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**NORTH
JERSEY.**

CONNECTING
PEOPLE, PLACES,
AND POTENTIAL.

Bloomfield Avenue Complete Corridor Plan

Bloomfield Township • Borough of Glen Ridge • Montclair Township • Verona Township

APRIL 2015

A LOCAL DEMONSTRATION PROJECT



PROJECT PARTNERS



Bloomfield Township



Borough of Glen Ridge



Montclair Township



Verona Township



Essex County

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Montclair Center Business Improvement District

Bloomfield Center Alliance

HOME Corp

New Jersey Bike & Walk Coalition

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EXECUTIVE SUMMARY

The Bloomfield Avenue Complete Corridor Plan is a collaborative effort to pursue the creation of design standards and recommendations for a 4.5 mile long, multi-modal transportation corridor in Essex County. The purpose of the project is to develop a Complete Corridor Plan, that addresses the unique characteristics of this segment of Bloomfield Avenue; which traverses several traditional downtown districts, and carries significant volumes of local and regional traffic, serving average traffic volumes of 18,000 to just over 25,000 vehicles per day. With aligned transportation planning and the development of consistent standards, these communities and the County can begin to implement a unified plan for the Avenue.

The Plan identifies short- and long-term improvements needed to make Bloomfield Avenue a more pedestrian-friendly and pleasant shopping experience, while also ensuring safer, more appropriate travel and access vehicle flow consistent with Essex County's Complete Streets Policy.

In conjunction with development of the Complete Corridor Plan, the New Jersey Health Impact Collaborative at Rutgers University conducted a Health Impact Assessment (HIA). By combining scientific data, health expertise and public input, HIAs identify and assess the potential positive and negative health effects of decisions related to policies, programs or projects. The HIA considers a range of social, environmental and economic influences on health and places an

emphasis on identifying groups who might be particularly vulnerable or disproportionately impacted.

One of the biggest concerns identified in the background research and community outreach for the Corridor is speeding traffic. Whether due to the roadway's physical design, intersection configuration, or signal timing, the community is concerned with lack of speed enforcement. The posted speed limit for almost the entire corridor is 25mph, but actual speeds are typically much higher. This poses a major safety concern for

pedestrians, cyclists, motorists and transit users. Other concerns include inefficient and confusing intersection operations – particularly where more than two streets intersects, and congestion related to on-street parking and turning movements.

Using a typology based approach, sections of the roads in the study area were categorized by various design characteristics. A series of Complete Streets recommendations were developed for improvements for each street type.



Traffic congestion on Bloomfield Avenue at Lakeside Avenue in Verona

These illustrate general standards and can be applied to other places along the corridor and in the County. An implementation matrix identifying the range of options and time frames, a recommended street section for each type, and a series of character images are provided in the Complete Corridor Plan. A summary table of these typology-based strategies can be found on page 6 and in greater detail in the “Phase 3: How do we get there?” section.

Additionally, each municipal partner identified locations along the Bloomfield Avenue

corridor that have pedestrian, bike, transit and auto-oriented circulation challenges and design impediments to study Complete Streets improvements. Traffic counts (vehicle, pedestrian, and bike) were taken at these locations and analysis was conducted with study design horizons each town designated. Improvements were recommended from both a signalization/traffic pattern and traffic calming/Complete Streets perspective.

These locations were identified for their specific challenges, but could serve as prototypes for the

design strategies in other locations in the corridor and in Essex County. The specific intersections included:

- Lakeside Avenue and Bloomfield Avenue, Verona
- Valley Road and Bloomfield Avenue, Montclair
- North & South Fullerton Avenue/Glenridge Avenue/Church Street and Bloomfield Avenue, Montclair
- Ridgewood Avenue and Bloomfield Avenue, Glen Ridge
- Park Street and Bloomfield Avenue, Bloomfield and Glen Ridge

PEDESTRIAN IMPROVEMENTS AND TRAFFIC CALMING

Pedestrian activity in the study area is very high as these communities are all very walkable and have downtown districts and neighborhood parks and schools. There is the need to make pedestrian activity safer as the downtown areas and surrounding neighborhoods continue to grow and revitalize. Traffic calming and Complete Streets improvements for Bloomfield Avenue can provide a better and safer connection throughout the study area, local towns and the County.

Some of the general pedestrian, bicycle, and traffic calming recommendations include: upgraded crosswalks and signalization; improved



Existing downtown storefronts along Bloomfield Avenue in Montclair Township

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streetscape and street trees in transitional areas; additional pedestrian-scaled lighting; curb cut consolidation/access management; bike parking areas; and traffic calming interventions, such as curb bumpouts, medians, and textured intersections.

Strategies for some of the specific intersections identified as prototypes include: pedestrian-activated lighted crosswalks, increased pedestrian crossing timing/signalization, textured intersections, curb bumpouts, demarcated bus loading areas, ergonomic crosswalks (flared crosswalks following pedestrians desired paths), pedestrian shelter islands, and protective bollards.

BICYCLE NETWORK

Municipal and County Bicycle Network plans and studies (if available) were reviewed as part of this plan. The individual plans consider potential routes but not to the level of identifying specific bicycle lanes and sharrows (shared lane for bicycles and vehicles, demarcated on the pavement) locations. The Bloomfield Avenue Complete Corridor Plan seeks to build upon these efforts by recommending further study and implementation of a regional network coinciding with local municipal bicycle circulation plans and connecting downtown areas, transit stations, and regional parks.

Other bike recommendations designed to give cyclists better awareness of bicycle routing and positioning and to give drivers better awareness



Project Site Area: The 4.5 mile long, multi-modal Bloomfield Avenue transportation corridor in Essex County, New Jersey.



Intersection concept in Montclair Center - Intersection recommendations include curb bumpouts, ergonomic crosswalks, textured intersections & dedicated bus loading



Simulation in Glen Ridge - Recommendations include physical improvements but also policy/informational campaigns to promote the health benefits of walking and biking.

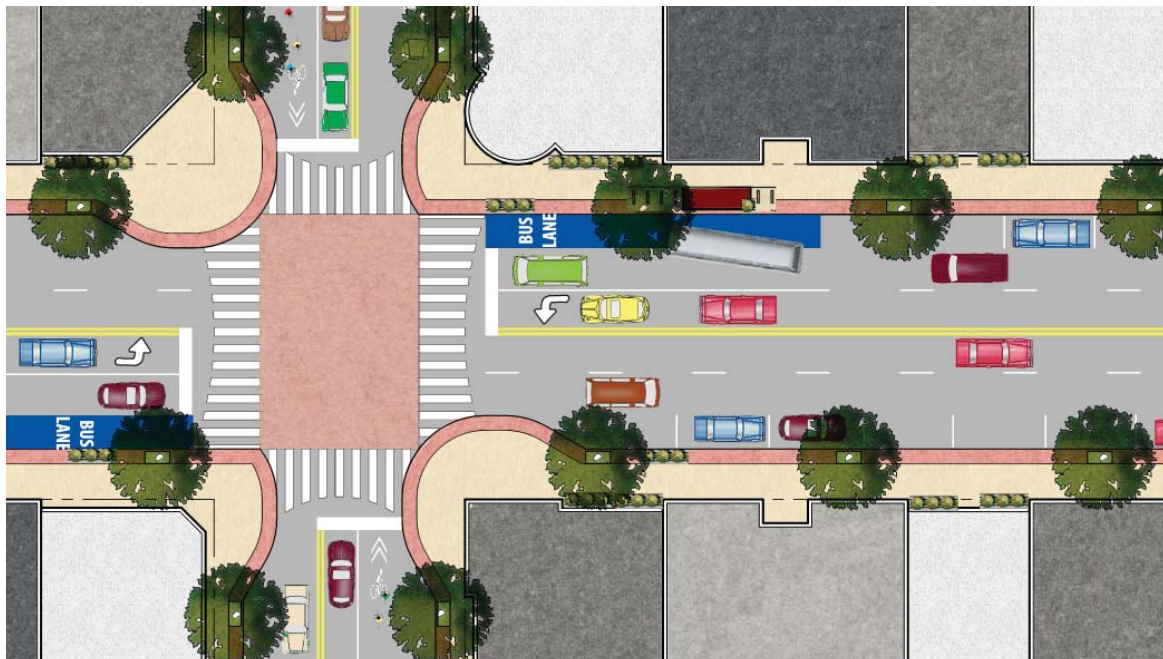
of people using bicycles traversing the corridor include: signage and road markings for a higher level for awareness of cyclists, additional bicycle parking with new racks, lockers, and storage areas; and locations for a potential bike share hubs and informational and repair kiosk.

TRANSIT IMPROVEMENTS

Though the area has extensive transit coverage and connectivity, including bus, rail, and shuttle service, improvements to signalization, road configuration, and parking enforcement can improve access and travel time to key destinations. Some of the key recommendations include: improving bus stops and bus information, enforcing parking regulations at bus stops, and providing pull-offs and marked bus loading areas.

IMPLEMENTATION

In order to implement the improvements in the Bloomfield Avenue Complete Corridor Plan, the local partners and stakeholder groups will need to take a series of short and long-term actions. A Planning and Implementation Agenda is included to indicate these actions developed during the evolution of this and other planning initiatives over the next several years. The agenda recognizes that successful implementation of plans requires strong local support and action, as well as assistance from Essex County and the State of New Jersey.



Street typologies identified traffic calming recommendations for different conditions across the Corridor. This is an illustration of a typical downtown area with some traffic calming and pedestrian safety elements.

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Implementation Category	Implementation Category				
	Downtown Activity Corridor	Avenue	Town Thoroughfare	Suburban Highway	
Informational	○	○	○	○	Speed Limit Postings
	○	○	○	○	Distracted Driver/Pedestrian Info Campaign
	○	○	○	○	Pedestrian Safety Campaign
	○	○	○	○	Bicycle Safety Campaign
		◐	◐	◐	"Walking" School Bus/Student Drop Zones
	○	◐	◐	◐	Improved Wayfinding
Traffic/Signalization	○	○	○	○	Repaving/Pothole Repair
			◐	◐	Changes to Turn-only Signals
	○	○	○	○	Improved Lane Guides/Pavement Arrows
	●			●	Changes to Turning/Travel Lanes
	◐				Turn-Restrictions
	◇	◇	◇	◇	Reversible/Floating Lanes
			○	○	Speed Limit Reductions
		●	●	●	Curbside Consolidation/Access Management
		◐			Changes to Stop Bar Locations
		○	○		Changes to On-street Parking/Bus Pull-off

Implementation Category	Implementation Category				
	Downtown Activity Corridor	Avenue	Town Thoroughfare	Suburban Highway	
Traffic Calming	◇	◇	◇	◇	Reduction in Lanes/Width - Road Diet
	◐	◐			Textured Intersection/Road Tatum
	●	●			Lighted Pedestrian Crossing
	◇	●	●	●	Median/Pedestrian Refuge Island
	○	○	○	○	Striped/Painted Curb Extensions
	◐	●	◐	●	Curb Bumpouts
Pedestrian/Sidewalks	○	○	○	○	Sidewalk Upgrades/Maintenance
	◐	◐	◐	◐	Pedestrian Countdown Clock
	◐	◐	◐	◐	Audible Pedestrian Signal & Accessible Signal
	◐	◐	◐	◐	Pedestrian Push Button Signals
	○	○		○	High-Visibility Crosswalks
	○	○	○	○	Ergonomic Crosswalks
	◐	◐	◐	◐	"Yield to Pedestrian" Crosswalk Sign
◐	◐	◐	●	Pedestrian-Scale Lighting	

Implementation Category	Implementation Category				
	Downtown Activity Corridor	Avenue	Town Thoroughfare	Suburban Highway	
Bikes	◇	◇	◇	●	Share-the-Road/Sharrows
		◇	◇		Dedicated Bike Lane
	◐	◐	◐	●	Bike Racks/Storage/Parking
	●	●	○	○	Bike Share Hubs
Transit	◐	◐	●	◐	Add/Upgrade Transit Shelter
	○	○	◐	◐	Add/Improve Signage
	○	○	○	○	Marked Bus Loading
	◇	◇	◇	◇	Bus Pull-offs
				Bus Lanes with Bus Bulb Loading	

- Complete/Recently Improved
- Short-Term Recommendation (3-6 mos.)
- Medium-Term Recommendation (6-18 mos.)
- Long-Term Recommendation (18-36 mos.)
- Future Consideration (with further study)

The full Planning Implementation Agenda with detailed steps, potential funding and partners can be found in Appendix A

TOGETHER NORTH JERSEY

TOGETHER NORTH JERSEY is an unprecedented planning initiative for the 13-county North Jersey Transportation Planning Authority region of New Jersey.

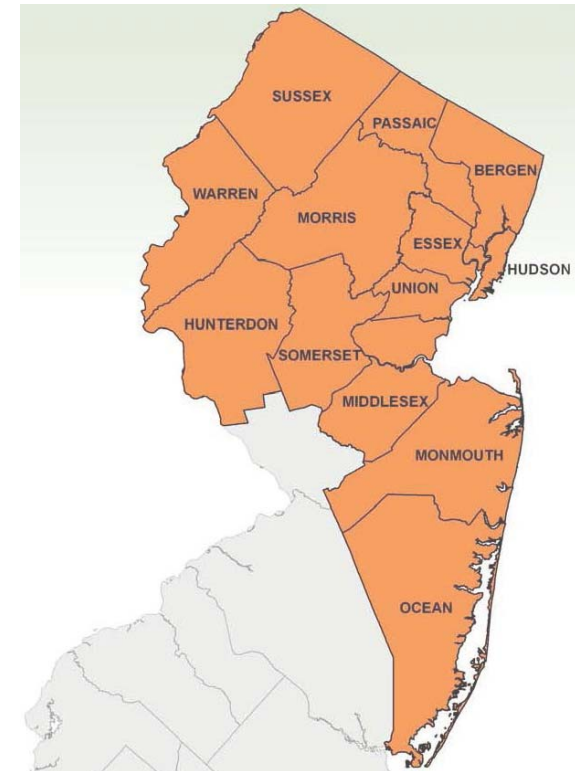
In November 2011, the U.S. Department of Housing and Urban Development (HUD) awarded TOGETHER NORTH JERSEY (aka North Jersey Sustainable Communities Consortium) a \$5 million Sustainable Communities Regional Planning Grant. The grant is matched with an additional \$5 million in leveraged funds from project partners. Grant funds have been used to implement the Local Demonstration Project (LDP) Program, develop a Regional Plan for Sustainable Development (RPSD) for the 13-county planning region, and provide technical assistance and offer education opportunities that build the capacity of jurisdictions, organizations and the public to advance sustainability projects and initiatives.

The plan is both “place-based” and “issue-based” and uses sustainability, transit system connectivity and Transit-Oriented Development (TOD) as the central framework for integrating plans, regulations, investments and incentive programs at all levels of government to improve economic and environmental conditions, while promoting regional equity and resource efficiency. The outcome of plan implementation will be a more sustainable future for the region that invests in existing communities where housing, jobs, educational, cultural and recreational opportunities are made more easily accessible.

Through open forums TOGETHER NORTH JERSEY and its members have created a comprehensive and balanced plan that invests in the region’s existing communities where housing, jobs, educational, cultural and recreational opportunities are made more easily accessible to most residents without having to drive to them.

ACKNOWLEDGEMENTS

- 13 County Governments in the NJTPA Region
- Edward J. Bloustein School for Planning and Public Policy at Rutgers University
- North Jersey Transportation Planning Authority {NJTPA}
- NJ TRANSIT
- NJ Office of Planning Advocacy (NJOPA)
- Housing and Community Development Network of New Jersey (HCDN- NJ)
- Sustainability Institute/Sustainable Jersey at The College of New Jersey
- NJ Future
- Building One New Jersey
- PlanSmart NJ
- Regional Plan Association (RPA)



The work that provided the basis for this publication was supported by funding under an award with the U.S. Department of Housing and Urban Development. The substance and findings of the work are dedicated to the public. The author and publisher are solely responsible for the accuracy of the statements and interpretations contained in this publication. Such interpretations do not necessarily reflect the views of the Government.

ABOUT THE LOCAL DEMONSTRATION PROJECT PROGRAM

The Local Demonstration Project (LDP) Program seeks to advance specific projects, initiatives, and other investments for local communities to achieve short-term, implementable projects which are consistent with the RPSD goals and program outcomes.

The LDP Program provides technical assistance for strategic planning studies focused on designated areas or corridors associated with established or anticipated transit services and/or facilities. Eligible LDP projects will be sponsored by municipalities, counties, non-governmental organizations, community development corporations, and other interested organizations.

These demonstration projects help to identify partnering opportunities, milestones, and potential funding sources and serve as a model for future initiatives.

Please visit togethemothjersey.com to learn more.

12 KEY ISSUES

The range of issues faced by the communities within the Region in positioning themselves for a more sustainable future is broad. The Local Demonstration Project program as a whole will attempt to engage all of the major policy issues that

have been identified in recent years, as seen in the adjacent diagram.

Each project of the LDP program will address Land Use and Transportation at its core and will identify several primary issues as the project's focus.



PHASE 1:

WHERE ARE WE NOW?
WHERE ARE WE HEADED?



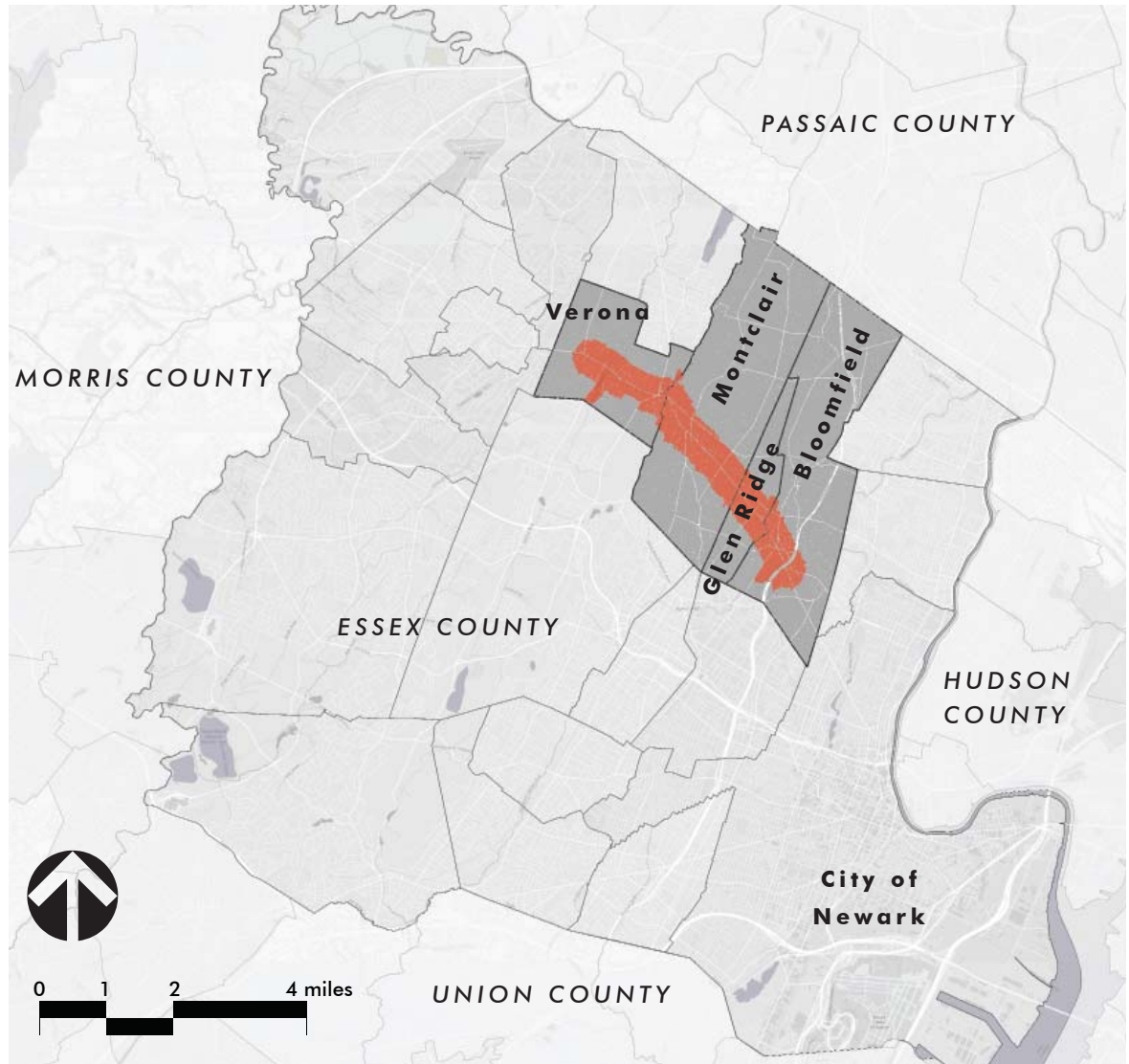
INTRODUCTION

The Bloomfield Avenue Complete Corridor Plan is a Local Demonstration Project (LDP), part of a larger regional planning initiative, crafting the Regional Plan for Sustainable Development, which Together North Jersey has launched pursuant to HUD’s Sustainable Communities program.

The LDP program is designed to create “on-the-ground” success stories and will be an important component of creating a supportive implementation framework and informing the development of the Regional Plan for Sustainable Development.

PROJECT DESCRIPTION

The plan is a collaborative effort to pursue the creation of design standards and recommendations for this over four mile long, multi-modal transportation corridor in Essex County. With aligned transportation planning and the development of consistent standards, these communities can begin to implement a unified Complete Streets policy. Each of the partners identified locations along the Bloomfield Avenue corridor that have pedestrian, bike, transit and auto-oriented circulation/mobility challenges and design impediments to study Complete Streets improvements.



The Study Area (highlighted in orange) is a main east-west connector for all modes of transport in Essex County crossing through Bloomfield, Glen Ridge, Montclair, and Verona (highlighted in dark gray).

