



NEW JERSEY

BICYCLE & PEDESTRIAN MASTER PLAN.



Message from the Commissioner



The New Jersey Department of Transportation (NJDOT) is pleased to present the *New Jersey Bicycle & Pedestrian Master Plan*. NJDOT is committed to improving our quality of life by integrating bicycling and walking into the fabric of our transportation system. This master plan presents a vision, goals, and actions to do just that.

Our comprehensive transportation system is more than cars, trucks, buses, and trains. Walking and bicycling are smart transportation solutions that conserve energy, promote public health, protect the environment, provide access to public transit, contribute to our economies, and connect people across our communities. By investing in walking and bicycling, we are investing in clean and healthy transportation that is equitable for all New Jersey citizens.

The *New Jersey Bicycle & Pedestrian Master Plan* recognizes that the many decisions we face and actions to be accomplished in improving our pedestrian and bicycle transportation environment will take place in a dynamic setting and rely upon the diverse input of our citizens, transportation professionals, and government agencies. For that reason, this master plan is designed to bring people together through a series of annual summits, leverage their creativity and expertise, and foster the communication and collaboration that is necessary to achieve the master plan's goals.

NJDOT will continue working to improve pedestrian and bicycle transportation in communities throughout New Jersey. We value your input, perspective, and creativity, so please let us know if you have any ideas to share. You can reach us at BIKEPED@dot.nj.com.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Richard T. Hammer'. The signature is stylized and enclosed within a large, hand-drawn blue circle.

Richard T. Hammer
Commissioner, New Jersey Department of Transportation



Statewide Bicycle and Pedestrian Plan (BPMP)

- Policy Plan/Framework for Action
- Vision, Goals, and Strategies
- Integrated with Complete Streets Initiative
- Guides BPMP Implementation Statewide
- Collaborative Partnership



Suite of Plans and Design Guides

State Bicycle and Pedestrian Master Plan

- Pedestrian Safety Action Plan (2014)
- Bicycle Safety Action Plan (2016)
- New Jersey School Design Guide (2014)
- NJ Complete Streets Design Guide (2017)
- Guide to Complete Streets Policy Development (2014)
- Guide to Complete Streets Implementation (2015)

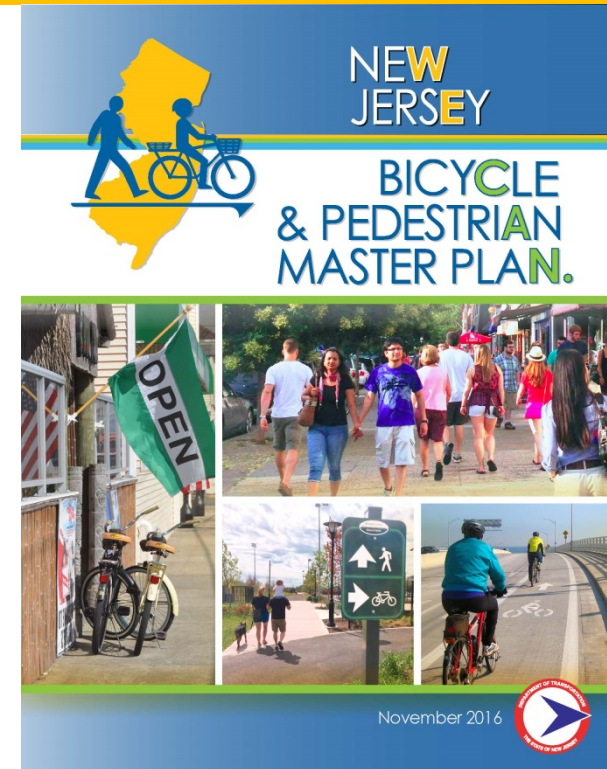
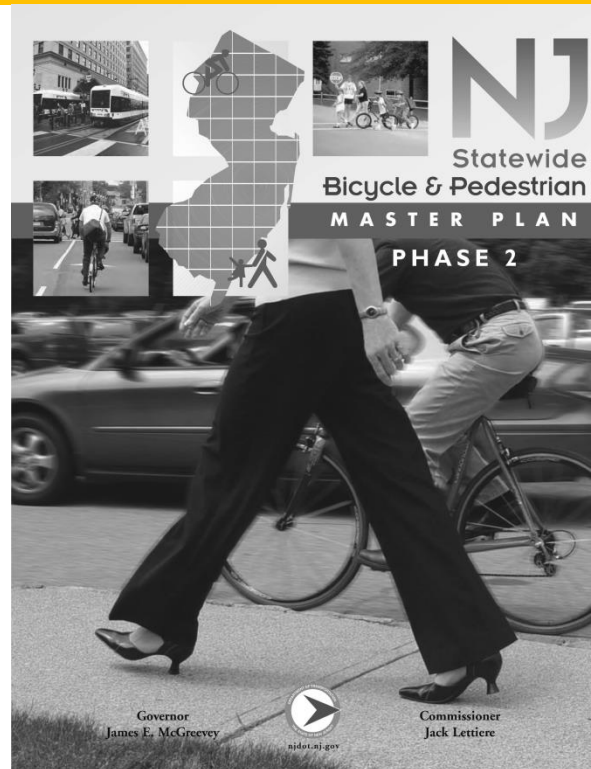
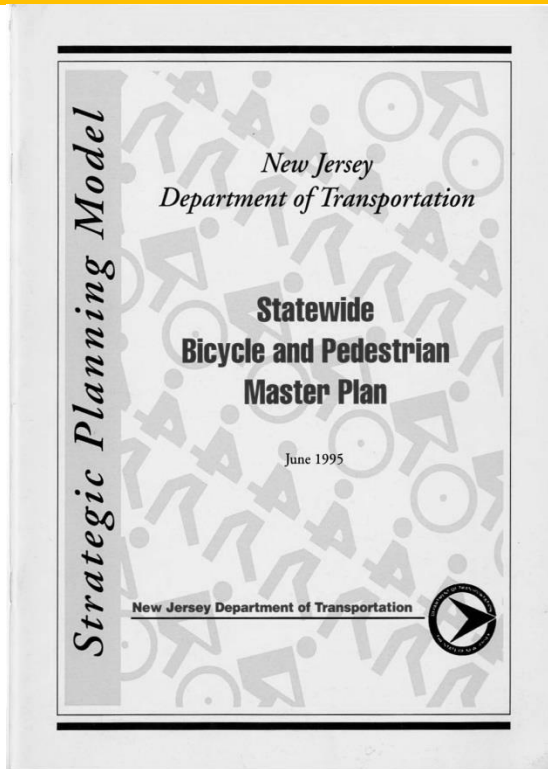


NJ BP Master Plan (BPMP)

