NJTPA
Connecting
Communities

NJTPA NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

APPENDIX E: Regional Capital Investment Strategy

Connecting Communities DRAFT Appendix E: The Regional Capital Investment Strategy

Overview

The economic health and overall future of northern and central New Jersey depend greatly on its transportation system. By leading the metropolitan transportation planning process, the North Jersey Transportation Authority (NJTPA) makes decisions that significantly affect how the region prospers, and its communities grow and evolve. The region faces opportunities and challenges, foreseen and unforeseen, with economic shifts, environmental changes, technological developments, and demographic trends. This Regional Capital Investment Strategy (RCIS) approaches the region's competing demands through a balanced, realistic approach to regional transportation spending.

In its long range transportation plan (LRTP), the NJTPA identifies regional goals that provide a foundation for planning, project development, and capital programming. The agency programs over $3 billion each year in capital investments. The RCIS provides policy and planning direction and guides project selection. In turn, the NJTPA prioritizes projects based upon criteria related to its planning goals and consistent with the RCIS.

Over the NJTPA's 25-year planning horizon, significant funding will be available for transportation investments. However, even with an increased revenue stream, the investment will fall short of fully addressing the region's transportation needs, making identifying investment priorities more crucial. As the NJTPA policy, the RCIS seeks to best balance the region's investments to realize a robust and positive long-term future for the region.

This RCIS is based on guidance from the NJTPA Board of Trustees and its vision for the transportation system that is defined through established investment principles. The NJTPA has periodically refined and updated the RCIS since its initial publication in 2005, and, as presented in this document, has been comprehensively refined in support of the LRTP that will be adopted in 2025. This document reflects consideration of pressing regional issues and emerging funding sources, and includes enhanced attention to performance measures and outcomes, greater accounting for all transportation spending within NJTPA purview, and recognition of historical funding decisions and planned programs and projects. These existing conditions are embodied in nine investment principles,

Considering the present goals of the LRTP and utilizing spending projections from the most recent 10-year capital plan, the RCIS targets allocations among 16 categories of capital investment within three thematic groups. The RCIS guidelines identify how projects and programs within each category should be planned and designed to help the region achieve desired performance outcomes. The allocation targets largely mirror current spending patterns, with some adjustments, and therefore reinforce past investment decisions by the NJTPA and partner agencies.

IMPORTANT NOTE: The following items pertain to this policy.

- The RCIS allocation goals are intended to apply to "general purpose" transportation funding sources. In general, if separate funding is provided for a large scale project or program, that funding would fall outside of the RCIS allocation goals.

- The investment strategy allocations are long-term and approximate targets. The precise levels of funding applied to the various spending categories will understandably vary from year to year.
- The RCIS assumes overall funding levels will be consistent with historical trends as identified in LRTP financial elements. Significant deviations from these levels would likely require adjustments to allocations to remain consistent with the spirit of this RCIS. For example, additional revenue might allow for more system improvement, acknowledging achievements in system preservation. Conversely, less funding might require larger allocations to preservation.

Investment Principles

The intent of the RCIS can be summarized as a set of nine principles:

1. *Plan and design all projects and programs to achieve regional planning goals and measurable **performance outcomes**, including:*
    a) Environmental improvement and climate resilience
    b) Prosperity, equity, and vibrant communities
    c) Safety and health
    d) Travel accessibility and reliability

2. *Preserve and make the transportation network more **resilient***
    The existing transportation system requires large expenditures for maintenance, preservation, and repair. Investments should be made to adapt to risks associated with sea level rise, extreme weather, homeland security, and other potential threats. Investments should consider criticality of infrastructure, vulnerability, and level of risk.

3. *Engineer, educate, and enforce transportation **safety***
    A safe system approach, which works by building and reinforcing multiple layers of protection to both prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur, should be explicitly incorporated in the planning, design, and implementation of all investments.

4. *Expand and support **public transit** and shared rides*
    Investment to improve the region's extensive transit network should be a high priority, including strategic expansions to increase capacity and to serve new markets. Support should be given for ridesharing and first-last mile strategies and transit-supportive land use.

5. *Support **active transportation** and complete streets*
    All transportation projects should promote walking, bicycling, and other active transportation modes wherever possible. Roads and streets should balance capacity for all appropriate forms of travel considering their location, context, and function.

6. *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.

7. ***Improve roads**, add few; supporting resource-sensitive land use and reconnecting communities*
    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 roadway system. Opportunities to facilitate more resource-sensitive land use policies that lower environmental impact and mitigate disruption to communities by roadways should be considered.

8. *Manage **travel demand** and **efficiently operate** the transportation system*
    Investments should support motorized trip and vehicle miles reduction, and transportation system management should improve information flow and operational coordination.

***9. Leverage technology**, including micromobility and electrification*

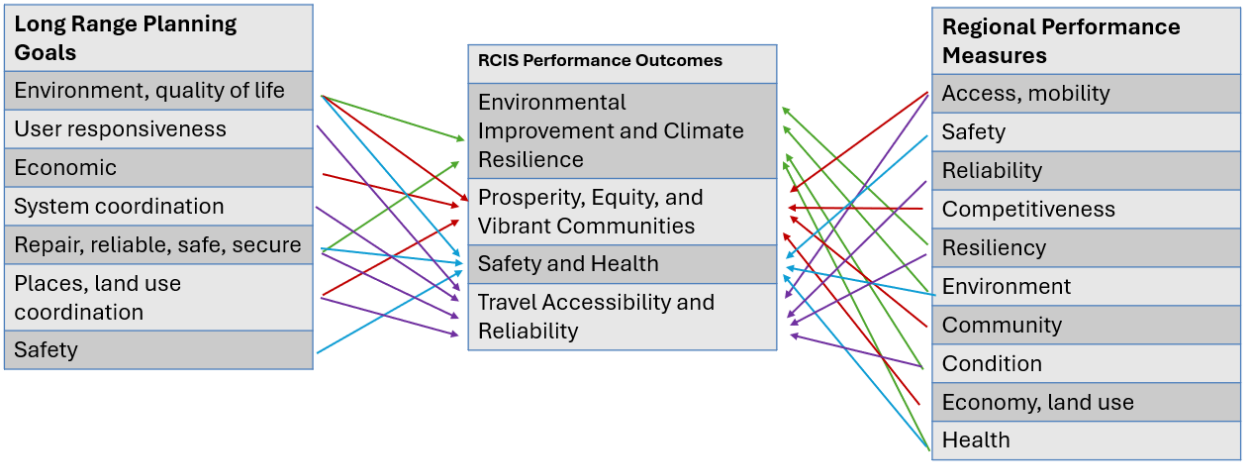
Investments should take advantage of technological advances that make the transportation system work smarter, more efficient, more equitable, and use clean and renewable energy.