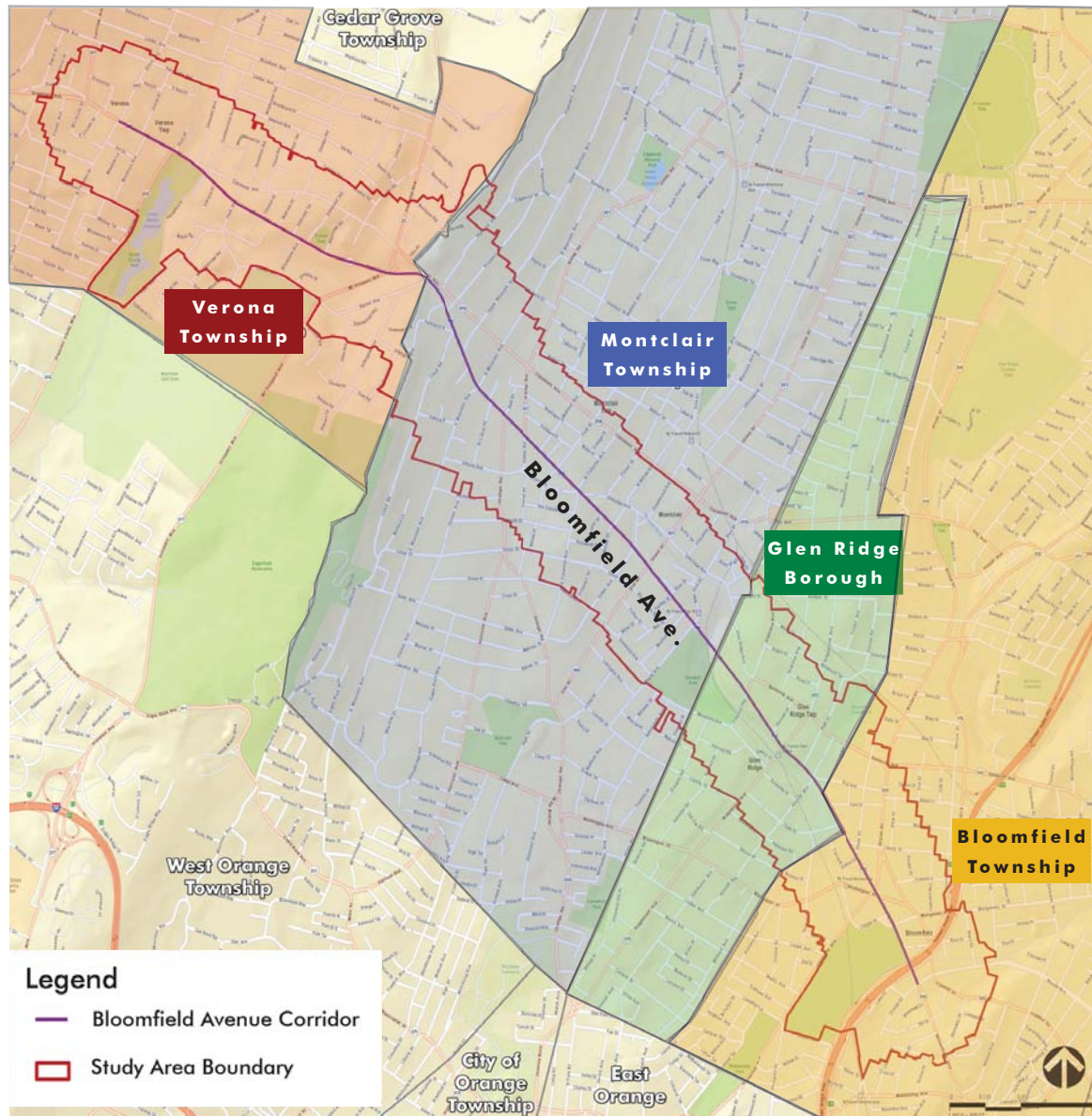
STUDY AREA

The study area is the 4.5 mile segment of Bloomfield Avenue from the Garden State Parkway in Bloomfield to Grove Avenue in Verona. Bloomfield Avenue is one of few east-west corridors that connect the far western suburbs of Essex County with the County seat in Newark. It is classified as an urban principal arterial.

Bloomfield Avenue is also a major transit corridor, with bus and rail service along much of its length. Bus service in the corridor connects Newark with other locations in Essex County and the region. Three rail stations providing service to Newark and New York City are located within 1,000 feet of Bloomfield Avenue at Bloomfield Center, Glen Ridge and Montclair (Bay Street) and other commuter and light rail stations are in close proximity.

PROJECT GOALS

- Assess the physical design conditions and health impacts corridor-wide
- Gather and analyze data to identify gaps in transportation, pedestrian and bike access
- Develop a unified concept plan for the entire corridor consistent with County's Complete Streets policies
- Study prototypical designs for key nodes in each community with a range of conditions
- Recommend improvements to create a healthy and safe environment using Complete Street guidelines



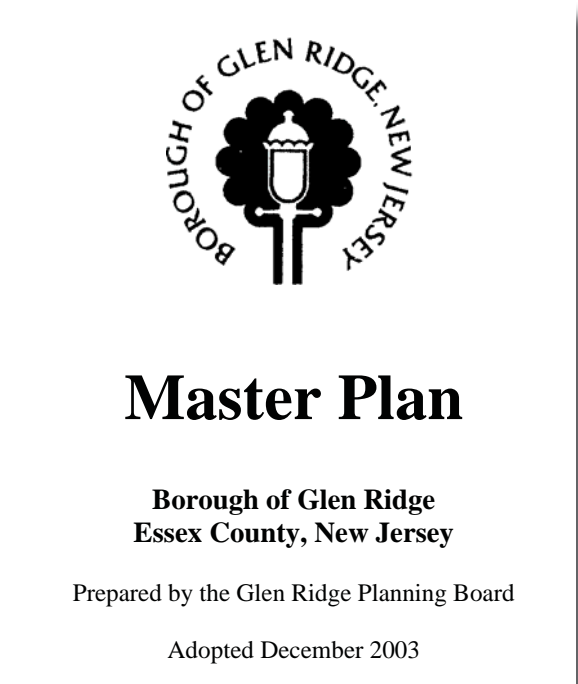
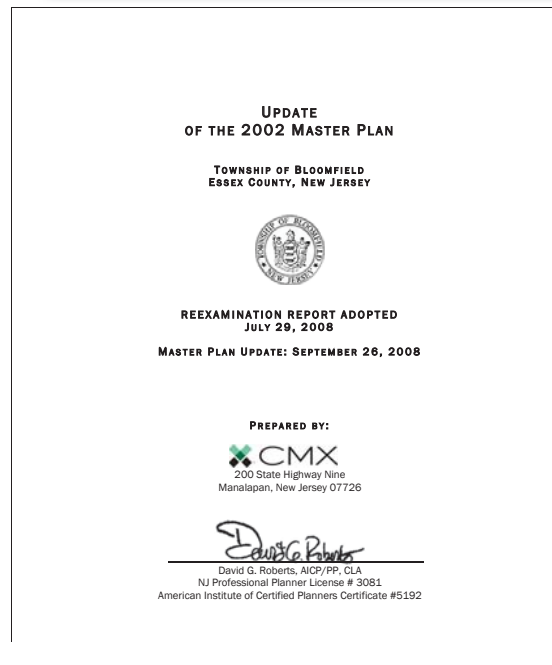
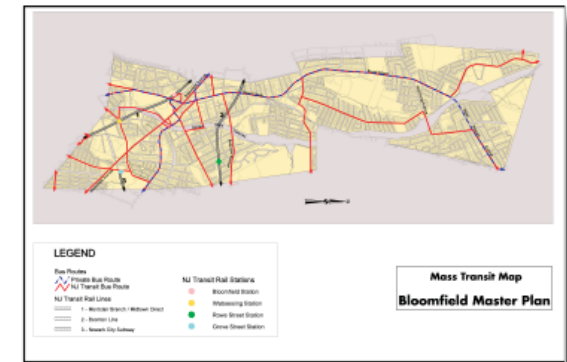
BUILDING ON EXISTING PLANS AND STUDIES

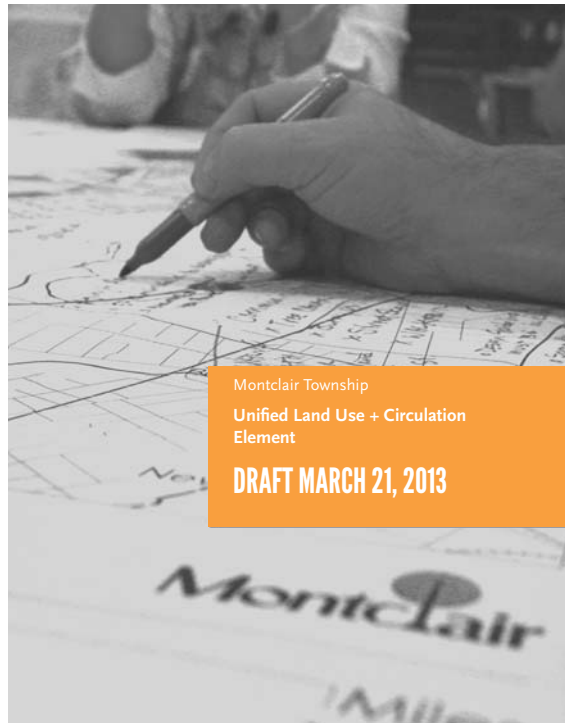
This strategic plan is meant to build upon past planning efforts, focusing on key priorities established by stakeholders and to generate strategic outcomes that can be implemented.

The following list of documents was reviewed as part of the background baseline for the Bloomfield Avenue Complete Corridor Plan:

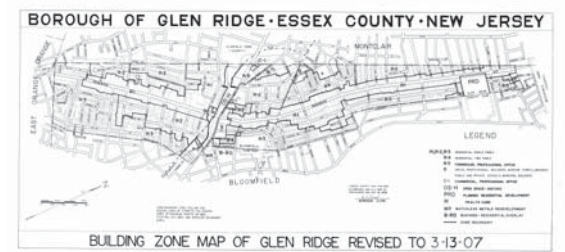
Bloomfield Township

- 2009 Bloomfield Center Streetscape Construction Plans
- 2008 Traffic Report for Bloomfield Center Redevelopment
- 2010 Traffic Engineering Report for Bloomfield Center Redevelopment
- 2012 Redevelopment Plan for Block 243,
- Bloomfield Center Redevelopment Design Guidelines & Redevelopment Plan
- 2008 Township of Bloomfield Master Plan Reexamination Report
- 2002 Township of Bloomfield Master Plan – Circulation Element
- 2014 Township of Bloomfield Shuttle Bus Service Information/Schedules
- Bloomfield College Franklin Street Residence Hall Plan



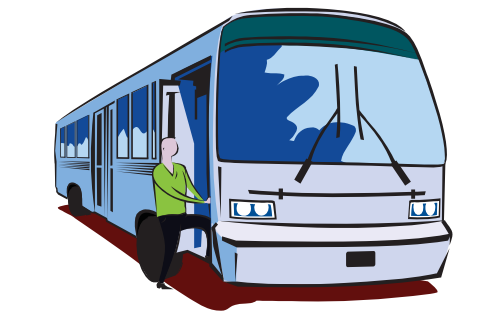


Montclair Township
 Unified Land Use + Circulation
 Element
DRAFT MARCH 21, 2013



Verona LIVE
 Lifelong Involvement for Vital Elders

**Your Guide to
 Public Transportation**



Borough of Glen Ridge

- 2003 Master Plan
- 2010 Master Plan Re-Examination Report
- 2007 Building Zone Map of Glen Ridge
- 2014 Glen Ridge Jitney Service Information/Schedule

Montclair Township:

- 2011 Montclair Center Gateway Redevelopment Plan
- 2013 Eastern Gateway Redevelopment Plan
- 2013 Draft Unified Land Use & Circulation Element
- Centoverde - Traffic Study

Verona Township:

- Verona Live - Guide to Public Transportation
- 2009 Master Plan & Reexamination Report
 Verona, New Jersey

Essex County:

- 2013 Essex County Comprehensive Transportation Plan
- 2014 Essex County Complete Streets Implementation Action Plan & selection matrix

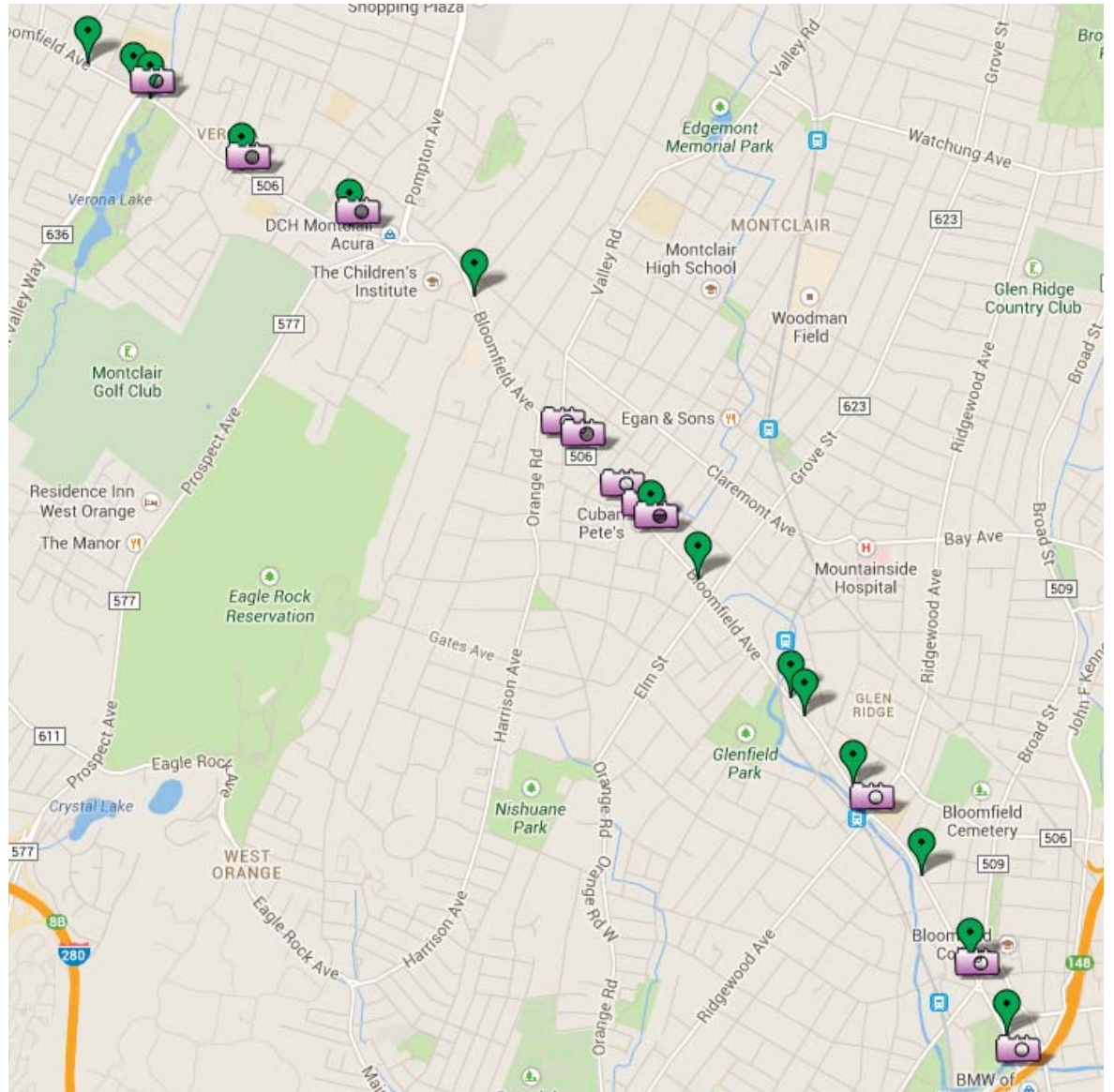
CORRIDOR ANALYSIS

As part of the preliminary site analysis phase, the Project Team conducted field work to identify and inventory bicycle and pedestrian accessibility and safety issues at key nodes on Bloomfield Avenue. The Team also assessed certain qualitative aspects of motor vehicles traffic flows and transit networks throughout the roughly 4.5 mile study area.

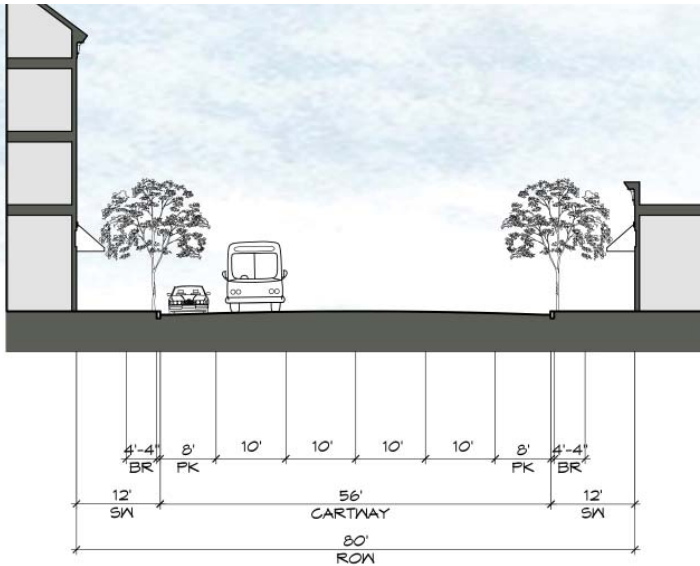
METHODOLOGY

Based upon feedback from associated project partners, the team strategically selected and mapped 25 sites within the study area that have pedestrian, bike, transit and auto-oriented circulation/mobility challenges and design impediments. Each site was photographed and measured according to specifications outlined on the site survey form. Details measured and recorded on the site survey form included: location, design speed, street types, parking, sidewalks/planting strips, street trees, street lighting, street furniture, building frontages, development/ land use, transit, pavement, lane, and right-of-way widths.

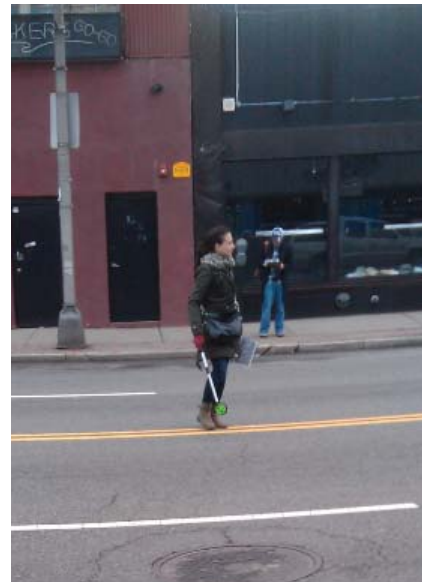
Data collected from the field observation was compiled into formal street sections for further analysis. The following pages illustrate some of the existing conditions. The full analysis including all sections and panoramic images can be found in Appendix E.



Google Map of locations where detailed street sections (green markers) and panoramic photos (purple cameras) were documented. All notes, drawings, and photos can be found in Appendix E.



One of a series of street sections generated as part of the field survey work. This is a section in the Monclair downtown area - all sections can be found in Appendix E.



Project Team members measuring and documenting points along Bloomfield Ave.



Covered NJ Transit GO Bus Stop near the Post Office in Bloomfield



The historic Arcade Building with some front parking in Glen Ridge



Pedestrian plaza and curb extensions at Lackawanna Station in Montclair



Bus stop at Ridgewood Avenue and Bloomfield Avenue in Glen Ridge



Pedestrians looking at their phones on a street corner in Montclair Center



The "Six Points" intersection in Bloomfield Center has plans for traffic calming and intersection adjustments in for final approvals. There are several multi-point intersections in the Study Area where 5 or 6 streets converge - making it very challenging for drivers, pedestrians, and cyclists.



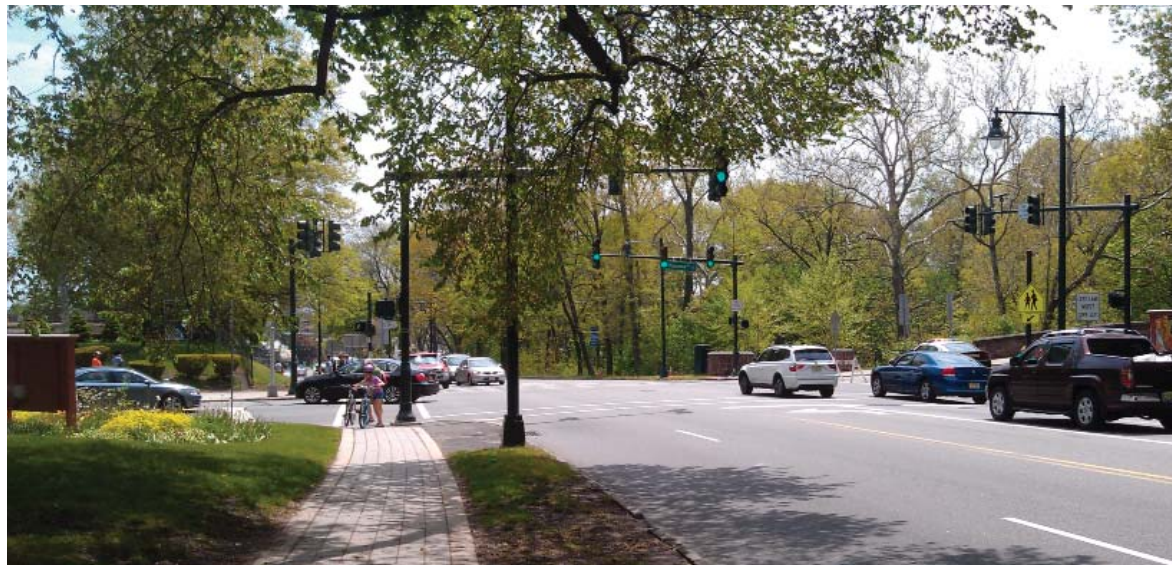
Recent streetscape improvements in Verona included brick sidewalk accents, street lighting and street furniture



Wayfinding signage at Seymour Street and Bloomfield Avenue in Montclair Center



Unmarked parallel parking and four travel lanes on Bloomfield Ave near Church Street in Verona. The perceived road width can encourage higher speeds in some areas in the corridor.



Portions of the road in Glen Ridge have a more parkway like feel with adjacent park space and civic uses with larger landscaped front yards areas.

TRANSPORTATION ANALYSIS

Bloomfield Avenue is a four lane minor arterial county road (Essex County Rte 506) It has intermittent on street parking and multiple NJ Transit Bus and private bus lines running the length of the Study Area. It is oriented east to west connecting the townships of Bloomfield, Glen Ridge, Montclair, and Verona. Within the study boundaries Bloomfield Avenue is primarily bordered by residential and commercial land uses.

VHB conducted motor vehicle capacity analysis at five intersections and a comprehensive review of traffic operations on Bloomfield Avenue for the Study Area. It is important to note this analysis considers each intersection in isolation and therefore any design alternatives should be revisited in greater detail as part of a complete corridor study.

TRAFFIC COUNTS AND INTERSECTION ANALYSIS

Five intersections along Bloomfield Avenue were analyzed for a range of alternatives. The following five intersections were agreed upon by each community as key locations for capacity and traffic level of service analysis:

- Park Street and Bloomfield Avenue, Bloomfield and Glen Ridge (Intersection 1)

- Ridgewood Avenue and Bloomfield Avenue, Glen Ridge (Intersection 2)
- North & South Fullerton Avenue/Glenridge Avenue/Church Street and Bloomfield Avenue, Montclair (Intersection 3)
- Valley Road and Bloomfield Avenue, Montclair (Intersection 4)
- Lakeside Avenue and Bloomfield Avenue, Verona (Intersection 5)

Each intersection selected has attributes that are common among other intersections along Bloomfield Avenue between the townships of Bloomfield and Verona. Intersection [1] is an unsignalized intersection, [2] is a traditional 4-leg intersection, [3] is a complicated 6-leg intersection, [4] is a 4-leg skewed intersection and [5] is an off-set intersection.

A traffic survey was conducted at all five intersections on Tuesday May 6th between the hours of 6:00 AM to 9:00 PM and 2:30 PM to 7:00 PM. The survey consisted of documenting physical conditions, roadway geometry, lane configurations, bus stop locations, adjacent parking, signal timing, sample delays, sample queue lengths, and general traffic conditions; as well as performing a seven and half hour vehicle, pedestrian and bicycle counts at the intersections of Park Street, Ridgewood Avenue, and Lakeside

Avenue. Traffic counts were scheduled on Thursday May 8th for the intersection at Fullerton Avenue/Church Street and Glenridge Avenue in order to better capture peak traffic and pedestrian conditions attributed to an evening when the Wellmont Theater was having an event. Counts were conducted between 7:00 AM and 9:00 AM and from 5:00PM to 8:00PM. At the intersection of Bloomfield Avenue and Valley Road, existing traffic count data was used from the Centoverde at Montclair Mixed-Use Redevelopment Project Traffic Impact Study (vehicular traffic count was performed on February 14th, 2012).