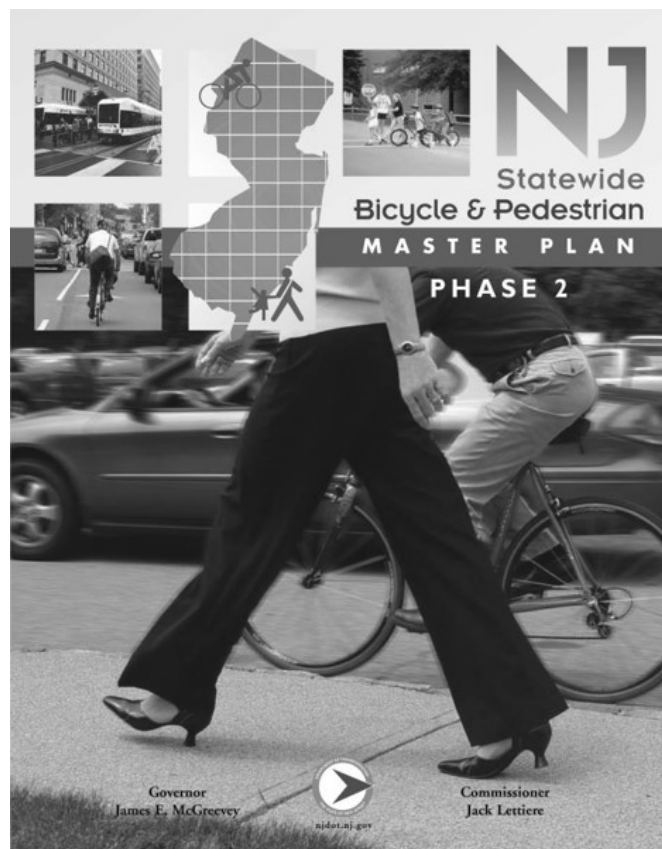
1995

2004

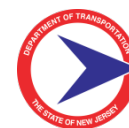
2016



Why update?



- 12 years
- NJDOT
 - 2009 Complete Streets Policy
 - 2014 Pedestrian Safety Action Plan
 - 2016 Bicycle Safety Action Plan
 - 2017 Complete Streets Design Guide
- New national design guidance and federal policies
- Designation as a FHWA Pedestrian-Bicycle Focus State
- Update the vision & goals to reflect current trends



Outcomes 1995

- Policy Plan
- Bicycle & Pedestrian Planning and Design Guidelines
- Community Resource Manual
- Training Workshops, Curriculum
- Case Studies





Outcomes 2004

- Policy Update
- Inventory of designated facilities
- Demand and Suitability Modeling (and training)
- Prioritization Process (demand & suitability)



Outcomes 2016?



- Focus on Safety
- Fully Implement Complete Streets
- Collaborate for Access/Mobility for all
- Implement Across Agencies

