The Regional Capital Investment Strategy for the NJTPA Region

THE FOLLOWING IS THE NJTPA'S Regional Capital Investment Strategy (RCIS). This strategy, which informs the project selection and policy direction of Plan 2045, was initially developed for NJTPA's 2030 Regional Transportation Plan, approved in September 2005. This RCIS has been carried forward into Plan 2045 with modified language, as discussed in Chapter 4. The changes are highlighted below in italics.

Investment Principles and Guidelines

Help Northern New Jersey Grow Wisely Transportation investments should encourage economic growth while protecting the environment and minimizing sprawl in accordance with the *State Development and Redevelopment Plan*, Energy Master Plan, and Greenhouse Gas Plan.

Investment Guidelines

- Encourage shorter and fewer motor vehicle trips, especially those involving single-occupancy vehicles, through continued support (about 2 percent of transportation funds) for demand management, including the programs of Transportation Management Associations.
- Make investments that *support* development in cities, planned growth areas, distressed areas, centers, redevelopment areas, brownfield and grayfield sites, and other places with existing infrastructure.
- Scrutinize investments outside the above areas, to ensure that alternatives are examined, that they are justified by economic and community needs, and that sprawl-inducing impacts are minimized.
- Fund investments that encourage compact, mixed-used development, that support transit use ("transit oriented development"), *safe* walking/biking, *access to open space and recreation*, and cost-effective use of existing or planned public infrastructure.
- Use investments to help communities implement the North Jersey Regional Comprehensive Economic Development Strategy (CEDS), with special attention to facilitating access to jobs for all residents and communities.
- Protect the character of communities and the natural environment through context-sensitive design, traffic calming, historical preservation, roadway beautification and creative placemaking strategies.
- Develop transportation improvements that distribute benefits and burdens equitably and serve all communities, including low-income residents, minority populations, senior citizens, the disabled, and children.

Make Travel Safer Improving safety and security should be explicitly incorporated in the planning, design and implementation of all investments.

- Allocate approximately 4 percent of overall spending to direct safety improvements, while also fully incorporating safety enhancements in other investments.
- Enhance safety in areas with high fatality and injury rates, with particular attention to pedestrian travel and safety for seniors.
- Target investments to address priority crash types identified in the New Jersey Strategic Highway Safety Plan.
- Use NJ TRANSIT Safety Programs to improve safety.
- Develop improved safety measures at at-grade rail crossings along heavily traveled corridors and other measures to address freight movement safety.
- Consider national security and disaster response issues in facility designs.

Fix it First The existing transportation system requires large expenditures for maintenance, preservation, and repair, and its stewardship should be the region's highest priority.

Investment Guidelines

- Invest 73 percent of overall spending in maintenance and preservation, with about 36 percent going to transit, 20 percent to bridges, and 17 percent to roads.
- Maintain, preserve, rehabilitate, and replace infrastructure applying asset management techniques to address objective measures such as facility condition, level of use and projected service life ("life cycle").
- Coordinate preservation investments with those that enhance the resiliency of the regional transportation network.
- Utilize innovative preservation materials and techniques to improve environmental conditions or at least to minimize negative environmental impacts.
- Streamline project delivery to make more cost effective use of available funding.

Expand Public Transit Investment to improve the region's extensive transit network should be a high priority, including strategic expansions to increase capacity and serve new markets.

Investment Guidelines

- Allocate about 8 percent of total spending to enhancing and expanding public transportation (about 4 percent dedicated to enhancing the public transit system—projects such as station and operational improvements—and 4 percent for expansion—new bus routes, new or extended rail lines, etc.)¹
- Focus enhancements on improving the speed and reliability of trips, facilitating access to the system, incorporating pedestrian and bicycle facilities, integrating bus and rail services, and achieving new intermodal connectivity.
- Expand system *capacity* in measured steps based on the ability to attract new riders and achieve cost-effective operations.
- *Improve conditions and service at transit hub locations.*
- Build a new passenger rail tunnel under the Hudson River and associated new capacity for expanded service, which is the region's top transit expansion priority, by obtaining additional dedicated funding (beyond normal allocations that are subject to this regional capital investment strategy).

Improve Roads but Add Few Road investments should focus on making the existing system work better, and road expansion should be very limited without compromising the tremendous accessibility provided by the existing highway system.

- The investment mix should *allot about 3 percent of spending* to physically *enhance* roadways (such as renovating intersections or adding turning lanes).²
- Limit expanding roadway capacity (new roads or widening) to about 1 percent of funding.
- Use the NJTPA congestion management process and context-sensitive criteria to target roadway investments that improve travel time reliability and address bottlenecks and hotspots. Emphasize improvements that will help to expedite efficient goods movement flows.

