated bicycle facility uphill enables motorists to safely pass slower-speed bicyclists

 maximizes existina roadway widths

- requires no restrictions on

CONSIDERATIONS

requires posted speed limit reduction to 25 mph may encourage wrong-way bicycle riding with steep slopes

SHARROWS & TRAFFIC CALMING

· install sharrows or shared lane markings in conjunction with traffic calming measures such as installing speed humps, tightening the curb radii, adding curb extensions, etc. BENEFITS

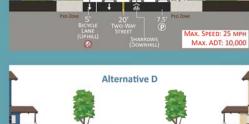
- indicate the most appropriate and safe locations to ride on with respect parked cars and moving traffic - reinforces the legitimacy of bicycle traffic on the street
- requires no restrictions on parkina
- provide wayfinding guidance

- recommended for roadways

CONSIDERATIONS

- can be used to fill a gap within a bicycle

requires posted peed limit reduction not ideal for high volume roadways does not dedicate exclusive use for



Alternative C



INTERSECTION TREATMENTS

- · consider intersection treaments for both bicyclists and pedestrians to improve visibility / safety and help in creating a complete network
- intersection treatments can include but are not limited to high-visibility crosswalks. bicycle boxes, curb extensions, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.



ow-Cost Curb Extensions and continuous bi-



Bicycle Box, San Francisco, CA Credit: SF Bicycle Coalition)

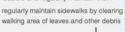
- · place centerline "stop for pedestrians" signs on lower speed roadways to help alert drivers of a crosswalk
- ensure crosswalk signs meet current standards



"Stop For Pedestrians" Sign forristown, NJ

consider using other traffic calming measures such as installing speed humps, tightening the curb radii of

- certain streets install high-visibility crosswalks where
- feasible and regularly maintain them



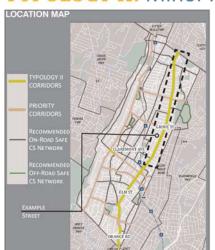


Orange Road West, Montclair, NJ





Typology II: Minor Arterial Street (38'+ wide)



(example: Grove Street) SPEED 16,000



Existing street example - Grove Street (Northbound)

35



RECOMMENDATIONS

install bicycle lanes on both sides with a striped buffer

BENEFITS

enables bicyclists to ride at their preferred speed without interference from prevailing traffic conditions a buffer provides a greater shy distance between motor vehicles and bicyclists thus appealing to a wider cross-section

of hicycle users visually reminds motorists of bicyclists'

n the bicycle lane

right to the street

CONSIDERATIONS

parking will need to be restricted on one side areater enforcement s required to prevent notorists from parking

PROTECTED BICYCLE LANES

· install two-way protected bicycle lanes with a striped buffer with bollards

RENEFITS

- dedicates and protects space for bicyclists

- reduces risk and fear of collisions especially with over-taking vehicles more attractive to a wide range of bicyclists at all levels and ages

CONSIDERATIONS

- ideal for roadways with longer blocks as additional considerations is required at ariveways and side-street

- parking will need to be restricted on one side or both sides for narrow roads





CLIMBING BICYCLE LANE & SHARROWS

install a bicycle lane on one side (uphill direction) and add sharrows on the other side of the roadway (downhill direction)

BENEFITS

ADT

(2010)

- a dedicated bicycle facility uphill enables motorists to safely pass slower-speed bicyclists - maximizes existing roadway

CONSIDERATIONS

- parking may need to be restricted on one side on narrow roadways - may encourage wrong-way bicycle riding - recommended for roadways with steep slopes

· install sharrows or shared lane markings in conjunction with traffic calming measures such as installing speed humps, tightening the curb radii, adding curb extensions, etc. RENEFITS

- indicates the most appropriate and safe locations to ride on with respect to parked cars and moving traffic - reinforces the legitimacy of bicycle traffic on

- requires no restrictions on parking - can be used to fill a gap within a bicycle
- provide wayfinding guidance

Alternative C

MAX. SPEED: 25 MPH MAX. ADT: 10.000

CONSIDERATIONS

- the street
- network

does not dedicate exclusive use for bicvclists not ideal for high volume roadways



INTERSECTION TREATMENTS

- · consider intersection treaments for both bicyclists and pedestrians to improve visibility / safety and help in creating a complete network
- intersection treatments can include but are not limited to high-visibility crosswalks. bicycle boxes, curb extensions, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.



ow-Cost Curb Extensions and continuous bi-

certain streets



Bicycle Box, San Francisco, CA credit: SF Bicycle Coalition)

- place centerline "stop for pedestrians" signs on lower speed roadways to help alert drivers of a crosswalk
- ensure crosswalk signs meet current standards



"Stop For Pedestrians" Sign forristown, NJ

consider using other traffic calming measures such as installing speed humps, tightening the curb radii of

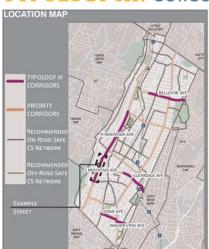
- install high-visibility crosswalks where feasible and regularly maintain them
- regularly maintain sidewalks by clearing walking area of leaves and other debris



Orange Road West, Montclair, NJ



Typology III: Collector Street (Up to 37.5' wide)



(example: S. Mountain Avenue)





Existing street example - South Mountain Ave (Southbound)



RECOMMENDATIONS

· install bicycle lanes on both sides with a striped buffer

BENEFITS	CONSIDE
- enables bicyclists to ride at their preferred speed without interference from prevailing traffic conditions - a buffer provides a greater shy distance between the product of the provides and bineficial traffic to the product of	- parking v restricted of - greater e is required

thus appealing to a wider cross-section visually reminds motorists of bicyclists right to the street

will need to be on both sides enforcement d to prevent from parking n the bicycle lane



· install two-way protected bicycle lanes with a striped buffer with bollards

BENEFITS	CONSIDERATIONS			
- dedicates and protects space for	- ideal for roadways with			

bicyclists reduces risk and fear of collisions especially with over-taking vehicles

nsiderations is required at driveways and side-street - more attractive to a wide range of bicyclists at all levels and ages

parking will need to be restricted on both sides

ATIONS

onger blocks as additional



SHARED USE PATH

 add a two-way shared use path especially in locations with large landscape buffers, longer blocks and where public rightof-way is available

2,900

ADT

(2010)

vehicle traffic and potentially with fewer intersections and as a result are safer than other facilities

- can provide an enjoyable recreational opportunity
- appeals to users of all ages and abilities parking does not need to be restricted

CONSIDERATIONS

ideal for roadways with longer blocks as additional considerations is required at driveways attract a variety of user groups who often

have conflicting needs

CLIMBING BICYCLE LANE & SHARROWS

 install a bicycle lane on one side (uphill direction) and add sharrows on the other side of the roadway (downhill direction)

- a dedicated bicycle facility uphill enables motorists to safely pass slower-speed bicyclists

maximizes existing roadway

parking will need to be restricted on one side - may encourage wrong-way bicycle ridina

CONSIDERATIONS

- recommended for roadways with steep slopes

Alternative C WITHIN PUBLIC R O W ONLY



SHARROWS & TRAFFIC CALMING

· install sharrows or shared lane markings in conjunction with traffic calming measures such as installing speed humps, tightening the curb radii, adding curb extensions, etc.

- indicates the most appropriate and safe locations to ride on with respect to parked cars and moving traffic - reinforces the legitimacy of bicycle traffic on

- the street - requires no restrictions on parking
- can be used to fill a gap within a bicycle
- provide wayfinding guidance

CONSIDERATIONS

does not dedicate exclusive use for bicyclists



- · consider intersection treaments for both bicyclists and pedestrians to improve visibility / safety and help in creating a complete network
- intersection treatments can include but are not limited to high-visibility crosswalks, bicycle boxes, curb extensions, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.