2016 BPMP Trends

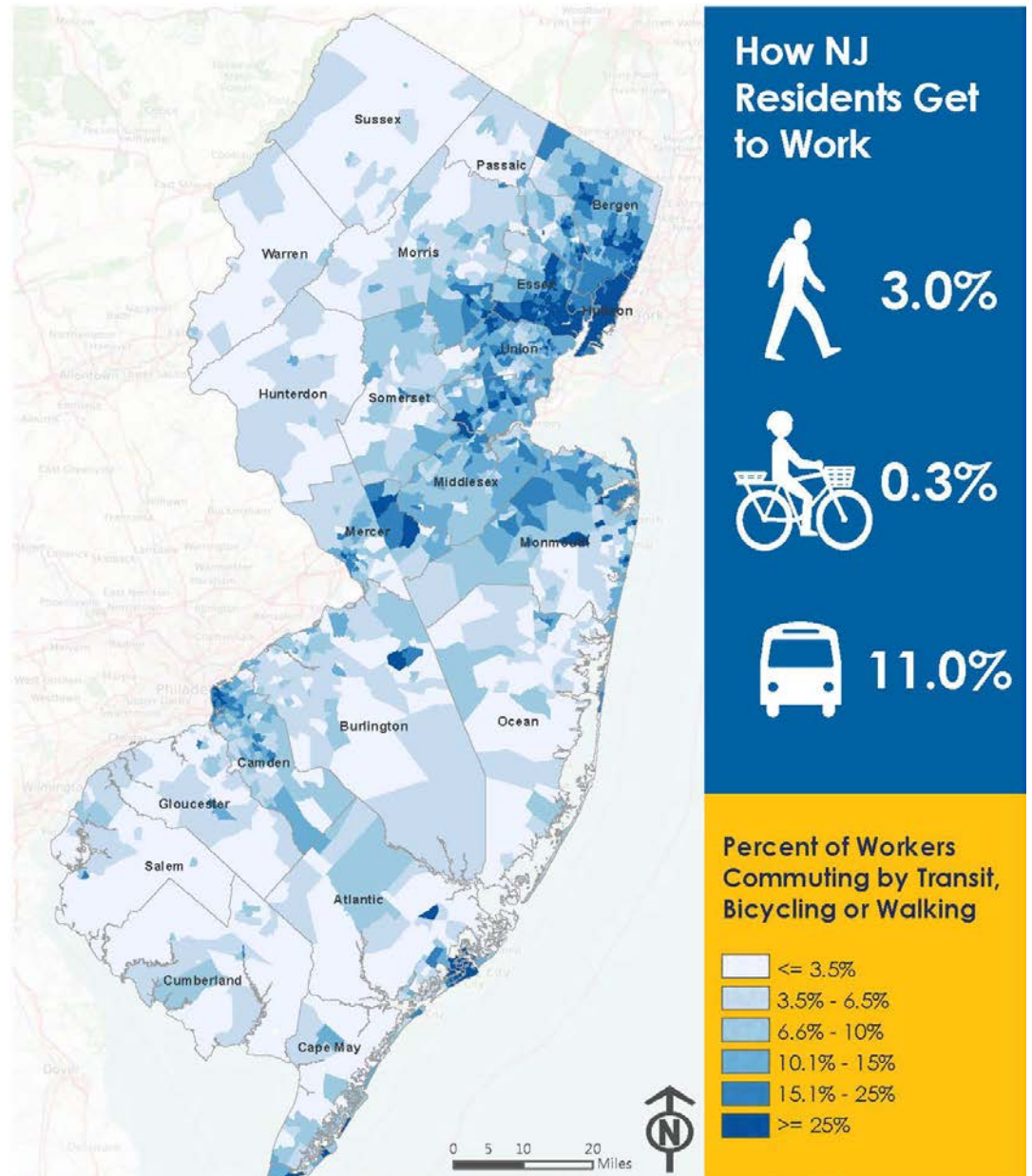


- Demographics
- Changing Demand
- Crash Data



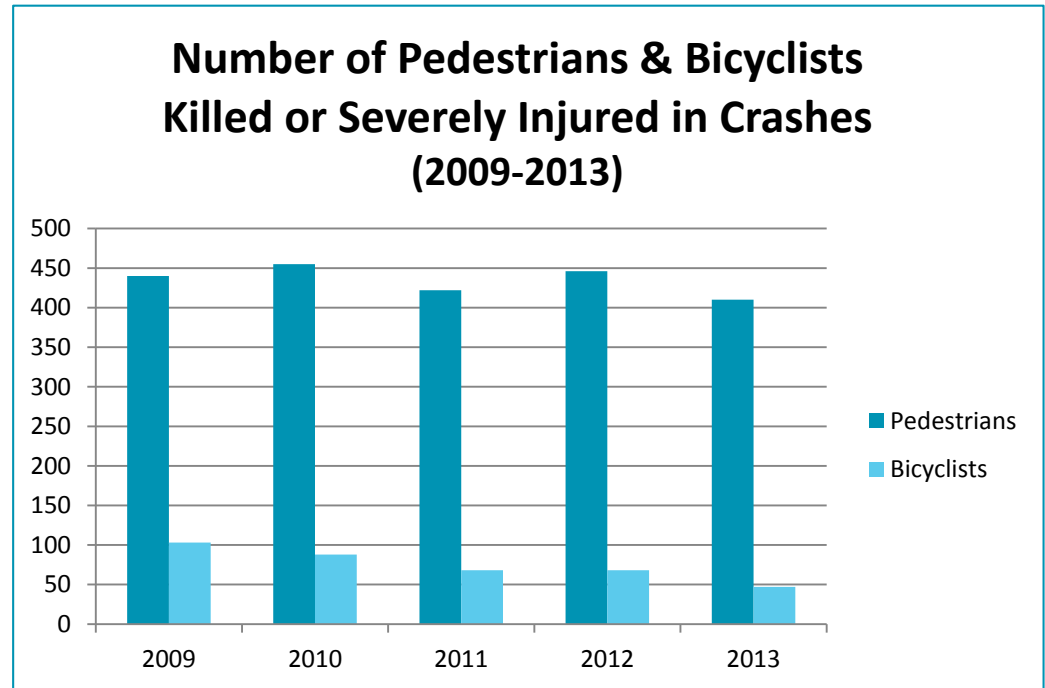
Demographics

- Growing, aging, and urbanizing
- 12% of NJ Households Do Not Have a Car
 - 373,136 households
- 11% of NJ Residents Live Below the Poverty Line
 - 934,665 people



What do crash data tell us about bicycle and pedestrian safety in NJ?

- **45,471** Pedestrians and Bicyclists involved in crashes (2009-2013)
 - **74%** Pedestrians
 - **26%** Bicyclists
- **814** Fatalities
 - **90%** Pedestrians
 - **10%** Bicyclists
- **1,785** Severe Injury
 - **81%** Pedestrians
 - **19%** Bicyclists

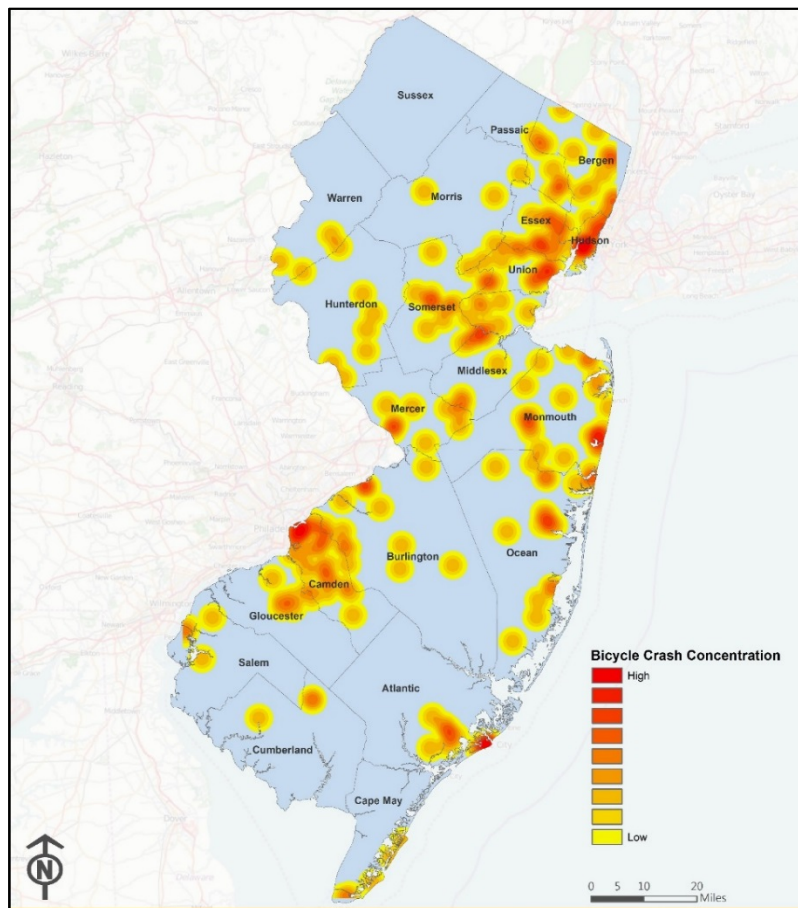


Bicycle & Pedestrian Fatality Rates (2014)		NJ	National
Pedestrian	Fatality Rate	1.88	1.53
	% of All Traffic Fatalities	30.3%	16.3%
Bicyclist	Fatality Rate	0.12	0.23
	% of All Traffic Fatalities	2.1%	2.4%



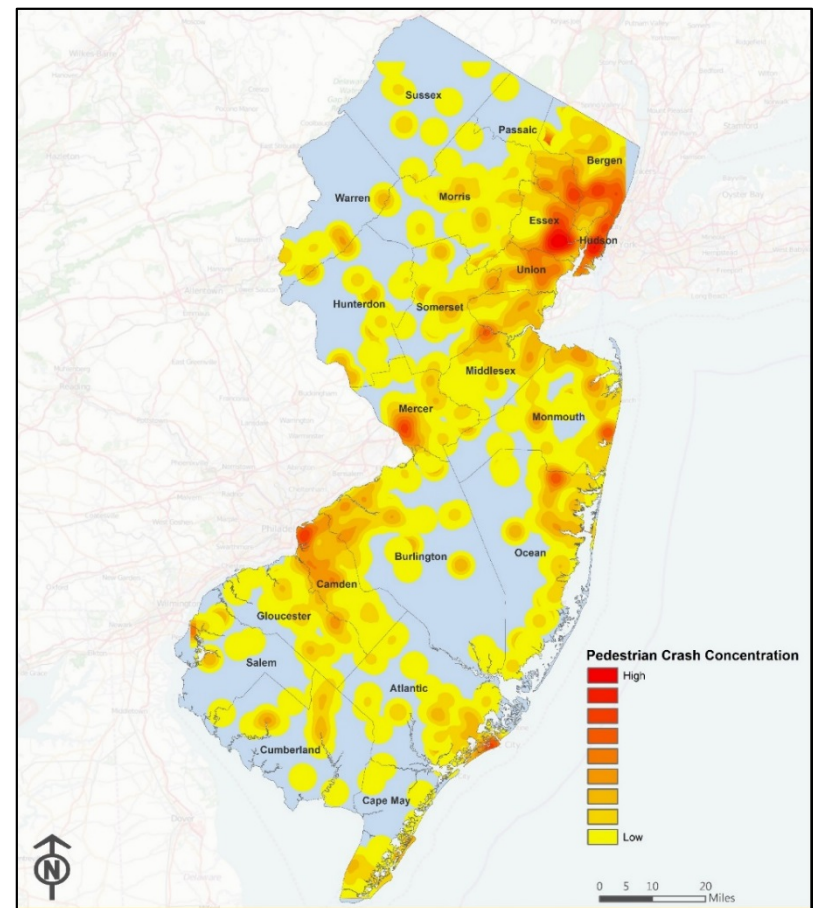
Where are the crashes occurring?