The full detailed analysis can be found in Appendix B.



Members of the team counting cars, pedestrians, and bicyclists in Montclair Center

TRANSPORTATION ANALYSIS



Bloomfield Avenue at Park Street (1)

Bloomfield Avenue at Park Street is an unsignalized intersection on the border of Bloomfield and Glen Ridge Township. At this intersection, Bloomfield Avenue has two travel lanes with curb side parking in both directions. Park Street is a stop controlled approach on Bloomfield Avenue’s north side. Bloomfield Avenue’s south side has two driveways within 50’ of the intersection. These driveways provide access to Starbucks, Bottle King (both located

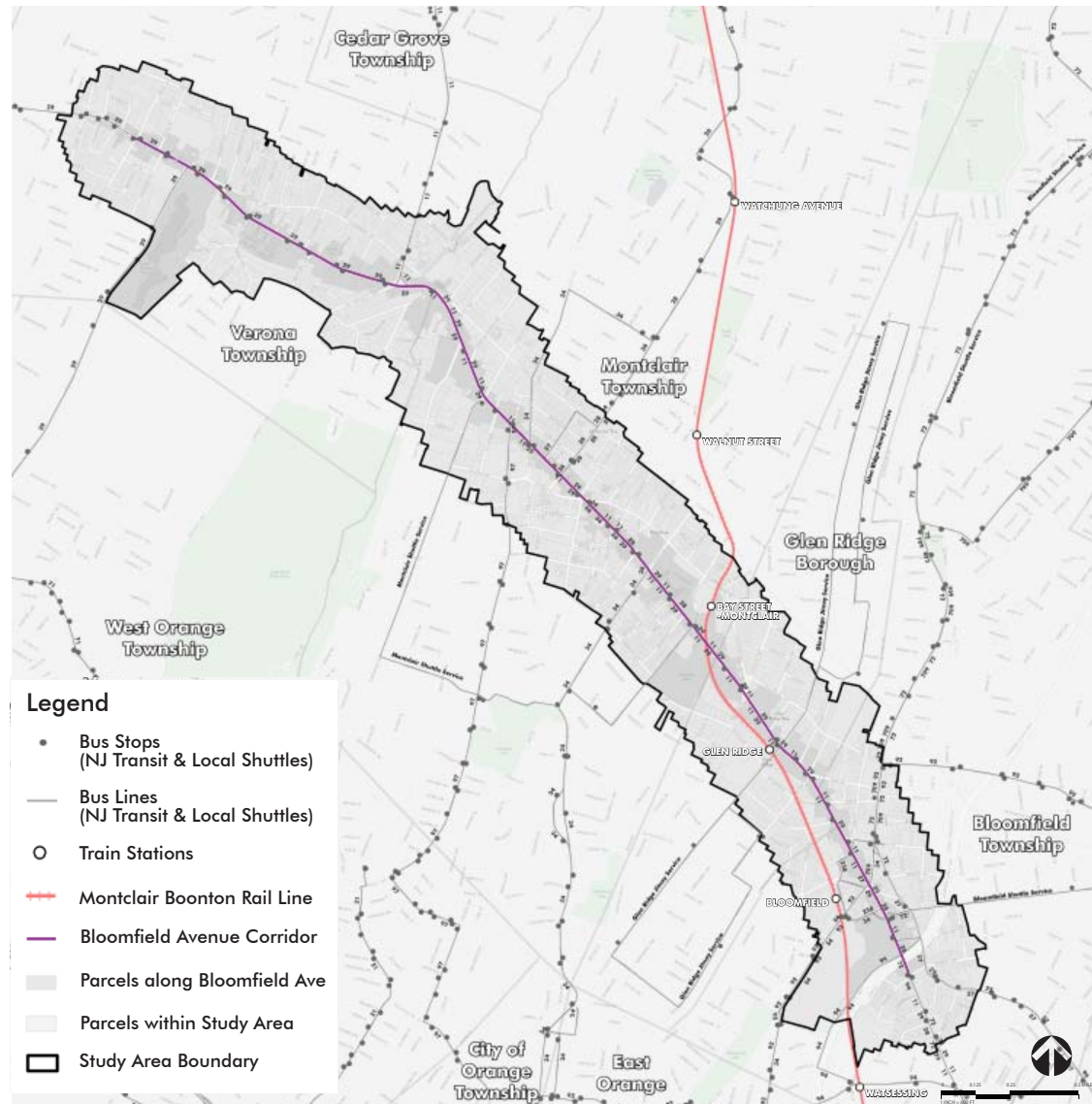


NJ TRANSIT’s signature express bus service, GO BUS 28, runs from Bloomfield Center to Newark.

in a small strip mall), Bank of America, and the community pool which is located behind the strip mall. The strip mall is fairly active during the morning and evening peak hours.

Pedestrian and bicycle activity was light at Bloomfield Avenue and Park Street. During public outreach events participants indicated that during the midday, students from Bloomfield High School (which is located a few blocks away) are often observed crossing Bloomfield Avenue at Park Street heading towards Starbucks and during the summer months there is additional pedestrian activity with people walking to the community pool. While NJ State Law states that vehicles must “stop and stay stopped for pedestrians crossing marked or unmarked crosswalks,” vehicles rarely stopped to allow pedestrians to cross Bloomfield Avenue at Park Street.

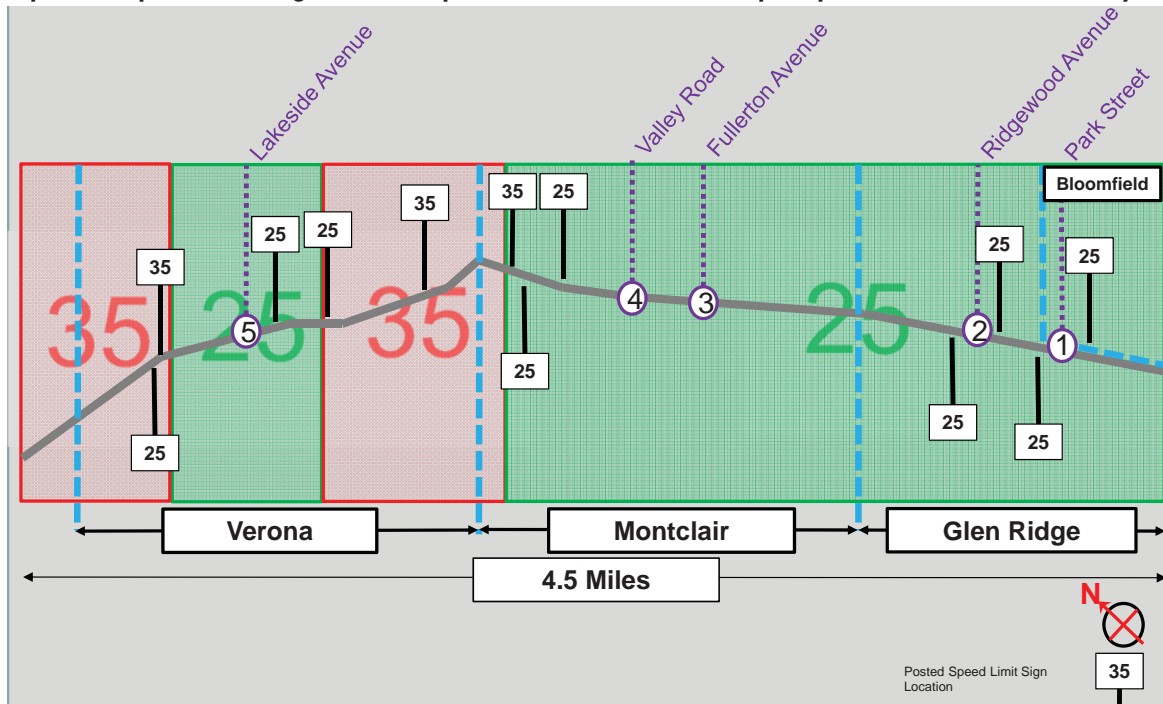
NJ Transit bus stops serving the 11, 28, and 29 routes are located on westbound Bloomfield Avenue just before Park Street and on eastbound Bloomfield Avenue just before Clark Street (one block east of Park Street). Both Clark Street and Park Street are unsignalized intersections and the nearest signalized intersection is a good distance away so transit passengers generally crossed Bloomfield Avenue at either Clark or Park Street.



Mass transit in the Study Area includes NJ TRANSIT and private commuter bus, NJ TRANSIT rail service on the Montclair-Boonton line, and commuter jitneys making loops in Bloomfield, Montclair, and Glen Ridge



Bloomfield Avenue, particularly in areas outside the downtown cores like near the Park Street intersection, experience speeds much higher than the posted limits often due to the perception of such a wide roadway.



With the exception of one small section in Verona, the posted speed limit for the Avenue in the Study Area is 25 miles per hour

Bloomfield Avenue at Ridgewood Avenue

Bloomfield Avenue at Ridgewood Avenue is a signalized intersection within the Glen Ridge Township. It is in close proximity to the NJ Transit Montclair-Boonton line Glen Ridge Station and Ridgewood Avenue Elementary School -- both are major pedestrian generators. Bloomfield Avenue has two travel lanes in either direction with an exclusive left turn lane on both approaches. Ridgewood Avenue has a shared through-right lane in both directions with an exclusive left turn lane.

This intersection is very busy with a mix of pedestrians, transit vehicles, and a notable number of left turning vehicles on all approaches, so many conflicts exist making it a challenging intersection to navigate.

The Glen Ridge Police Department conducted a traffic survey in this area and found that the 85th percentile speed was 39 miles per hour for eastbound traffic with 76.9 percent of the vehicles exceeding the 25 miles per hour (mph) speed limit. In the westbound direction, the 85th percentile speed was 38 mph with 80.2 percent of the vehicles exceeding the 25 mph speed limit.

This intersection was very busy with pedestrian and bicycle activity primarily consisting of school children traveling to school and commuters headed for either the bus stop or train station.

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During the AM peak period and the afterschool hours, two crossing guards are busy helping people and bicyclists safely navigate the intersection.

Pedestrians walking westbound along Bloomfield Avenue (on the south side of the intersection) traveling toward the train station were often observed crossing Ridgewood Avenue on an angle toward the station and not staying entirely within the crosswalk or if the signal was green for Ridgewood Avenue, they would turn up Ridgewood and eventually cross mid-block.



At the Glen Ridge Train Station, existing bike facilities appear to be at or beyond capacity. Additional bike racks and storage areas would alleviate this issue.



During the morning rush hour peak, the Ridgewood intersection in Glen Ridge is one of the busiest pedestrian areas in the County given the proximity of schools, bus stops, and the Glen Ridge train station



Kids waiting at the Ridgewood intersection in Glen Ridge - The proximity of neighborhood schools in the Study Area allow many kids to bike

This intersection is a hub for transit activity including a bus stop located on near side of Bloomfield Avenue's eastbound approach which serves NJ Transit's 11, 28, and 29 routes and DeCamp's 33 route. The Glen Ridge train station is located a block south. Both transit options generate a significant amount of vehicular, pedestrian and bicycle activity.

The bus stop is located close to the intersection and at times when two busses arrived at the same time, buses were observed boarding passengers in the intersection making it difficult for pedestrians to cross Bloomfield Avenue. The

bus shelter is set back from the crosswalk and it is fully enclosed so it is difficult for passengers waiting for a bus to see buses approaching and for bus drivers to see bus passengers waiting.

Bloomfield Avenue at Fullerton Avenue/ Church Street and Glenridge Avenue

Bloomfield Avenue at Fullerton Avenue/Church Street and Glenridge Avenue are two clustered intersections within the Montclair Township's downtown. Bloomfield Avenue is striped as two travel lanes with curb side parking permitted

on both sides (parking is prohibited in storage space between Fullerton Avenue and Glenridge Avenue).

The northbound approach of Fullerton Avenue is striped as one lane in each direction, and a parking lane on the west curb. The southbound approach of Fullerton Avenue is striped as one lane in each direction. Church Street is striped as a one-way southbound receiving lane. Glenridge Avenue is one-way southbound approach with exclusive left and right turn lanes. Several vehicles were observed turning right from westbound Bloomfield Avenue on to Glenridge Avenue. While there is signage and pavement markings indicating Glenridge is one-way approaching Bloomfield Avenue, motorists were still confused with several motorists recognizing their mistake and turning around in the intersection and one motorist continuing down the intersection the wrong way.

This is a large and challenging intersection with numerous vehicles, pedestrians and bicyclists. During the peak hours vehicles turning left from either North or South Fullerton to Bloomfield were often observed having difficulty navigating the large intersection appearing to be confused about what travel path they should take through the intersection to safely avoid other vehicles, pedestrians and cyclists. Aggressive driving was also observed, particularly in the evening when drivers were searching out parking spaces.



Riders picking up the bus in Glen Ridge - NJ TRANSIT services the Bloomfield Avenue corridor with bus and train service. DeCamp (stacked behind the NJT bus in the photo) also provides bus service and shares stop locations creating the need for larger loading areas for improved stacking in certain areas.

Bloomfield Avenue at Fullerton Avenue/Church Street and Glenridge Avenue has a significant amount of bicycle and pedestrian activity. While most pedestrians appeared to cross at signalized intersections during periods when traffic volumes were lighter several pedestrians were observed crossing against the signal. Several pedestrians were observed crossing Bloomfield Avenue at the far side of Glenridge Avenue where there is not a striped crosswalk. Pedestrians were also observed following desire lines and not fully walking within the crosswalks particularly pedestrians headed for Church Street.

Bicyclists were observed on all approaches to the intersection and on the sidewalks including a number of teen/tween-aged children that were observed riding around the downtown in a more recreational fashion as they were seen riding up and down the sidewalks a number of times during the evening peak period.

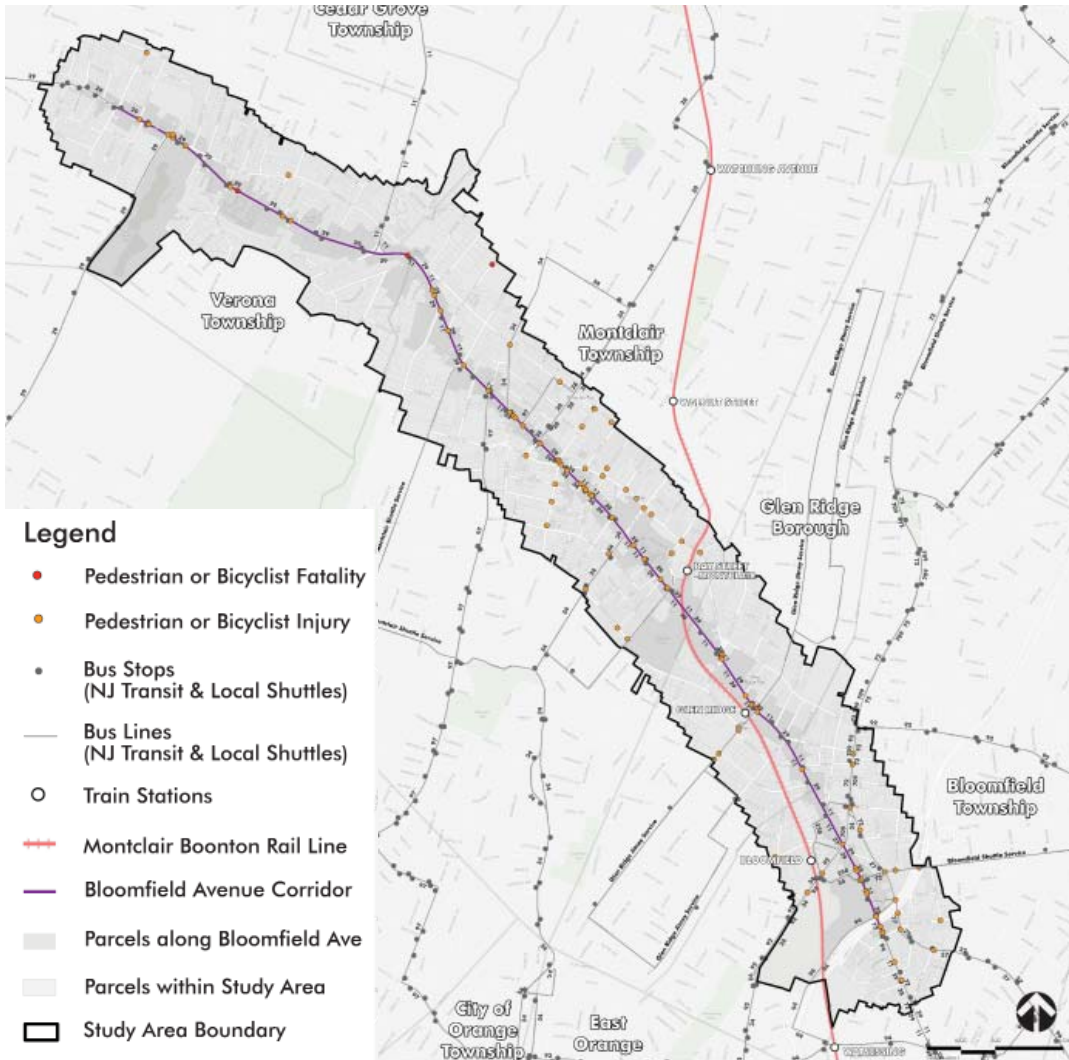
NJ Transit has a bus stop located on both near side approaches to the intersection that serves the 11, 28, 29, and 34 routes and also the DeCamp route 33. A well-used clear shelter is provided at the stop on Bloomfield Avenue eastbound but only a bench is provided at the westbound stop.



Traffic backup in Montclair Center during the morning rush hour peak



Biking along Bloomfield Avenue, particularly in peak travel times, is challenging without signs, lanes or sharrows that permit safe passage for bikes.



Reported pedestrian and bicycle accidents for 2009 to 2012 from PLAN4SAFETY data



Pedestrian making a dash across the Avenue near the intersection of Glen Ridge Avenue in Montclair



Pedestrians jaywalking in Montclair near the Wellmont Theater - there are several long blocks without a midblock crossing

Bloomfield Avenue at Valley Road

Bloomfield Avenue at Valley Road is a signalized intersection within the Montclair Township. It is in close proximity to the currently under construction Centroverde at Montclair Mixed-Use Redevelopment and the Montclair Police Headquarters. Bloomfield Avenue is striped as two travel lanes in both directions within an exclusive left turn lane on the eastbound approach. Valley Road is striped as a two lanes in each direction with adjacent parking on the southbound approach.

Since existing traffic count data was used from

the Centroverde Traffic Study, no new count data was collected and bicycle and pedestrian counts were not conducted at this intersection; however, pedestrians were observed walking in the street along Bloomfield Avenue near where the Centroverde construction site is located as the sidewalk is closed on that side of the street and there were no accommodations for pedestrians to access a safe alternate route. Pedestrians were also observed crossing Bloomfield Avenue at the intersection just west of Valley Road where there is no striped crosswalk.

NJ Transit has a near side bus stop located on Bloomfield Avenue’s westbound approach

servicing the 11, 29, and 97 routes. There is no bus shelter provided at this location.

Bloomfield Avenue at Lakeside Avenue/Park Place

Bloomfield Avenue at Lakeside Avenue/ Park Place is a signalized intersection within the Verona Township. It is in close proximity to Verona Park and HB Whitehorse Middle School; major pedestrian generators. Bloomfield Avenue is striped as two travel lanes both directions with an exclusive left turn lane on the eastbound approach and adjacent parking on the westbound approach. Lakeside Avenue is



Due to the traffic speeds and volumes on Bloomfield Avenue, many cyclists ride along sidewalks



Turning lanes on Bloomfield Avenue at the intersection of Lakeside Avenue in Verona

striped as a left turn lane and a shared through right turn lane with adjacent parking. Park Place is stripped as a shared left through right lane with one receiving lane.

Traffic traveling westbound on Bloomfield Avenue approaches the intersection at high speeds possibly because of the topography that has them coming down a hill and the road seems wider and less congested in the transition area between the core areas of Montclair and Verona. There is not a good indication that they are approaching an active downtown and that the speed limit had decreased to 25 mph.

Drivers also appeared confused navigating through the large intersection not realizing that both of the through lanes continue. Many

vehicles were observed drifting from the right lane to the left lane while traveling through the intersection. This could be because they think the right lane is going to drop out or because there is very little buffer between the lane and the curb. Guidelines for the lanes are faded in the intersection and are hard to follow.

Modest pedestrian and bicycle activity was observed at this intersection during the AM and PM peak hours. A crossing guard was present during school periods and is also there on Saturday afternoons. Much of the pedestrian and bicycle activity was by school children and people traveling to Verona Park. On evenings and weekends there is a substantial increase in pedestrians and cyclists, particularly when there

are events occurring in Verona Park.

The crossing guard indicated that the northwest corner of the intersection feels very unsafe because of the speed of vehicles approaching the intersection and the curvature of the road. There are some protective bollards on that side of the street along Bloomfield Avenue but they appear more decorative rather than protective. There was a preference for more protection around the corner of that intersection where children walking home from school are waiting to cross Bloomfield Avenue.

NJ Transit has a near side bus stop located on Bloomfield Avenue's westbound approach serving the 11, 29, and 97 routes. This stop is lightly used and there is no bus shelter provided at this location.



Faded lane guidelines cause vehicles to drift into adjacent lanes



Bloomfield Avenue, particularly in areas outside the downtown cores like this section in Verona, experience speeds much higher than the posted limits often due to the perception of such a wide roadway.



CONNECTING
PEOPLE, PLACES,
AND POTENTIAL.

PHASE 2:

WHERE DO WE WANT TO GO?



COMMUNITY OUTREACH AND EVENTS

The Project Team conducted several input sessions with stakeholder group representatives and individuals who live, work, and traverse the Study Area. These events were designed to elicit observations and suggestions concerning traffic, pedestrian, and bike safety and mobility for the Study Area. The Steering Committee identified a list of key stakeholders and helped the Project Team identify various community events, festivals, etc. where it would be beneficial to gather further community input. Outreach included:

- Focus Groups
- Community Festivals and Events
- Community Open House
- On-line Use and Perception Survey

DOT-MOCRACY BOARDS

The focus groups and community event sessions included a “Dot-mocracy” exercise, identifying where people live, work, and go in the Study Area and larger region, places that are traffic HOT SPOTS and pedestrian/bike SAFETY CONCERNS on a map. Large-format boards with aerial photos and/or maps were created and participants placed colored dots in these locations. The mapped results of the Dot-mocracy exercise can be found in Appendix D.



Participants at community events and the Open House gave direct feedback to the Project Team, made written comments, took the on-line survey, and participated in the Dot-mocracy exercise.



The Dot-mocracy" exercise identified where people go and hot spots in the Study Area and larger region



CASTING A WIDE NET

Outreach events were conducted in a variety of locations to maximize opportunities to participate. The on-line survey was used as an opportunity to engage those who may not have attended any of the events. In addition, the project team set up information and feedback tables at several events in the communities to be sure to include a fully diverse sampling of the populations within the study area. Special efforts were made to reach seniors, youth, lower-income and traditionally disadvantaged populations.