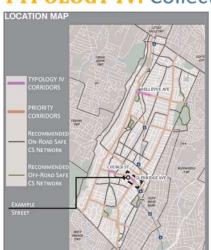








Typology IV: Collector Street (38" wide)



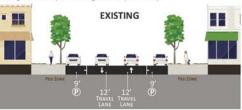
(example: Glenridge Avenue)



5,800 ADT (2010)



Existing street example - Glenridge Avenue (Eastbound)



Alternative A

RECOMMENDATIONS

· install two-way protected bicycle lanes with a striped buffer with bollards

BENEFITS	CONSIDERATIO
- dedicates and protects space for bicyclists - reduces risk and fear of collisions especially with over-taking vehicles	ideal for roadw longer blacks as considerations is at driveways and

vays with additional s required d side-street

parking will need to be estricted on one side

BUFFERED BICYCLE LANE

more attractive to a wide range of

bicyclists at all levels and ages

install bicycle lanes on both sides with a striped buffer

BENEFITS
- enables bicyclists to ride at their preferred speed without interference
from prevailing traffic conditions
- a buffer provides a greater shy distance
between motor vehicles and bicyclists
thus appealing to a wider cross-section
of bicycle users

right to the street

CONSIDERATIONS parking will need to be restricted greater enforcement is required to prevent motorists from parking n the bicycle lane



PROTECTED BICYCLE LANES w/ PARKING

· install two-way protected bicycle lanes with a striped buffer in between the sidewalk and on-street parking

		,
ENEFITS		CONSIDERAT

- dedicates and protects space for eliminates risk and fear of collisions especially with over-taking
- more attractive to a wide range of bicyclists at all levels and ages

ideal for roadways with longer blocks as additional considerations is required at driveways and side-street crossings parking will need to be restricted on one side



 install a bicycle lane on one side (uphill direction) and add sharrows on the other side of the roadway (downhill direction)

- a dedicated bicycle facility uphil enables motorists to safely pass slower-speed bicyclists - maximizes existing roadway

CONSIDERATIONS

may encourage wrong-way bicycle riding recommended for roadways with steep slopes



install sharrows or shared lane markings in conjunction with traffic calming measures such as installing speed humps, tightening the curb radii, adding curb extensions, etc.

BENEFITS

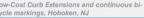
- indicates the most appropriate and safe locations to ride on with respect to parked cars and moving traffic - reinforces the legitimacy of bicycle traffic on
- requires no restrictions on parking
- can be used to fill a gap within a bicycle network - provide wayfinding guidance

CONSIDERATIONS does not dedicate exclusive use for bicyclists



- · consider intersection treaments for both bicyclists and pedestrians to improve visibility / safety and help in creating a complete network
- · intersection treatments can include but are not limited to high-visibility crosswalks, bicycle boxes, curb extensions, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.









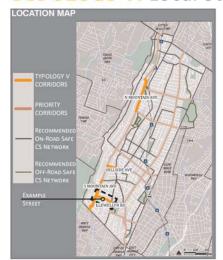








Typology V: Local Street



(example: Llewellyn Road)





Existing street example - Llewellyn Rd (Eastbound)



RECOMMENDATIONS

CLIMBING BICYCLE LANE & SHARROWS

 install a bicycle lane on one side (uphill direction) and add sharrows on the other side of the roadway (downhill direction)

BENEFITS

widths

CONSIDERATIONS

- a dedicated bicycle facility uphill enables motorists to safely pass slower-speed bicyclists maximizes existing roadway

parking may need to be restricted on one side may encourage wrong-way bicycle riding recommended for roadways with steen slones



BICYCLE ROUTE

 install signage on low-volume /low-speed streets where exclusive bicycle facilities are not necessary

BENEFITS

- reinforces the legitimacy of bicycle traffic on the street - requires no additional space or restrictions on parking
- can provide wayfinding guidance can discourage sidewalk riding

CONSIDERATIONS does not dedicate exclusive use for bicyclists



SHARROWS & TRAFFIC CALMING

install sharrows or shared lane markings in conjunction with traffic calming measures such as installing speed humps, tightening the curb radii, adding curb extensions, etc. CONSIDERATIONS

BENEFITS

1,800

ADT

(2008)

- indicate the most appropriate and safe locations to ride on with respect parked cars

- and moving traffic - reinforces the legitimacy of bicycle traffic on the street
- requires no restrictions on parking - can be used to fill a gap within a bicycle network - provide wayfinding guidance

does not dedicate exclusive use for



Alternative D

ADVISORY BICYCLE LANES

· install dashed white lines on both sides of a low traffic volume roadway (no centerline) to delineate bicycle areas

BENEFITS

- striping offers visual separation

- and reminds people that the road is a shared space
- have a traffic calming effect as motorists tend to travel slower - provides a viable option for bicycle facilities on narrow roadways

CONSIDERATIONS

less protection for cyclists than a unfamiliarity with the reatment can lead to

confusion may require restrictions on parking

onventional bicycle lane

MAX. SPEED: 25 MPH MAX. ADT: 2,500

- · consider a bicycle boulevard / greenway treatment by optimizing bicycle travel along low-volume and low-speed streets using treatments such as traffic calming, signage, and pavement markings, and intersection crossings
- can be achieved with minor changes to the street configuration and no additional width is required
- typical deisgn elements along a bicycle boulevard include forced-turn islands. centerline medians with bicycle/pedestrian pass throughs, raised crossings / intersections, minitraffic circles, pedestrian refuges etc.

- · consider intersection treaments for both bicyclists and pedestrians to improve visibility safety and help in creating a complete network
- · intersection treatments can include but are not limited to high-visibility crosswalks, bicycle boxes, curb extensions, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.



Bicycle Boulevard, Portland, OR Credit: NACTO)



ini-Traffic Circle, Madison, WI edit: NACTO)



ow-Cost Curb Extensions and continuous bivcle markings, Hoboken, NJ



Bicycle Box, San Francisco, CA Credit: SF Bicycle Coalition)

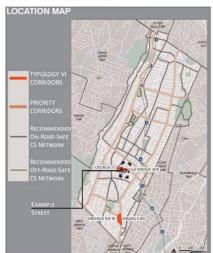








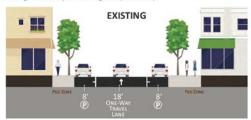
Typology VI: One-Way Streets







Existing street example - Glenridge Ave (Eastbound)



RECOMMENDATIONS

CONTRAFLOW BICYCLE LANE & SHARROWS

 install a contraflow bicycle lane in the opposite direction of motor vehicle traffic with a striped buffer and sharrows on the other side

BENEFITS

- provides direct access and connectivity for bicycles traveling in both directions Bicyclists do not have to make
- a detour as a result of one-way - limits dangerous wrong-way riding by allowing cyclists to
- safely ride in the opposite direction of cars

CONSIDERATIONS

- use only where bicyclists can effectively and conveniently nake transitions at the terminus of the bicycle lane
- ideal for a few blacks to omplete a proposed or existing bicycle network
- relevant signage is important buffers are needed for safe movement of the bicyclists

BUFFERED BICYCLE LANE (ONE-WAY TRAVEL)

· install bicycle lane with a buffer

BENEFITS

- enables bicyclists to ride at their preferred speed without interference from prevailing traffic conditions a buffer provides a greater shy distance between motor vehicles and bicvclists thus appealing to a wider cross-section of bicycle users

visually reminds motorists of bicyclists' right to the street

CONSIDERATIONS

only accommodates one-way travel for to discourage vrong-way riding a bicycle facility should be provided for the opposite direction on a eighboring street





BICYCLE BOULEVARD / GREENWAY

- · consider a bicycle boulevard / greenway treatment by optimizing bicycle travel along low-volume and low-speed streets using treatments such as traffic calming, signage, and pavement markings, and intersection crossings
- can be achieved with minor changes to the street configuration and no additional width is required
- typical deisgn elements along a bicycle boulevard include forced-turn islands, centerline medians with bicycle/pedestrian pass throughs, raised crossings / intersections, minitraffic circles, pedestrian refuges etc.