Bicycle Crash Hotspots



Bicycle Crash Hotspots in New Jersey
Crashes Involving Serious Injury or Death to Bicyclists (Plan4Safety 2010-2014)

Pedestrian Crash Hotspots



Pedestrian Crash Hotspots in New Jersey
Crashes Involving Serious Injury or Death to Pedestrians (Plan4Safety 2010-2014)



Pedestrian Focus State

Pedestrian-Bicycle Focus Cities/States 2015

NEW JERSEY

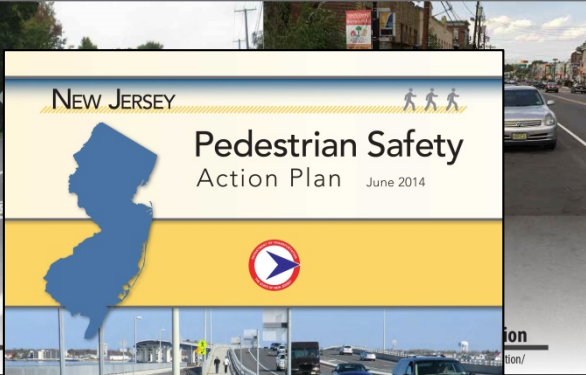
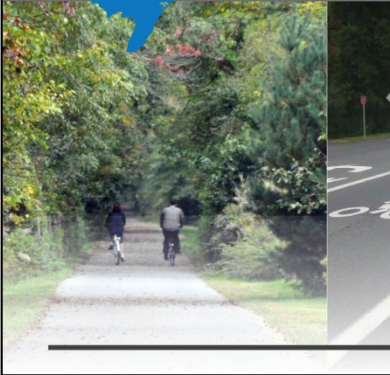
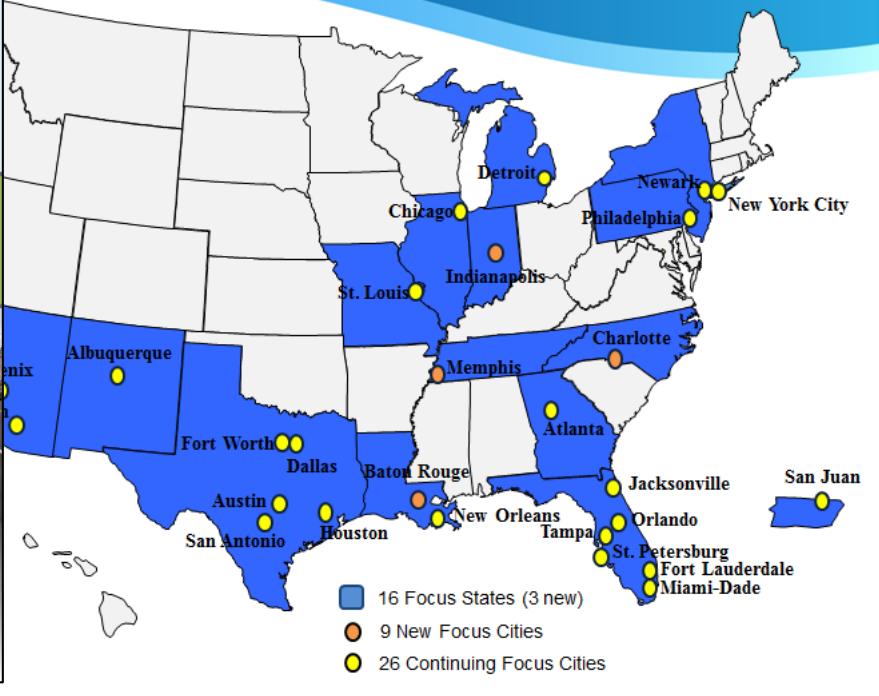


BICYCLE SAFETY
ACTION PLAN September 2016




NEW JERSEY

Pedestrian Safety
Action Plan June 2014

Meeting Needs: Most Vulnerable Users





Walking and bicycling are important to New Jersey because

Benefits



... are healthy.



... contribute to the economy.



... promote equity.



... are good for the environment.



... improve access to schools.



... improve access to public transit.



... help enhance transportation systems to better serve disabled persons.



... are at the heart of Green, Smart, and Complete Streets.



... are fiscally attainable.



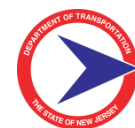
... are good for personal finances.



... are growing in acceptance, legitimacy, and preference.



... contribute to placemaking and quality of life in New Jersey.



SUCCESS STORIES



SUCCESS STORIES



Rt 52 Causeway

Completed in 2012, NJDOT's Route 52 bridge replacement project is an example of synergy between local and state Complete Streets policies to create a more robust, complete network. The bridge project links Ocean City with its mainland neighbors and features a separated shared use path for pedestrians and bicyclists. Since a permanent count station was installed in 2014, over 250,000 people used the shared use path between August 2014 and September 2015, with an average of over 1,400 people per day in July and August.



Camden GreenWay Circuit Trails Plan

With the support of NJDOT, Cooper's Ferry Partnership, and the City of Camden, the Camden GreenWay Circuit Trails Plan advances development of an active transportation network with regional connectivity throughout the City of Camden. The plan identifies proposed routes that will close gaps in the city's trails system and bicycle network, as well as integrate the Camden GreenWay (within the City of Camden) with the Circuit (Greater Philadelphia Regional Trails Network). Upon completion, the network will connect over 128 miles of bicycle and pedestrian facilities, with Camden acting as a hub for South Jersey.



Trenton Wellness Loop

The Wellness Loop serves Trenton citizens in a number of ways. It links Battle Monument and the D&R Canal trail system with Mill Hill Park and downtown Trenton, providing a safe opportunity for bicycle commuting, recreational use, and children traveling to and from school. In June of 2016, the project was awarded funding through a Phase IV Regional Trails Program Grant (DVRPC).

New Brunswick Ciclovía

The first of its kind in New Jersey, the New Brunswick Ciclovía is an open streets event where streets are closed to vehicular traffic and open to bicyclists and pedestrians. First held in 2013, the event draws thousands of residents, students, and visitors to downtown New Brunswick for a day of walking, bicycling, and festivities. Ciclovía strives to show the positives of walking and bicycling and how these modes of transportation help bring a community together. (Photo credit: nj.com).



Division Street

Division Street in Somerville became a pedestrian-only street in 2013. The street has attracted new businesses, serves as a focal point for the community, and provides a flexible public space for community events.



Crossing Guard Training

The Safe Routes To School Resource Center (SRTSRC) compiles research and tools to support school crossing guards and conducts training programs for the municipal police traffic safety officers that supervise school crossing guards. The SRTSRC has released a Crossing Guard Training Manual detailing topics ranging from post routines to incident reporting. The training program, which has proven to be a major success, is offered regionally throughout the state and is open to any municipality. The SRTSRC offers other vital resources on their website, such as New Jersey traffic laws and legislation, crossing guard placement considerations and gap assessment, and a crossing procedures tip sheet.

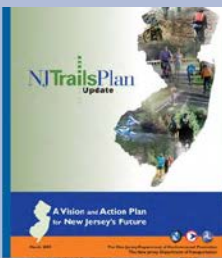
Montclair Bike Depot

With support from the NJ Bike & Walk Coalition, Montclair opened a bike depot at the Bay Street NJ TRANSIT commuter rail station in 2014. The first of its kind in New Jersey, the depot features 24 indoor bike parking spaces, storage lockers, key card access control, and 24/7 security camera monitoring. (photo credit: nj.com).