Additional information on Traditionally Disadvantaged Populations can be found in the Health Impact Assessment in Appendix C and the Demographics Profiles in Appendix G.



The Project Team conducted seven focus group workshops as part of the community outreach.

FOCUS GROUPS

The Project Team conducted seven focus group workshops as part of the community outreach. These meetings allowed participants to identify safety, health and mobility goals and objectives while sharing their respective experiences along the Bloomfield Avenue Corridor. Participants filled out a short survey form, participated in the Dot-mocracy exercise, and were engaged in a round-table discussion about issues and ideas for the Avenue.

The focus group sessions included:

May 8th - Glen Ridge Train Station

- Community organizations
- Police and emergency service providers
- School/Youth
- Transit riders
- Business owners & organizations

May 20th - Glen Ridge Train Station

- Health providers/professionals & seniors

June 4th - 73 See Gallery - Montclair

Local residents



Participants placing dots at Focus Group sessions to identify traffic hotspots and areas of safety concern



Participants shared their experiences and help identify what they would like to see happen along the Avenue



The focus groups included participants throughout the community, including teenagers and younger school children who brought a different perspective to the input.



Round-table discussions allowed everyone to give their concerns and ideas for improvements



Dots helped to pinpoint specific problem areas

COMMUNITY EVENTS

The Project Team attended a series of community-oriented fairs and festivals to publicize the project and gather further community input. It was a great opportunity to connect with all different users of Bloomfield Avenue and address mobility concerns in the Study Area and around Essex County. Visitors to the tables and booths signed up for an email distribution list, filled out a short survey form, received flyers about events and the on-line survey, and participated in the Dot-mocracy exercise. These community events included:

- *Glen Ridge Eco-Fair (5/10) -Ridgewood Avenue, Glen Ridge*
- *YMCA Montclair Healthy Kids Day/Health Fair (5/10) – Park St., Montclair*
- *Fine Arts and Crafts at Verona Park (5-17) - Verona Park, Verona*
- *Montclair Bike and Scavenger Hunt (5/18) - Lackawanna Plaza, Montclair*
- *African American Heritage Festival (6/7) – Nishuane Park, Montclair*

A detailed summary and the full results of the focus group sessions and community events can be found in Appendix D.



Participants looking at problem areas during the Montclair Bike Scavenger Hunt Event



The “Dot-mocracy” exercise, conducted at all meetings and events, helped to identify destinations and locations of hot spots in the Study Area



Giving written comments at the Glen Ridge Eco Fair



• Place a Light Blue Dot to identify **WHERE YOU LIVE** on the map
 • Place a Dark Blue Dot to identify **WHERE YOU WORK** if you work in the area on the map
 • Place Green Dots to identify **PLACES YOU LIKE MOST** on the aerial photo
 • Place Red Dots to identify **PLACES YOU LIKE LEAST** on the aerial photo
 • Place Yellow Dots to identify **PEDESTRIAN AND TRAFFIC “HOT SPOTS”** on the aerial photo



Participants placing dots on the aerial at the Verona Arts & Crafts Festival in Verona Park



Eco-Fair attendees examine maps of the Study Area



Participants studying the project area of the Montclair Bike Scavenger Hunt Event in Lackawanna Plaza



YMCA Healthy Kids events on a closed portion of South Park Street in Montclair

OPEN HOUSE WORKSHOP

An evening Open House Workshop was held at Bloomfield College in the Study Area on June 26, 2014. The event was advertised with flyers, email distribution lists, postings on local websites and Facebook pages, and with a formal Together North Jersey media release through Rutgers University. The meeting was attended with a variety of stakeholders from the Study Area and surrounding neighborhoods.

The workshop was an open house format where participants could drop-in any time between 5:00 pm and 8:00 p.m. to visit various exhibits structured by topic. The Project Team presented their analysis of the Study Area and initial recommendations for mobility and safety improvements in a presentation at 6:30 p.m.

At this meeting, the Steering Committee and Project Team provided a general overview including the project goals and schedule, and information about the project implementation process. Participants were then asked to move around to topic-stations. Members of the Project Team were available at each station to discuss concerns, challenges, and mobility priorities for the Study Area. Workshop attendees were encouraged to provide input on issues and priorities by submitting survey forms as well as providing input at the stations which included:

Meet & Greet - Participants reviewed the Bloomfield Ave Corridor Implementation Plan Goals and received information about the project and the Study Area.

Traffic and Safety - Participants were encouraged to share their experiences with pedestrian or bicyclist safety and traffic concerns along the corridor. A series of maps showed the results of earlier "Dot-mocracy" exercises for "traffic hotspots" and "safety concerns" and crash data from pedestrian injuries and fatalities and mapped along the corridor as part of the study.



BLOOMFIELD AVENUE COMPLETE CORRIDOR PLAN

Bloomfield, Verona, Montclair, Glen Ridge

WE NEED YOUR INPUT!

The BLOOMFIELD AVENUE COMPLETE CORRIDOR PLAN is a collaborative effort to pursue the creation of design standards and recommendations for a nearly four mile long section of Bloomfield Avenue. The plan focuses on improving the design standards at specific nodes that have pedestrian, bike, transit or auto-oriented circulation and mobility challenges.

Whether you are a driver, transit commuter, walker or cyclist who regularly uses the Bloomfield Ave. corridor through Bloomfield, Glen Ridge, Montclair or Verona, work in a local business, or live in the local area, we invite you to spend some time to see some initial design recommendations and provide your thoughts about the Avenue. Your input will help to inform and guide development of a Complete Corridor Plan for improving Bloomfield Ave.



OPEN HOUSE & PRESENTATION

**DROP IN ANY TIME BETWEEN
5:00 PM - 8:00 PM**

**FORMAL PRESENTATION
6:30 PM**

THURSDAY, JUNE 26TH, 2014

**BLOOMFIELD COLLEGE
COLLEGE HALL, ROOM 016
Corner of Liberty & Spruce Streets
Bloomfield NJ 07003**

Parking in 225 Liberty Street lot or on local streets.
Bus: NJ Local Buses to Bloomfield Center, GO Bus 28
Rail: Montclair-Boonton Line to Bloomfield Station

www.togethernorthjersey.com



The Project Team discussed concerns, challenges, and mobility priorities for the Study Area with Open House attendees.



Computers with the on-line survey were made available at the workshop.



Participants review recommendations for traffic calming and design techniques to identify elements that they thought were appropriate and inappropriate for the Study Area.



A Kids Corner activity area allowed children to participate by coloring designs for crosswalks and street art.

Corridor Use and Perception Survey - A room with several computers was made available for participants to take the on-line survey while at the workshop. A summary of the on-line survey is provided on pages 32-35.

Kids Corner - An activity area was provided to allow children attending the workshop to participate by coloring designs for crosswalks and street art.

Implementation Ideas - Participants were also shown some of the early recommendations for street design, potential bike network, and specific intersections. Boards included illustrations of potential design solution, as well as, a range of other traffic calming and design techniques and participants were encouraged identify design elements that they thought were appropriate and inappropriate for places in the Study Area.

The full results of the workshop are included in Appendix D.

HEALTH IMPACT ASSESSMENT:

BLOOMFIELD AVENUE CORRIDOR USE AND PERCEPTION SURVEY

In conjunction with development of the Bloomfield Ave. Complete Corridor Plan, the New Jersey Health Impact Collaborative at Rutgers University (NJHIC) conducted a Health Impact Assessment (HIA). By combining scientific data, health expertise and public input, HIAs identify and assess the potential positive and negative health effects of decisions related to policies, programs or projects.

The HIA considers a range of social, environmental and economic influences on health and places an emphasis on identifying groups of people who are or might be disproportionately impacted by the way the corridor functions. In looking at potential Complete Streets measures including a “road diet,” the HIA followed a six-step method that resulted in a set of recommendations and a monitoring plan. The vision of a healthy Bloomfield Avenue is one where pedestrians and bicyclists of all ages and abilities can safely access destinations and use the corridor for walking and bicycling with minimal risk of crashes and minimal exposure to noise and air pollution, where motor vehicle traffic is efficiently managed to reduce driver stress, and where social interaction leads to improved mental health and a vibrant business environment.

The Bloomfield Avenue Complete Corridor Plan HIA, conducted between February and August of 2014, included reviewing background data and literature, engaging stakeholders, and conducting a survey of over 1,000 residents in surrounding

communities, to both characterize the baseline health status and also project health impacts of Complete Streets measures for nearby communities.

The HIA focused on the following impacts of Complete Streets policy implementation for pedestrians, bicyclists, transit uses and motorists:

- Safety (collisions) impacts
- Outdoor environmental exposure impacts (physical activity, pollution)
- Mental health impacts (stress, noise)

- Impacts to social cohesion for communities along the Corridor
- Economic impacts along or near the Corridor
- Impacts to access to public services, transit, and healthy food

A web-based Bloomfield Avenue Corridor Use and Perception Survey was prepared as part of the LDP and HIA efforts to identify issues with Bloomfield Avenue and community preferences for traffic, pedestrian, bike and transit improvements in the Study Area. The survey was hosted by the



Poster soliciting community feedback from Complete Corridor Survey



A community member participating in a virtual survey

Bloustein School of Planning and Public Policy at Rutgers University as part of the HIA associated with Bloomfield Avenue. The purpose of the survey was to obtain information about local use, experiences, preferences and health impacts of Bloomfield Ave.

to inform the development of the Complete Corridor Plan.

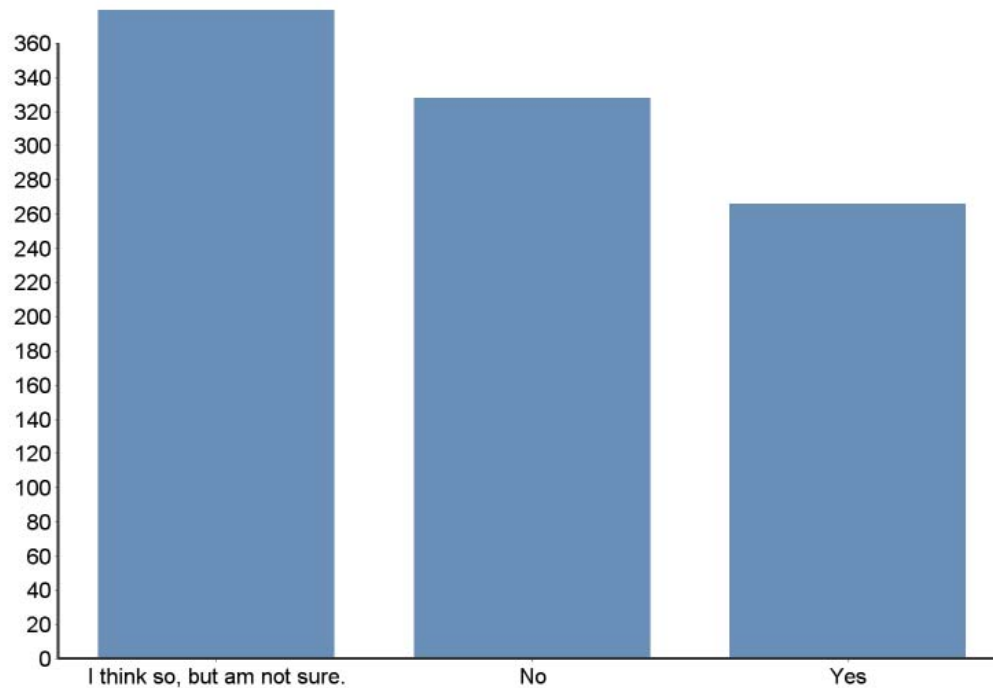
The Bloomfield Avenue Corridor Use and Perception Survey was active on-line for approximately two months from the middle of May 2014 to the middle

of July 2014. Over 1200 people across the four towns and in the region took the survey during this time period. The survey was promoted with links from social media and municipal websites and was advertised with flyers at various community events and focus groups. A series of computers were also made available at the Open House Workshop for people to take the survey.

Participants gave knowledge and insight about the use, local preferences and impacts of Bloomfield Ave. to the region and help to inform the prioritization of actions to improve access, awareness, health and safety along the corridor. This survey effort supplemented the public input gathered through focus groups, community events and the “Dot-mocracy” exercises.

A detailed summary and the full results of the Bloomfield Avenue Corridor Use and Perception Survey can be found in the Health Impact Assessment in Appendix C. Some of the highlights of the findings are outlined on the following pages.

Are you aware of the posted speed limits along Bloomfield Ave., including where they change?



Pedestrians

About 83% of the survey respondents said that they walk on Bloomfield Ave. Of these, about 80% reported walking along Bloomfield Ave. at least 2-3 times per month, with 31% of those walking at least 2-3 times per week. Over 90% of those walking along Bloomfield said that they do it most often to go shopping or out to eat, while almost 40% said that they do it for exercise.

Over two thirds of walkers felt there was a need for lower speeds. The majority of respondents wanted to see better crosswalks and pedestrian signals. The primary concerns and challenges for walkers are:

- Poor traffic enforcement
- Difficult to cross the street
- Drivers speeding
- Fear of assault

Motorists

The HIA survey, with over 1,200 Bloomfield Ave. motorists responding, showed that the most common reason to drive on Bloomfield Ave. was to shop or go out to eat, with 85% reporting that as their usual purpose. Only about 40% reported that

their usual driving along Bloomfield Ave. is to get to work.

About 80% of the survey respondents who were motorists reported either occasional or frequent congestion that delays their trip more than 5 minutes. Most of the congestion was reported to occur in the morning and evening rush hours on weekdays, and on weekend evenings. Over 60% of

drivers think that the traffic problems have gotten worse compared with several years ago. Notably, rather than pure volume of cars, more respondents felt that the increased congestion was due to drivers making turns, traffic light coordination, and drivers trying to find a place

Specific concerns and challenges widely ranged from too much congestion and desire for better



traffic flow, to those looking for lower speeds and better sharing with bicyclists and pedestrians. Enforcement was consistently noted as an issue and less than 25% of the respondent indicated that they definitively know the speed limits on the road. The primary issues for drivers are:

- Poor speed and traffic enforcement
- Double parking and parking in general

- Left turns
- Unsynchronized lights
- Transit buses

Transit Riders

Approximately one third of respondents indicate that they currently use public transportation, even though the corridor is well-served by a variety of modes

and providers. Of those that responded, most indicated they use the trains. Daily NJTRANSIT train commuters are the most common transit users, followed by people who travel by train from one to three times per month, and then by both NJTRANSIT and private bus riders who ride several times per month.

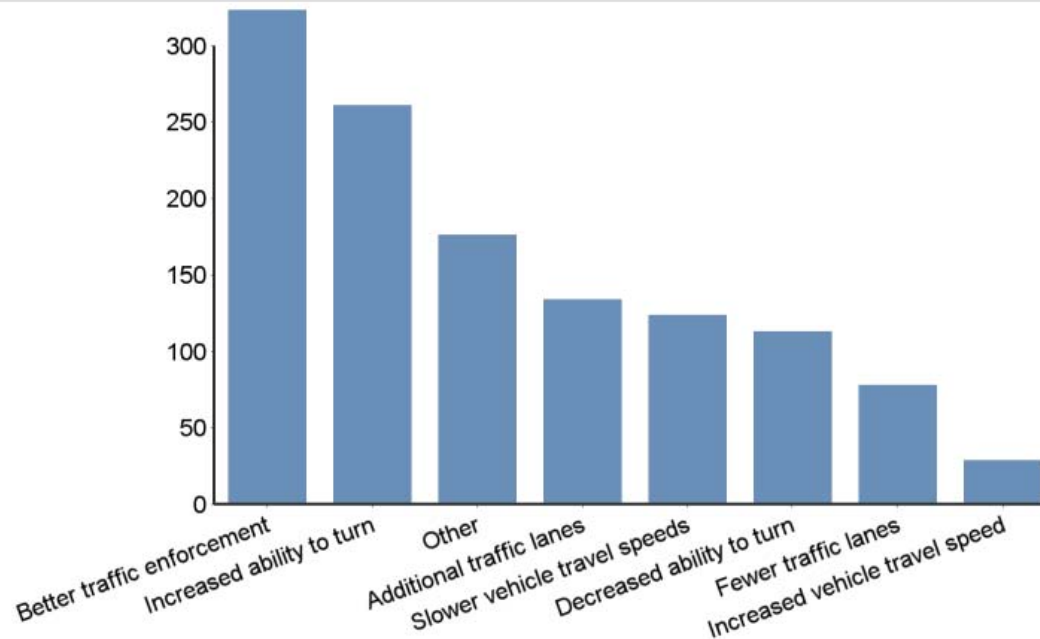
Given the amount of transit commuters, one of the study recommendations will include further outreach to these users, including those who travel through, transfer, and or work in the area, but are not residents of the four communities.

A recent survey by Eat, Play, Live Better survey hat 64% of transit riders walk to the station, while about 30% get a ride with someone and 3% ride a bicycle to the train station or bus stop. Train riders are more likely to drive or get a ride (55%) than are bus commuters (27%).

The primary issues for transit riders are:

- Not enough bus shelters
- Bus shelters in poor condition
- Buses delayed pulling in and out of stops by traffic and illegal parking
- Limited off peak and weekend service on buses and trains

What changes would you like to see to make it safer to drive on Bloomfield Ave.? (Check all that apply.)



Cyclists

About 16% of our survey respondents reported that they bicycle along Bloomfield Ave. Cyclists ride along the Avenue in Montclair most often, followed by Glen Ridge, with far fewer reporting bicycling in Verona or Bloomfield. About one quarter of cyclists are on Bloomfield Ave. at least once a week, and about a third bicycle along the corridor less frequently than once a month.

Most (76%) bike on the street and 96% of the total feel unsafe biking on the Avenue. A vast majority (80%) of cyclists are doing it for the exercise, but about half also report cycling to go to shops and restaurants. The primary issues for cyclists are:

- Speed and number of cars
- Poor traffic enforcement
- No bicycle infrastructure/dedicated facilities
- Crossing are difficult
- Road surface is in poor conditions

Why do you feel unsafe bicycling along Bloomfield Ave.? (Check all that apply.)

Value		Percent	Count	Percent
2	Speed of cars and trucks on the roads		128	81.0%
3	Unsafe drivers on the roads		126	79.7%
1	Number of cars and trucks on the roads		124	78.5%
13	No bicycle facilities (bike lanes, separated path, etc.)		119	75.3%
4	Crossing Bloomfield Ave is too difficult		65	41.1%
12	Road surface in poor shape (potholes, debris, etc.)		60	38.0%
10	Too much exhaust fumes from motor vehicles and trucks		43	27.2%
14	Other		21	13.3%
11	Inadequate street lighting		14	8.9%
15	Sidewalks not wide enough		14	8.9%
6	Physical assault		8	5.1%
8	Loitering, leering or catcalling		6	3.8%
5	Drug dealers and users		6	3.8%
9	Abandoned buildings, vacant lots		4	2.5%
7	Sexual assault		2	1.3%
-	Total		740	468.4%

Sampling of Comments from the Survey...

"Too many variables -- people pulling out of/into parking spots, narrow lanes with large trucks/ buses, double-parked trucks, corners where you can't make turns."

"Educate all drivers and cyclists about sharing the road with bicycles. Nobody knows the rules or how to go about sharing."

"Narrow driving lanes, cars pulling into and out of parking spots, doors opening into the driving lane, innate invisibility of bikes make riding on Bloomfield dangerous."

Often bicycle riders use the sidewalks. I know there is a lot of traffic on the roads, but, as a pedestrian, sharing the sidewalk isn't ideal.

"...there was always issues with the buses being cut off or not being allowed to break back into traffic from a pickup/drop off"

"Traffic is too fast and congested. It's unsafe for bikes."

"The roar of the traffic is disconcerting and the speed when there is a green light makes it like the Indy 500."

"I'm either passing through, or if shopping, I'll park off of Bloomfield Ave so I'm never walking on it for very long."

"I like walking my dog and people watching."

"Drivers don't stop for pedestrians, even when pedestrians have the right of way, drivers turning do not yield, so traffic lights should be modified to give the right of way to pedestrians and later on to cars turning, but not to both at the same time."

"Safety is not the issue. TRAFFIC is the issue. The lights are all timed so that you sit at each one, from Newark to the Caldwells and back again."

"Many of us are concerned with bicyclists respecting pedestrians and enforcement of bike traffic violations."

"I would like more bike racks, like in front of Starbucks, and really a dedicated lane would be great for bikes."

"I don't feel Bloomfield Avenue is suitable for bike riding. Another east-west thoroughfare such as Claremont would be a better route."

"My bike and I don't have the chops for a busy street like that."

"I like the shops, the restaurants; it's a lively street with lots of options."

"I work in Montclair and like to walk if we go out to lunch or to an appt nearby."

"It's ugly. Not enough trees. Property owners should be forced to maintain attract facades..."

"Make it as pedestrian friendly as possible, Maintain in winter, make bus stop shelters where none exist"

"If the sidewalks were wider, there could also be more outside seating for restaurants"

"Defined turn lanes would help. Driving in the left lane it's hard to know when someone will abruptly stop and driving in the right lane it's hard to know when someone will abruptly stop for parking or buses making stops"

"Exercise,. Better connection to place. Less dependence on car."

"There should be more public transportation and less individual drivers driving recklessly in SUVs"

"The bus stops are not well designed. Many are not in good condition....and some are obstructions in the sidewalk. That being said, access and service is very good in my experience."

"People are trying to park, double parked, the buses, people are trying to cross the street. There is too much going on in this small strip of road."