Performance Outcomes and Measures

The RCIS is intended to help generate a variety of benefits for the region, explicitly defining those benefits in the context of established NJTPA planning goals, performance measures, and targets. Under three federal laws, Moving Ahead for Progress in the 21st Century Act (MAP-21) its successor Fixing America's Surface Transportation (FAST) Act, and the most recent Infrastructure Investment and Jobs Act (IIJA), State Department of Transportations (DOT) and Metropolitan Planning Organizations (MPO) are required to conduct performance-based planning and programming by tracking performance measures and setting data-driven targets for the measures. Agencies must also select projects and programs to help meet those targets. The RCIS serves as a foundation for this process.

The four performance outcomes identified in the first investment principle (broadly: environment, communities, safety, and accessibility/reliability) are intended to incorporate measures by which investment types can be evaluated for their ability to produce a transportation system in line with the RCIS principles. By using performance outcomes as a qualitative evaluation metric, the RCIS can provide stronger justification for why investment targets are set at the levels shown. Table 1 shows the connections among the long range planning goals, the RCIS performance outcomes, and the NJTPA regional performance measures.

Table 1: RCIS Performance Outcomes Connections



Categories, Allocations, Guidelines, Impacts

The RCIS groups similar types of projects into sixteen categories, which are further grouped into three category groups. These categories cover the range of projects and programs that the NJTPA oversees in its biannual Transportation Improvement Program (TIP). The sections that follow provide more information on each group and individual category, including target allocations, potential impacts, and investment guidelines that discuss ways to maximize desired outcomes and minimize adverse impacts.

Categories represent projects and programs with similar core functions, either in their types of work, their primary outcomes, or in their primary modes, shown in

Table **2**. The RCIS categories reflect similar or identical project classifications applied over many years by the NJTPA and partner implementing agencies in planning and program management. Some updates were made to the categorization scheme for this RCIS in order to call out projects worthy of increased priority and attention, given changes in policy, regional issues, and LRTP goals. Additionally, funding that was not included in previous RCIS has been categorized, including broader programs or overhead spending. It is important to recognize that an individual project or program may serve multiple functions (e.g., a bridge repair may add or improve a pedestrian walkway and/or bike lane); however, only one (primary) RCIS category is assigned to each project/program.

For each category, a **funding allocation** is identified. This allocation reflects the **target percentage** of available transportation funding that should be allotted to that category. Allocations are formulated with attention to supporting performance measures and outcomes, historical spending patterns, and currently planned programs and projects. Investment categories in which outcomes are expected to be largely positive across all categories are allocated a larger share of spending within its broader category group.

IMPORTANT NOTE: Due to the enhancement to the categories in this RCIS, allocation percentages are not numerically comparable to those in the prior NJTPA RCIS. However, relative changes from the prior allocations are interpreted for each category.

Table 2: RCIS Investment Categories and Example Project Types

Category Group	RCIS Category	Project Type Examples
System Preservation (55%)	Bridge Preservation	Bridge maintenance, rehabilitation, replacement
	Transit Preservation	Operation of existing services, continued maintenance of facilities and equipment, rolling stock and bus acquisition
	Road Preservation	Repaving, signage, lighting, drainage repairs
System Support (15%)	Program Management	Overhead for project planning and delivery, maintenance equipment, staff augmentation, consulting and support services, IT services
	Local System Reserve	Reserve funds, discretionary funds for municipalities and counties, future NJTPA projects
System Improvement (30%)	Transit Enhancement	Station/stop improvements, operational efficiency, increased service, amenities, ADA improvements, signaling, park-and-rides
	Transit Expansion	New routes, new facilities and rail lines, major rail infrastructure
	Road Enhancement	Signalization, intersection geometry, access/egress improvement, ramps, auxiliary/ turning lanes, shoulders, roundabouts
	Road Expansion	Grade separation, new travel lanes
	Dedicated Freight	Dedicated freight roads, freight rail track, intermodal facilities, port access/egress, truck safety
	Pedestrian and Bicycle	Sidewalks, bike lanes and paths, pedestrian crossing, greenways
	Direct Safety	Traffic calming, median and shoulder treatments, railroad crossings
	ITS and Incident Management	Connected vehicles technology, incident management, signal prioritization, messaging, automation, artificial intelligence
	Travel Demand Management	Congestion pricing, high-occupancy vehicle lanes, paratransit
	Environment and Climate	Air quality projects, environmental meditation, storm and flood protection, system hardening, nature-based projects, EV and electrification programs, evacuation routes
	Placemaking and Land Use	Transportation-Oriented Development, Transit Village Program, Reconnecting Communities, downtown revitalization plans, master planning programs

Category groups (

Table **2**) are used to first consider allocation of all available funding. Allocations for each category are specified within each group (i.e., allocations for categories within each group sum to 100 percent).

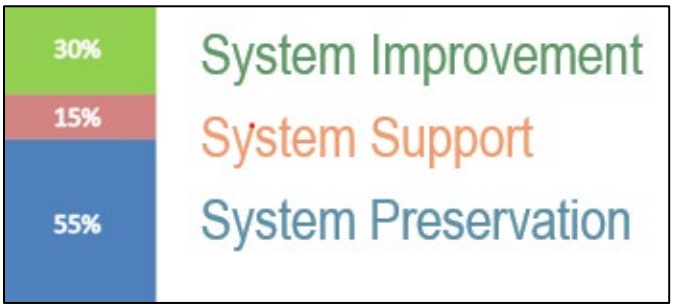
A set of **guidelines** is presented for each category, and associated with one of the four outcome areas:

- Environmental improvement and climate resilience
- Prosperity, equity, and vibrant communities
- Safety and health
- Travel accessibility and reliability

These guidelines provide general prescriptions for how investments within each category can meet the nine principles and have positive performance outcomes. Guidelines may call out specific project development approaches, project types, coordination needs, or economic geographies where performance outcomes can be most impactful. For further description on expected **performance impacts** information, an appendix is provided to present further justification.

Overall Allocation Across Category Groups

System Preservation (55%)



Given its enormity and age, the existing transportation network demands most transportation funding just to maintain it in a state of good repair. This group of categories includes preservation of bridges, public transit facilities, and roadways in the NJTPA region.

Addressing federal requirements, regional partner agencies like New Jersey Department of Transportation (NJDOT), NJ TRANSIT, and the Port Authority of New York and New Jersey (PANYNJ) employ transportation asset management plans and public transit asset management plans to assist in executing cost-effective preservation programs. This RCIS seeks to modestly reduce the fraction of spending on preservation from prior levels to **55 percent** of total funding to allow for greater benefits in the system improvement category, taking advantage of such asset management techniques and making proactive life-cycle cost investments. Streamlined project delivery should make more cost-effective use of available funding as well.

System Preservation Guidelines:

- Reduce costs by using life cycle planning (LCP), which seeks to manage assets over their entire life by capitalizing on timely and appropriate treatments to extend the life of assets at the lowest reasonable cost.

Meet modern safety, environmental, and mobility standards in preservation projects, and prioritize greater investment in older facilities where these standards may be most absent.