New Jersey Trails Plan Update (2009)

This update of the *New Jersey Trails Plan*, developed in coordination among NJDOT, NJDEP, and the New Jersey Trails Council, presents a renewed vision, goals, and strategic actions to help guide and coordinate the efforts of all those who plan, build, operate and maintain New Jersey's trails. The *Trails Plan* reaffirms the importance of providing trails for all and emphasizes the value of trails in supporting a wide range of benefits.



Liberty Water Gap Trail

The Liberty Water Gap trail is a 130-mile long pedestrian trail that connects two national landmarks at each end: the Delaware Water Gap and the Statue of Liberty. The trail is comprised of six individual, interlinked trails. The segment of the trail towards the eastern terminus that passes through the City of Newark, Kearny, and into Jersey City is known as the East Coast Greenway.



Lawrence Hopewell Trail

The Lawrence Hopewell Trail (LHT) is a 22-mile bicycle and pedestrian recreational trail and transportation corridor through public and private lands in Lawrence and Hopewell Townships, Mercer County, New Jersey. Through public-private partnerships, trail segments have been added over time to create a robust trail system that connects neighboring communities, parks, employment hubs, and schools.



East Coast Greenway

The East Coast Greenway is a 3,000-mile urban trail from northern Maine to southern Florida. The Greenway covers 93 miles in New Jersey, passing through urban centers, suburban settings, and rural landscapes. More than half of the Greenway in New Jersey is off-road, the second highest rate of completed trail in any Greenway state.



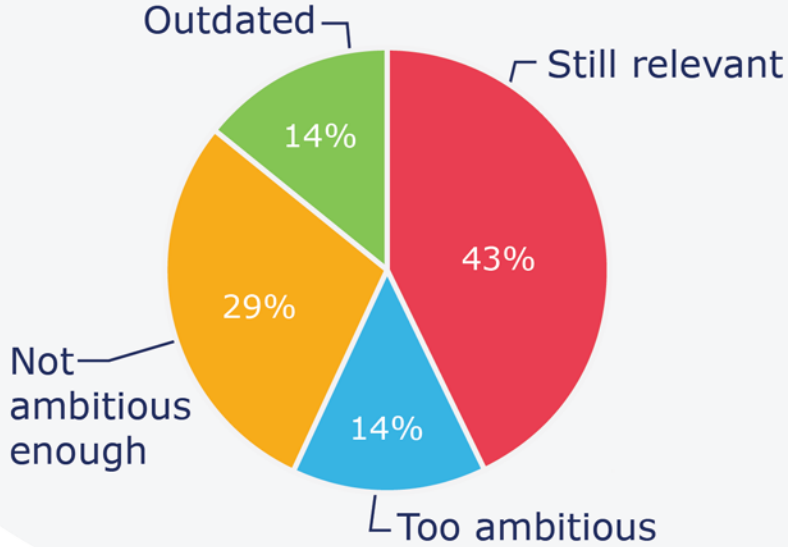
Outreach

- NJ Bicycle & Pedestrian Advisory Council
- Conferences
- Website
- Online survey
- Focus groups
- Stakeholder interviews
- NJDOT interviews



How does the Vision Statement hold up?

What are your top 3 issues for the master plan?





Plan Organization

- Chapter 1: Purpose and Process
- Chapter 2: Current Conditions and Needs
- Chapter 3: Vision, Goals, and Strategies
- Chapter 4: Implementing the Master Plan
- Appendix: Funding Sources, Related Policies, Plans, and Programs





Vision

The vision statement is an aspirational description of desired future conditions for walking and bicycling in New Jersey that guides the development and execution of all goals and strategies.

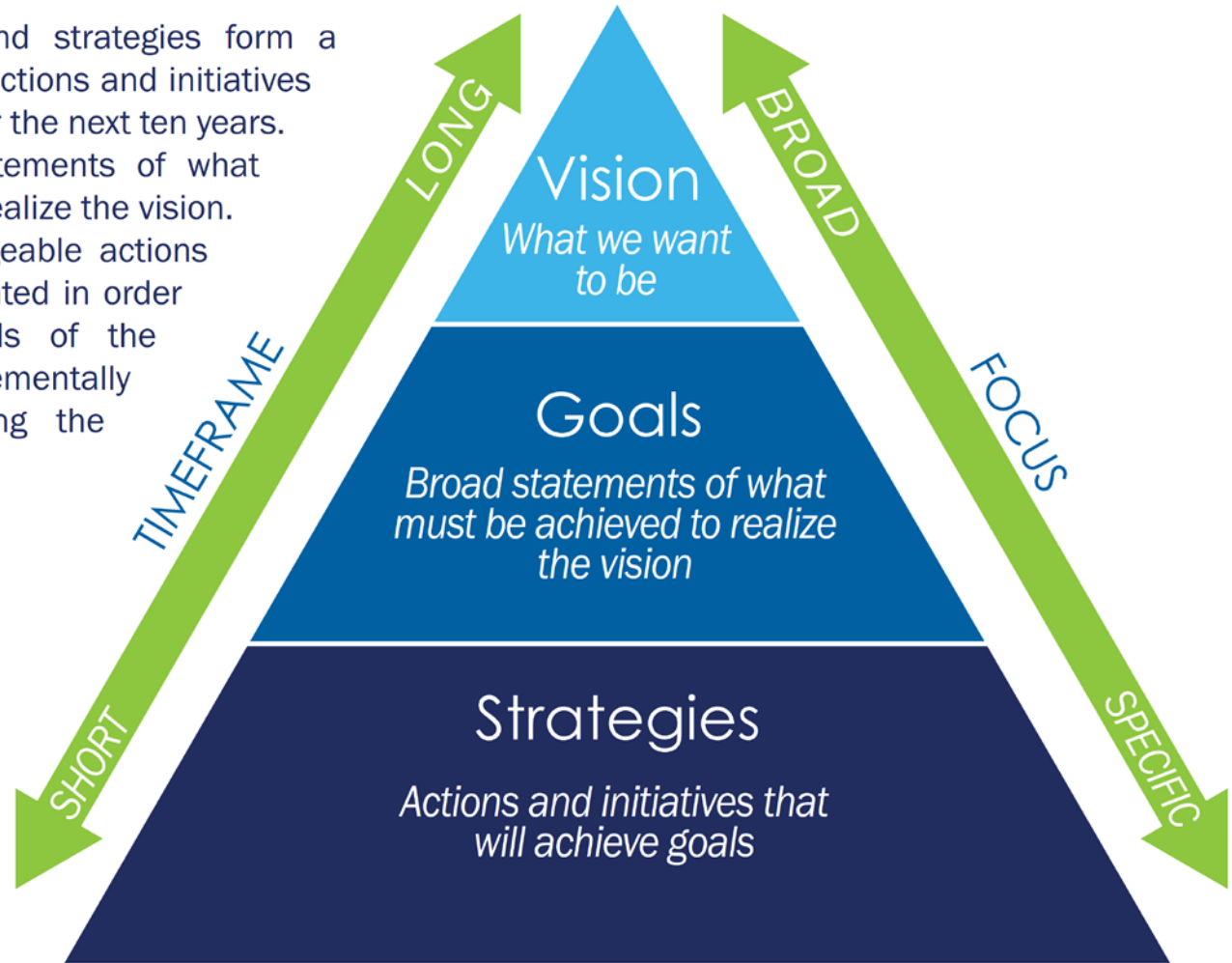
Vision Statement

New Jersey is a place where people of all ages and abilities are able to bicycle and walk. Those who live, work, or visit are able to conveniently walk and bicycle with confidence, a sense of security in every community, and with the respect of all modes. Both activities are a routine part of the transportation and recreation systems.