Bicycle Boulevard, Portland, OR (Credit: NACTO)



Mini-Traffic Circle, Madison, WI (Credit: NACTO)

INTERSECTION TREATMENTS

- · consider intersection treaments for both bicyclists and pedestrians to improve visibility safety and help in creating a complete network
- · intersection treatments can include but are not limited to high-visibility crosswalks, bicycle boxes, curb extensions, continuous bicycle markings, loop detectors at signalized intersections, etc.
- Treatments such as curb extensions also create a traffic calming effect and make it easier for pedestrians to cross the roadway by reducing the crossing distance.



w-Cost Curb Extensions and continuous biycle markings, Hoboken, NJ



icycle Box, San Francisco, CA

· consider placing centerline "stop for pedestrians" signs on lower speed roadways to help alert drivers of a crosswalk



Stop For Pedestrians" Sign

OTHER RECOMMENDATIONS

- · consider using other traffic calming measures such as installing speed humps, tightening the curb radii of certain streets
- install high-visibility crosswalks where feasible and regularly maintain them
- regularly maintain sidewalks by clearing walking area of leaves and other debris



range Road West, Montclair, NJ





MEMORANDUM OF MEETING

TO: Kim Craft, Montclair and Bill Riviere, NJDOT

FROM: Mike Dannemiller, Rachana Sheth

DATE: 03/08/2017 at 7:00 pm Montclair Fire HQ

ATTENDEES: See attached Sign-In Sheet

SUBJECT: Montclair SAFE CS Implementation Plan – Public Information Center

NV5, Inc. Project # J728616.0000095.03

The Montclair SAFE CS Implementation Plan Team (NV5 & Susan Blickstein) held a public open house on Wednesday, March 8^{th} , 2017 from 7:00 p.m. to 9:00 p.m. at the Montclair Municipal Building. The purpose of the meeting was to present the methodology, recommended SAFE CS network, and the pedestrian and bicycle recommendations including street typologies and gather feedback from the public.

The format of the meeting was an open house format with presentation boards and comment forms. In addition, to Montclair and NJDOT staff, the meeting was attended by more than 50 people from the community. A sign-in sheet is attached for reference; however please note that the sign-in sheets do not accurately reflect attendance as several attendees did not sign in. Some of the feedback received is summarized below:

Public Comments

- Street lighting is a major issue and should be highlighted
- Accommodations for landscaping trucks and other large vehicles that typically park in the shoulder should be considered if the recommendations include removing or reducing the shoulder widths
- Safety of the bicyclists in the roadways is a concern
- Consider phasing the implementation of the capital plan municipal streets first as a pilot and then County roads
- Reduce the speed limit to 25 mph town wide

Attachments:

- Sign-in sheet
- Comment forms
- Boards:
 - Schedule
 - What are Bicycle & Pedestrian Friendly Streets?
 - Methodology
 - Recommended SAFE CS Network
 - Priority Network and Street Typologies Assumptions
 - Pedestrian Recommendations
 - Six (6) Street Typologies

NV5 March 20, 2017 Page 2

Meeting Photos









Final Public Open House SIGN-IN SHEET

Name	Title / Affiliation	Email Phone
SACOB Lewis	,	
(CO12p)		
Susan Blickstein	SGB	Sblickstein@gmail.com
Kachare Sheth	NVSS	
JOHN KANE	SIENA COMMUNITY GROUP	NJ_JOHNK@YAHOO.COM
DAVE FUCTO	from with is shotted	DAVE. PUGO & VA 1304 16
	Commile	
William Scott	TPAC	William LScott & VERIZUNINET
Cynthia Cox		CJCOX71 @ comcast. net
Mollie Thange,	The Martelair Times	gray anorhyercy can
Jana Talley	Montdaje Top	<u> </u>
Will Fearly	Bike and Walk Mentela!	r Nill terney Sagnail. Com
Ryan Sharp		resharp20@gmail.com
J		







Final Public Open House SIGN-IN SHEET

Name	Title / Affiliation	Email	Phone
Coursiluoman REC	Bookeville MD M.	onplar Township	(973)4771146
Laura Torchio B	The swell Montober	torchidanne gmal, can	973 723 2848
Alfred Davis	3r 3/601	age Kd ME	973 783 3606
AUDREY HAWLEY	17 GREN		773 809-4372
Bythe Eamar	9 Carteret	St. BLYTHEEAMAN OGMA	
Roz Moskovitz Bi	elski 11 Wedge	ewood DR W.O. PLOSON PSABIN	
CAM PICCOLL	Circi un anno	· · · · · · · · · · · · · · · · · · ·	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
B- 55001	MEAT	CEL TWIP OF HONTCLARA	973 509-5721
DEN SELBY	MDD INC	bSelbye Montdaie. KIR. NJ. 1	
ANDREW REIMANN	MPB, HYC #5	STUDNEY BI REDUCENT WE	1 973-632-77 94 917-993-0302
John Sullian	Bullardan	physillian 73 ocinail con	1 11 712
Mike Dannentiller		Michael Dannem Here NV5. Con	





Final Public Open House SIGN-IN SHEET

Name	Title Title	e / Affiliation	Email	Phone
Norma	79589	BIKE: MALK ALTE		973768 8541
MATE RIVE	/	MSUUSGBC		2d 655-9960
James	na Grant	Resident	jamer	na grant@ gmail.com
Koren	Skelenson	Re Sident		na grant @ gmail.com 973 7440755
1	IOSCAKI	RESIDENT		
Debra	Kagar	Regiz 48Mm		dicaparallaigproductioning
Willio	im Riviere	NZDOL		
Michael	Garrett	Texpeyer	mic	had @ cavarly com
			¥	
:				





Final Public Open House

SIGN-IN SHEET

Name	Title / Affiliation	Email	Phone
Carmel to be how	Bleering Committee	Te .	
	O		





Final Public Open House COMMENTS

If you have any comments or recommendations for improving walking or biking in Montclair, please indicate below.

The same of the sa
THIS WAS VERY INFORMATIVE & BENEFICIAL.
I WANT MY DANGHAM TO RIDE HOR BIKE
WHEN SHE BEGINS MIDDLE SCHOOL MEXT
MEAR & THIS RESEARCH IS GREAT LAST
YEAR I SAW A LITTLE GIRL WHO WAS
RIDING HON BIKE ALONE ON BLOOMFIELD
PIDING HOR BIKE ALONE ON BLOOMFIERD AVE & MIDLAND & WAS HIT BY A CAR.
THIS PLANNING & PESEARCH MILL HARP KERP PEDPLE & SCHOOL AGE CHILDREN SAPE
KAR PEDPLE & SCHOOL AGE CHILDREN SAPE
GREAT WORK //



Final Public Open House

COMMENTS

If you have any comments or recommendations for improving walking or biking in Montclair, please indica	ıte below.
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A STATE OF THE PROPERTY OF THE TO SENTE
AS PROTECTED BIKE LANES, SIGNED BIKE PATHS, SHARED ROADS BEGIN TO COME TO FRUITION,
BIKE HERE FROM DOWN TOWN BLOOMFIELD; THE MAPS KEPT ROUTING ME BACK TO BLOOMFIELD AVE,
WOULD LOVE TO SEE THESE PROJECTS GET THE MAXIMUM EXPOSURE POSSIBLE. MORESO, I AM VERY INTERESTED
IN STAYING UP DATED ON THE PROPOSED RAIL TRAIL FROM HERE TO JERSEY (ITY,
- ANDREW REIMANN
ANDREWG JALAPENOCYCLING CONT



Final Public Open House COMMENTS

you have any comments or recommendations for improving walking or biking in Montclair, please indicate below.	
Excellent work. May be consider phasing the implementation of the capital plan to do a municipal street first (perhaps as	16
Excellent work. May be consider phasing the implementation of the capital plan to do a municipal sheet first (perhaps as pilet), demonstrate the success of the complete sheet, then use this success strong to push Essex country into more aggiversive constitution on country Roads.	mplek
Also love the min traffic circles	





MONTCLAIR SAFE

Final Public Open House

COMMENTS

If you have any comments or recommendations for improving walking or biking in Montclair, please indicate below.

Street lights ore Nut enough. The Sheets overall one very DALK
Street lights ore Nut enough. The streets overall on very DALK Wishuone PARK- IS not litatall at nights



Final Public Open House COMMENTS

If you have any comments or recommendations for improving walking or biking in Montclair, please indicate below.
AFTER A COMPLETE REVIEW OF THE TOPOGRAPHY I
SEE A GOOD PLAN COMING TO GETHER MY PRESENCE
15 ON SREETS 38' - WELL AS Would RIKE TO
SEE SLIERNAGE A FEELING THAT A BETTER DELL
THELD CYCLIST SECURITY WOULD GO A LONG WAY
TO Monote Cycling IN THE Township.
ONE THE DATE WAY STREETS I FEEL SIGNAGE
Nould The THEST HELE WATH WALKERS & CYCHIST
SHARING THE ROADWAY SMUAR TO- SCHERNAR BITTE
OK TOUCHORNITH SIV ACTEMPTE WITH, COTTECTS
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Final Public Open House

COMMENTS

If you have any comments or recommendations for improving walking or biking in Montclair, please indicate below.