System Support (15%)

This group of categories covers a wide array of large planning and support efforts that are critical to the operations of the regional transportation system, as well as reserve funding for local municipality and county project support. The RCIS calls for maintaining the **15 percent** allocation to this group reflected in the 2026-2035 NJDOT capital program, expecting these programs to remain consistent over time. *(Note that the categories in this group were generally not addressed in the prior NJTPA RCIS.)*

System Support Guidelines:

- Identify programs and overhead spending that maximizes the benefits of investments in other categories.
- Consider regional objectives and goals when allocating local and sub-regional aid funding to ensure positive performance outcomes.

System Improvement (30%)

Enhancements and expansions of the transportation network and other related improvements make up this category. Funding in these areas should take advantage of opportunities to yield significant benefits for the region's travelers and residents. The RCIS allocates **30 percent** of funding on system improvement, slightly more than previously allotted. Transit enhancement, transit expansion, direct safety improvements, pedestrian and bike investments, and environment and climate investment warrant particular emphasis due to their expected performance benefits.

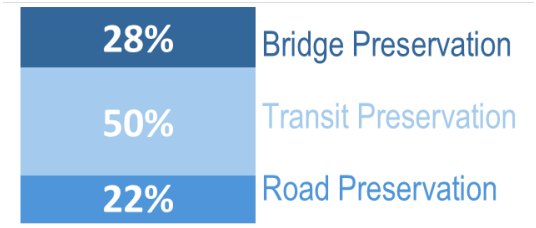
System Improvement Guidelines:

- Plan, design, and deliver context-sensitive multimodal improvements that support people, accessibility, and connecting communities.
- Focus investments on improvements that support the targets of the Global Warming Response Act of 2007, the 2019 New Energy Master Plan, and the NJDEP-sponsored GWRA 80x50 Report addressing New Jersey's greenhouse gas reduction goals and related NJ State Plan recommendations. Coordinate such investments at state, regional, and local levels.

Allocation within Category Group—System Preservation (55% of total funding)

Bridge Preservation (28% of System Preservation spending)
Bridge preservation projects encompass almost all bridge-based work, including maintenance, structural upgrades, replacement, or weatherproofing.

Of system preservation expenditures, **28 percent** should be targeted for bridge preservation. The allocation within the System Preservation group is like the prior RCIS but is reduced somewhat from levels of the 2026-2035 NJDOT capital program with the expectation that major bridge problems are being addressed and to allow for greater system improvement.



Bridge Preservation Guidelines:

- Expand accessibility for all modes during bridge preservation projects, including the provision of pedestrian, bicycle, and transit access where feasible.
- Focus on areas of high climate risk, especially where other travel options are limited. Where appropriate, bridge replacements should include an assessment of future water levels and select appropriate heights to avoid flooding impacts.
- Prioritize projects where improvements to incorporate modern safety standards can have major impact, such as bridges with high crash rates and/or bike/pedestrian incidents.
- Evaluate benefits of bridge preservation projects with respect to system improvement projects that can produce high reliability for travel time and accessibility. Consider the relative benefits of bridge preservation in areas with multiple connection options against preservation projects where the bridge is critical to the region.
- Provide security implementations for bridges such as side-barriers and protective netting that can mitigate harm for all users
- Utilize innovative materials in preservation projects and employ techniques to minimize negative environmental impacts or improve environmental conditions where possible.

Transit Preservation (50% of System Preservation spending)
Substantial work is needed to ensure that public transit infrastructure is in good condition, with projects like repairing lines and stations or replacing fleets important for maintaining operational performance and supporting ridership.

Of system preservation expenditures, **50 percent** should be targeted for transit preservation. The allocation within the System Preservation group is like the prior RCIS and slightly lower than the 2026-2035 NJDOT capital program. After historical underinvestment in transit infrastructure, high levels of

funding may not need to be the long-term norm, and this should allow greater emphasis on system improvement.

Transit Preservation Guidelines:

- Focus preservation improvements on geographies and on specific assets where existing service is most unreliable, or where operational disruptions can impact a significant portion of the transit network.
- Increase transit asset resilience by considering climate risk and including measures such as raising infrastructure, stormwater filtration, and flood barriers to protect critical assets
- Provide for increased socioeconomic equity benefits through a prioritization of transit preservation investment in communities that are especially reliant on transit.

Road Preservation (22% of System Preservation spending)
Road preservation projects are typically part of rebuilding, enhanced maintenance, or highway repair programs. Preservation projects may address previous design standards, but they inherently exclude key elements that enhance roadway performance.

Of system preservation expenditures, **22 percent** should be targeted for road preservation. The allocation within the System Preservation group is similar to the prior RCIS but is higher than the allocation within the 2026-2035 NJDOT capital program.

Road Preservation Guidelines:

- Identify road corridors or specific geographies where significant degradation impacts the accessibility of travel for all modes and prioritize these areas for investment.
- Prioritize projects that alleviate safety hazards, particularly near bike, pedestrian, or waiting areas.
- Increase the road network's ability to withstand stronger and more frequent storms.
- Incorporate significant investment in best practices for roadway maintenance to clear hazards and keep roadways operational during or immediately after storms.

Allocation within Category Group—System Support (15% of total funding)

Program Management (50% of System Support spending)
Program management covers a wide array of planning and support efforts that are critical to the operations of the regional transportation system. Program management covers overhead, consulting services, training, airport operations and security programs, information technology, and planning efforts conducted by NJTPA and its partner agencies.

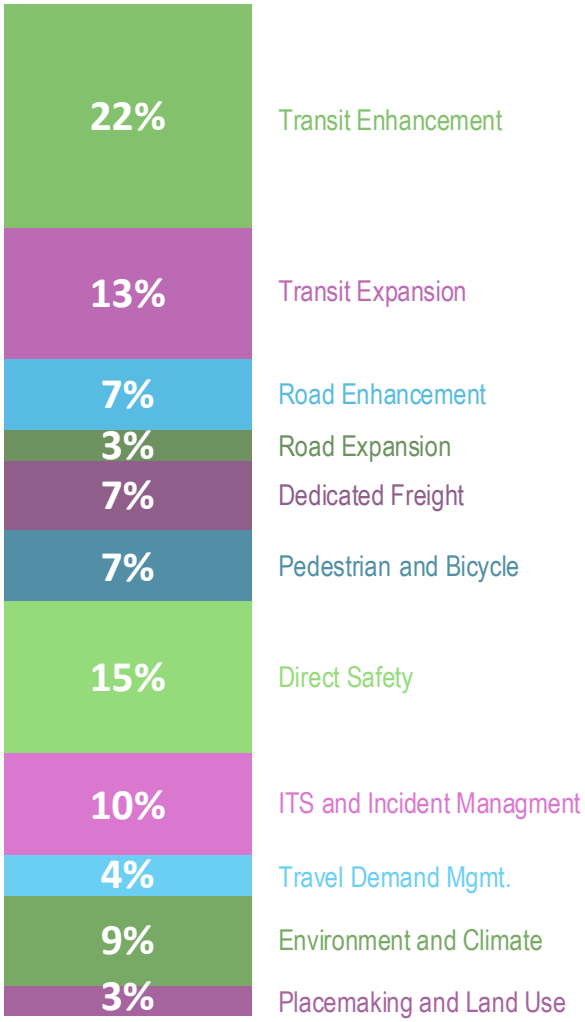
Of system support expenditures, **50 percent** should be targeted for program management. This spending level is the similar to that in the 2026-2035 NJDOT capital program.