Vision, Goals & Strategies

The vision, goals, and strategies form a critical framework of actions and initiatives to be undertaken over the next ten years. Goals are broad statements of what must be achieved to realize the vision. Strategies are manageable actions that can be implemented in order to achieve the goals of the master plan and incrementally contribute to realizing the vision.





Goals

- 1) Improve Safety**
 - 2) Enhance Access, Mobility, Connectivity**
 - 3) Achieve Healthy, Equitable, Sustainable Communities**
 - 4) Foster a Culture Shift**
 - 5) Facilitate Coordination & Integration**
- 



NJDOT Transformational Leader

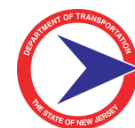


Chapter 4

Implementing the Master Plan



Implementation is a cooperative effort among NJDOT and a number of stakeholders. Recognizing that this master plan is a living document, this chapter describes a path forward that builds momentum through outreach, collaboration, and transparency.



BPMP Implementation Partners and Events

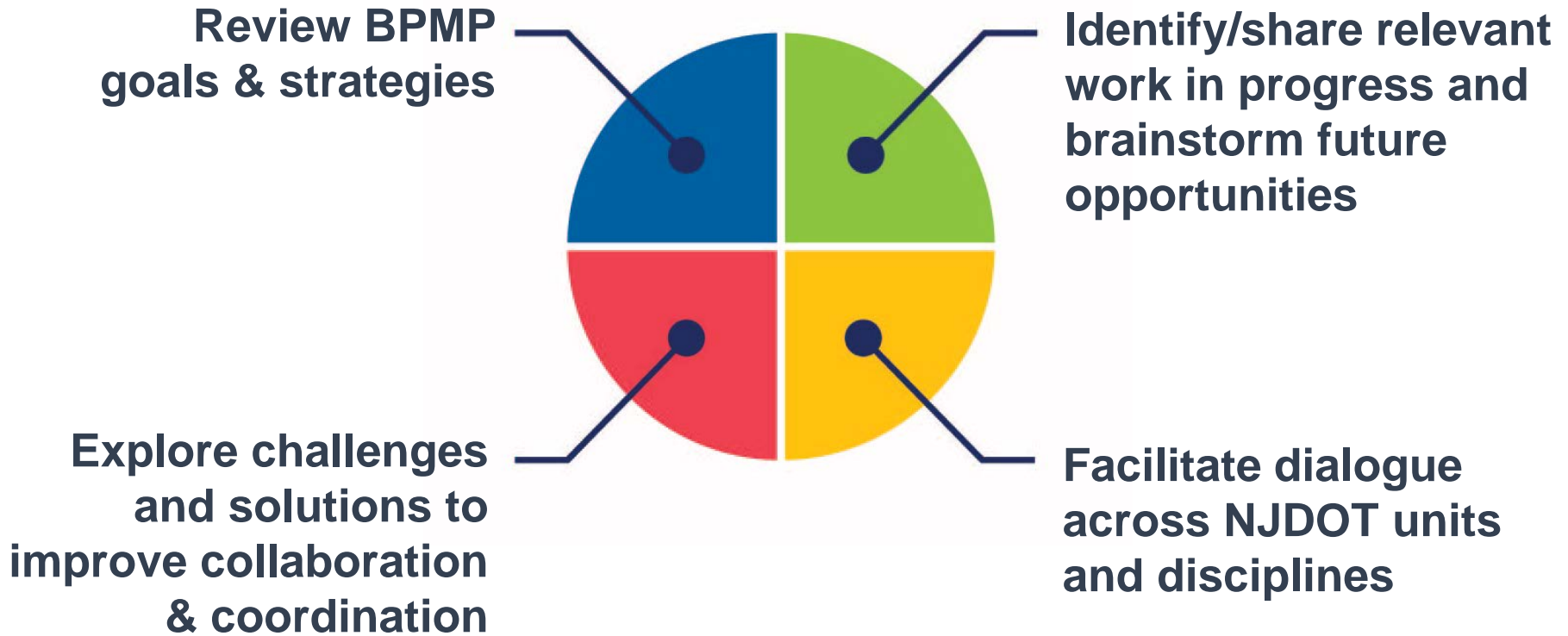
Internal Partners Summit

External Partners Summit





Internal Partners Summit Objectives



Internal Partners Process

- **NJDOT internal “in-reach” interviews**
- **What makes for a successful project?**
- **Internal Partners Summit workshop**
- **Review of key BPMP strategies**
- **Identify next steps**



Key In-reach Findings/Ideas

- **Improve internal coordination and communication**
- **Review project development process and checklists**
- **Complete Streets implementation requires a “Culture Shift”**
- **Local (municipal) obstacles to implementation**
- **NJDOT Management Systems and data-driven methodologies**





What makes for a successful project?

- **Meets Purpose & Need**
- **Completed on time and on budget**
- **No one complains!**
- **Collaborative process (include B/P needs)**
- **Discuss B/P early-on at Scoping Meeting**
- **Informed decision making**
- **Clear expectations of project scope during any public outreach**
- **Clarity on maintenance/jurisdiction of bike/ped facilities**
- **Document lessons learned and identify opportunities for improvement**



Review of Key BPMP Strategies

- Safety: Eliminate Fatalities, Serious Injuries
- Complete Street Implementation
- Access, Mobility, Connectivity
- Health, Equity, Sustainability





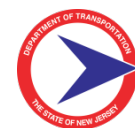
Goal #1: Improve Safety

Eliminate pedestrian and bicycle fatalities and serious injuries and improve the sense of safety.

Strategies

1. Prioritize the most vulnerable (disadvantaged/high-risk groups — youth, seniors, low-income, disabled and minority populations) of vulnerable user needs in projects and decision-making.

- A. Develop a data-driven approach to the project prioritization process for bicycle and pedestrian safety and mobility needs.
- B. Develop a Short Trip Opportunity Analysis tool to help inform mobility needs in projects under consideration, using six criteria (population density, employment density, proximity to a NJ TRANSIT bus or rail station, proximity to schools, population below Poverty Level, and percent of households with no motor vehicle access). Over time, refine and use this tool to reflect and inform other goals with respect to health, equity and sustainability.



Goal #1: Improve Safety

Eliminate pedestrian and bicycle fatalities and serious injuries and improve the sense of safety.

Strategies

2. Maximize use of HSIP funding for ADA, pedestrian, and bicyclist safety projects.

- A. Adopt project prioritization criteria that create incentives for bicycle and pedestrian projects or establish minimum set-asides.