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Final Public Open House

COMMENTS

If you have any comments or recommendations for improving walking or biking in Montclair, please indicate below.
Great to have some thought about trappie in the Area.
Brayde segregation from auto trapper unil enable more people to isine
- The various choices or volvations snow never another and well work if
Lin for all viers and also tripught above difficult intersection over
as textolog & the two parts streets. I am there given and one nuch
meds to he done. Stop lights, troyer ander or any other calming
devices unds to be unplemented.



Final Public Open House COMMENTS

If you have any comments or recommendations for improving walking or biking in Montclair, please indicate below.
neve are a few key intersections that need pedestrian heads/lights
I'm particularly concerned about Watching & Valley &d.
Poixe lanes need prioritization in Montelair. There are so many
activities for kids in town, but they are often dependent on
having parents or sitters provide rides. Safe billing options
for our kids & teens are needed for their safety and a
Shift in perspective — it can be done.



MONTCLAIR SAFE

Final Public Open House COMMENTS

If you have any comments or recommendations for improving walking or hiking in Montclair, please indicate below.

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\$ 75 mph town wi	76
ophous A of B. Any of the ophow at	It is for to despectus to do 35 mpn, redistically people speci
If you take the parkits once legicents with some with some	afficient of cross a coad





Michael Dannemiller

From:

Kimberli Craft < kcraft@montclairnjusa.org>

Sent:

Friday, March 10, 2017 9:34 AM

To: Subject: Michael Dannemiller FW: SAFE Streets Plan

FYI

Kimberli R. Craft, P.E. Township Engineer

From: <u>juliebrian@comcast.net</u> [<u>mailto:juliebrian@comcast.net</u>]

Sent: Friday, March 10, 2017 9:08 AM

To: Kimberli Craft

Subject: SAFE Streets Plan

Dear Ms. Craft,

Thank you for looking at a plan to make our streets safer for cyclists and pedestrians. I was not able to attend your open house this week, so I wanted to write with a comment. I think it would be wonderful to make bike routes on our streets (like Upper Mountain). In your safety analysis, I urge you to also take into account landscaping trucks that are often parked on our streets. They take up the shoulder if one exists and usually some of the driving lane as well. I don't know what the solution is (maybe they should have to park in their clients' driveways) but that needs to be solved for us to use streets safely.

Thank you,

Julie Clemens

116 Central Ave

Rachana Sheth

From: Michael Dannemiller

Sent: Monday, March 20, 2017 10:03 AM

To: Rachana Sheth
Subject: FW: SAFE Streets

Follow Up Flag: Follow up Flag Status: Flagged

Please add to public comments:

Michael Dannemiller, PE | Principal Engineer | NV5 – Formerly The RBA Group

7 Campus Drive, Suite 300 | Parsippany, NJ 07054 | P: 973.946.5626

Electronic Communications Disclaimer

From: Kimberli Craft [mailto:kcraft@montclairnjusa.org]

Sent: Friday, March 17, 2017 2:40 PM

To: 'David Jones'

Subject: RE: SAFE Streets

Dear Mr. Jones,

Thank you for sharing your concern, which I will forward to our consultant for inclusion in the final report. Missing sections of sidewalk should certainly be a priority as we seek to improve pedestrian safety on our streets.

Regards, Kim Craft

Kimberli R. Craft, P.E. Township Engineer

From: David Jones [mailto:dkj104@gmail.com]

Sent: Friday, March 17, 2017 2:06 PM

To: Kimberli Craft Subject: SAFE Streets

Hello Kimberli,

I realize that I am coming to this a bit late and many of the opportunities to voice my opinion have passed, but I was reviewing some of the information about the SAFE Complete Streets Plan and noticed something that concerned me.

According to the attached document (Typologies by Street List from Montclair SAFE) Normal ave has some of the highest traffic volumes in Montclair. My concern is that this street is not on the list of

prioritized streets. The reason for my concern is that the section of Normal ave between Upper Mountain and Highland Ave has no sidewalk, yet might be one of the busiest streets in Montclair.

I feel that this should be part of the prioritized work as it is probably one of the few streets in Montclair that does not have any form of sidewalk. (I've attached a photo of Normal Ave showing the section without the sidewalk - Highland is in the distance.)

I would really appreciate it, if you would consider this portion of Normal ave when prioritizing streets involved in the Complete Streets program.

Thank you

David Jones





MEMORANDUM OF MEETING

TO: Kim Craft, Montclair and Bill Riviere, NJDOT

FROM: Mike Dannemiller, Rachana Sheth

DATE: 06/13/2017 at 4:00 pm Montclair Town Hall

ATTENDEES: See attached Sign-In Sheet

SUBJECT: Montclair SAFE CS Implementation Plan - Final Steering Committee Meeting

NV5, Inc. Project # J728616.0000095.03

The purpose of the meeting was to review the draft Montclair SAFE Complete Streets Implementation Plan, to obtain feedback from the Steering Committee and discuss next steps. Presentation boards of background material, typologies and the implementation matrix were presented. Handouts included the main body of the report, excerpts from the NJDOT CS Design guide and the agenda (see attached). The sign-in sheet is also attached.

Bill Riviere, NJDOT Bicycle and Pedestrian Programs initiated the meeting an overview of the project and the meeting purpose. Mike Dannemiller and Rachana Sheth provided background of the project, overview of the draft plan and the schedule. The following summarizes the major items of discussion from the Steering Committee meeting:

Steering Committee Input and Recommendations:

- This report is planned to be adopted as an element of the Master Plan and will be presented to the Planning Board and then the Town Council
- Close coordination between county and municipality was recommended especially since there is opportunity to incorporate bicycle and pedestrian accommodations when County roads are resurfaced
- The flexibility of the plan was well-received and the township will solicit consensus from the community to decide what options are selected for implementation
- Modify the implementation matrix to include a recommendation that the Township explore shared responsibility for sidewalk maintenance
- It was recommended that the Traffic & Parking Advisory Committee present and advocate for this plan to be implemented

Immediate Action Items:

- NV5 will provide all final documents necessary to edit and modify the report.
- It was decided that the deadline for sending any additional comments is 6/17/2017
- NV5 will prepare the final plan

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NV5 June 26, 2017 Page 2

Attachments:

- Attendee List
- Handouts:
 - Meeting Agenda
 - Excerpts from NJDOT Complete Streets Design Guide

Meeting Photos





MONTCLAIR SAFE COMPLETE STREETS IMPLEMENTATION PLAN

FINAL STEERING COMMITTEE MEETING

SIGN-IN SHEET

Name	Title / Affiliation	Email	Phone	7- J
William Riviere	NZDOT	william. rivieroe	lotinjav 609	5304646
Mike Dannemiller	NV5	Michael Dannemille	~	
DAVID ANDONO	Outy of Bist	DANTONNO	esseranty)	dao
CARMEZ LOUGHUAN	PLANNING BOX		rove genal.	
RACHANA SHEFK	VNZ		ne NV5. Com	
Kein Cool	Montclair	Kevaflomonto	Pairijusa. Com	973-509-5707
Debra Kagan	BWM	debra. Kagani	@gmail.con	201 452-4087-
Jana Talle	Montelan		0	
Stephanie Egnezzb	Montdair PD	Segnezzo@mon	tclairnjusa.org	973-509-4718
Laura Torchib	BWM			one 473 723 Degs
Erin Roll	Montclair Local	roll@mon	tchirloal.	news
Liz Brady	New Sersey Bike + W			
			0	







2017 State of New Jersey Complete Streets Design Guide



Health

Street design has a major impact on health. Each additional hour spent driving per day is associated with a 6 percent increase in obesity, while each additional kilometer walked is associated with a 5 percent reduction in this likelihood.¹

Complete Streets provide opportunities for active transportation by integrating features into street designs that facilitate and encourage walking, cycling, and transit use. One study found that residents are 65 percent more likely to walk in a neighborhood with sdewalks.² Other studies have shown similar effects where bicycle, pedestrian, and transit infrastructure correlate with higher rates of physical activity and lower rates of obesity.