Local System Reserve (50% of System Support spending)
Local system reserve covers a set group of funds held for local municipality and county project support. This can act as reserve funding to help clear spending gaps on urban aid or local projects. Of system support expenditures, **50 percent** should be targeted for local system reserve. This spending level is similar to that in the 2026-2035 NJDOT capital program.

Allocation within Category Group—System Improvement (30% of total funding)

Transit Enhancement (22% of System Improvement spending)
Public transit enhancements may include vehicle procurement, station amenities and services, and service improvements like signaling. Enhancement focuses on improvements to service and amenities that augment quality and reliability.

Within system improvement, **22 percent** of funding should be allocated for transit enhancement. This is a higher level than the prior RCIS, but lower than the 2026-2035 capital program, because the capital program includes significant transit enhancement that is unanticipated to continue into the future. Benefits are expected across all performance outcomes.



Transit Enhancement Guidelines:

- Provide improved transit service where there are large clusters of residents and workers.
- Include transit amenities in train stations or bus stop improvement projects that may attract zero-emission access to transit, such as bike parking, improved waiting areas, and more.
- Facilitate safety improvements such as grade separation for trains, improved stopping areas for buses, and vehicle safety investments can make travel safer for transit users and other travelers around the transit system.
- Coordinate investments within and across modes to provide and/or enhance parallel routes, regional connectivity and integrated bus and rail services.

Transit Expansion (13% of System Improvement spending)
Added track capacity, the expansion of transit lines, and associated planning for increased transit service account for spending in this category.

Of system improvement expenditures, **13 percent** should be targeted for transit expansion. This spending allocation is slightly lower than the prior RCIS. Projected 2026-2035 capital program amounts are significantly lower; however, these amounts do not currently include the dedicated spending (such as on Gateway trans-Hudson program, that is in addition to the focus of the RCIS) along with post-Gateway transit expansion possibilities. Benefits are expected across all performance outcomes.

Consideration of the cost of future maintenance and operations for new transit capacity should be factored into this category of investment.

Transit Expansion Guidelines:

- 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).
- Provide opportunities for both rail and bus expansion, and pair new transit investment where underutilized areas can gain further investment.
- Provide investments for the safety of transit users and other travelers near transit stops, stations, and crossings.
- Coordinate investments within and across modes that can provide further transit options that divert vehicle trips and reduce emissions.
- Expand system capacity in measured steps based on the ability to meet travel demand, attract new riders, and achieve cost-effective operations.

Road Enhancement (7% of System Improvement spending)

Roadway enhancement focuses on roadway improvements that don't add capacity to the network. These may include intersection redesigns, highway access/egress improvements, geometry changes, or other road redesigns that are meant to improve traffic flow.

Within system improvement expenditures, **7 percent** should be targeted for enhancing roads. This is lower than the prior RCIS and the 2026-2035 capital program, intended to free up funds for other categories. It also reflects the mixed impacts of road projects, potentially addressing travel reliability or safety, but also leading to unintended negative outcomes such as encouraging single occupant vehicle travel or increasing speeds which may lead to increased crash severity.

Road Enhancement Guidelines:

- 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 public transit and goods movement flows.
- Specify the expected benefits of roadway enhancement and provide mitigative actions for how negative consequences, particularly potential increases in VMT, can be avoided.
- Identify roadway enhancements like access/egress and ramp redesigns or limited widenings that improve congestion, which can relieve stop-and-go congestion and associated emissions.
- Avoid interventions that allow for higher speed, especially near intersections or areas where interactions with other modes is common.
- Provide improvements and roadway design options that mitigate further safety issues like speeding, unsafe turning or merging, or separate vehicle modes from bikes and pedestrians.
- Consider improvements near economic centers like ports, retail centers, and areas of high-density roadways, which can improve access and create positive economic outcomes.
- Utilize environmentally beneficial materials and design in road enhancement and expansion projects.
- Include accessibility and reliability for other modes, such as transit amenities on surface streets, improved bike and pedestrian amenities and crossings, and limited capacity increases.

Road Expansion (3% of System Improvement spending)
New capacity includes the construction of new roadways, connections, or lanes.

3 percent of system improvement expenditures should be applied to expanding capacity on the roadway network. This is slightly lower than called for in the prior RCIS and also slightly lower than the planned expenditures in the 2026-2035 capital program (which includes a few expansion projects). Consistent with the NJTPA's federally required Congestion Management Process, roadway capacity increases should be minimized with alternatives strongly encouraged due to their potential to induce vehicular travel and result in negative climate and safety outcomes.

Road Expansion Guidelines:

- Consider roadway expansion only when the congestion management process is followed, and no other alternatives are possible to meet regional mobility needs.
- Ensure improvements for accessibility and reliability for all users by including bike and pedestrian amenities that either expand the bike/ped network or mitigate any obstructions the expansion may cause. When expansions do not include these amenities, they are negatively impacting a goal that centers travel accessibility and reliability for all users.
- 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.

Dedicated Freight (7% of System Improvement spending)
Projects with specific benefits to goods movement and commercial travel needs may focus on freight hubs like seaports and distribution centers, local roadways that service these locations, and major freight corridors like the interstate system. Truck stops and safety improvements geared towards trucks are also covered in this category.

Dedicated freight projects have pointed benefits for economic development and travel reliability. Within system improvement, **7 percent** of funds should be allocated to dedicated freight improvements. This is slightly lower than that in the prior RCIS, but higher than in the 2026-2035 capital program.

Dedicated Freight Guidelines:

- 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.
- Provide system improvements that lessen both truck VMT and emissions produced per truck mile driven.
- Seek opportunities to add capacity for alternative freight movement away from communities, especially in locations where truck traffic has negative public health outcomes.
- Focus transportation investments on encouraging freight related redevelopment of brownfield sites and similar strategies particularly in and around intermodal facilities and corridors.
- Address impediments to national freight rail standard access.

Pedestrian and Bicycle (7% of System Improvement spending)
Infrastructure for active transportation includes sidewalk or bike lanes, off-road trails, bike parking amenities and accessibility projects for non-motorized users. Pedestrian and bicycle enhancements focus on new as well as improvement to existing infrastructure.