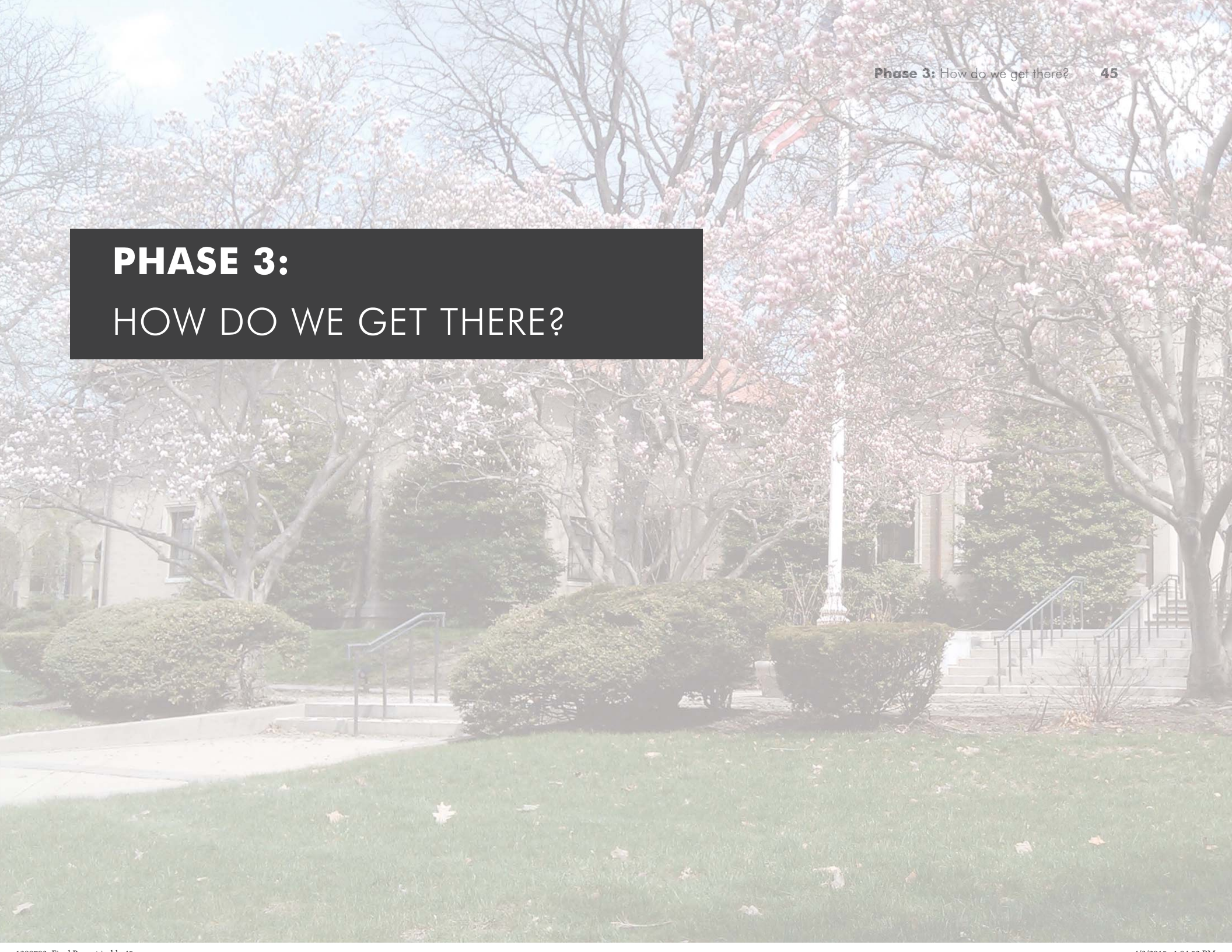
"I think that more stop lights are needed and better policing of cross walks. Speed limits need



CONNECTING
PEOPLE, PLACES,
AND POTENTIAL.



PHASE 3:
HOW DO WE GET THERE?



RECOMMENDATIONS OVERVIEW

The Bloomfield Avenue Complete Corridor Plan, through Complete Streets policies, promotes a healthier, safer and more accessible community. Increased mobility and better access to jobs, goods and services will increase the well-being of residents. The Complete Corridor Plan includes recommendations for:

- *General Policy and Education Efforts*
- *Pedestrian Safety and Traffic Calming*
- *Bicycle Improvements*
- *Street Typologies*
- *Prototype Intersection Improvements*

In order to improve the neighborhood and to encourage a safe and active community, the local partners need to take a series of short-, medium- and long-term actions. The following section outlines the planning and implementation recommendations developed during the evolution of the Complete Corridor Plan.

STATE AGENCY “WALK, TALK AND ACT”

On June 26 2014, New Jersey TRANSIT and the Project Team facilitated a “Walk, Talk and Act” event in the Study Area. The presentation and roundtable discussion was held at Bloomfield College in Bloomfield.

Attendees included the project partners, elected officials, Steering Committee members and representatives of various state agencies, Essex County, the North Jersey Transportation Planning Authority and HUD. The “Walk, Talk, and Act” meeting presented an opportunity to share key challenges and recommendations with the group and seek input on potential partnering and funding opportunities. The Planning Implementation Agenda (Appendix A) was developed based on the feedback from this group.



GENERAL POLICY AND EDUCATION RECOMMENDATIONS

SPEED LIMIT ENFORCEMENT

To reduce speeding in the corridor, a multi-pronged strategy is needed which combines increased and regular enforcement, signage and markings, and traffic calming measures. Additional signage should be considered including “Reduced Speed Ahead” and “Your speed is” radar signage and pedestrian crossing and speed limits painted directly on the roadway in key locations.

Much of perceived safety concerns of pedestrians and cyclists comes from motorists’ speed. The faster

a vehicle is traveling, the more likely crash injuries to a person on foot or bicycle will be serious.

PEDESTRIAN, CYCLIST, AND DRIVE AWARENESS CAMPAIGNS

The communities should also launch an education campaign to alert motorists of the downtown speed limit and encourage them to travel at safe speeds. The “Drive with Care in Montclair” campaign has just recently been announced. The campaign is funded by Partners for Health Foundation and administered through the Township Council’s

advisory committee on Pedestrian Safety. Similar awareness and educational initiatives should be explored in the other communities and on the County level. Other local driver safety initiatives include the Courteous Driving pledge and NJTPA’s Street Smart Challenge.

The National Highway Traffic Safety Administration (NHTSA) has marketing materials available at their website (<http://www.trafficsafetymarketing.gov/>) for the Townships and there are education materials available through NJTPA’s Pedestrian Safety Campaign website (<http://beststreetsmartnj.org/>) Street Smart NJ public awareness efforts



have utilized a multi-pronged strategy to enhance public safety campaign results and positively impact behavior. Police agencies can also employ best practices in pedestrian enforcement with traffic safety officers. Cops in the Crosswalk programs and other means to monitor driver, pedestrian and bicyclist behavior at selected crossings for an extended period of time can use the stops to educate drivers, pedestrians and bicyclists about their responsibilities under the law.

Awareness campaigns should also include education on distracted driving and walking and the rules of the road for sharing with bicyclists.

WALKABILITY AUDITS

As communities adopt Complete Streets policies and are promoting bicycling and walking as viable transportation options, it is important to understand all the opportunities and challenges. Walkability Audits are a good way to address pedestrian safety issues by identifying challenged areas where safe, comfortable, accessible and welcoming environments for pedestrians and cyclists can be created or improved. Audits are often conducted along roads near specific locations including schools, business districts, parks, public facilities

and transit stations.

Audits can be sponsored by local municipalities, non-profits, or civic organizations. It is important to include input from a variety of people, including

youth, seniors, people with disabilities and those that use transit. Given the size of the Bloomfield Avenue Study Area, the four participating municipalities, and the number of high pedestrian areas (downtowns, schools, transit centers, etc.) it is recommended that



StreetSmart has a series of education campaigns that can be used to promote awareness and safety



Signage prohibiting biking on sidewalks in high pedestrian traffic areas.

several audits of specific locales be studied

WALKING SCHOOL BUS

A walking school bus is a group of children walking to school with one or more adults. It can be as informal as two families taking turns walking their children to school or as structured as a planned route with meeting points, a timetable and a schedule of trained volunteers. By establishing drop-off areas a few blocks from schools, children

have the health benefit of walking to school and a means to make walking to school safer, more fun and more convenient.

The walking school bus also has the added benefit of distributing school-related traffic and take some of the traffic pressure off of intersections and roadways near schools. This program has been very successful in Glen Ridge. Given the walkable network of sidewalks in all the Bloomfield Avenue communities, there are opportunities to explore



"Walking school buses", where drop zones are established a few blocks from schools and students walk in groups a few blocks to school, have been successful in Glen Ridge and could be used in other towns.

PEDESTRIAN SAFETY AND TRAFFIC CALMING RECOMMENDATIONS

similar programs at other local schools.

Traffic calming is an effect which helps lower vehicular speeds, as motorists get the sense that the street is a shared public space with pedestrians. Traffic calming is an integral part of community planning and is achieved through the careful design of traffic calming devices, building placement, architecture and streetscape elements.

COMPLETE STREETS AND NACTO STANDARDS

Complete Streets are streets designed for all users, all modes, and all ability levels. They balance the needs of drivers, pedestrians, bicyclists, transit vehicles, emergency responders, and goods movement based on the roadway context. Essex County has had a Complete Streets policy since April 2012. The County has recently finalized a Complete Streets Implementation Action Plan to offer a variety of tools and procedures to help Essex County accomplish implementation at all levels and through all stages of its streets projects.

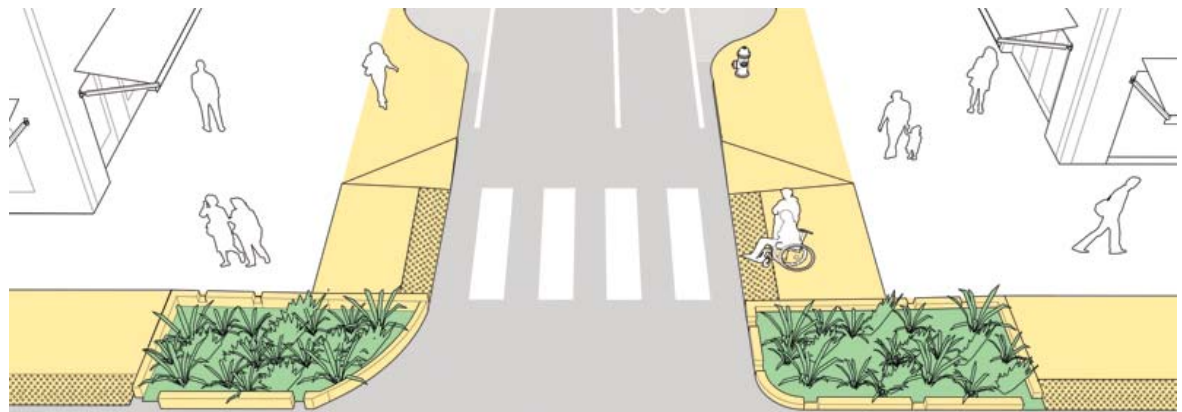
The National Association of City Transportation Officials (NACTO) has published an Urban Street Design Guide to focus on the design of city streets and public spaces, sensitive to all user types. Whereas, the American Association of State Highway and Transportation Officials (AASHTO) guidelines provide a general discussion of street design in an urban context and focuses on roadway

design, the NACTO guide emphasizes street design in a Complete Streets context with sets of design goals, parameters, and tools for vehicles, pedestrians, cyclists and transit alike.

The Urban Street Design Guide is recommendation as a basis for the creation of local standards customized to the particular needs of a place. The County and the local community should explore adopting many of the NACTO concepts as Complete Streets policies are being refined and finalized and as design solutions are being considered for Bloomfield Avenue and other County and local roads. The Urban Street Design Guide can be found at <http://nacto.org/usdg/>.

A number of traffic calming and street design concepts should be explored for the Bloomfield Avenue Corridor. Some of these include:

- Curb Bumpouts & Extensions
- Ergonomic Crosswalks
- Reversible/Floating Lanes
- Colored/Textured Intersection
- Road Tattoo/Decorative Crosswalks/Street Art
- Lighted Pedestrian Crossing
- Median/Pedestrian Refuge Island
- Sidewalk Bollards
- Parklets
- Curbside Consolidation/Access Management
- Delineated Bus Loading areas
- “Green Streets” storm water management
- Diverse Street Trees



Gateway bumpout diagram from the NACTO Urban Street Design Guide incorporating stormwater management into traffic calming



Curb Bumpouts

ROADWAY DESIGN & CURB EXTENSIONS

The width allocated to lanes for motorists, buses, trucks, bikes, and parked cars is a key aspect of street design and a big determiner of traffic speeds. Lane widths should be considered within the physical size of a given street delineating space to serve needs and understanding of the goals for traffic calming, as well as making adequate space for larger vehicles, such as trucks and buses. In general, lane widths of 10 feet are appropriate in developed corridors with high levels of pedestrian traffic and can have a positive impact on a street's safety without impacting traffic operations.

The enhancement/buffer zone as defined by NACTO is the space immediately next to the sidewalk that may consist of a variety of different elements. In the case of Bloomfield Avenue, this is the area most often associated with on-street parking and bus loading. Changes to the roadway should include extensions and bumpouts, both at intersections and in midblock locations, to narrow the perceived width of the road in key locations. Curb bump-outs occur at intersections or mid-block locations to narrow the street pavement and define parallel parking areas. The smaller pavement width enables shorter crosswalks making pedestrian crossings quicker and safer. The bump-outs create protected areas for turning vehicles to get closer into the intersection for increased visibility.

Other interventions can include curb extensions, parklets, stormwater management features, bike racks, and bike share stations. The locations can also be an extension of the street furniture where street furniture and amenities, such as outdoor dining/displays, lighting, benches, newspaper kiosks, utility poles, tree pits, and bicycle parking are provided. They are also ideal locations for green infrastructure elements, such as rain gardens or flow-through planters, which have engineering and aesthetic value.

Refer to the Street Typologies in the following pages to see specific recommendations for roadway and sidewalk types and dimensions.



Example of a cross walk with a design theme in Ocean City, NJ

SIDEWALKS AND CROSSWALKS

Pedestrian improvements are needed corridor-wide. While sidewalks are continuous throughout in the entire study area many are congested (particularly in downtown core areas and during school arrival and dismissal hours) and in need of widening, repair and regular maintenance.

Many crosswalks require higher visibility markings like a ladder crosswalk. In areas of high pedestrian activity such as in downtown cores and near transit centers, ergonomic crosswalks are recommended to give additional space and visibility to pedestrians and protect the desire line movements that walkers typically make. Decorative crosswalks that incorporate street art can also be a great way to calm traffic and introduce design themes and public art into areas.

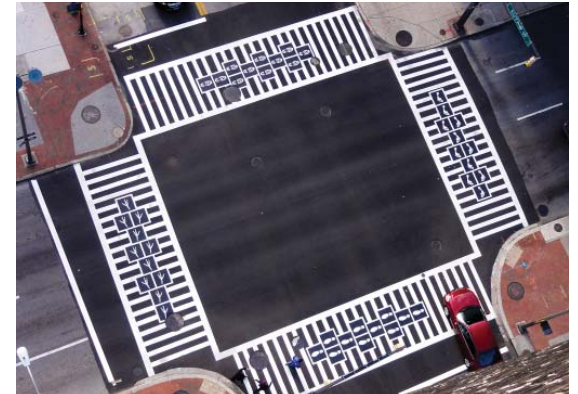
Additional countdown pedestrian signal heads and handicap signalization are needed at signalized intersections that do not already have them installed. Flashing signals or HAWK beacons at unsignalized or mid-block crossings should also be explored.

. Pedestrian-scale lighting and landscaping along many stretches of the corridor and near transit stops are need to help improve safety and make for a more pleasant walking experience.

Refer to the Street Typologies in the following pages to see specific recommendations for sidewalk and crosswalk types.



Ergonomic crosswalks follow desire-line paths



Crosswalks as street art



Street trees help to create a more comfortable and safer sidewalk along State Rt. 27 in Metuchen



Pedestrian shelter island

STREET TREES

Street trees enhance city streets both functionally and aesthetically. A diversity of street trees and plant material will help reduce, collect and filter storm water runoff, create habitat for birds and wildlife, and provide a shade canopy in the summer months for pedestrians, adjacent to buildings and public spaces. Street trees also have the potential to slow traffic speeds and frame the street and the sidewalk for pedestrians, helping to increase safety and establishing human scale. Requirements for tree spacing depend upon the adjacent uses, setback

from curb, and integration with street lights and other furniture.

In downtown areas with high concentrations of retail storefronts, street trees should be no closer than 60' in spacing. In residential and transitional areas they can be more tightly spaced at approximately 30'-40'. The study area has sections with a nice canopy of trees and some sections, particularly in the transitional sections of Bloomfield and Verona that could use additional plantings to improve the pedestrian realm and help to calm traffic.

Refer to the Street Typologies in the following pages to see specific recommendations for street trees.



Planted median along Northfield Road (Essex County Rt. 508) in Livingston, NJ

PLANTED MEDIANS AND TRAFFIC ISLANDS

Planted medians and traffic islands are another means of narrowing travel lanes. They can be utilized to reduce speeds, restrict turning movements and shorten pedestrian crossing distances, thus, improving overall safety for motorists and pedestrians. They could be considered as part of an overall road diet and used in conjunction with center turn lanes or can be located in places where there is not a need for on-street parking allowing portions

of the pavement to be given back to an island. This may be useful in calming traffic in the transitional areas in the Corridor between the towns.

PEDESTRIAN REFUGE ISLANDS

A refuge island allows pedestrians a safe stopping point before crossing a road. It is typically used when a street is very wide and/or with heavy traffic, as the pedestrian crossing can be too long for some individuals to cross in one traffic light cycle. It is also used when no light exists, and pedestrians need safe harbour after managing one direction of traffic, before taking on the next. This can be useful in locations in the Corridor where there are multi-point intersections, offset intersections, or streets intersecting at angles.

TEXTURED PAVEMENT

Changes in texture and/or color in the pavement in the roadway indicates to motorists that they need to slow down and become aware of high levels of pedestrian activity. This technique can be effectively used to define crosswalks, offset intersections, parallel parking spaces and travel lanes.

PARKLETS

Parklets are typically applied where narrow or congested sidewalks could use additional public space for cafes, seating areas, and street furniture. They are also effective ways to introduce and test additional traffic calming on a temporary or pilot program basis. Parklets are raised platforms flush with the sidewalk that extend into one to three parallel parking spaces. They should be positioned in locations away from intersection and crosswalks for safe visibility. Generally to obtain a parklet, property owners or community organizations enter into an agreement with the municipalities or the County, procuring one or more on-street parking



Textured paved intersections with protective bollards help to calm traffic speeds, raise awareness of pedestrian activity and landmark downtown areas



Parklets are raised platforms flush with the sidewalk that extend into one to three parallel parking spaces and can be effective ways to test traffic calming on a temporary basis.

BLOOMFIELD AVENUE CORRIDOR ROAD DIET

Per the collective towns' request, a road diet alternative was reviewed under analysis year 2019 conditions. A 'road diet' is when two through lanes are redesigned to one through lane with a shared left turn lane and/or median. If 'vehicle throughput'(the amount of vehicles that can travel through an intersection at each light cycle) is the priority, a road diet is considered successful if motor vehicle demand is below 1,750 vehicles per peak hour. However under existing vehicular demand and projected 2019 demand Bloomfield Avenue would exceed the 1,750 vehicle threshold at all five study

intersections. Bloomfield Avenue at Ridgewood Avenue would be predicted to operate at an overall failing level of service from a traffic congestions standpoint during both the AM and PM peak hours.

Vehicular capacity and queue length analysis was also performed under the proposed road diet operation and analysis year 2019 conditions at the intersection of Bloomfield Avenue at Ridgewood Avenue as a sample for other intersections along Bloomfield Avenue. This intersection was selected due to its lower vehicular demand (in relation to other study intersections), and that it does not have

left turn restrictions. Average queue lengths on Bloomfield Avenue's eastbound and Ridgewood Avenue's southbound approaches are predicted to extend into upstream intersections during both the AM and PM peak hours. Maximum simulated queue lengths on all approaches are predicted to extend into upstream intersections.

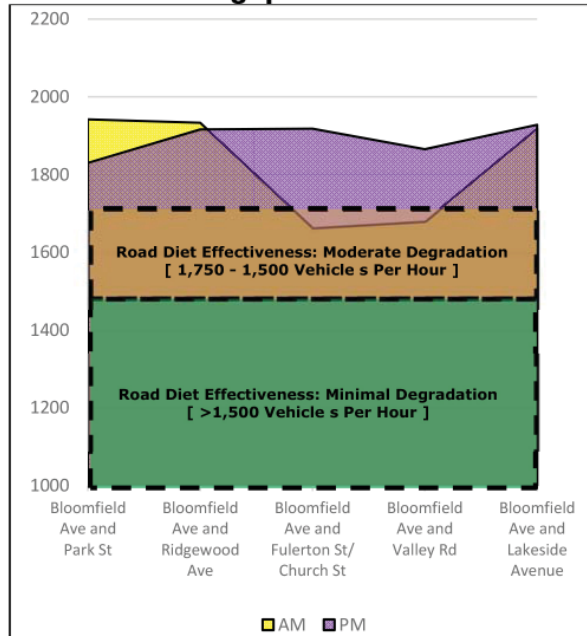
The road diet with a reduction of travel lanes is a question of trade-offs for all the local communities working with the County to balance traffic capacity and level of service needs with injury & fatality prevention, long term health benefits, economic vitality and quality of life that go along with road diet concepts and a furtherance of a Complete Streets Policy.

Some of the short term recommendations for street typologies and intersection concepts on the following pages include road diet elements such as curb extensions and bumpouts to reduce the overall roadway width and make crossings shorter.

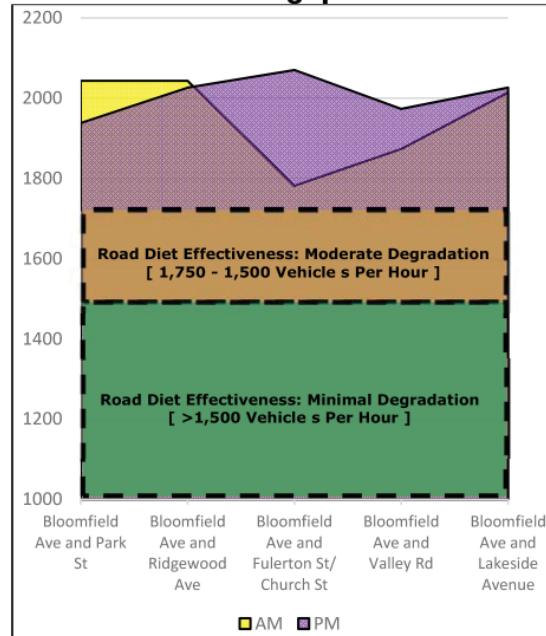
Additional information on the health, safety, and mobility advantages and disadvantages of a road diet can be found in the Health Impact Assessment in Appendix C.

With improved pedestrian and bicycle access and other project recommendations to enforce speed limits and slow vehicular speeds, motorists may choose to switch to other modes or take other routes and traffic volumes may decrease to a level where a road diet may be viable. In the future, after some of the project recommendations have been implemented, a full corridor study to evaluate a road diet should be conducted.

Bloomfield Avenue Existing Vehicular Throughput Demand



Bloomfield Avenue Future Year 2019 Vehicular Throughput Demand



BIKE RECOMMENDATIONS

Although the Project Team observed people bicycling along and across the corridor, existing road geometries and traffic patterns create real challenges for on-street bicycle routes. Survey and outreach results on biking along Bloomfield Avenue ranged from people who feared riding on Bloomfield Avenue and did not want to see additional bikes on the road, to those who are comfortable riding on the road now, to those that wanted to see dedicated lanes as part of the design changes to the roadway so those who bicycle for transportation purposes are less at risk.

Based on current roadway considerations and the short-term implementation recommendations of this study, dedicated bicycle lanes were not included on Bloomfield Avenue at this time. This is something that should be revisited as other changes to the roadway are made over time and changes to surrounding land use patterns occur. Additional road diet and dedicating lanes for bikes ultimately is a question of trade-offs for all the local communities working with the County to balance traffic capacity with increased health benefits and pedestrian/bike safety that go along with road diet concepts and an implementation of the Complete Streets Policy.