Streets that are designed only for cars discourage other modes of transportation, including walking and bicycling. Even where sidewalks do exist, large gaps in the sidewalk network, wide intersection crossings, speeding traffic, poor maintenance, and the lack of adequate accommodations for the mobility impaired can make walking unpleasant or unsafe.



According to the Centers for Disease Control and Prevention (CDC), more than one-third (34.0 percent) of U.S. adults are obese, with a related estimated annual medical cost of \$147 billion in 2008 dollars. Childhood obesity is also a serious problem in the U.S., affecting about 17 percent or 12.7 million U.S. children 2 to 19 years of age. According to the U.S. Department of Health and Human Services (HHS), one big factor in high obesity levels is inactivity. About 55 percent of the U.S. adult population falls short of recommended activity quidelines.⁴



34_%



147 billion*



17% Obese Children



55% Adults do not ge enough exercise

* In 2008 dollars

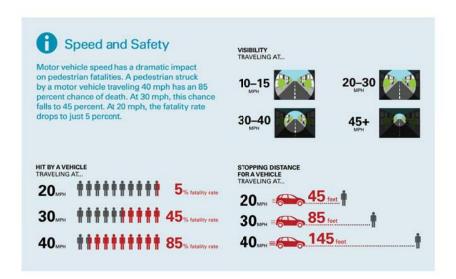


Design Speed

Speed is a critical factor in the occurrence of crashes and the severity of their outcomes. Street design in the latter half of the 20th century was grounded in highway design principles that focused on forgiving driver error and accommodating higher travel speeds. The highway design approach bases design speed and posted speed on the 85th-percentile of how fast drivers are driving rather than how fast they should drive. Designing for faster speed increases the frequency of crashes and their severity. This approach accommodates and encourages speeding and reckless driving behavior, and puts drivers who are driving the speed limit and other roadway users at greater risk. Higher design speeds also have a very negative impact on urban areas and degrade

the pedestrian environment by mandating larger curb radii, wider travel lanes, and generous clear zones to accommodate higher vehicular speeds. Designing for desired travel speed can help lower travel speeds, reduce crash severity, and otherwise improve the built environment for all users.

Design speed should be selected based on the context. and roadway elements should be selected and designed to support that speed. Where there are higher volumes of pedestrians, bicyclists, and transit users, roadway cesign should encourage a lower speed differential between modes. On most urban roads, a target speed cf between 10 and 30 mph is appropriate.





Bikeway Selection Guidance

Selecting the appropriate bicycle facility is a process that requires an understanding of context, roadway characteristics, the types of cyclists expected to use the facility, and how the facility fits within the overall roadway and cycling network. The flow chart below outlines a basic bicycle planning approach for engineers and planners in New Jersey. The process requires the user to determine which bicycle facility is appropriate for the roadway using the Bicycle Facility Table.

The table below uses 85th percentile motor vehicle speeds (if not available, use posted speed) and average daily traffic to determine which bicycle facility is appropriate and comfortable for most adults (generally a bicycle level of traffic stress of 2 or better). Additional factors, such as truck volumes, should also be considered. Design options with lower speeds or greater separation are more attractive for most bicyclists. As with most design guidance, flexibility through professional judgment is essential in applying the guidelines.



A Bicycle Facility Table

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	85TH PERCENTILE SPEED ¹										
ADT	≤ 20	25	30	35	40	45	≥50				
≤ 2,500	ABCDEF	A ² BCDEF	CDEF	CDEF	CDEF	DEF	F				
2,500-5,000	BCDEF	BCDEF	CDEF	CDEF	DEF	DEF	F				
5,000-10,000	B ³ CDEF	B ³ CDEF	CDEF	DEF	DEF	EF	F				
10,000-15,000	DEF	DEF	DEF	DEF	EF	EF	F				
≥15,000	DEF	DEF	DEF	EF	EF	F	F				

A: Shared Street/Bicycle Boulevard B: Shared-lane Markings E: Separated Bicycle Lane F: Shared-use Path

C: Bicycle Lane D: Buffered Bicycle Lane

'If data not available, use posted speed ² Bicycle boulevards are preferred at speeds ≤25 mph

3 Shared-lane markings are not a preferred treatment with truck percentages greater than 10%



Appendix E:

RECOMMENDED SAFE CS STREET
INVENTORY WITH STREET TYPOLOGIES

RECOMMENDED SAFE CS NETWORK RECOMMENDATIONS

(ON-ROAD LINKS ONLY)

0	STREET NAME	START	END	JURISDICTION	WIDTH	ADT	COUNT	FUNCTIONAL	TYPOLOGY
							YEAR	CLASS	
:	1 Alexander Ave.	Valley Rd.	Grove St.	Local	28.0	1194	2015	Local	V
	2 Alexander Ave.	Grove St.	Bloomfield line	County	28.0	4420	2009	Collector	III
	3 Argyle Rd			Local	26.0			Local	V
	4 Bell St.	Mountainview Place	Bloomfield Ave.	Local	32.0	6075	2009	Collector	III
!	5 Bellevue Ave.	Upper Mountain Ave.	Norwood Ave.	Local	40.0	6940	2012	Collector	IV
	6 Bellevue Ave.	Norwood Ave.	Grove St.	Local	37.0	8551	2014	Collector	111
	7 Bellevue Ave.	Grove St.	Bloomfield line	Local	35.0	9013	2010	Collector	III
:	8 Berkeley Pl	Upper Mountain Ave.	Valley Rd.	Local	30.0	1136	2010	Local	V
9	9 Bloomfield Ave.	N. Fullerton Ave.	Glenridge Ave.	County	56.0	17011	2010	Principal Arterial	XXXX
10	0 Braemore Rd	Lorraine Ave.	Upper Mountain Ave.	Local	22.0	638	2008	Local	V
1	1 Brooklawn Rd.			Local	26.0			Local	V
1	2 Carolin Rd.	N. Fullerton Ave.	Grove St.	Local	26.0			Local	V
13	3 Cedar Ave.	High St.	Nishuane Rd.	Local	33.0	6625	2015	Collector	III
1	4 Central Ave.	Walnut St.	Chestnut St.	Local	36.0			Local	V
1	5 Central Ave.	Chestnut St.	Valley Rd.	Local	36.0	1208	2014	Local	V / VI
1	6 Champlain Terr.			Local	26.0			Local	V
1	7 Chestnut St.	Valley Rd.	Midland Ave.	Local	32.0	3913	2009	Collector	Ш
18	8 Chestnut St.	Midland Ave.	N. Fullerton Ave.	Local	36.0	4392	2011	Collector	III
19	9 Chestnut St.	N. Fullerton Ave.	Essex Ave.	Local	35.0	5652	2012	Collector	III
20	0 Chestnut St.	Essex Ave.	Grove St.	Local	35.0	5545	2012	Collector	111
2:	1 Church St.	Bloomfield Ave.	S. Park St	Local	25.0	4540	2014	Collector	VI
2	2 Church St.	S. Park St	Orange Rd.	Local	35.0	1003	2011	Collector	III
2	3 Church St.	Trinity Pl.	South Park St.	Local		4707	2016	Collector	III
2	4 Claremont Ave.	Crestmont Rd.	Valley Rd.	Local	38.0	14743	2009	Minor Arterial	II.
2	5 Claremont Ave.	Valley Rd.	N. Fullerton Ave.	Local	32.0	12847	2011	Minor Arterial	ı
2	6 Claremont Ave.	N. Fullerton Ave.	Grove St.	Local	35.0	12906	2015	Minor Arterial	ı
2	7 Claremont Ave.	Grove St.	Walnut Crescent	Local	32.0	11028	2016	Minor Arterial	1
2	8 Eagle Rock Way	Undercliff Rd.	S. Mountain Ave.	Local	31.0	1772	2008	Local	V
	9 Edgemont Rd.	Watchung Ave.	Parkside	Local	36.0			Local	V
	0 Elm St.	Llewellyn Rd.	Elmwood Ave.	County	40.0	13455	2015	Minor Arterial	II

RECOMMENDED SAFE CS NETWORK RECOMMENDATIONS

(ON-ROAD LINKS ONLY)