Within system improvement, **7 percent** of funding should be allotted to pedestrian and bicycle investment. This is a similar to the prior RCIS, historic spending, and much higher than that represented in the 2026-2035 capital program. Bike and pedestrian improvements can generate high benefits across all performance outcomes, particularly safety and health, environmental and climate resilience, vibrant communities, equity, and accessibility. Though projects in other categories may include bike and pedestrian elements, this RCIS target reflects the value of specific active transportation infrastructure projects.

Pedestrian and Bicycle Guidelines:

- Enhance or create pedestrian and bicycle facilities, including sidewalks, bike lanes, and bike paths, which improve their connectivity for walking and biking trips, facilitate and improve access to transit and also complement other transportation improvements.
- Estimate existing and new users to project the extent of improved conditions and potential reduction in crashes involving bikes and pedestrians.
- Invest in improvements that support walking by children (such as Safe Routes to School) and others with limited motor vehicle travel options.
- Dedicate funding for off-road bike and pedestrian infrastructure where social and economic benefits can spur dense development and attract high rates of ridership.
- Consult other opportunities for bike and pedestrian infrastructure to serve environmental needs such as open space or storm adaptation infrastructure, where off-road trails can act as a buffer between the water and less resilient infrastructure.
- Coordinate bike and pedestrian projects with other local and regional transportation improvements or preservation projects to develop a stronger network that can encourage active transportation for more needs.

Direct Safety (15% of System Improvement spending)
Direct safety improvements have a sole or primary purpose to reduce vehicular crashes, transit-related incidents, or other conflicts across modes. Implemented projects might focus on separating modes, reducing speeds in high-crash areas, and other approaches.

Recognizing and encouraging that safety should be part of many project types, direct safety investment allocation should be **15 percent** of system improvement expenditures, which results in similar funding levels to the prior RCIS, and also similar to the 2026-2035 capital program. Other transportation projects and programs should increase incorporation of safety features as indicated in the RCIS guidelines below, and for other categories as well.

Direct Safety Guidelines:

- Develop projects that separate routes between users or otherwise make service more desirable, increasing the potential for mode shift to active transportation and developing moderate emissions benefits.
- Target direct safety improvements to highly trafficked areas or for vulnerable users like pedestrians and seniors, using resources like the New Jersey Strategic Highway Safety Plan to coordinate investments.

- Implement 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.

Intelligent Transportation Systems and Incident Management (10% of System Improvement spending)
Intelligent Transportation Systems (ITS) and incident management programs cover a variety of technology applications, including critical systems for emergency communications and more future-focused investments in connected vehicles. ITS programs include both existing assets and advanced planning due to the dynamic technology landscape.

Within system improvement expenditures, **10 percent** should be targeted for ITS and incident management. This is lower than specified in the prior RCIS but slightly higher than the 2026-2035 capital program. Effective incident management is essential to fostering reliable travel, an essential aspect of accessibility. Technology can contribute to safety, and when tailored appropriately, address equity, and support economic prosperity and regional resilience.

Intelligent Transportation Systems and Incident Management Guidelines:

- Focus initial ITS investments on demonstration projects to evaluate potentially beneficial new technologies and systems.
- 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, electronic fare and payment systems, and other cost-effective technology infrastructure that demonstrates societal or economic benefits.
- Provide for technology that serves first- and last-mile access to the public transit network.
- Invest in incident response best practices in highly vulnerable areas where many people may be evacuating or where language barriers may create additional challenges for emergency response.
- Focus reliability-based ITS programs on corridors of large goods movement or where freight traffic is especially sensitive to reliability issues, as these improvements can strengthen the competitiveness of goods travel in the state.
- Invest in electric vehicle infrastructure in support of state and national carbon reduction goals.
- Assess unwanted impacts from technology (e.g., self-driving cars that circle excessively, or reduced public transit demand) and adopt appropriate policies to minimize these impacts.
- Invest in technological improvements in accordance with the region's Intelligent Transportation Systems (ITS) architecture.

Travel Demand Management (4% of System Improvement spending)
Travel demand management encourages shorter and fewer motor vehicle trips, especially those involving single-occupancy vehicles. This includes a variety of strategies to achieve efficiencies with existing infrastructure, such as high-occupancy lanes, congestion and other pricing strategies, and rideshare programs.

Within system improvement, **4 percent** of funding should be allocated for travel demand management, resulting in somewhat lower funding levels than the prior RCIS but slightly higher than the 2026-2035 capital program. Travel demand programs can focus benefits to markets (such as paratransit for the elderly or mobility challenged) and thus support equity goals along with accessibility and reliability outcomes.

Travel Demand Management Guidelines:

- Consider the whole of the region and areas outside the region when evaluating the outcomes of a potential program.
- Focus TDM planning in areas of high congestion that impact economically critical corridors like key commuting corridors or freight corridors.
- Evaluate TDM measures that can remove risky mobility scenarios like varying speed, lane changes, or unpredictable driving resulting from congestion.
- Use existing tools like activity-based demand models and modern data tools that can provide more accuracy in predicting traffic flows and the impact of TDM measures.

Environment and Climate (9% of System Improvement spending)

Investments with a primary purpose to reduce air or water pollutants, improve the environment and natural habitats, and mitigate and adapt to climate change and extreme weather may include hardening of facilities, alternate routing, storm and wastewater management, and other such projects and programs. Many projects/programs that were previously labeled as road/bridge preservation, road enhancement, TDM, safety, and environment/air quality are accounted for in this category.

Within system improvement, **9 percent** of funding should be spent on environment and climate investments. The 2026-2035 capital program assessed with this new RCIS category includes a slightly smaller amount of planned projects and programs. Environment and climate investment is an increasingly important category as the threats of climate change become more apparent and increased visibility on protecting assets and travelers is a focus of public sector responsibilities. These investments should have significant benefits, particularly in environment and climate resilience.

Environment and Climate Guidelines:

- Prioritize environmental justice populations in all transportation investment, with a focus on projects that can improve health and resilience in these communities.
- Emphasize climate adaptation, storm or water protection, and asset hardening on assets of the highest monetary risk or where social and economic risks are most severe.
- Pair environmental projects with other improvements near transit facilities to promote sustainable development like transit-oriented development opportunities.
- Evaluate evacuation routes that may be at risk of inundation or damage from storms and prioritize investments that harden and protect these routes.
- Mitigate areas of the transportation network that are subject to frequent flooding or other impacts that detour traffic, cause congestion, limit access and reduce reliability.

Placemaking and Land Use (3% of System Improvement spending)

Downtown revitalization, area master plans, reconnecting community efforts, and other improvements to the built environment fall under this category. Allocation of funding within system improvement for placemaking and land use investments should be about **3 percent**. A new RCIS category, this is slightly larger than projects of this type in the 2026-2035 capital program, but such investments should grow as their scope and opportunities rise in the future. Revitalizing places has multiple benefits to community cohesiveness, personal health and safety, economic prosperity and growth, and accessibility. Reconnecting communities' projects may have specific equity benefits, working to restitch neighborhoods that have been divided by highways, often involving underserved communities.