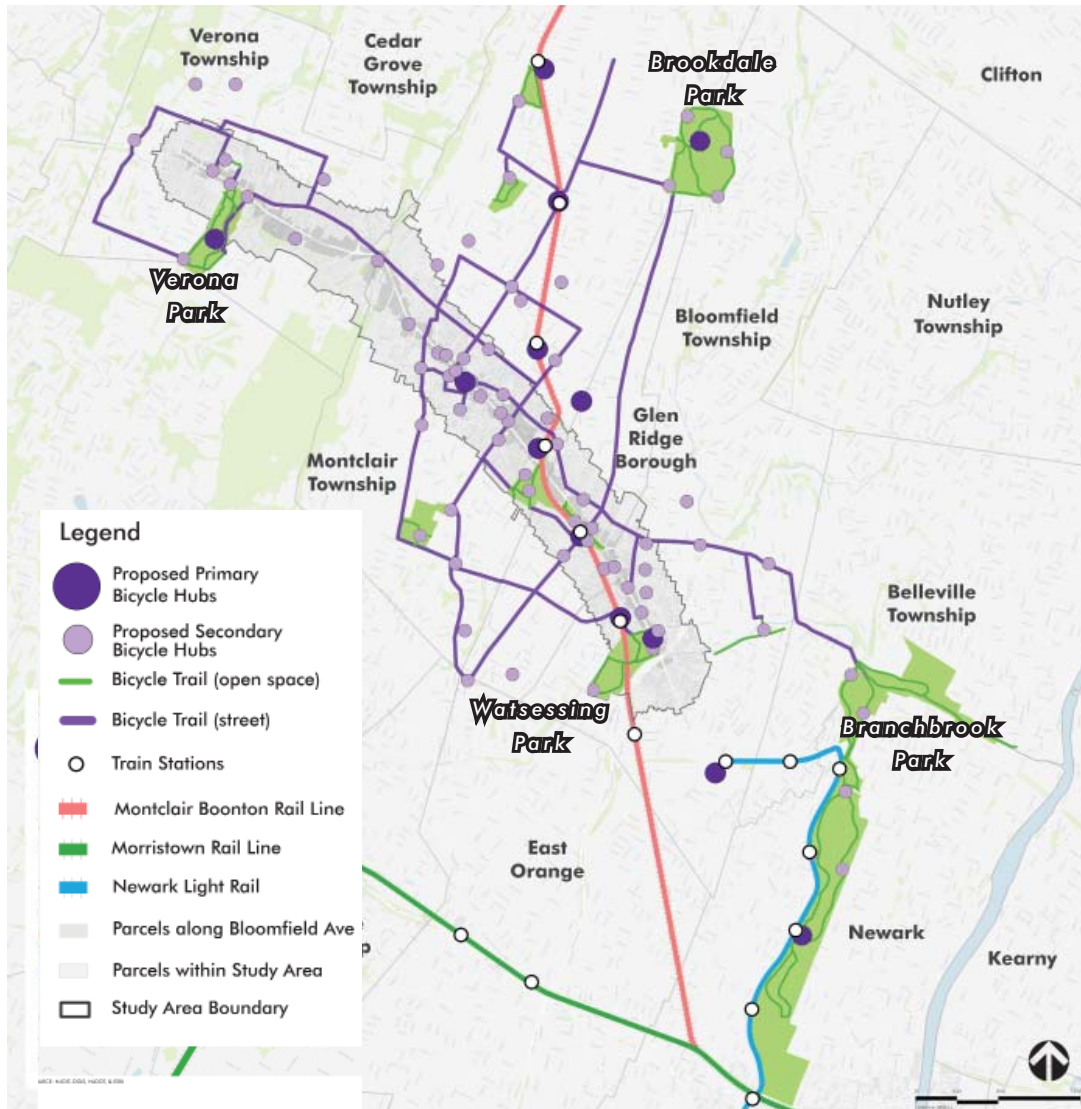
One of the recommendations of the Plan includes exploring special events like a “Parking Day”, to allow for increased awareness for expanding



The bike network should be coordinated amongst the towns and the County and include a combination of dedicated bike lanes, sharrows (share the road markings), and off-street trails.



Example of dedicated bicycle parking on the side of a building in downtown Princeton allowing the sidewalk in front of businesses to be clear.



Complete Streets concepts in the Corridor.

CORRIDOR BICYCLE NETWORK

The public input did indicate there is a need for the creation of designated and clearly-marked bike lanes, paths and routes near or along Bloomfield Avenue including the business districts in Verona, Montclair, and Bloomfield. There was also a strong desire expressed for linking other major destination attractions such as parks, schools, transit facilities with a bikeway system. A network should be developed by synchronizing the existing municipal plans for bicycle circulation that includes parallel streets, cross connectors, and improved bicycle safety to destinations on Bloomfield Avenue to reduce the risk of cyclists who must ride in heavy traffic to work, school, social services, etc.

The map on this page indicates some potential bicycle routes, coinciding with local municipal bicycle circulation plans where available. These routes have not been analyzed in detail, would need further study, which is one of the key initial recommendations in the Planning Implementation Agenda. The diagram shows the potential of creating designated bicycle routes that can get cyclists to Bloomfield Avenue and other key local destinations. Ideally these routes would have a hierarchy and could be a combination of lanes, sharrows, and off-street trails (such as in parks like Verona Park, Brookdale Park, and Watsessing Park). Primary hub locations are sites

Potential bicycle routes, linking key destinations in the Corridor and the region - These routes have not been analyzed in detail and would need further study, but could be the basis of a regional network.

that could be places for substantial bike storage and potential locations for a future bike share program. These include downtown areas, transit stations, and regional parks. Secondary hubs are other destinations where racks and other facilities could be located.

BICYCLE WAYFINDING AND SIGNAGE

Better bicycle wayfinding signage is needed to go along with any network. This would include developing maps and better wayfinding to the routes in the Study Area, as well as trails and systems in and around the County and region.

Mapping the routes will illustrate how to get to key locations and some defined routes and loops for various uses should be part of the program. The maps should include routes of various lengths, along with local landmarks and important businesses and community resources. Directory signs should be developed and located in the hub locations and maps could be made available for businesses and community organizations to provide.

Signage along the routes should be

well-delineated and signage and road markings should give all road users a higher level of awareness of cyclists. This will in turn promote cyclists as users who share the right to the roadways.

BIKE RACKS, LOCKERS, AND STORAGE

Safe and secure bicycle parking can help encourage more travelers to bike to their destination in place of driving. While there are some bike racks located in downtown areas and at train stations, there is definitely a need for additional bike parking. Locations that provide convenient access to local destinations while not blocking businesses or on-street parking. Bike stations and bike racks both for private use and bike share should be considered at transit centers and other study area destinations.



Bike routes should be clearly marked both on the roadway pavement and with wayfinding signage and route markers.



Street tattoo as public art and traffic calming to landmark intersections near schools, parks, and community facilities



Downtown locations should provide areas for bike racks and bike share

A comprehensive bike plan should include hub location where additional bike racks and amenities are located and could also become locations for bike share kiosks and parking.

TRANSIT RECOMMENDATIONS

Several recommendations have been identified to improve the transit experience in the Corridor. The recommendations are based on feedback obtained during the various project outreach activities and conversations with NJ TRANSIT.

UPGRADED BUS SHELTERS & AMENITIES

Making public transit access safe and efficient in the Study Area is essential. Therefore, new or upgraded bus shelters should be added within the Study Area and should be consistent in design throughout the area.

Bus shelters should be made bicycle friendly, with amenities such as bicycle racks, lockers and/or bicycle repair kiosks. NJT has provided shelters to any community interested in having one at any given bus stop, but municipalities are solely responsible for the upkeep and maintenance of those shelters once installed. The towns, individually, or collectively as a corridor could explore partnering with private shelter purveyors (like AR James in Newark) to offer different design options and have maintenance contracts as a tradeoff for increased advertising.

BUS LOADING AREAS

A common problem observed by the project team and reinforced from the public outreach included bus loading areas being blocked by parked or

waiting cars. When there are delays in accessing stops buses tend to bunch causing delays and inconsistencies in the schedule. Additionally, when there is not sufficient space to load, buses have the tendency to be forced to position into cross walks which causes further problems for pedestrians and cyclists. Better local policing and parking enforcement is needed to keep bus stops clear of parked vehicles.

To help reinforce the bus loading areas, changes

in texture and/or color in the pavement in the roadway indicates to motorists that they need to keep these areas clear from driving or parking. Where possible the width of the loading areas should be 10'. The use of bumpouts or curb extensions where there is sufficient space can help to define the bus loading area and also be used for traffic calming.

Future study of the corridor and road diet options may consider dedicated/offset bus lanes with bus bulbs to create loading areas and define parallel parking zones.



Where there is adequate sidewalk space, bike racks could be included near bus stops and shelters like this example in Summit, NJ.

TRANSIT COLLABORATIONS

While there is an abundance of transit in the Corridor, service during off-peak times can be limited. Train and municipally-sponsored jitney service are primarily for peak commuting. Given that there are downtown core areas in Montclair and Bloomfield that have off-peak activities,

such as dining and entertainment venues, it is important to supplement mobility options for patrons and workers. Therefore, the community can advocate for increased service in specific locations, and there should be collaborations between major regional employers and third-party transit providers to improve transit service for all

work shifts. There may be potential for corporate sponsorship of “last mile/first mile” shuttle services to fill these transit gaps.



Dedicated and clearly marked bus loading areas (in blue) are among the specific street typology and intersection recommendations like this example from the Park St. concept in Bloomfield.



Bus shelter with increased visibility for transit users and bus drivers

STREET TYPOLOGY RECOMMENDATIONS

Different sections of Bloomfield Avenue have some key, repeating commonalities in each of the four municipalities of the Study Area. From this finding, Bloomfield Avenue was divided into five different street typologies according to similarities observed in the field analysis. Each has a unique set of design characteristics as it relates to Complete Streets design.

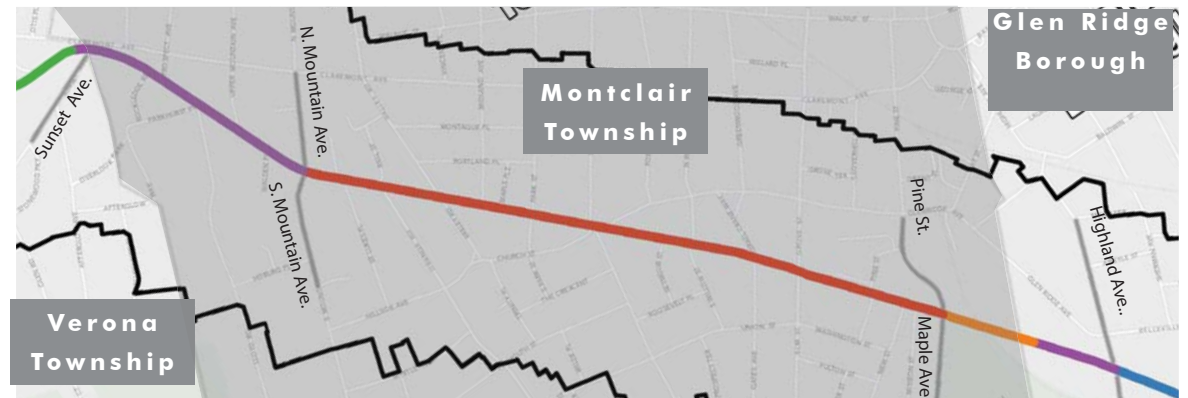
The five street typologies of the Study Area are:

1. Downtown Activity Corridor
2. Avenue
3. Town Thoroughfare
4. Neighborhood Activity Corridor
5. Suburban Highway

The table on the opposite page indicates the various types of improvements recommended in the plan. The following pages illustrate the design parameters for these types.

Legend

- Downtown Activity Corridor
- Avenue
- Town Thoroughfare
- Neighborhood Activity Corridor
- Suburban Highway
- Study Area Boundary



Implementation Category	Implementation Category				
	Downtown Activity Corridor	Avenue	Town Thoroughfare	Suburban Highway	
Informational	○	○	○	○	Speed Limit Postings
	○	○	○	○	Distracted Driver/Pedestrian Info Campaign
	○	○	○	○	Pedestrian Safety Campaign
	○	○	○	○	Bicycle Safety Campaign
		◐	◐	◐	"Walking" School Bus/Student Drop Zones
	○	◐	◐	◐	Improved Wayfinding
Traffic/Signalization	○	○	○	○	Repaving/Pothole Repair
			◐	◐	Changes to Turn-only Signals
	○	○	○	○	Improved Lane Guides/Pavement Arrows
	●			●	Changes to Turning/Travel Lanes
	◐				Turn-Restrictions
	◇	◇	◇	◇	Reversible/Floating Lanes
			○	○	Speed Limit Reductions
		●	●	●	Curbside Consolidation/Access Management
		◐			Changes to Stop Bar Locations
			○	○	Changes to On-street Parking/Bus Pull-off

Implementation Category	Implementation Category				
	Downtown Activity Corridor	Avenue	Town Thoroughfare	Suburban Highway	
Traffic Calming	◇	◇	◇	◇	Reduction in Lanes/Width - Road Diet
	◐	◐			Textured Intersection/Road Tatum
	●	●			Lighted Pedestrian Crossing
	◇	●	●	●	Median/Pedestrian Refuge Island
	○	○	○	○	Striped/Painted Curb Extensions
	◐	●	◐	◐	Curb Bumpouts
Pedestrian/Sidewalks	○	○	○	○	Sidewalk Upgrades/Maintenance
	◐	◐	◐	◐	Pedestrian Countdown Clock
	◐	◐	◐	◐	Audible Pedestrian Signal & Accessible Signals
	◐	◐	◐	◐	Pedestrian Push Button Signals
			○	○	High-Visibility Crosswalks
	○	○			Ergonomic Crosswalks
	○	○	○	○	"Yield to Pedestrian" Crosswalk Sign
	◐	◐	◐	◐	Pedestrian-Scale Lighting

Implementation Category	Implementation Category				
	Downtown Activity Corridor	Avenue	Town Thoroughfare	Suburban Highway	
Bikes	◇	◇	◇	●	Share-the-Road/Sharrows
		◇	◇		Dedicated Bike Lane
	◐	◐	◐	●	Bike Racks/Storage/Parking
	●	●	○	○	Bike Share Hubs
Transit	◐	◐	●	●	Add/Upgrade Transit Shelter
	○	○	◐	◐	Add/Improve Signage
	○	○	○	○	Marked Bus Loading
	◇	◇	◇	◇	Bus Pull-offs
				Bus Lanes with Bus Bulb Loading	

- Complete/Recently Improved
- Short-Term Recommendation (3-6 mos.)
- Medium-Term Recommendation (6-18 mos.)
- Long-Term Recommendation (18-36 mos.)
- Future Consideration (with further study)

The full Planning Implementation Agenda with detailed steps, potential funding and partners can be found in Appendix A



AVENUE - Parallel parking along a parkway condition - NJ Rt. 27 in Princeton



TOWN THOROUGHFARE - Example of transitional area to downtown districts with extended curb bumpouts and a planted edge where not as much on-street parking is needed - NJ Rt. 27 in Metuchen

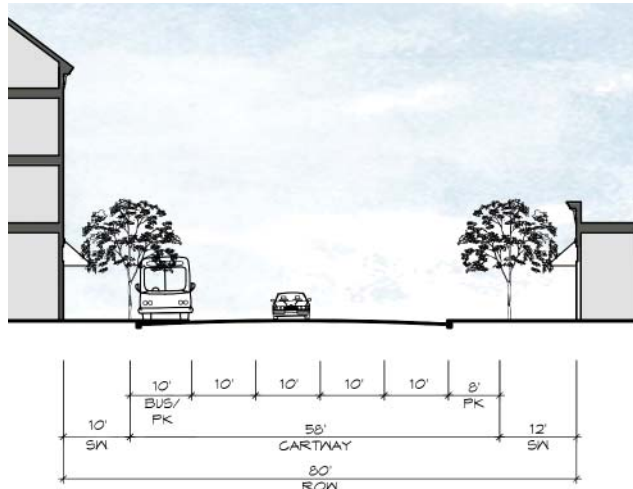


NEIGHBORHOOD ACTIVITY CORRIDOR - On-street parking, mixed use & pedestrian streetscape - County Route 683 in Plainsboro



SUBURBAN HIGHWAY - Example of consolidated curb cuts, access management and streetscape improvements in Glen Ridge in the Study Area

DOWNTOWN ACTIVITY CORRIDOR



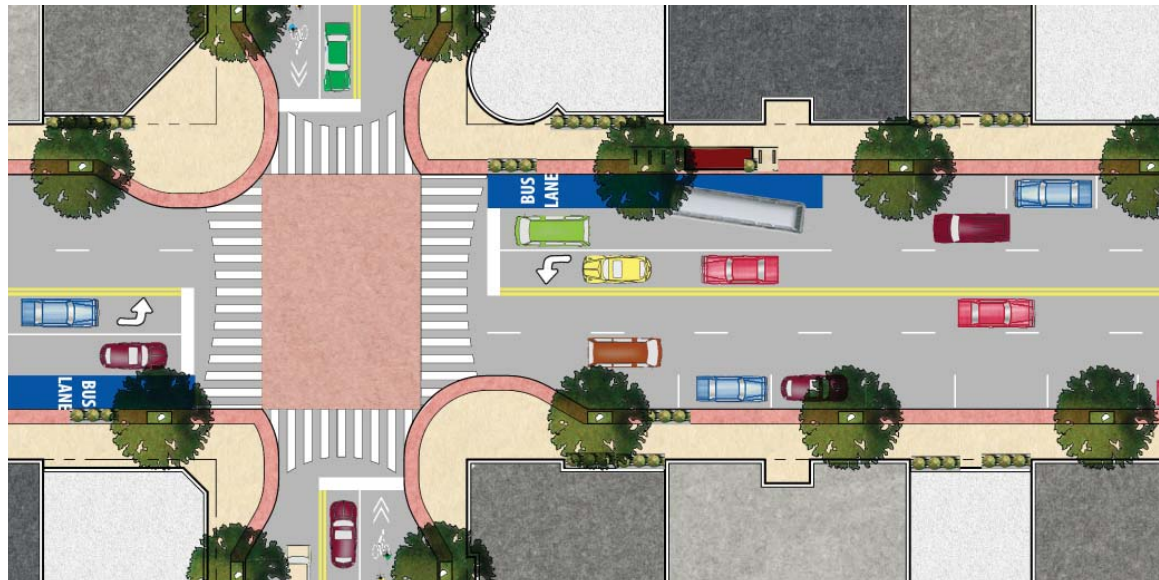
Design Recommendations	
Design Speed	25 MPH
Pavement Width	50-60'
Typ. Lane Width	10'
Right-of-Way Width	80'
Parking	On-Street, Marked & Metered
Sidewalks/ Planting Strip	10'-15'/None
Street Trees	Retail-spacing, columnar
Crosswalks	Ergonomic, Textured
Traffic Calming	Curb bumpouts, textured intersection, shelter islands, mid-block crossings
Transit	Marked bus loading

The Downtown Activity Corridor street typology has a “Main Street” feel and design qualities that encourage pedestrian activity. This street type is consistent with the Primary Activity Corridor in the Montclair Unified Land Use & Circulation Plan.

The Downtown street has marked and metered parking on both sides of the street defined by bumpouts. There is a higher frequency of transit stops in these areas and sections of the parallel parking areas are dedicated to bus pulloff lanes with clearly marked loading areas in the street. Intersections should include bumpouts and textured pavement to help calm traffic and make crossing distances shorter. Ergonomic crosswalks and increased pedestrian crossing timing will also make crossing easier and safer for pedestrians.

Street trees should be provided at a spacing appropriate to retail visibility and human-scale street and sidewalk lighting should line the corridor. Other streetscape amenities should include benches, outdoor dining tables, cohesive planters, wayfinding signage and welcome banners on street lights.

These are key bicycle destinations, so bike racks (and potential bike share kiosks) should be accommodated in locations that do not block the pedestrian flow or access to businesses. There are generally little to no setbacks, allowing for a mix of active retail, restaurants and services at the ground level that frame the street.



AVENUE

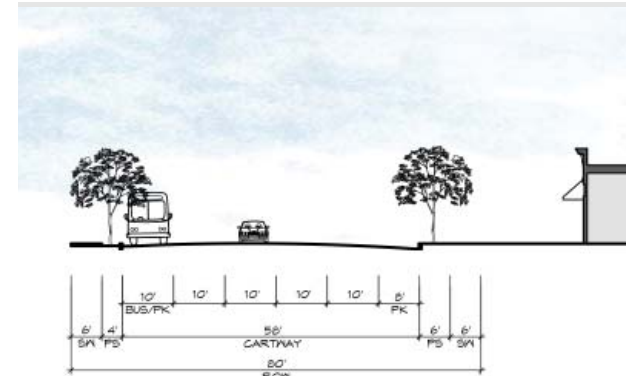
The Avenue street typology occurs near parks, schools and other civic uses. It generally only has development on one side of the street, while the opposite side is typically a park or civic use. There should be parallel parking along the developed side, but limited on the open side to allow for bus pull-offs and curb bumpouts for landscaping.

Intersections should include bumpouts and textured pavement to help calm traffic, make crossing distances shorter and accentuate the parkway setting and civic-orientation of these locations. These are often areas near transit station and school with heavy peak times for pedestrians and cyclists, so the intersections should also include ergonomic crosswalks and increased crossing timing to make crossing safer and accommodate the higher volumes of foot traffic.

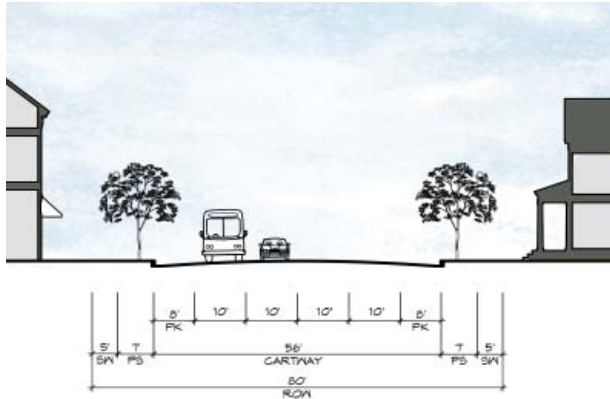
Street trees should be provided at a regular spacing appropriate to the adjacent uses and should provide a wildlife habitat and a shade canopy. The landscape on the civic side of the street should be more of a parkway condition relating the park or adjacent civic use.

Other streetscape amenities should include benches, kiosks and park structures, wayfinding signage and pedestrian-scaled lighting. These are key bicycle destinations and areas for bike should be accommodated with a range of racks and lockers.

Design Recommendations	
Design Speed	25 MPH
Pavement Width	50-60'
Lane Width	10'
Right-of-Way Width	80'
Parking	On-Street, Marked
Sidewalks/ Planting Strip	6'/4'
Street Trees	Tight spacing, shade
Crosswalks	Ergonomic, Textured
Traffic Calming	Curb bumpouts, textured intersection, medians, shelter islands
Transit	Marked bus loading, pull-offs



TOWN THOROUGHFARE



Design Recommendations	
Design Speed	25 MPH
Pavement Width	50-60'
Lane Width	10'
Right-of-Way Width	80'
Parking	On-Street, Marked
Sidewalks/ Planting Strip	5'/7'
Street Trees	Tight spacing, shade
Crosswalks	High-visibility
Traffic Calming	Curb bumpouts, medians, shelter islands
Transit	Marked bus loading

The Town Thoroughfare is a transitional street between towns, connecting downtown areas with each other and serve as a gateway into each town. This street type is consistent with 'Township Thoroughfare' as defined in the Montclair Unified Land Use & Circulation Plan. Thoroughfare sections have a mix of adjacent land uses ranging from single-family homes to apartments to small-scale commercial. On-street parking should be permitted, particularly in areas with multi-family housing and/or commercial uses.

With less intense development in these stretches, there is the possibility of additional traffic calming with gateway treatments located in bumped-out curb areas or even in a planted median in limited stretches. Intersections should also include bumpouts to help calm traffic and make crossing distances shorter with high-visibility crosswalks for pedestrians.