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Wildwood Ave. Watchang Ave. Wildwood Ave. Eddi 32.5 1303 2000 Eddi	60 N. Fullerton Ave.	Watchung Ave.	Wildwood Ave.	Local	32.0	1305	2008	Local	V

RECOMMENDED SAFE CS NETWORK RECOMMENDATIONS

(ON-ROAD LINKS ONLY)

o STREET NAME	START	END	JURISDICTION	WIDTH	ADT	COUNT YEAR	FUNCTIONAL CLASS	TYPOLOGY
61 N. Mountain Ave.	Bloomfield Ave.	Club St.	Local	32.0	6868	2014	Collector	III
62 N. Mountain Ave.	Club St.	Watchung Ave.	Local	32.0	4073	2014	Collector	III
63 N. Mountain Ave.	Watchung Ave.	Lorraine Ave.	Local	32.0	3105	2009	Local	v
64 Normal Ave.	Wateriung Ave.	Lorraine Ave.	County	30.0	10466	2011	Minor Arterial	
65 Normal Ave.	at NJT RR Xing		County	30.5	6979	2016	Minor Arterial	1???
66 Oak St.	ac 1451 KK XIIIB		Local	28.0	0373	0	Local	٧
67 Orange Rd.	Orange line	Llewellyn Rd.	County	40.0	9499	2015	Minor Arterial	II / VI
68 Orange Rd.	Llewellyn Rd.	Union St.	Local	30.0	745	2009	Local	VI
69 Orange Rd.	Union St.	Bloomfield Ave.	Local	40.0	11811	2009	Minor Arterial	11
70 Orange Rd. West		Dioci.iii ciu / ii ci	County	0.0	6352	2011	Minor Arterial	VI
71 Park St.	Bloomfield Ave.	Claremont Ave.	Local	40.0	7842	2014	Collector	IV
72 Park St.	Claremont Ave.	Chestnut St.	Local	35.0	5062	2011	Collector	III
73 Park St.	Chestnut St.	Watchung Ave.	Local	35.0	5844	2014	Collector	101
74 Park St.	Watchung Ave.	Lorraine Ave.	Local	35.0	5882	2014	Collector	III
75 Park St.	Lorraine Ave.	Glenwood Ave.	Local	35.0	4899	2014	Collector	III
76 Pine St.	Bloomfield Ave.	Glenridge Ave.	Local	33.0	5177	2016	Collector	III
77 Pine St.	Glenridge Ave.	Claremont Ave.	Local	33.0	3609	2011	Local	V
78 Pine St.	Claremont Ave.	Walnut St.	Local	33.0			Local	V
79 Pleasant Way			Local	26.0			Local	V
80 Pleasant Way			Local	26.0			Local	V
81 S. Fullerton Ave.	Union St.	Bloomfield Ave.	Local	30.0	6263	2016	Local	V
82 S. Mountain Ave.	Eagle Rock Way	Union St.	Local	35.0	2893	2014	Local	V
83 S. Mountain Ave.	Union St.	Bloomfield Ave.	Local	35.0	8809	2014	Collector	Ш
84 S. Park St.	The Crescent	Church St.	Local	36.0	1970	2014	Collector	IV
85 S. Park St.	Church St.	Bloomfield Ave.	Local	54.0	2711	2014	Collector	IV
86 The Crescent	Trinity Pl.	South Park St.	Local	26.0	1922	2016	Local	V
87 Union St.	Orange Rd.	S. Willow St.	Local	32.0	3617	2016	Collector	III
88 Union St.	S. Willow St.	Elm St.	Local	32.0	3285	2016	Collector	Ш
89 Upper Mountain A	ve Bellevue Ave.	Jerome +300 ft.	Local	28.0	15795	2011	Minor Arterial	ı
90 Upper Mountain A	ve Jerome +300 ft.	Mt. Hebron Rd.	County	28.0	9167	2008	Minor Arterial	I.

MONTCLAIR SAFE COMPLETE STREETS IMPLEMENTATION PLAN

RECOMMENDED SAFE CS NETWORK RECOMMENDATIONS

(ON-ROAD LINKS ONLY)

No	STREET NAME	START	END	JURISDICTION	WIDTH	ADT	COUNT	FUNCTIONAL	TYPOLOGY
							YEAR	CLASS	
	91 Upper Mountain Av	re Mt. Hebron Rd.	Little Falls line	County	28.0	8132	2015	Minor Arterial	T.
	92 Valley Rd.	Bloomfield Ave.	Claremont Ave.	County	36.0	15195	2014	Minor Arterial	1
	93 Valley Rd.	Claremont Ave.	Watchung Ave.	County	32.0	12965	2011	Minor Arterial	1
	94 Valley Rd.	Watchung Ave.	Bellevue Ave.	County	32.0	13212	2009	Minor Arterial	
	95 Valley Rd.	Bellevue Ave.	Mt. Hebron Rd.	County	40.0	12920	2014	Minor Arterial	II.
	96 Valley Rd.	Mt. Hebron Rd.	Normal Ave.	County	40.0	13359	2009	Minor Arterial	II.
	97 Valley Way	200 ft. south of Eagle Rock	Way	Local	28.0	1849	2013	Local	V
	98 Walnut Crescent	Walnut St.	Oxford St.	Local	30.0	6071		Collector	Ш
	99 Walnut St.	Valley Rd.	Park St.	Local	35.0	7751	2009	Collector	III
1	00 Walnut St.	Park St.	Greenwood Ave.	Local	35.0	8096	2014	Collector	III
1	01 Walnut St.	Greenwood Ave.	Grove St.	Local	40.0	7377	2011	Collector	IV
1	02 Walnut St.	Grove St.	Walnut Crescent	Local	36.0	3651	2009	Collector	Ш
1	3 Washington Ave.			Local	30.0	3503	2014	Collector	III
1	04 Watchung Ave.	Upper Mountain Ave.	Valley Rd.	County	40.0	5824	2011	Minor Arterial	П
1	05 Watchung Ave.	Valley Rd.	Park St.	County	40.0	12834	2008	Minor Arterial	II.
1	06 Watchung Ave.	Park St.	Grove St.	County	40.0	12517	2014	Minor Arterial	II.
1	07 Watchung Ave.	Grove St.	Glen Ridge line	County	40.0	14791	2011	Minor Arterial	II
1	08 Willowdale Ave.	Hollywood Ave.	Washington Ave.	Local	26.0			Local	V
1	09 Willowdale Ave.	Washington Ave.	Lincoln St.	Local	35.0	1253	2008	Local	V
1	10 Willowdale Ave.	Lincoln St.	Woodland Ave.	Local	36.0			Local	V
1	11 Willowmere Ave.			Local	26.0	440	2016	Local	V
1	12 Woodland Ave.			Local	36.0			Local	V
1	13 Yantacaw Brook Rd			Local	30.0	705	2009	Local	V



Appendix F:

MONTCLAIR COMPLETE STREETS POLICY

#9

TOWNSHIP OF MONTCLAIR

A RESOLUTION AMENDING RESOLUTION TO ESTABLISH A COMPLETE STREETS POLICY

December 6, 2011

WHEREAS, by resolution adopted October 6, 2009 the Township of Montclair established a Complete Streets Policy resolving that all public street projects, both new construction and reconstruction (excluding maintenance) undertaken by the Township of Montclair shall be designed and constructed as "complete streets" whenever feasible to do so in order to safely accommodate travel by pedestrians, bicyclists, public transit, and motorized vehicles and their passengers is committed to creating street corridors that safely accommodate all road users of all abilities with special priority given to pedestrian safety and establishing conditions; now therefore

BE IT RESOLVED by the Council of the Township of Montclair, in the County of Essex, that said resolution be amended by amending subsection c of said conditions to read as follows:

c. In any project, should the proportion of the project costs applicable to pedestrian, public transit, and/or bicycle facilities exceed 20% as determined by engineering estimates that would have to be funded with local tax dollars, then and in that event, approval by Council must be obtained for same prior to bidding of the project.

RECORD OF COUNCIL VOTE

	YES	NO	ABS	N.V.	AB		YES	NO	ABS	N.V.	AB
Councilor Africk		1				Councilor Murnick	/			:	
Councilor Baskerville				, , , , , , , , , , , , , , , , , , ,		Councilor					
	\					Terry					
Mayor Fried	V		-			Deputy Mayor Weller- Demming	V	:			
Councilor Lewis	V										
X	- Indic	ate Vo	ote A	BS - A	bstain	N.V Not Voting	AB - A	bsent	•	1	

I HEREBY CERTIFY the foregoing to be a true copy of a resolution adopted by the Council of the Township of Montclair, in the County of Essex, at its meeting held on December 6, 2011.