Placemaking and Land Use Guidelines:

- Encourage shorter and fewer motor vehicle trips, especially those involving single-occupancy vehicles, through projects that provide economic options without the need of a car, such as transit-oriented development.
- 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.
- 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.

Conclusions

The RCIS is intended to provide guidance and direction for decision makers on how goals and objectives of long-range planning can be incorporated into investment decisions and demonstrate to the public how the investments we make in transportation systems play a role in the sustainability, safety, reliability, and prosperity of our region. To accomplish this, the RCIS organizes all general spending by a category, and assigns a target allocation for funding that is consistent with needs of the current system and the potential for those categories to positively affect performance outcomes centered around our regional objectives.

While the RCIS isn't designed to help prioritize any one project or program, it does help us understand what outcomes may be achieved when we spread our investments across the transportation needs of the region. Ultimately, the target allocation should reflect the ideal level of funding to maximize the benefits of each RCIS category. If investment is significantly lower for a certain category than the target, the performance outcomes and benefits detailed for each RCIS category may not be achieved. If investment is significantly higher than a target allocation, there may be a corresponding lack of investment in other RCIS categories that limits performance outcomes across all investments.

Given other sources of transportation system investment, the RCIS target allocations should not be viewed as a required threshold for successful implementation. The precise levels of funding applied to the various spending categories may vary significantly from year to year. Thus, successful implementation of capital investments is achieved when investment projections are close to their target across all categories over the course of a long-term capital program. Successful implementation can also be achieved when investments made in smaller categories like roadway enhancements or road expansion have been made to maximize potential benefits and mitigate unintended consequences.

The RCIS is a living policy and document and is intended to be reviewed and updated as investments are made, new needs and objectives for the region arise, or new challenges present themselves to the region. As regional investment in preservation and state of good repair continues, its overall need may be lessened, and more investment should be considered for system improvement. This is born out in this update, as preservation target spending has been reduced from 60% of all general funding in the legacy RCIS to 55%. Even as regional needs change, the RCIS should remain an important tool to provide guiding transportation investments towards a healthier, prosperous, and sustainable future.

Appendix A: Performance Outcomes and Impacts by RCIS Investment Category

System Preservation

Bridge Preservation Impacts

Performance Outcome	Impacts
	Bridge preservation can have important climate change adaptation benefits in areas that are especially flood-prone or on existing flood evacuation routes. As pieces of critical infrastructure, they are vital for communities at risk of climate-related hazards. Preserving existing bridges is not typically associated with additional vehicular travel.
	Bridge preservation may have high performance outcomes for economic competitiveness and placemaking when keeping areas of high economic activity connected or facilitating quicker goods movement. Otherwise, impacts are typically neutral.
	Bridge integrity is critical for a safe roadway network, and funds to support bridge inspection and rehabilitation programs will improve the structural integrity of bridges. Safety is enhanced as facilities are renovated conforming to improved safety codes
	Bridge preservation projects typically focus heavily on maintaining accessibility for current users but should also work to incorporate options for other modes when available.

Transit Preservation Impacts

Performance Outcome	Impacts
	As transit ridership can be sensitive to maintenance and other on-time performance delays, simply maintaining existing services can yield emissions and other benefits. Transit preservation is not typically focused on climate adaptation projects (those projects would typically be categorized as Environment and Climate within the System Improvement group).
	Transit preservation serves economic competitiveness and placemaking by keeping areas of high economic activity connected.
	Transit preservation can improve safety outcomes when older infrastructure is replaced with newer, safer infrastructure.
	Improved reliability of the transit network is the chief outcome when transit preservation investments are implemented. Because of transit's ability to meet many RCIS principles, meeting preservation needs for transit is especially important in achieving a wide range of system-wide performance outcomes.

Road Preservation Impacts

Performance Outcome	Impacts
	Generally, road preservation will have neutral impacts on climate change performance outcomes, though investments should be considered whether they may exacerbate emissions-heavy trips. In these cases, or when poor road conditions prompt diversions, modest emission outcomes can occur.
	Roadway preservation may have high performance outcomes for economic competitiveness and placemaking when keeping areas of high economic activity connected or maintaining goods movement. Otherwise, the impacts are typically minimal.
	Preservation projects will typically have slight safety benefits, as maintenance issues could cause damage to vehicles or even directly to users in the case of degradation near bike, pedestrian, or waiting areas
	Aside from avoiding deferred costs, maintaining accessibility and reliability is the chief purpose of roadway preservation projects.

System Improvement

Transit Enhancement Impacts

Performance Outcome	Impacts
	Enhancement may shift transportation modes to transit, potentially lowering vehicle miles traveled and associated emissions.
	Transit enhancement as economic development has shown to be effective in urban and suburban areas alike, attracting new residents and creating a market for users to work, live, and socialize. Transit-oriented development and transit villages have improved real estate value and the marketability of towns and neighborhoods. There are moderate benefits regionwide when reliability of transit is improved for commuters, and transit hubs can operate as a gathering place as well as a transportation amenity.
	Public transit's safety record, especially for rail, is typically stronger than other modes of transportation. General safety benefits can occur when transit enhancements shift modes to rail. Overall, public transit enhancements can improve safety outcomes but may be muted compared to other enhancements that deal with the highest rates of incidents.
	Transit enhancements have very high benefits for accessibility and reliability for those users, who disproportionately represent overburdened communities that have traditionally been deprioritized in transportation planning and investment.

Transit Expansion Impacts

Performance Outcome	Impacts
	Expansion opens public transit to users in new areas, to new trip types, and for new times of day, creating incentives for diversion to transit, as well as induced transit trips, thereby having positive impacts on emissions. Expansion can also have indirect impacts on density, creating urban environments that typically produce less emissions across most services, functions, and building types.
	Expansion projects can center placemaking with new transit coverage. Transit-oriented development can have a positive symbiotic relationship, as more livable communities around transit beget ridership, which in turn creates more opportunities for community amenities. Public transit has generally positive impacts on placemaking, especially in relation to sustainable urban development that aligns with many of northern New Jersey's goals. Beyond placemaking projects, public transit expansion has some of the highest potential for dense, livable development.
	Public transit expansion develops mobility options that are safer than most existing modes. Transit does not deal directly with those of highest risk, therefore the safety benefits for all travelers may be more muted than roadway enhancements and other projects. Overall, public transit expansion has small positive benefits for safety, but are muted compared to transit enhancement projects that add safety components to existing infrastructure and especially roadway enhancement and street safety projects that deal with users at high risk.
	Public transit expansion creates new mobility options for residents and workers in the region, helping relieve users from potential roadway congestion or other issues. Expansion of public transit coverage to new places gives greater accessibility for people who might not own a vehicle or are reliant on other modes of transportation beyond a personal car. Expansion has very high benefits for accessibility and reliability for users who disproportionately represent overburdened communities that have traditionally been deprioritized in transportation planning and investment. Expansion also provides a greater potential for diversion from other modes, providing small congestion relief benefits for those who may still rely on vehicles.