Street trees should be provided at a regular spacing appropriate to the adjacent uses. Other streetscape amenities should include benches, wayfinding signage, and pedestrian-scaled lighting.



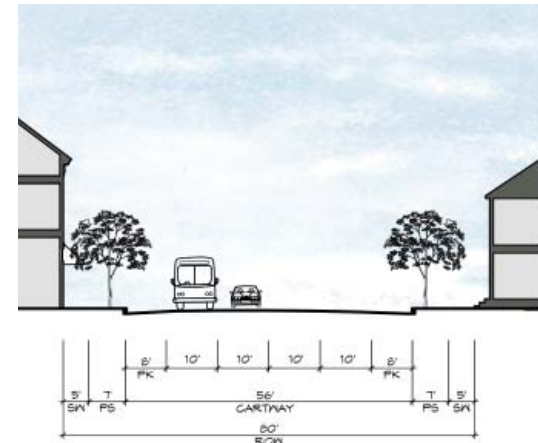
NEIGHBORHOOD ACTIVITY CORRIDOR

The Neighborhood Activity Corridor sections have a mix of adjacent land uses including apartments, street-oriented commercial, as well as some strip centers with front parking lots. On-street parking should be permitted, particularly in areas with multi-family housing and street-oriented commercial. Bus stops should be clearly designated, with signage and shelters at key intersections.

With less intense development in these stretches without the parking demand, there is the possibility of additional traffic calming with bumped-out curb areas, planted medians and bike lanes. Intersections should also include bumpouts to help calm traffic and make crossing distances shorter with high-visibility crosswalks for pedestrians.

Street trees should be provided at a regular spacing appropriate to the adjacent uses. Other streetscape amenities should include benches and street furniture along commercial sections and pedestrian-scaled lighting in all locations.

Design Recommendations	
Design Speed	25 MPH
Pavement Width	50-60'
Lane Width	10'
Right-of-Way Width	80'
Parking	On-street, not continuous
Sidewalks/ Planting Strip	5'/7'
Street Trees	Tight spacing, shade
Crosswalks	High-visibility
Traffic Calming	Curb bumpouts, medians, shelter islands, bike lanes
Transit	Marked bus loading

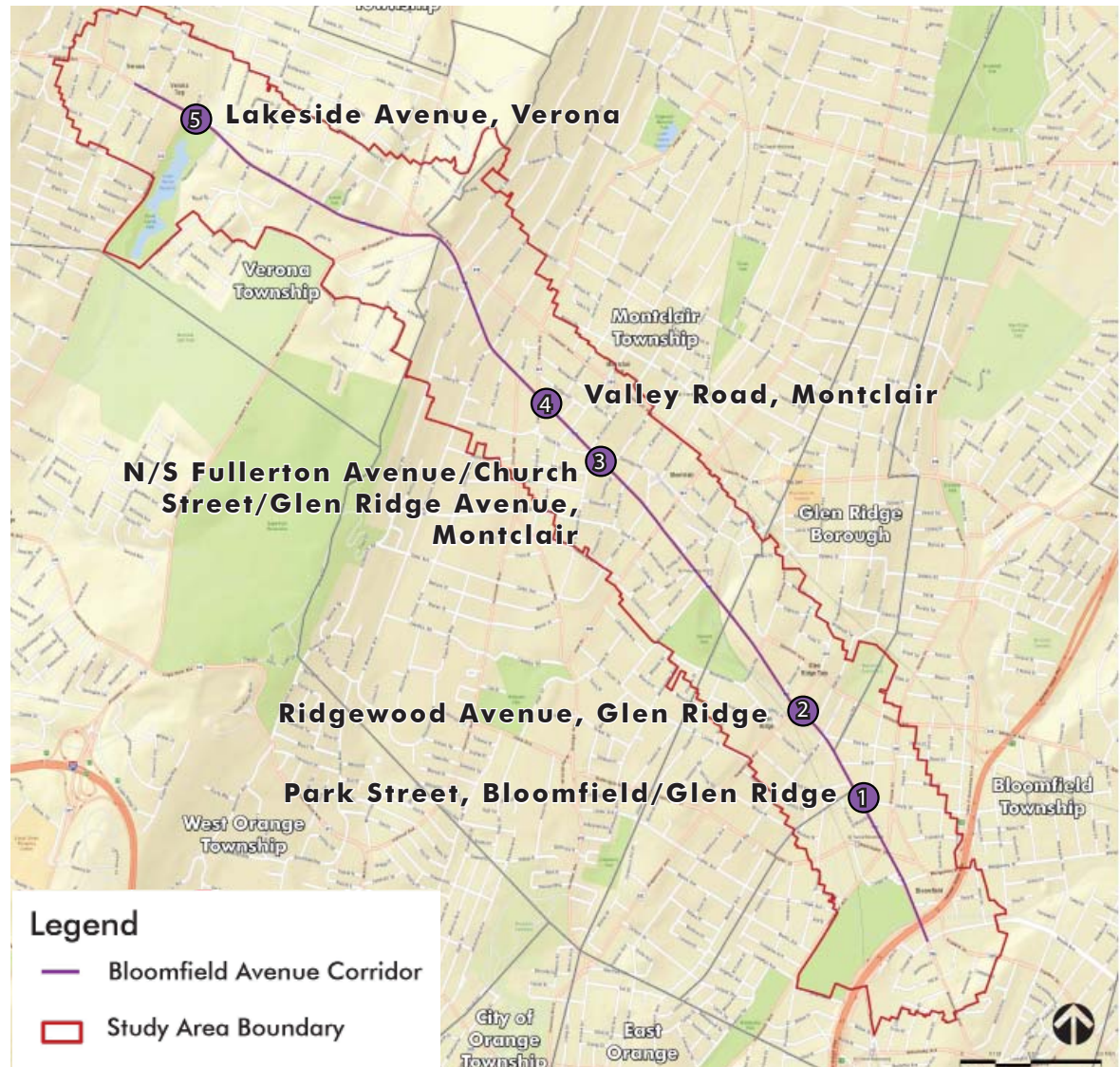


INTERSECTION TYPOLOGY RECOMMENDATIONS

Each municipal partner identified locations along the Bloomfield Avenue corridor that have pedestrian, bike, transit and auto-oriented circulation or mobility challenges, and design impediments to study Complete Streets improvements. Traffic counts (vehicle, pedestrian, and bike) were taken at these locations, analysis was conducted with study design horizons each town was comfortable with and some improvements were recommended from both a signalization/traffic pattern and traffic calming/Complete Streets perspective. The full intersection capacity analysis, including the various alternatives studied for each intersection can be found in Appendix B: Traffic Operations and Capacity Analysis Technical Memorandum.

These locations were identified for their specific challenges, but could serve as prototypes for the design strategies in other locations in the corridor and in Essex County. Design concepts for each are presented on the following pages. The specific intersections included:

- Lakeside Avenue & Bloomfield Avenue, Verona
- Valley Road & Bloomfield Avenue, Montclair
- North & South Fullerton Avenue/Glenridge Avenue/Church Street and Bloomfield Avenue, Montclair
- Ridgewood Avenue & Bloomfield Avenue, Glen Ridge
- Park Street & Bloomfield Avenue, Bloomfield and Glen Ridge



Five locations were analyzed in detail representing the range of intersection types common in the Study Area

BLOOMFIELD AVENUE & PARK STREET - MIDBLOCK/T-INTERSECTION

BLOOMFIELD TOWNSHIP & GLEN RIDGE BOROUGH

The proposed strategy for this midblock/T-intersection involves a series of interventions to slow speed and make crossings safer while making bus access more convenient. This strategy includes:

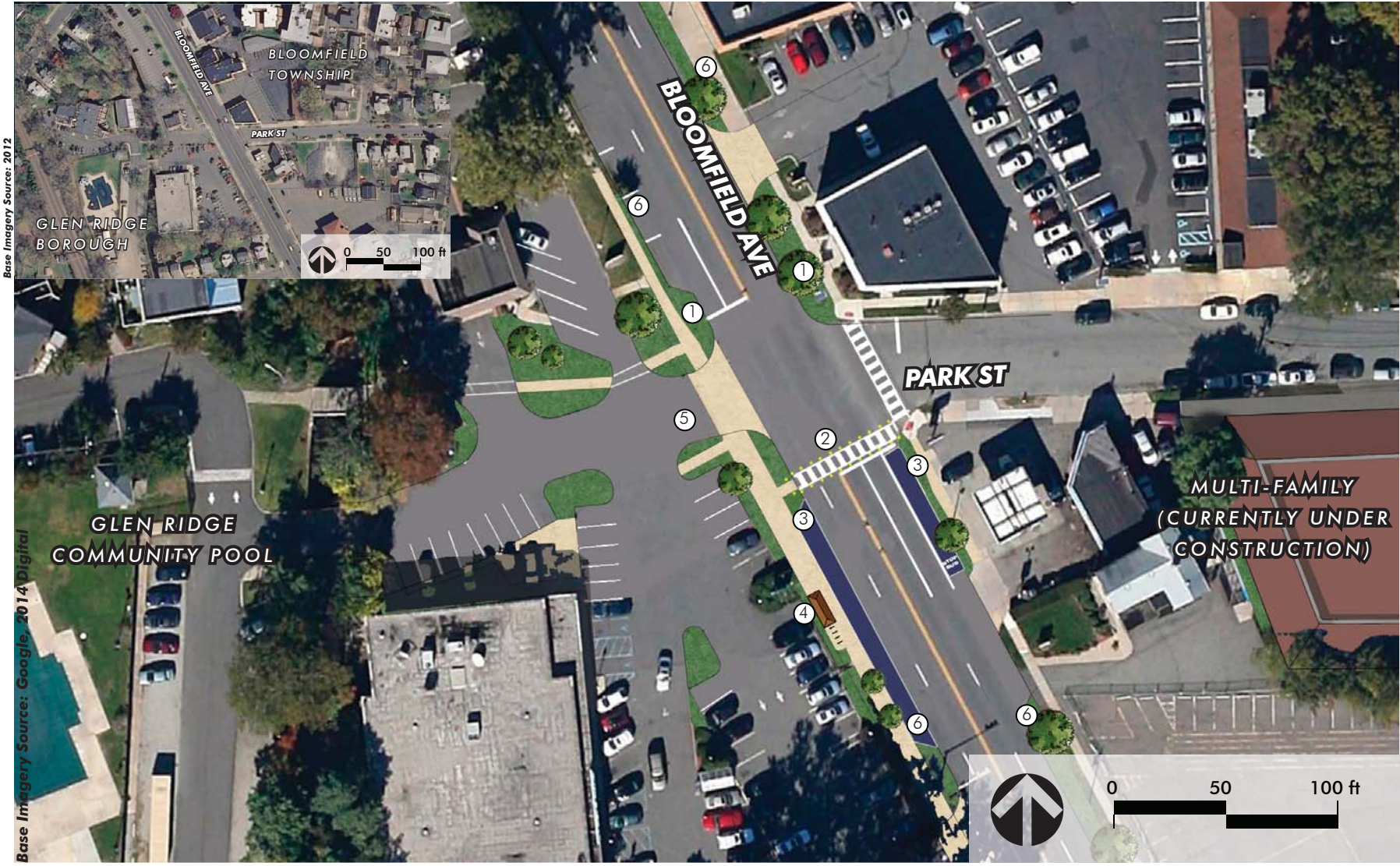
- ① Adding curb bumpouts to narrow roadway, define parking/bus pull-offs, & calm traffic
- ② Adding a lighted crosswalk
- ③ Highlighting bus stop area with pavement markings
- ④ Adding a new bus shelter and bike racks
- ⑤ Consolidating curb cuts to local retail, services, and community pool to align with Park St.
- ⑥ Adding street trees for shade, safer sidewalks and traffic calming



Photo montage of lighted crosswalk



Photo montage of consolidated curbcuts



BLOOMFIELD AVENUE & RIDGEWOOD AVENUE - COMMUNITY NODE

GLEN RIDGE BOROUGH

The proposed strategy for this intersection involves a series of interventions to slow speed and make crossings safer while making bus access more convenient. This strategy includes:

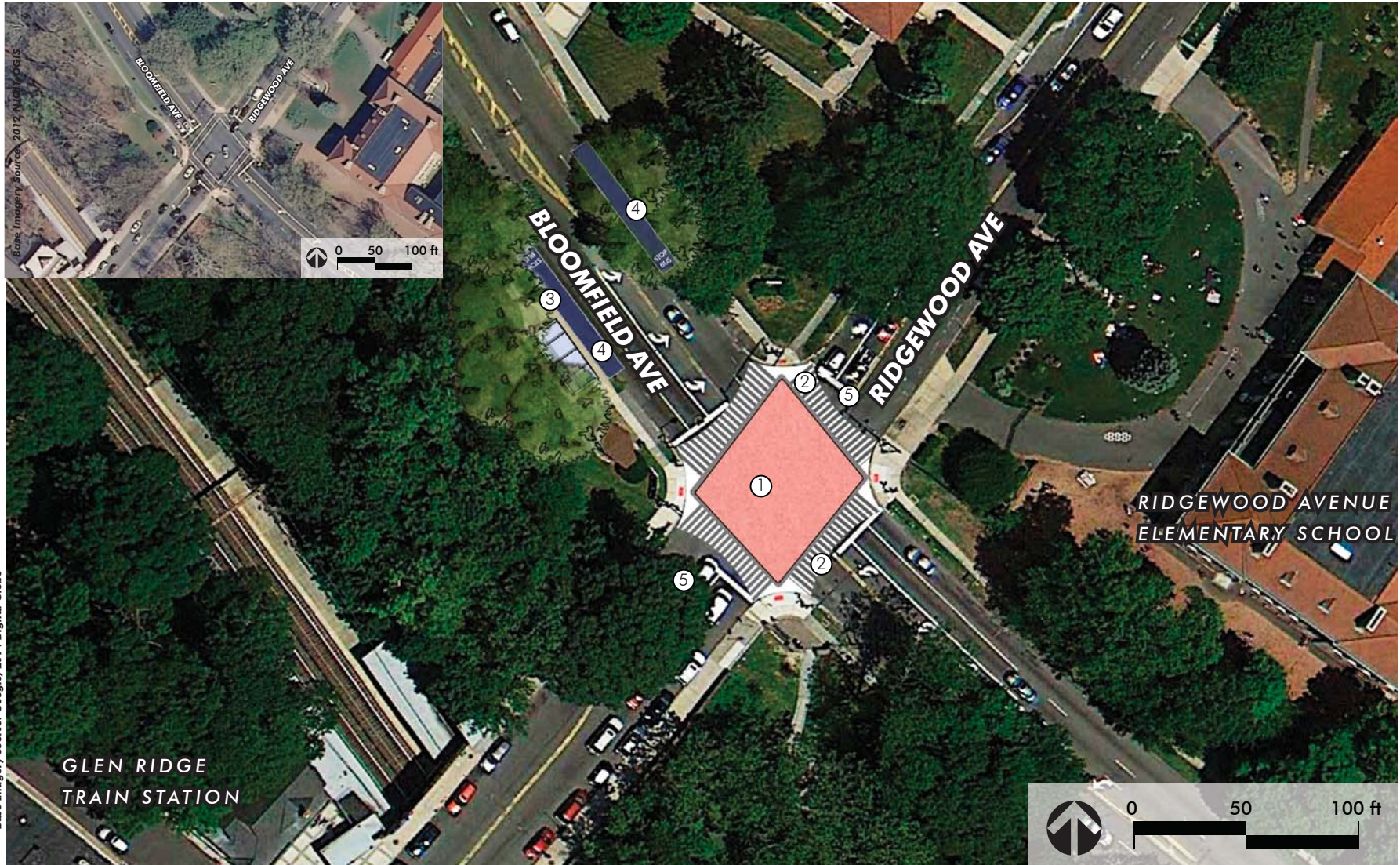
- ① Adding a painted/textured intersection
- ② Installing ergonomic crosswalks
- ③ Expanding the length of bus stop and improving bus stop shelter to accommodate more passengers and have more visibility
- ④ Highlighting bus stop area with pavement markings
- ⑤ Creating new north & south bound exclusive turn phases



Photo montage of the proposed intersection improvements



Highlighting bus stop areas with pavement markings will assist with stacking, loading, and help to calm traffic by distinguishing bus pull-offs from parking and travel lanes



Base Imagery Source: Google, 2014 Digital Globe

GLEN RIDGE
TRAIN STATION

RIDGEWOOD AVENUE
ELEMENTARY SCHOOL



**BLOOMFIELD AVENUE & NORTH/SOUTH FULLERTON AVENUE - MULTIPLE POINT
MONTCLAIR TOWNSHIP**

The proposed strategy for this multi-point intersection involves a series of interventions to slow speed and make crossings safer while limiting gridlock and confusion for drivers. This strategy includes:

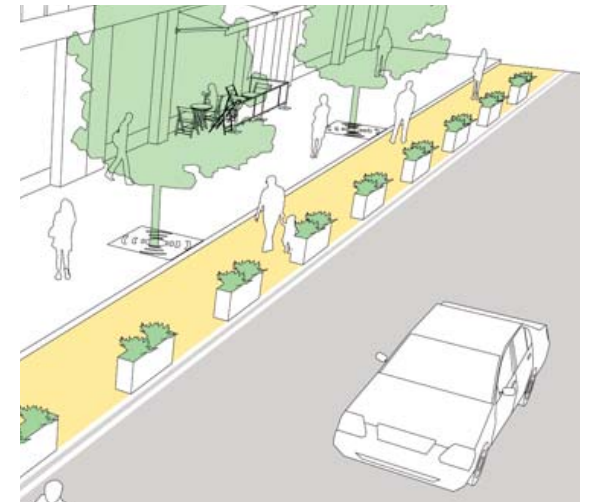
- ① Adding a painted/textured intersection near the GlenRidge intersection
- ② Installing ergonomic crosswalks
- ③ Installing curb bumpouts to match existing streetscape
- ④ Adding lane markings in the roadway to better indicate direction of traffic
- ⑤ Highlighting bus stop area with pavement markings
- ⑥ Creating dedicated left turn lanes with new north & south bound exclusive turn phases



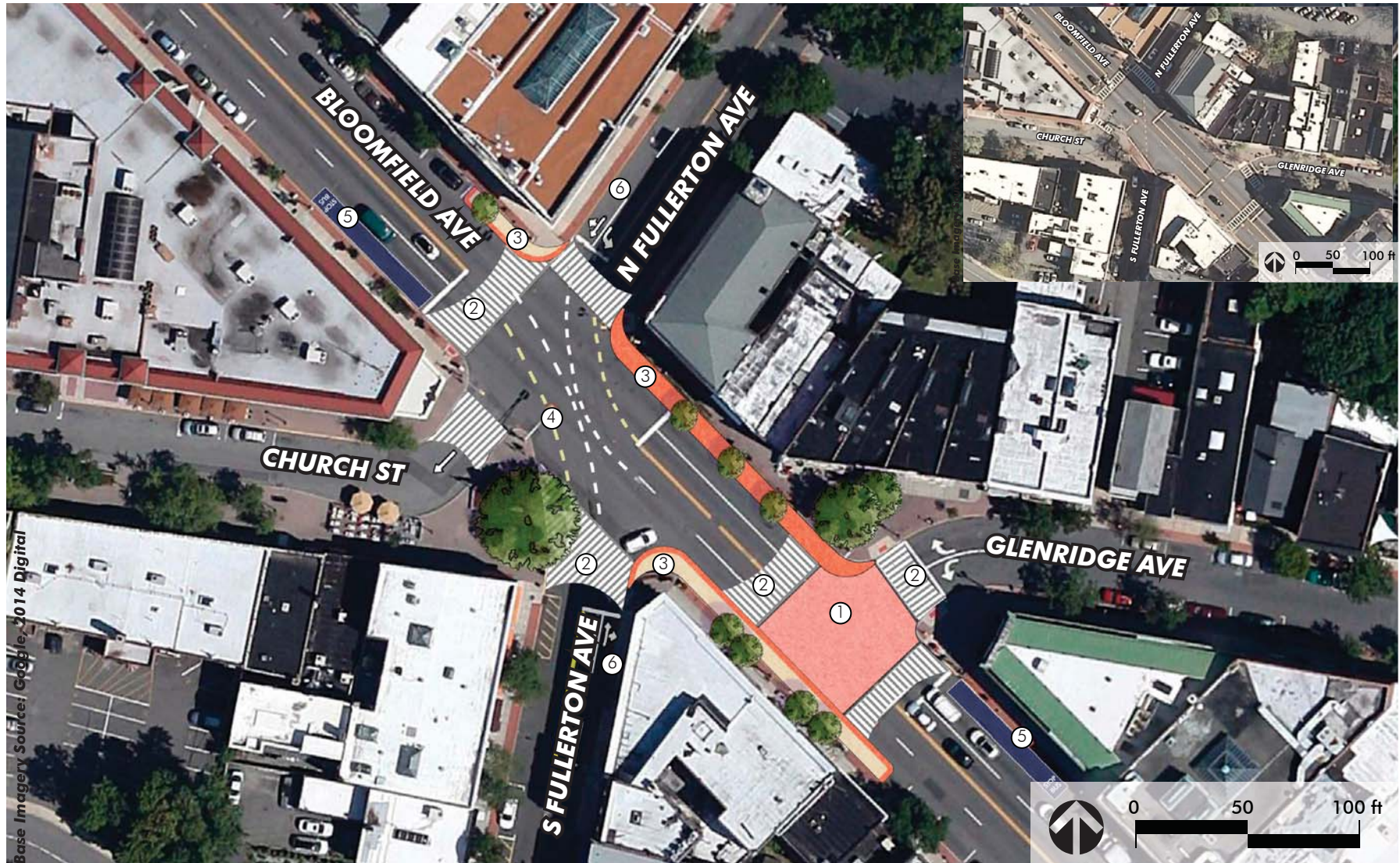
Textured pavement and curb bumpouts



Church Street has some areas that could accomodate additional bike storage and the potential for future bike share



Example from the NACTO standards illustrating a curb extension. Sidewalks can be expanded using interim materials, planter beds, and bollards, in advance of a full reconstruction.