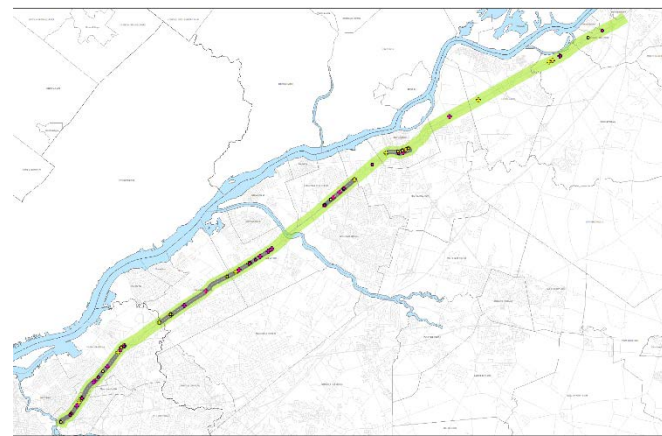
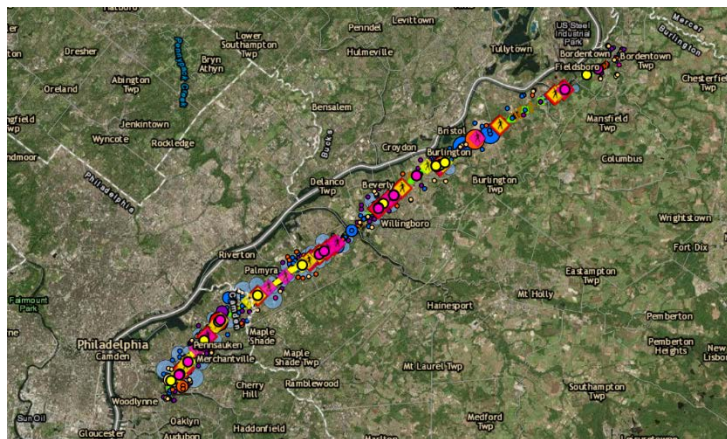
Goal #1: Improve Safety

Eliminate pedestrian and bicycle fatalities and serious injuries and improve the sense of safety.

Strategies

3. Improve data collection and data management systems.

- A. Reduce the incidence of null records and, over the longer-term, customize crash reports for crashes involving pedestrians and for crashes involving bicyclists. This should occur in conjunction with training the enforcement community on crash report completion.
- B. With improved data and land use criteria, continue to identify high-risk locations and populations needing targeted improvements.
- C. Establish an online tool and mobile application (with geolocation capability) where the public can report bicycle and pedestrian problem locations – “near misses”, etc.
- D. Develop bicycle and pedestrian safety performance measures as part of the new FHWA rules for implementing MAP-21 and the FAST Act.



Goal #1: Improve Safety

Eliminate pedestrian and bicycle fatalities and serious injuries and improve the sense of safety.

Strategies

4. Implement the *Pedestrian Safety Action Plan* and the *Bicycle Safety Action Plan*.

- A. Review priority actions and recommendations of the *Pedestrian Safety Action Plan* (2014) and *Bicycle Safety Action Plan* (2016) and integrate implementation efforts with this master plan.



Goal #2: Enhance Accessibility, Mobility, and Connectivity

Provide a connected and accessible network for bicyclists and pedestrians throughout New Jersey.

Strategies

1. Continue to move Complete Streets from policy to implementation.

- Maximize Complete Streets Implementation through education, training, funding support, tools and best practices.
- Develop and fund pilot projects in communities that have adopted Complete Streets implementation plans.
- Test and evaluate innovative concepts, new practices and technological advances.





Goal #2: Enhance Accessibility, Mobility, and Connectivity

Provide a connected and accessible network for bicyclists and pedestrians throughout New Jersey.

Strategies

2. Improve and expand the transportation infrastructure for bicyclists and pedestrians throughout the state.

- A. Develop a data-driven approach to the project prioritization process for bicycle and pedestrian safety and mobility needs.
- B. Adopt NACTO *Urban Bikeway Design Guide*, *Urban Street Design Guide*, and *Transit Street Design Guide* at the state, MPO, county, and local levels.
- C. Update guidance on the evaluation of bicycle and pedestrian facility types to include user need, comfort, and perceptions of safety.
- D. Identify and complete trail system gaps.
- E. Improve access to transit.
- F. Improve maintenance of facilities to ensure safety of users.
- G. Support construction of bicycle facilities to improve connectivity and mobility of non-motorized transportation networks to attract the widest range of potential users.



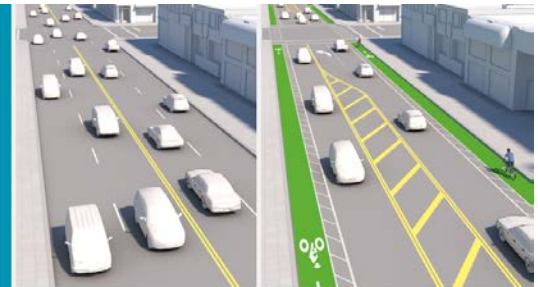


State of New Jersey Complete Streets Design Guide



Roadways

- Design speed
- *Traffic calming features*
- Travel lanes
- *Allocating use of space*
- On-street parking
- Design vehicle
- Design hour
- Design year
- Transit
- Quality of transit service
- *Bicycle facilities*
- Wayfinding



Result

Buffered bicycle lane



Goal #2: Enhance Accessibility, Mobility, and Connectivity

Provide a connected and accessible network for bicyclists and pedestrians throughout New Jersey.

Strategies

3. Collaborate with counties, municipalities, and school boards on land use and transportation decisions.

- A. Using the *PSAP* (2014), *BSAP* (2016), and *New Jersey Complete Streets Design Guide* (2016) as framework, develop a training tool for local officials and municipal planning and zoning board members who review and approve site plans. Include issues such as aging in place, ADA and other relevant topics. Consider infographics and video as elements of the training program.
- B. Train and coordinate municipal engineers for funding and prioritization.
- C. Collaborate with school boards to support and coordinate SRTS efforts.
- D. Conduct training via a coordinated, geographically informed strategy to bring together local, county, and NJDOT liaisons on resources including the NJDOT *Complete Streets Design Guide* (2016) and NACTO *Urban Bikeway Design Guide*, *Urban Street Design Guide*, and *Transit Street Design Guide*.



Photo source: RBA Group



Goal #3: Achieve Healthy, Equitable, Sustainable Communities

Provide opportunities for people to become more healthy and active through walking & bicycling.

Strategies

1. Continue to educate the public on the benefits of and safe practices for walking and bicycling.

- A. Create and publicize a pilot program for safe walking practices and coordinate dissemination with partners.
- B. Support efforts to improve community/local enforcement relationships through educational programs/outreach based on positive reinforcement of safe bicycling and walking practices.
- C. Create a multilingual Public Service Announcement (PSA) or video for safe bicycling in underserved communities.



Goal #3: Achieve Healthy, Equitable, Sustainable Communities


Provide opportunities for people to become more healthy and active through walking & bicycling.

Strategies

2. Continue and prioritize all Safe Routes To School initiatives.

- A. Continue to promote and encourage schools and municipalities to support and implement SRTS programs, including education and encouragement programs and policies, and school travel plans.
- B. Leverage SRTS networks to achieve complementary goals around community health and wellness.