Road Enhancement Impacts

Performance Outcome	Impacts
	New enhancements will typically include stormwater and other infrastructure that add capacity for the transportation network to deal with rainfall and flooding, helping to adapt to more intense and frequent storms. If widening is occurring in areas with high transit or in places that may induce further auto travel, the added VMT is likely to negate any carbon emissions benefits from better traffic flow.
	Reliability improvements can help ensure that mobility issues do not adversely affect economic health. Roadway enhancements' role in placemaking can be very dependent on the project, though most enhancement projects focus on vehicular throughput, which has relatively negative impacts on placemaking in those locations. Bridge enhancements can have relatively small placemaking benefits when the bridge includes signature amenities or provides access for other modes. These features may be part of roadway enhancement when they are a small portion of a larger project but help add positive economic and social impacts.
	Roadway enhancements have many safety features as a primary or secondary feature in its description. As roadway users are the most at risk from transportation safety incidents, roadway enhancements have positive safety outcomes. However, roadway enhancement benefits are more muted than non-capacity roadway safety projects and investment could be reconsidered for other project categories like intelligent transportation system (ITS) projects.
	Many enhancement projects mitigate congestion at specific pinch points and improve traffic flow, all of which have positive travel time reliability improvements for drivers. Because of the prevalence of vehicular use for travel, enhancements that provide relief at key pinch points will have a meaningful positive benefit on reliability. However, projects that include widening and dispersion of typical congestion may create conditions that grow future traffic and do not address accessibility and reliability for other users. These potential disbenefits mute the positive accessibility and reliability outcomes of roadway enhancements compared to projects like transit enhancement, which have direct transit benefits and indirect benefits for all users.

Road Expansion Impacts

Performance Outcome	Impacts
	Roadway expansion projects at best may reduce VMT and emissions when a facility shortens existing trips, but typically will create conditions for induced demand and cement existing vehicular dominance that negatively impacts climate change goals in transportation.
	Highway development has been a core feature of urban decay, community erosion, and sprawled development with inequitable outcomes, especially for traditionally underserved populations. Expansion is primarily concerned with enhanced throughput, which acts negatively towards placemaking in locations where roadways are expanded. Additionally, expansion in dense areas may remove homes, businesses, and other services of existing communities. Improved economic conditions can be a positive impact of expansion where travel reliability is improved, but long-term trends of induced demand may nullify these improvements and create neutral economic outcomes regionwide, and negative ones where expansion has displaced existing businesses. Because of the limited conditions for roadway expansion to create long-term economic improvement or facilitate community improvements, roadway expansion generally has a negative outcome for these goals.
	Though expansion may create room for multimodal use, more harmful conditions may result if it allows for higher speeds near more vulnerable users like cyclists and pedestrians. Expansion may have indirect safety benefits if vehicles using local roadways are encouraged to use expanded limited-access facilities, but projects should consider the limitations of this given the feedback loop of induced demand on local roads, which may attract additional traffic. Because of inherent safety concerns in existing roadways and few attributes of expansion projects to mitigate these dangers, expansion has an overall slight negative safety impact.
	Roadway expansion's primary goal is usually centered around improved accessibility and reliability, and these are positive if real and sustainable. Expansion projects can have especially positive benefits when they connect areas with existing demand that are not efficiently served by the transportation network. Expansion of existing facilities (i.e. highway widenings) may have negative outcomes even when they improve access for other modes if the potential for congestion due to induced demand and latent vehicular demand are not curbed by other means. Given the propensity for expansion projects to be of existing facilities, expansion projects have a slight negative impact on overall accessibility and reliability goals.

Dedicated Freight Impacts

Performance Outcome	Impacts
	Given freight's outsized contributions to roadway emissions, enhancement programs that seek more efficient freight movement will likely have small positive emissions benefits. Outcomes may be stratified by community however, and projects that mitigate the impact of freight on climate-related topics like air quality can have more outsized impacts.
	Potential freight enhancement projects like rest areas, weigh stations, and technology improvements could have major safety benefits for drivers and other highway vehicle users. To the extent that these focus on mitigating truck-related crashes, safety benefits can be moderately positive even if safety is not the key goal of most freight enhancement programs. Freight enhancement typically focuses on efficient movement of freight, but local impact funding can help alleviate safety concerns for other travelers around freight vehicles.
	Given freight movement's major role in traffic, strong positive outcomes to accessibility and reliability can result when enhancements help move freight more efficiently on the transportation network.

Pedestrian and Bicycle Impacts

Performance Outcome	Impacts
	Bike and pedestrian enhancements facilitate better travel conditions for these users and create conditions to attract new users. As bike and pedestrian trips are almost entirely emissions free, new trips that are diverted from other modes have positive climate impacts. Bike and pedestrian infrastructure provide very positive climate change adaptation benefits on a per-traveler basis.
	Bike and pedestrian projects play a key part in creating more livable urban communities. Bike and pedestrian projects can have high benefits for placemaking. They have a large role in urban development and represent the largest number of projects where social cohesion and interaction is a feature of the infrastructure.
	Bike and pedestrian projects create categorically safer conditions for their users compared to prior conditions. Though bike and pedestrian projects may only affect a relatively small percentage of users compared to other projects, they have high positive impacts on traditionally underserved populations, as these modes are predominant in urban areas.
	Bike and pedestrian projects add accessibility for these users. Projects should seek to expand the accessibility of bike and pedestrian projects for all users who might not be served by existing infrastructure, including ADA-accessible pedestrian infrastructure. Bike and pedestrian projects as built in a network can have compounding effects on usability. Overall, these projects have positive impacts on accessibility and reliability, though the highest degree of impact can come when a cyclist or walker has a network of supportive infrastructure to use for their travel.

Direct Safety Impacts

Performance Outcome	Impacts
	Safety improvements may also have specific benefits for environmental hazards if existing conditions posed risk during storms or other inclement events. The net impact of direct safety improvements on climate change mitigation will largely be neutral, but safety investment should be specifically considered in places where active transportation is prevalent, as these improvements could have the highest benefits for increased diversion.
	Placemaking especially can benefit from direct safety investment when combined with other infrastructure and property investment in commercial areas. Safety improvements by themselves will have minimal impact on economic competitiveness but can multiply the benefits of other investment when making access and egress safer.
	Direct safety improvements have inherent benefits to safety metrics like crash rates or bike/pedestrian incidents, though the efficacy of certain safety improvements can vary based on design quality, geography, land use, roadway use, and more. Vetted studies from sources like FHWA's Crash Modification Factor Clearinghouse can help assess performance outcomes of specific improvements based on the crash profile of a roadway, intersection, or other place of improvement.
	Direct safety improvements should reduce the risk of all types of crashes, reducing travel time uncertainty and sporadic accessibility issues caused by crashes or other incidents. Direct safety improvements create small-to-neutral impact on travel performance outcomes, but they can be targeted based on where high-crash corridor rates correspond with poor travel congestion and other reliability issues.