Linda S. Wanat

Clerk of the Township of Montclair, N.J.

TOWNSHIP OF MONTCLAIR

A RESOLUTION TO ESTABLISH A COMPLETE STREETS POLICY

October 6, 2009

WHEREAS, the Township of Montclair is committed to creating street corridors that safely accommodate all road users of all abilities; and

WHEREAS, significant accomplishments have already been achieved by incorporating pedestrian safety and traffic calming measures when public streets are improved; and

WHEREAS, the Township Council supports this "complete streets" initiative and wishes to reinforce its commitment to creating a comprehensive, integrated, connected street network that safely accommodates all road users of all abilities and for all trips; now therefore

BE IT RESOLVED that all public street projects, both new construction and reconstruction (excluding maintenance) undertaken by the Township of Montclair shall be designed and constructed as "complete streets" whenever feasible to do so in order to safely accommodate travel by pedestrians, bicyclists, public transit, and motorized vehicles and their passengers, with special priority given to pedestrian safety, and subject to the following conditions:

- a. Pedestrian and bicycle facilities shall not be required where they are prohibited by law.
- b. Public transit facilities shall not be required on streets not serving as transit routes and the desirability of transit facilities will be determined on a project specific basis.
- c. In any project, should the cost of pedestrian, public transit, and/or bicycle facilities cause an increase in project costs in excess of 5%, as determined by engineering estimates, that would have to funded with local tax dollars, then and in that event approval by Council must be obtained for same prior to bidding of the project.



Appendix G:

FUNDING SOURCES



I. Funding Sources

Funding Programs and Source

The following is a compilation and brief description of sources of funding that have been, or could be used to fund pedestrian and bicycle improvements in New Jersey. The list is not exhaustive, but it identifies funding sources that can be utilized to fund bicycle and pedestrian planning and project development activities, as well as construction. Some funding sources may also be used to fund programmatic activities.

FEDERAL FUNDING OPPORTUNITIES 2
Transportation Alternatives Program (TAP)2
Safe Routes to School Program (SRTS)2
Local Safety Program3
Recreational Trails Program (RTP)
STATE FUNDING OPPORTUNITIES4
NJDOT Municipal Aid
NJDOT Bikeway Grant Program
NJDOT Safe Streets to Transit (SSTT)
NJ Division of Highway Traffic Safety Grants
New Jersey Healthy Communities Network Grants5
PRIVATE AND NON-PROFIT FUNDING SOURCES
Sustainable Jersey6
People for Bikes Community Grants6
The Robert Wood Johnson Foundation6
OTHER POTENTIAL FUNDING SOURCES 6
Municipal Allocations6
Impact Fees
Local Private-Sector Funding
Adopt-A-Trail Programs
Membership campaigns

Federal Funding Opportunities

Federal funding available for bicycle related projects is in a state of flux until a new federal transportation bill is updated. The current Federal Transportation Bill —known as Moving Ahead for People in the 21st Century (MAP-21) — was passed in 2012. Federal funding is set to expire on October 29, 2015. As new federal transportation legislation is adopted, the Borough of Bay Head should work closely with NJTPA, Ocean County, and NJDOT to monitor and take advantage of the new funding opportunities.

Transportation Alternatives Program (TAP)

Transportation Alternatives is the largest federal source for bicycle and pedestrian funding under MAP-21. TAP provides federal funds for community based "non-traditional" projects designed to strengthen the cultural, aesthetic and environmental aspects of the nation's intermodal system. TAP projects must relate to surface transportation.

While Transportation Alternatives projects are federally funded, the funds are administered by the New Jersey Department of Transportation and the state's Metropolitan Planning Organizations (MPOs).

Eligible projects must fall into one of the following seven categories:

- 1. Provision of facilities for pedestrians and bicycles (sidewalks, curb ramps, bike lane striping, wide paved shoulders, bike parking, off-road trails, bike and pedestrian bridges and underpasses).
- 2. Scenic or historic highway programs including the provision of tourist and welcome center facilities as well as scenic turnouts, overlooks and viewing areas.
- 3. Landscaping and other scenic beautification (streetscape projects including lighting, benches, planting, decorative walls, and walkways; the reintroduction of native or endangered plants or trees).

MONTCLAIR SAFE

- 4. Historic preservation.
- Rehabilitation of historic transportation buildings, structures and facilities (including historic railroad facilities and canals).
- 6. Preservation of abandoned railway corridors (including the conversion and use for pedestrian and bicycle trails).
- Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.

The federal funds for TAP projects are provided to the project LPA on a reimbursement basis only. The local public agency (LPA) must have the financial capability to advance project costs for materials and contractors. Before applying, prospective LPAs should assess their capability to comply with state and federal requirements for procurement of materials and services, accounting practices, right-of-way and easement acquisitions, environmental regulations and applicable design standards.

For more information on the Transportation Alternatives Program in New Jersey, visit http://www.state.nj.us/transportation/business/localaid/alternatives.shtm

Safe Routes to School Program (SRTS)

The Safe Routes to School Program (SRTS) is a federally funded reimbursement program administered by the New Jersey Department of Transportation (NJDOT), in partnership with the North Jersey Transportation Planning Authority (NJTPA). Under MAP-21 legislation, Transportation Alternatives Program (TAP) funding does not provide for a standalone Safe Routes to School Program. The New Jersey Department of Transportation (NJDOT) has elected to continue funding the SRTS program separately.

Projects must be located within two miles of a school that serves students in grades K-8. Infrastructure projects may include the installation of sidewalks, crosswalks, bike lanes, multi-use paths, traffic calming measures, and other means to ensure the ease and safety of children walking or biking to school.

Any municipality, school district, or county is eligible to apply for funding after a solicitation is announced. Non-profit organizations are not eligible as direct grant recipients for the solicitation. However, non-profit organizations may partner with a local public agency that will assume responsibility and administration for the grant.

For more information, visit http://www.state.nj.us/transportation/business/localaid/srts.shtm or http://www.njtpa.org/project-programs/project-development/safe-routes-to-school.aspx

Local Safety Program

The Local Safety Program (LSP) was established by the NJTPA in 2005 in conjunction with NJDOT as a competitive program. The purpose of this program is to advance quick-fix safety improvements on county and local roadway facilities within its region. To date, over \$44 million in projects have been selected for the program. Municipalities located within the subregions may make a request through their respective county to sponsor an application.

Local Safety Program projects typically address NJTPA/NJDOT derived high priority crash locations. Projects must be supported with detailed crash data, and will be in a construction-ready state at the time federal authorization is received. Proposals must demonstrate a location's crash history (using multi-year data) and clearly show a relationship between the types of crashes and the proposed improvements (e.g.,

pedestrian signals will address a history of pedestrian crashes).

Crash prone locations within the NJTPA region have been identified with the assistance of NJDOT and Plan4Safety using network screening. Bridge Avenue in Bay Head is ranked 42nd on the top pedestrian corridor list for Ocean County because there were two pedestrian crashes along the roadway between 2009-2013. For more on the Local Safety Program, visit http://www.njtpa.org/project-programs/project-development/local-safety/fys-2016-and-2017-lsp-hrrr-solicitation.aspx

Recreational Trails Program (RTP)

The Federal Highway Administration's Recreational Trails Program (RTP) provides financial assistance to states for developing and maintaining trails and trail facilities. The RTP funds come from the Federal Highway Trust Fund, and represent a portion of the motor fuel excise tax collected from non-highway recreational fuel use. Since the program's inception in 1993, New Jersey has awarded more than \$16 million to federal, state, county and local governments, and non-profit agencies. Projects are funded on an 80% federal share and 20% matching share basis.

The DEP's Green Acres Program administers the program in New Jersey. Projects are reviewed and recommended for funding by the New Jersey Trails Council. Land on which trail facility is to be funded must be public land or private land with an easement for public recreational use. Maximum grant award is \$24,000 for nonmotorized projects.