¹ Maintenance, technological and safety/security improvements are addressed in other guidelines. Does not include additional dedicated transit funding, such as for trans-Hudson transit expansion.

² Particular road improvements, including technological, direct safety improvements, and creating dedicated freight facilities are addressed separately.

- Make improvements that strengthen parallel routes and network redundancy.
- Invest in new and retrofitted facilities that enable safe access and mobility of pedestrians, bicyclists, and transit users of all ages and abilities.
- Complement road improvements with transit, ridesharing, and pedestrian/bicycle projects to help limit auto trips.
- Avoid roadway expansion in environmentally sensitive areas or away from planned growth areas.
- Utilize environmentally beneficial materials and design in road enhancement and expansion projects.

Move Freight More Efficiently Investments should be made to improve the efficiency of goods movement because of its importance to the region's economy and quality of life.

Investment Guidelines

- Allocate about 3 percent of spending to dedicated freight improvements (such as freight rail facilities and intermodal infrastructure).
- Support the transport of goods with improvements in the operations, efficiency, and connectivity of roadway, freight rail, and waterborne facilities. Give priority to the region's major corridors, including critical urban and rural truck corridors as well as first and last mile connectors.
- Focus transportation investments on encouraging freight related redevelopment of brownfield sites and similar strategies particularly in and around *intermodal facilities and corridors*.
- Make investments that promote intermodal options and optimization where possible, including rail and waterborne freight movement via barges or ferries.
- Address impediments to national freight rail standard access.

Manage Incidents and Apply Transportation Technology Investments should be made to transportation systems management and operations to improve information flow, operational coordination, energy use, and other technological advances that can make the transportation system work smarter and more efficiently.

- About 4 percent of funding should be dedicated to direct incident/emergency management projects, intelligent transportation systems, and new technology, while incorporating such elements in other types of projects as well.
- Invest in cooperative planning and coordination among agencies to improve incident/emergency management and deployment of intelligent transportation systems.
- Invest in technological improvements in accordance with the region's Intelligent Transportation System (ITS) architecture.
- Fund development of systems that provide real-time *traffic*, *transit*, *parking*, scheduling, and connection information on travel conditions to public transit customers, roadway travelers, and freight movers.
- Provide for technology that serves first- and last-mile access to the public transit network.
- Invest in information systems that support information flow within and among operating agencies including those responsible for addressing roadway incidents.
- Invest in improved and standardized electronic fare and toll payment systems.
- Focus initial ITS investments on demonstration projects to evaluate potentially beneficial new technologies and systems.
- Invest in technologies that deliver environmental benefits, improve reliability, manage congestion, and streamline traffic flow.

- Support technology investments that are accessible/available to all travelers, regardless of income, age, disability, etc.
- Add cost-effective new technology infrastructure with demonstrable demand and benefits, such as that serving connected vehicles, autonomous and driverless vehicles, and on-demand transportation.
- Assess unwanted impacts from technology (e.g., self-driving cars that circle endlessly or reduced public transit demand), and adopt appropriate policies to minimize these impacts.

Support Walking and Bicycling All transportation projects should promote walking and bicycling wherever possible.

Investment Guidelines

- About 2 percent of funding should be applied to build and redesign facilities for walking and biking.
- Enhance or create pedestrian and bicycle facilities, including sidewalks, bike lanes, and bike paths, which improve their connectivity for walking and biking trips and also complement other transportation improvements.
- Coordinate roadway and transit projects with pedestrian and bicycle improvements made by counties and municipalities.
- Target improvements to areas with existing, growing, or strong potential for walking and bicycle travel.
- Invest in improvements that support walking by children (such as Safe Routes to School) and others with limited motor vehicle travel options.
- Invest in innovative projects such as Complete Streets and bike-share programs that support increased and safer walking and bicycling.
- Make use of environmentally beneficial materials and design for pedestrian and bicycle facilities.

Increase Regional Resiliency Investments should be made to mitigate risks associated with climate change, extreme weather, homeland security, and other threats. Investments should consider criticality of infrastructure, vulnerability, and level of risk.

- Prioritize transportation investments that offer additional benefits for resiliency, for system preservation projects as well as upgrades and expansions.
- Incorporate vulnerability and risk assessments into project development.
- Scrutinize investments that are in places highly vulnerable to potential flooding/sea level rise.
- Invest in alternate fuel infrastructure in support of energy independence.
- In concert with Enhance Roads and Expand Transit guidelines, coordinate investments within and across modes to strengthen parallel routes, enhance regional connectivity, increase the availability of mode options, and increase network redundancy.
- Make investments that support the targets of the Global Warming Response Act of 2007, addressing New Jersey's greenhouse gas reduction goals and related NJ State Plan recommendations. Coordinate such investments at state, regional, and local levels.