Base Imagery Source: Google, 2014 Digital

**BLOOMFIELD AVENUE & VALLEY ROAD - DOWNTOWN 4-WAY
MONTCLAIR TOWNSHIP**

The proposed strategy for this downtown 4-way intersection involves a series of interventions to improve for future conditions. This strategy includes:

- ① Adding a painted/textured intersection
- ② Installing ergonomic crosswalks
- ③ Improving the existing painted pedestrian shelter island with curbing and plantings
- ④ Relocating the east-bound bus stop shelter with stop area road markings
- ⑤ Adding public art to serve as a gateway
- ⑥ Providing a location for racks and a future bike share
- ⑦ Adding pedestrian signal heads/push buttons
- ⑧ Creating exclusive turn phases



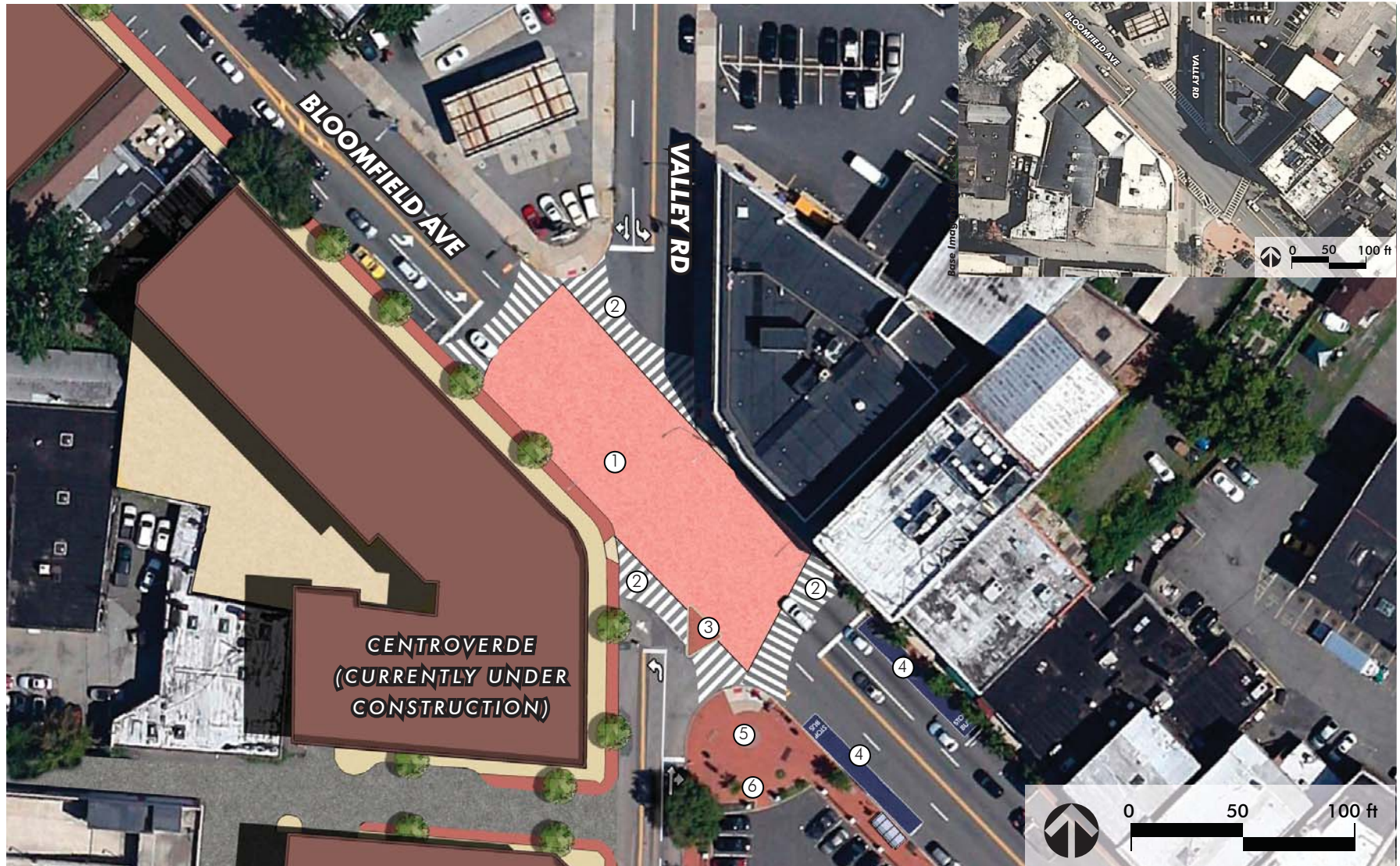
Photo montage of the proposed intersection improvements



The existing painted pedestrian shelter island can be with raised curbing and plantings



Adding public art to the Valley Road intersection can create a gateway to Montclair Center and be a form of traffic calming



Base Imagery Source: Google, 2014 Digital

BLOOMFIELD AVENUE & LAKESIDE AVENUE - OFFSET INTERSECTION

VERONA TOWNSHIP

The proposed strategy for this offset intersection involves a series of interventions to slow speed and make crossings safer while limiting gridlock and confusion for drivers. This strategy includes:

- ① Providing additional arrows in the roadway and new guidelines to better indicate lane shift and turns
- ② Adding bollards at the corner for additional protection
- ③ Tapering the lane offset closer to the Park Place corner to lessen the curve of the lane shift
- ④ Adding a painted curb extension - could become bumpout long-term if feasible
- ⑤ Optimizing the signal timing
- ⑥ Creating student drop zones for walking school bus



Protective bollards at the corner



New lane guides to assist in guiding drivers with turning movements



Painted curb extension to assist in guiding drivers with the shift and reduce the perceived road width

Base Imagery Source: Google, 2014 Digital Globe



IMPLEMENTATION

In order to make the improvements in the Bloomfield Avenue Complete Corridor Plan, the four municipalities and Essex County, and partners need to take a series of short, medium and long-term actions. The following summarizes the Plan Implementation Agenda.

The agenda recognizes that successful implementation of plans requires strong local support and action, as well as assistance from the State of New Jersey. These actions are fully illustrated in the Planning and Implementation Agenda.

BENEFITS TO TRADITIONALLY DISADVANTAGED POPULATIONS

The recommendations in this study benefit the Traditionally Disadvantaged Populations in Bloomfield, Glen Ridge, Montclair and Verona. Some of the ways the Bloomfield Avenue Complete Corridor Plan assists all people in these communities include:

- Enhancing transit access and amenities will, in particular, help to improve access to goods, services, jobs and regional transportation to this community
- Designing a corridor to accommodate potential expansion of GO Bus in the future

- Creating a safer and more pedestrian and bike-friendly network will help to make travel more convenient in the corridor for those who walk, bike, or take transit as their primary mode of transportation.
- Creating a regional bike network that has key nodes for bike amenities (additional racks, bike share, etc.) along Bloomfield Ave. (NJT local and GO Bus), train stations (Bloomfield, Glen Ridge,

Bay Street, Walnut Street, etc.) and LRT station (Grove Street)

- Promotes health by improving active transportation through Complete Streets Policy implementation

Additional information on the health, safety, and mobility benefits to Traditionally Disadvantaged Populations can be found in the Health Impact Assessment in Appendix C.



Bus stop in Bloomfield Center



CONNECTING
PEOPLE, PLACES,
AND POTENTIAL.

Planning and Implementation Agenda: LDP#16 Bloomfield Avenue Complete Corridor Plan

In order to make the improvements along Bloomfield Avenue in Montclair Township, Bloomfield Township, the Borough of Glen Ridge and Verona Township, the municipalities and partners need to take a series of short and long-term actions. The following agenda indicates these planning and implementation actions developed during the evolution of this and other planning initiatives over the last several years. The agenda recognizes that successful implementation of plans requires strong local support and action, as well as assistance from Essex County and the State of New Jersey. These actions are illustrated in the Planning and Implementation Agenda.

SHORT: 3-6 months
MEDIUM: 6-18 months
LONG: 18-36 months

Priority	Program/Improvement/Activity	Detail	Applicable Towns	Target Date	Lead Organization	Possible Funding Sources	Partners & Collaborators
1. General Traffic and Circulation Improvements	Corridor Network Analysis	Conduct Corridor-wide study to examine the impacts of a Complete Street improvements and intersection prototypes Identify transportation improvements to better accommodate vehicles, transit, bicycles, and pedestrians Implement study recommendations.	Bloomfield Glen Ridge Montclair Verona	Medium	Essex County Division of Engineering	NJTPA Corridor Studies NHTSA Pedestrian Safety Grant, NHTSA Section 402 Safety Funds NJDOT's Safe Routes to School Program NJDOT's Safe Routes to Transit Program	NJTPA NJDOT Municipal Public Works & Engineering Municipal Police Departments Essex County Transportation Advisory Board
	25 Miles per Hour Speed Limit on Bloomfield Avenue	Add to action items in the Circulation element of each community's Master Plan Re-exam Regularly and consistently enforce the current 25 and 35 mph speed limits Coordinate with County and neighboring towns for consistent enforcement Add speed limit signs and road markings, consider installing radar feedback signs Coordinate with traffic calming, lane delineation, and improved signalization to reduce to 25 mph in higher speed areas Provide (or continue to provide) cops in the crosswalk pedestrian decoy stings conducted by police and crossing guard training using new statewide training resources Add signage and increase patrolling	Bloomfield Glen Ridge Montclair Verona	Short	Essex County Division of Engineering	NJDOT Community Transportation Planning Assistance (CTPA) program	NJDOT Municipal Public Works & Engineering Municipal Police Departments Essex County Transportation Advisory Board
	Conduct Safety Studies at High Crash Locations	Conduct a study to identify safety-related recommendations at high crash locations Obtain funding and construct recommended improvements	Bloomfield Glen Ridge Montclair Verona	Medium	Municipal Public Works & Engineering	NJTPA Corridor Studies NHTSA Pedestrian Safety Grant, NHTSA Section 402 Safety Funds NJDOT's Safe Routes to School Program NJDOT's Safe Routes to Transit Program	Essex County Division of Engineering NJTPA NJDOT Municipal Public Works & Engineering Municipal Police Departments Essex County Transportation Advisory Board
	Integrate NACTO Design Standards and NJDOT Complete Streets into County's Complete Streets Policy	Assess NACTO standards for inclusion in locations along Bloomfield Avenue and other places in the County Amend Circulation Element of Municipal Master Plan & County Transportation Plan Revise municipal code to include selected NACTO standards	Essex County	Medium	Essex County Division of Engineering	NJDOT Community Transportation Planning Assistance (CTPA) program	Municipal Public Works & Engineering Planning/Zoning Boards Police Department Essex County Transportation Advisory Board
	Complete Streets	Amend Circulation Element of Municipal Master Plan Adopt a Complete Streets Policy Revise municipal code to include bicycle and pedestrian accommodation requirements	Verona	Short	Township Committee	NJDOT Community Transportation Planning Assistance (CTPA) program	Municipal Public Works & Engineering Planning/Zoning Boards Police Department Essex County Transportation Advisory Board

2. General Pedestrian and Bicycle Improvements	Sidewalk and Crosswalk Upgrades and Maintenance	Consider community in prioritization or communications regarding repair plans Repair/replace cracked-missing sidewalks Institute a regular maintenance program for sidewalks and street cleaning Repaint/add pavement markings	Bloomfield Glen Ridge Montclair Verona	Short	Municipal Public Works & Engineering	North Jersey Transportation Planning Authority (NJTPA) Subregional Program National Highway Traffic Safety Administration (NHTSA) Pedestrian Safety Grant NHTSA Section 402 Safety Funds New Jersey Department of Transportation (NJDOT) Centers of Place (or NJDOT Municipal Aid) Municipal Development Impact Fee Authorization Act	Local Business Improvement Districts Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Main Street New Jersey
	Lighting/Streetscape Upgrades	Conduct existing conditions assessment Continue Bloomfield Center Streetscape designs along western portion of Bloomfield Ave. in the Township. Finalize spec for a standardized sidewalk to be constructed with all new infill and redevelopment Install new pedestrian-scaled street lighting, benches, trash cans, etc. Add/Replace Street Trees	Bloomfield Glen Ridge	Medium	Municipal Public Works & Engineering	Federal Community Development Block Grant Program (CDBG) Department of Housing and Urban Development (HUD) Challenge Grant PSEG Local Government Lighting Program	Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Local Business Improvement Districts Main Street New Jersey
	Midblock Pedestrian Crossings	Meet with County to get a sense of possibilities (locations & crosswalk/signalization types) Conduct a traffic study & capacity analysis for intersection alterations Finalize engineering/design Construct improvements	Bloomfield Montclair Verona	Medium	Municipal Public Works & Engineering	NJDOT Community Transportation Planning Assistance (CTPA) program NJDOT's Safe Streets to Transit Program NHTSA Section 402 Safety Funds	Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Local Business Improvement Districts Bike-Walk Groups Main Street New Jersey
	Bike Network Plan	Coordinate Municipal Circulation Plans for Bike routes and amenities Coordinate with the County's Comprehensive Transportation Plan and parks plans Conduct Feasibility Study to explore route locations and types (lanes, sharrows, off-road, etc.) Develop Corridor and/or County-wide plan linking major destinations including parks and schools Paint lanes and sharrows and add "share the road" signage, where appropriate	Bloomfield Glen Ridge Montclair Verona	Medium	Essex County Department of Parks, Recreation, and Cultural Affairs	NJDOT Bike Grant Program NJDOT Transportation Enhancements Program	Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Local Business Improvement Districts Bike-Walk Groups
	Bike Racks, Lockers and Storage	Inventory current bicycle parking Identify locations along and near Bloomfield Avenue where safe and secure bicycle parking can be installed Install bike racks, lockers and storage at various study area locations.	Bloomfield Glen Ridge Montclair Verona	Short	Local Business Improvement District	NJDOT Bike Grant Program NJDOT Transportation Enhancements Program	Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Local Business Improvement Districts Bike-Walk Groups
	Wayfinding Program	Adopt a graphic concept/branding theme consistent with Montclair Center and County showing bike routes and networks Identify locations for signage along main thoroughfares and designated byways	Bloomfield Glen Ridge Montclair Verona	Medium	Essex County Department of Parks, Recreation, and Cultural Affairs	NJTPA Corridor Studies	Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Local Parks and Recreation Bike-Walk Groups

3. General Health and Safety Recommendations	Distracted Driver/Pedestrian Informational Campaign	Promote local initiatives including the Couteous Driving pledge and Drive with Care Montclair, along with NJTPA's Street Smart Campaign in all four communities, Make use of StreetSmart NJ promotional resources for driver awareness	Bloomfield Glen Ridge Montclair Verona	Short	Local Advocacy Group	NJTPA Unified Planning Work Program	NJTPA NJ Department of Health Municipal Health Departments Municipal Police Departments Rutgers - NJ Health Impact Collaborative Partners for Health NJ Bike & Walk Coalition
	Walkability Audits	Conduct NJTPA Walkable Community Workshops to examine assets and safety deficiencies	Bloomfield Glen Ridge Montclair Verona	Short	Local Advocacy Group	NJTPA "Street Smart" campaign	NJTPA NJ Department of Health Municipal Health Departments Municipal Police Departments Rutgers - NJ Health Impact Collaborative Partners for Health NJ Bike & Walk Coalition
	Pedestrian Safety Campaign	Support current efforts and institute additional pedestrian education regarding use of the road, sidewalks and crosswalks to improve safety Position radar speed signs in select locations along the corridor Utilize "Drive like your kids live here" signs on side streets to limit speeds and cut-through traffic Make use of StreetSmart NJ promotional resources for pedestrian safety awareness	Bloomfield Glen Ridge Montclair Verona	Short	Local Advocacy Group	NJTPA "Street Smart" campaign	NJTPA NJ Department of Health Municipal Health Departments Municipal Police Departments/Crossing Guards Local Schools YMCA Rutgers - NJ Health Impact Collaborative Bike-Walk Montclair NJ Bike & Walk Coalition
	Bicycle Safety Campaign	Support current efforts and institute additional bicycling education regarding use of the road, sidewalks and crosswalks to improve safety.	Bloomfield Glen Ridge Montclair Verona	Short	Local Advocacy Group		NJ Department of Health Municipal Health Departments Municipal Police Departments/Crossing Guards Local Schools/YMCA Rutgers - NJ Health Impact Collaborative Partners for Health NJ Bike & Walk Coalition
	"Walking" School Bus/Student Drop Zones	Increase number of crossing guards at strategic times and locations throughout day, with a priority to assist children and senior citizens Using Glen Ridge model, identify drop zones a few blocks from school to encourauge walking and lessen traffic closest to schools	Bloomfield Montclair Verona	Short	Local Schools	NHTSA Pedestrian Safety Grant, NHTSA Section 402 Safety Funds NJDOT's Safe Routes to School Program	NJ Department of Health Municipal Health Departments Municipal Police Departments/Crossing Guards Local Schools/YMCA Rutgers - NJ Health Impact Collaborative Bike-Walk Montclair NJ Bike & Walk Coalition
	Maximize social interaction benefits and promote patronization of local businesses for users of the corridor	Continue to promote and enhance events that bring people to Bloomfield Ave., or use Bloomfield Ave. as a segment of an event (e.g. races) Improve attractiveness of streetscape through public art, building improvements, decorations, seating, water features, etc. Work with local businesses to improve access and publicity for customers of all modes (walkers, cyclists, cars) Consider opportunities for off-street parking options Support and Expand Bike & Walk Montclair's Bike & Walk Friendly Business campaign to all four communities Consider shuttles/trolley/Go Bus options for connecting residents to commercial areas Consider art in the public space including bus stops & gateway treatments Encourage a variety of shops and restaurants at various price scales and appealing to diverse populations	Bloomfield Glen Ridge Montclair Verona	Medium	Local Business Improvement District		Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Bike-Walk Groups
	Institute measures to address crime and perceived crime.	Identify strategic locations for improved lighting Consider more frequent police patrol or other security personel at specific high-crime locations	Bloomfield Glen Ridge Montclair Verona	Short	Municipal Police Departments		Municipal Governing Bodies & Planning Boards Municipal Public Works & Engineering Local Business Improvement Districts

4. General Transit Improvements	Better Enforcement of Bus Stop Regulations	Establish weekly police details to enforce no parking regulations at study area bus stops	Bloomfield Glen Ridge Montclair Verona	Short	Municipal Police Departments	Local Funds/In-kind Staff	NJ TRANSIT DeCamp Bus Municipal Public Works & Engineering Local Business Improvement Districts
	Delineate bus pulloffs and loading areas	Conduct study to determine locations where bus stops are most constrained for space and/or accessibility corridor-wide Adjust locations where appropriate Paint/texture dedicate bus pull-off areas to reserve space on the street and to help with traffic calming	Bloomfield Glen Ridge Montclair Verona	Medium	Essex County Division of Engineering		NJTPA NJ TRANSIT DeCamp Bus NJDOT Municipal Public Works & Engineering Municipal Police Departments Essex County Transportation Advisory Board Local Business Improvement Districts
	Upgraded/ New Bus Shelters & Amenities	Determine locations most in need of shelters; explore designs including with neighboring communities Explore the variety of options for shelter types and financing (local designed/maintained vs. partnership with advertiser who supplies & maintains) Negotiation for property use or R-O-W use (leasing, deed restrictions, easements, permanent sale) Initiate competitive bidding process with specific policies and requirements in the RFP	Bloomfield Glen Ridge Montclair	Medium	Municipal Departments of Public Works	Advertising Revenue NJSCA Community Arts Program Improvement District Funding	Local artists and civic groups Local Business Improvement Districts NJ TRANSIT Essex County Department of Engineering Private Advertiser/Shelter Management Company NJ State Council on the Arts (NJSCA) Local Schools & Youth Art Programs
	Collaborations between Transit Providers, Regional Employers, Healthcare, and community services to improve mobility options	Promote use of public transportation through increased awareness of public transportation options (schedules, routes, fares) Analyze existing policies, funding sources and liability to determine approach to changing policies Advocate for policy changes and implement Complete a gap analysis with major employers, institutions, and community services to determine where additional transit service is needed Advocate for increased service to identified places	Bloomfield Glen Ridge Montclair Verona	Long	NJTPA	North Jersey Transportation Planning Authority (NJTPA) Subregional Program Meadowlink/NJDOT	EZ-Ride TMA Municipal Community Programs Municipal Departments of Health Local Healthcare providers NJ TRANSIT DeCamp Bus Essex County Transportation Advisory Board Local Business Improvement Districts Essex County Workforce Investment Board Essex County Department of Economic Development, Training, & Employment

5. Prototype Intersection Improvements

<p>Park Street and Bloomfield Avenue</p>	<p>Conduct detailed corridor analysis to determine feasibility of improvements Designate bus stop area highlighted with pavement markings Add lighted crosswalk Install curb bumpouts to narrow roadway, define parking/bus pull-offs & calm traffic Add new shelter and bike racks Reduce/consolidate curb cuts to local retail, services, and community pool to align with Park St.</p>	<p>Bloomfield Glen Ridge</p>	<p>Varies</p>	<p>Municipal Public Works & Engineering</p>	<p>NJDOT Community Transportation Planning Assistance (CTPA) program NJDOT's Safe Streets to Transit Program NHTSA Section 402 Safety Funds</p>	<p>Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Local Business Improvement Districts Bike-Walk Groups Main Street New Jersey</p>
<p>Ridgewood Avenue and Bloomfield Avenue</p>	<p>Conduct detailed corridor analysis to determine feasibility of improvements Increase pedestrian lead time Signalized left turn lane from Ridgewood Ave (north) to Bloomfield Ave (east) Install ergonomic crosswalks Designate bus stop area with pavement markings Install Painted/textured intersection Explore community arts/street tattoo Expanded and improved bus shelter for double stacking</p>	<p>Glen Ridge</p>	<p>Varies</p>	<p>Municipal Public Works & Engineering</p>	<p>NJDOT Community Transportation Planning Assistance (CTPA) program NJDOT's Safe Streets to Transit Program NHTSA Section 402 Safety Funds</p>	<p>Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Local Business Improvement Districts Bike-Walk Groups Main Street New Jersey</p>
<p>North/South Fullerton Avenue/Church Street/Glen Ridge Avenue and Bloomfield Avenue</p>	<p>Conduct detailed corridor analysis to determine feasibility of improvements Add Left Turn-only phases to North and South Fullerton Lane guides for left turns off of North and South Fullerton Install ergonomic crosswalks Designate bus stop area with pavement markings Install Painted/textured intersection at Glen Ridge Ave Explore community arts/street tattoo Install additional public art Additional bike racks & potential bike share location</p>	<p>Montclair</p>	<p>Varies</p>	<p>Municipal Public Works & Engineering</p>	<p>NJDOT Community Transportation Planning Assistance (CTPA) program NJDOT's Safe Streets to Transit Program NHTSA Section 402 Safety Funds</p>	<p>Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Local Business Improvement Districts Bike-Walk Groups Main Street New Jersey</p>
<p>Valley Road and Bloomfield Avenue</p>	<p>Conduct detailed corridor analysis to determine feasibility of improvements Add Left Turn-only phases to Valley turns Lane guides for left turns off of Valley Install ergonomic crosswalks Designate bus stop area with pavement markings Install Painted/textured intersection Explore community arts/street tattoo Create permanent pedestrian shelter island at current painted island location Install additional public art Additional bike racks & potential bike share location</p>	<p>Montclair</p>	<p>Varies</p>	<p>Municipal Public Works & Engineering</p>	<p>NJDOT Community Transportation Planning Assistance (CTPA) program NJDOT's Safe Streets to Transit Program NHTSA Section 402 Safety Funds</p>	<p>Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Local Business Improvement Districts Bike-Walk Groups Main Street New Jersey</p>
<p>Lakeside Avenue and Bloomfield Avenue</p>	<p>Arrows in roadway & new guidelines to better indicate lane shift Bollards at corner for additional protection Lane offset started closer to Park Place corner to lessen curve of lane shift Painted curb extension – could become bumpout long-term if feasible Signal timing optimization School bus/student drop zones Changes to turn only signals School bus/student drop zones</p>	<p>Verona</p>	<p>Varies</p>	<p>Municipal Public Works & Engineering</p>	<p>NJDOT Community Transportation Planning Assistance (CTPA) program NJDOT's Safe Streets to Transit Program NHTSA Section 402 Safety Funds</p>	<p>Municipal Governing Bodies & Planning Boards Essex County Division of Engineering Essex County Transportation Advisory Board NJTPA Local Business Improvement Districts Bike-Walk Groups Main Street New Jersey</p>