Broadening Outreach Efforts of Safe Routes to School to Children with Disabilities
Assessing Opportunities in New Jersey






Prepared by
Andrea Lohr and Tom Serrano
with assistance from Andrea Clarke
New Jersey Safe Routes to School Resource Center
Ann M. Hoffman, Transportation Center

Prepared for
State of New Jersey Department of Transportation
Federal Highway Administration

Date:
September 2012

RUTGERS
New Jersey's State System of Higher Education

SafeRoutes
f b e



To view the video in English, [click here](#). Or [click below](#).



New Jersey School Crossing Guard Manual for Supervisors (Draft)



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SafeRoutes
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Goal #3: Achieve Healthy, Equitable, Sustainable Communities

Provide opportunities for people to become more healthy and active through walking & bicycling.

Strategies

3. Continue to partner and build relationships outside of traditional transportation circles to strengthen communities, particularly those at high risk and with health concerns.

- A. Collaborate with health, enforcement, business, and environmental partners (NJ Department of Health, NJ Conservation Foundation, NJ Prevention Network, New Jersey Partnership for Healthy Kids, Rails-to-Trails Conservancy, NJ Healthy Communities Network, NJ Bike Walk Coalition, Sustainable Jersey & Sustainable Jersey for Schools, and others).
- B. Collaborate with equity and environmental justice partners (NJ Department of Environmental Protection (NJDEP) Office of Environmental Justice, NJ Department of Labor, and MPOs (including DVRPC's Equity through Access Program), New Jersey Environmental Justice Alliance, and others).
- C. Collaborate with community design and placemaking partners (American Planning Association New Jersey Chapter (APA NJ), AARP, Active Living Network, National Consortium for Creative Placemaking, Project for Public Spaces, Main Street New Jersey, and others).
- D. Re-evaluate NJ BPAC membership and amend bylaws to add one or two additional seats to NJ BPAC Executive Council to expand formal representation of equity and/or community health and sustainability partner agencies.
- E. Support development of job training opportunities through support of bicycle co-operatives and other community-based programs that provide training opportunities for youth and underserved communities.



Goal #4: Foster a Cultural Shift

Considering the needs of all users becomes the default way of doing business, with Complete Streets integrated into everyday practice.

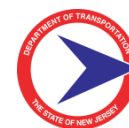
Strategies

1. Increase public awareness of the benefits of bicycling and walking.

- A. In concert with education, employment, equity, health, housing and other partners, conduct an alternating year bicycle and pedestrian survey. Add questions about cultural acceptance of bicycling and walking so that change over time can be studied.

2. Improve bicyclist, pedestrian, and driver behavior.

- A. Adopt Safe Passing legislation.
- B. Increase compliance with Stop and Stay Stopped crosswalk law.
- C. Support/expand pedestrian safety enforcement training tools, including development of a pilot pedestrian safety campaign.
- D. Develop a statewide public campaign to foster respect among modes.
- E. Partner and build relationships outside of traditional circles to build awareness and understanding of the need to improve safe driving and road sharing practices. Partners include those organizations and entities that address the needs of New Jersey's aging population, insurance companies, cellular companies, driver's education companies, and others.
- F. Launch a joint initiative among agencies such as NJDOT, NJDHTS, and NJMVC to educate the public on existing rules that govern how pedestrians, bicyclists, and motor vehicle operators share the roadway.



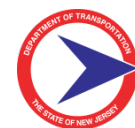
Goal #4: Foster a Cultural Shift

Considering the needs of all users becomes the default way of doing business, with Complete Streets integrated into everyday practice.

Strategies

3. Address emerging technologies, such as electric bikes and bike share.

- A. Develop a White Paper on emerging technologies and identify critical education, enforcement and other issues.



Goal #5: Facilitate Coordination and Integration

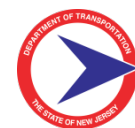
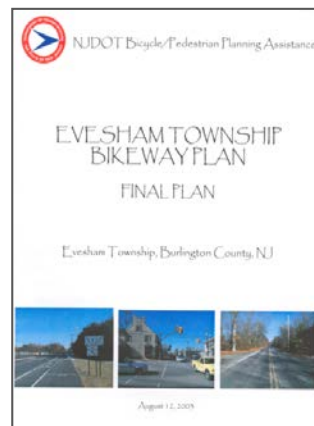
No one entity can achieve the goals of this master plan – a partnership of public, private, and nonprofit partners is needed.

Strategies

1. Conduct a comprehensive review and evaluation of bicycle and pedestrian legislation, regulations, plans and policies at the state, regional and county level to understand what exists and where there are gaps.

2. Monitor and track progress for adoption and implementation of state funded bicycle and pedestrian local technical assistance projects.

A. Conduct an annual scorecard, and a mid-horizon (Year 5) more detailed evaluation of progress toward master plan implementation.





Goal #5: Facilitate Coordination and Integration

No one entity can achieve the goals of this master plan – a partnership of public, private, and nonprofit partners is needed.

Strategies

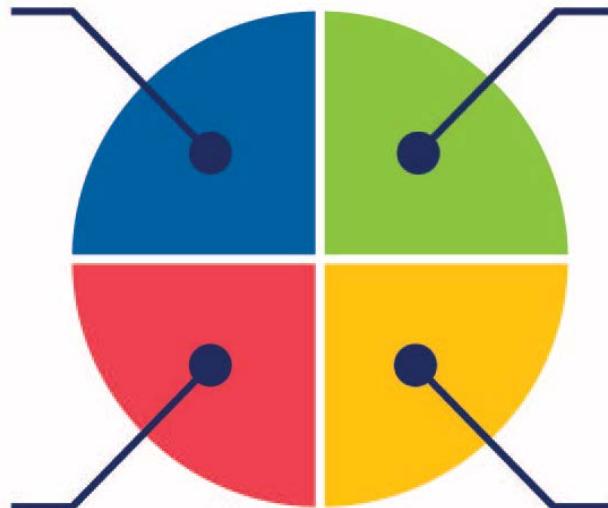
3. Partner with the public, private, and nonprofit communities in the education, employment, environment, enforcement, equity, health, and housing sectors to integrate Complete Streets, Safe Routes to School, Safe Streets to Transit and bicycle and pedestrian initiatives.

- A. Continue to improve internal coordination and collaboration within NJDOT. Hold an internal partners Summit at NJDOT for units that have a role in implementing bicycle and pedestrian projects in the state.
- B. Hold an external partners summit to share data, analysis/trends, and to kick off master plan implementation and partnership efforts.
- C. Review and assess NJ BPAC membership.



External Partners Summit Objectives

Diverse stakeholders,
issues, and needs



Identify/share relevant
work in progress and
brainstorm future
opportunities

Explore challenges/
solutions to improve
collaboration &
coordination

Facilitate dialogue
across groups and
stakeholders





Next Steps

- Prepare for External Partners Summit
- Review and Develop NJDOT Internal Implementation Actions, including
 - Review and update checklists and procedures
 - Improve integration and use of Pedestrian Safety Management System
 - Advance implementation of Safety Voyager for crash data analysis



Thank You!

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