Permissible uses and projects include:

- Maintenance and restoration of existing trails;
- development and rehabilitation of trailside and trailhead facilities and trail linkages for trails (e.g., parking, signage, shelters, sanitary facilities);

- purchase and lease of trail construction and maintenance equipment;
- construction of new trails in existing parks or in new right of way;
- for motorized use only, acquisition of easement and fee simple title to property for trails.

Activities not eligible for funding include land condemnation; trail feasibility studies; law enforcement activities and personnel; road and sidewalk repairs; purchase of promotional materials; projects on land with railroad tracks; conversion of non-motorized trails to motorized use.

For more visit, http://www.nj.gov/dep/parksandforests/natural/trail_grants.htm

State Funding Opportunities NJDOT Municipal Aid

Under Municipal Aid program, each county is apportioned a share of the total funding based on population and the number of local centerline miles. Municipalities compete for portions of their county's share. NJDOT provides 75 percent of the grant amount when a town awards a contract and the remaining 25 percent upon completion of the project.

Applications receive points based on various criteria including existing road conditions, Average Daily Traffic (ADT), safety improvements, and access to nodes (schools, residential areas, employment centers, etc). Other important criteria include the project's readiness to construct, whether the municipality has received an allotment within the last three years, and the municipality's award and close-out performance on previously awarded State grants. For more information, visit www.state.nj.us/transportation/business/localaid

NJDOT Bikeway Grant Program

The NJDOT Bikeway Grant Program provides funds to counties and municipalities to promote bicycling as an alternate mode of transportation in New Jersey. A primary objective of the Bikeway Grant Program is to support the State's goal of constructing 1,000 new miles of dedicated bike paths (facilities that are physically separated from motorized vehicular traffic by an open space or barrier either within the highway right of way or within an independent right of way

Although priority will be given to construction of new bike paths, the proposed construction or delineation of any new bicycle facility will be considered. Ineligible projects/activities include right-of-way purchases associated with any project, operating costs associated with any project, and planning activity costs. In order to be eligible, a project must place no restrictions upon hours of use by bicyclists (with the exception of dusk-to-dawn closings, as of some parks). Applicants must use the AASHTO 2012 Guide for the Development of Bicycle Facilities For more information, visit www.state.nj.us/transportation/business/localaid/bikewaysf.shtm

NJDOT Safe Streets to Transit (SSTT)

SSTT program provides funding to counties and municipalities in improving access to transit facilities and all nodes of public transportation. The objectives of the SSTT program are:

- To improve the overall safety and accessibility for mass transit riders walking to transit facilities.
- To encourage mass transit users to walk to transit stations.
- To facilitate the implementation of projects and activities that will improve safety in the vicinity of transit facilities (approximately one-half mile for pedestrian improvements).

Types of work eligible for funding under SSTT include:

/municaid.shtm

- Intersection safety improvements
- Constructing new sidewalks, curb ramps, sidewalk widening and major reconstruction
- Traffic calming measures
- Pedestrian oriented lighting
- Traffic control devices that benefit pedestrians

Bicycle facilities are not eligible for funding.

For more information, visit www.state.nj.us/transportation/business/localaid/safe.shtm

NJ Division of Highway Traffic Safety Grants

The NJ Division of Highway Traffic Safety offers, on an annual basis, federal grant funding to agencies that wish to undertake programs designed to reduce motor vehicle crashes, injuries, and fatalities on the roads of New Jersey. Municipal, county, state government and law enforcement agencies, as well as non-profit organizations, are encouraged to apply for NJDHTS grant funding to address specific, local traffic safety issues. Grants available include:

Comprehensive Traffic Safety Programs (CTSP's)

Comprehensive Traffic Safety Program grants address multiple traffic safety concerns within a county or larger community. CTSP grants include numerous tasks and strategies involving enforcement, education and engineering. The potential grantee must provide a detailed Problem Identification section with extensive information about the community, motor vehicle crash experience (including pedestrian & bicycle), data analysis and creative solutions to reduce these crashes.

Pedestrian Safety

The goal of the pedestrian safety program area is to lower the pedestrian fatality

and injury rates. In the Central Region, municipalities that are statistically high for pedestrian injury crashes are eligible to apply for our Pedestrian Safety Grant. The grant includes funding for overtime enforcement at pedestrian safety hot spots in the community and educational outreach throughout the community.

Other Eligible Programs

Grant applications may also be submitted that utilize enforcement, education or engineering counter-measures to address other specific traffic safety issues including:

- Speed
- Aggressive Driving
- Bicycling Safety
- Crash Investigation
- Distractions
- EMS Training relating to crash response
- Motorcycle Safety
- School Bus/Pupil Transportation
- Traffic Engineering primarily pedestrian pavement markings and pedestrian signs, but some traffic studies will be considered

New Jersey Healthy Communities Network Grants

These grants support projects advancing the implementation of policy changes and/or development of the built environment to support healthy eating and active living. Supported projects make the healthy choice the easy choice; make healthy food and beverages the affordable, available and desired choice; encourage and support physical activity by ensuring accessibility and safety; and make healthy school, work, and community environments the norm and not the exception. In 2016, up to 50 New Jersey-based entities will receive grants of up to \$20,000.

http://njhcn.org/

Private and Non-profit Funding Sources

Sustainable Jersey

Sustainable Jersey registered towns get special priority access and notification of incentives and grants, and are eligible for the Sustainable Jersey Small Grants program. Over \$1.75 million in grants have been provided to towns for community-based projects to improve quality of life in New Jersey.

Eligible projects include actions that would score a municipality points toward Sustainable Jersey certification. This includes projects addressing issues from renewable energy and green building design, waste reduction, a sustainable master plan, water conservation, natural resources management, energy management, and transportation issues. Most projects also include public outreach campaigns and many have involved school children and community organizations.

http://www.sustainablejersey.com/grantsresources/sustainable-jerseysmall-grantsprogram/

People for Bikes Community Grants

The PeopleForBikes Community Grant Program provides funding for important and influential projects that leverage federal funding and build momentum for bicycling in communities across the U.S. These projects include bike paths and rail trails, as well as mountain bike trails, bike parks, BMX facilities, and large-scale bicycle advocacy initiatives.

Since 1999, we have awarded 341 grants to non-profit organizations and local governments in 49 states and the District of Columbia. Our investments total more than \$2.9 million and have leveraged nearly \$670 million in public and private funding. http://www.peopleforbikes.org/pages/community-grants

The Robert Wood Johnson Foundation

The Robert Wood Johnson Foundation invests in grantees (e.g., public agencies, universities, and public charities) that are working to improve the health of all Americans. Current or past projects in the topic area "walking and biking" include greenway plans, trail projects, advocacy initiatives, and policy development.

http://www.rwjf.org/en/how-we-work/grants.html

Other Potential Funding Sources

The following funding sources for greenways have been identified by Project for Public Spaces, Railsto-Trails Conservancy and the National Trails Training Partnership.

Municipal Allocations

The most common sources of funding at the municipal and county level include allocations from a specific department, such as the park and recreation department or public works department. Incorporating funding for maintenance of bicycle and pedestrian facilities into the annual budget guarantees funds are available to cover maintenance.

In some localities, a portion of an increase in the sales tax will be set aside for recreational trail or other conservation funding. Rarely, new taxes will be levied to exclusively support active transportation projects.

Impact Fees

Regulated by subdivision policies, impact fees require residential, industrial and commercial development project leaders to provide sites, improvements and/or funds to support public amenities such as open space and trails. Impact fees may be allocated to a particular trail or greenway from land development projects if the fund is a dedicated set-aside account established to help develop a county- or city-wide system of trail or greenway projects.

Local Private-Sector Funding

Local industries and private businesses may agree to provide support for greenway development through one or more of the following methods:

- Donations of cash to a specific greenway segment
- Donations of services by large corporations to reduce the cost of greenway implementation, including equipment and labor to construct and install elements of a specific greenway
- Reductions in the cost of materials purchased from local businesses that support greenway implementation and can supply essential products for facility development

Adopt-A-Trail Programs

These are typically small grant programs that fund new construction, repair/renovation, maps, trail brochures, facilities (bike racks, picnic areas, birding equipment).

Membership campaigns

The return from this can be significant (The Pikes Peak Area Trails Coalition raises \$18,000 per year), but your effort must be repeated every year.



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