ITS and Incident Management Impacts

Performance Outcome	Impacts
	Though climate impact of ITS investments will be mostly neutral, improved incident management response will play a role in human responses to increased frequency of climate events.
	The economic benefits of new technologies on transportation can vary, and typically any benefits that occur are based on improvements in other performance outcomes, like travel accessibility and reliability.
	These programs have largely neutral safety outcomes, though specific investments in transit technology like signaling can focus on safety improvements.
	Incident management and ITS improvements have high travel reliability benefits as they are usually purpose-built to improve the travel experience in times of congestion or disruption. ITS improvements like signal coordination can have especially high benefits where travel flows are largely uniform (such as a commuter-heavy corridor or near a large employer). These investments should be prioritized based on the high potential for reliability improvements.

Travel Demand Management Impacts

Performance Outcome	Impacts
	TDM can have high emissions mitigation effects with a focus on incentives for reducing vehicle miles traveled.
	When TDM improvements are made on key economic corridors, the corresponding benefits should be multiplied across the region.
	TDM typically focuses on reliable conditions, though the uncertainty of travel plays some role in demand modeling and other TDM projects.
	Like climate change outcomes related to reduced VMT, accessibility and reliability could have very high positive impacts if policies related to congestion pricing or high-occupancy vehicle lanes are implemented.

Environment and Climate Impacts

Performance Outcome	Impacts
	Environment and climate investment will have high performance benefits primarily based on the lowered risk of degradation on the built environment from storms. Specific adaptation benefits can be measured by reduced operations and maintenance costs or avoided costs of damage and repair to infrastructure and private assets alike. Air quality investments can help improve the health outcomes of the transportation network, working to either reduce VMT or the impact of emissions on people.
	Environmental remediation projects can play a large role in placemaking and opening degraded areas for economic development.
	Continual investment in climate mitigation and adaptation projects and programs keeps the region moving even when climate events grow in frequency.

Placemaking and Land Use Impacts

Performance Outcome	Impacts
	Climate change mitigation and adaptation is not expected to be an area of high positive impact for placemaking projects in general, but projects and programs that incentivize denser land use and accessible connections for all users will incentivize reduced vehicular traffic, leading to emissions reductions. to reduce vehicular traffic. Placemaking projects that mitigate the impact of highways can have high benefits when air quality is specifically addressed through highway caps, or high-emissions vehicles are incentivized away from residential areas.
	Most placemaking and land use investment will have a primary focus on increasing economic competitiveness and connections for the project area.
	Residual safety benefits may occur from placemaking and land use investment when vehicle diversion is prevalent.
	Projects and programs within this RCIS category that reconnect communities have an especially important role in improving access for underserved communities.

System Support

Program Management

Performance Outcome	Impacts
	Program management includes the administration of funding and technical support that help regions meet environmental goals. When these funds supplement environmental and climate projects or ensure long-term planning for local sustainability projects, program support is providing positive environmental improvement and climate resilience outcomes.
	Program management may help ensure that outcomes associated with investment in things like preservation or mobility-based enhancement have equitable outcomes, enhancing those programs when their outcomes would typically be neutral without further support. Programs related to diverse business enterprise (DBE) and other business accessibility programs ensure the entire region benefits equitably from transportation projects.
	While the vast majority of projects are looking to improve health and safety of the region's transportation network, effective program management can help projects continually improve their outcomes related to security, safety of future programs, and ensure future planning avoids safety concerns for new modes and technologies.
	Overhead funds dedicated to long-term planning, concept development, and other studies helps to understand how existing and future mobility needs are best being served by the capital program. These investments help ensure design features and other project components are most responsive to future growth, modal needs, and other uncertainties.

Local System Reserve

Performance Outcome	Impacts
	NJTPA's future project and local aid funds can be used to help bridge funding gaps in projects that have outsized environmental benefits. The more flexible nature of these funds means that the RCIS can help ensure the success of these projects or avoid value engineering that might sacrifice environmentally friendly design standards and project components.
	NJTPA's future project and local aid funds can be used to help bridge funding gaps in projects that have outsized equity or economic benefits. The more flexible nature of these funds means that the RCIS can help ensure the success of these projects or avoid value engineering that might sacrifice project components that seek to ensure more robust social and economic connections, such as placemaking design elements of a larger road enhancement project.
	NJTPA's future project and local aid funds can be used to help bridge funding gaps in projects that have outsized safety and public health benefits. The more flexible nature of these funds means that the RCIS can help ensure the success of these projects or avoid value engineering that might sacrifice project components that seek to improve safety and public health like modal separation or industry-leading bike and pedestrian amenities.

	NJTPA's future project and local aid funds can be used to help support projects that are needed for local or regional mobility needs but struggling to achieve other funding. The more flexible nature of these funds means that the RCIS can help ensure the success of these projects or avoid value engineering that might sacrifice project components or design standards that work to improve multi-modal connections or reduce single-occupancy vehicle use.

Appendix B: RCIS Investment Categories and Anticipated Impact on Performance Outcomes

Performance outcomes, drawn from established NJTPA planning goals, measures, and targets, frame how transportation serves the region and how its performance may be improved through wise investment. Outcomes are identified in the first investment principle.

- **Environmental improvement and climate resilience** – Projects and programs work to mitigate the transportation networks adverse climate impact, remediate polluted areas associated with transportation, or adapt infrastructure to withstand storms, weather, and other climate impacts.
- **Prosperity, equity, and vibrant communities** – Projects and programs work to promote economic growth for all users by spurring additional economic development, connecting different communities to one another, especially those that may have been separated by developed infrastructure, and connecting communities to social, recreational, and health-based resources.
- **Safety and health** – Projects and programs work to improve crash and injury rates from existing conditions, especially for the most vulnerable users in dangerous locations. Projects and programs promote healthier conditions for individuals like active transportation modes or for society like improving air quality.
- **Travel accessibility and reliability** – Projects and programs work to make destinations more accessible across all modes by improving service and infrastructure and their operation. Projects and programs also work to improve travel reliability by lowering travel time variability and improving travel conditions.

Potential impacts on performance outcomes were identified from technical research on typical projects and programs. Measures of effectiveness that might be used to track the performance outcomes were considered. These factor into the positive, neutral, and negative designations that are qualitatively described for each investment category. Explore investment categories to see how impacts for each performance outcome were considered.

Qualitative Designations Assigned to Each Investment Category

Rating	Description
Positive	The investment category contains projects and programs have historically created benefits and improved conditions associated with the evaluated performance outcome. A majority of projects have an explicit purpose or feature that should provide benefits aligned with the evaluated performance outcome.
Neutral	The investment category contains projects that largely do not address measures of effectiveness or impacts associated with the evaluated performance outcome. The project or program purpose typically doesn't target the performance outcome, and any impacts (positive or negative) are expected to be secondary or minimal.
Neutral-Positive	The investment category contains a range of projects and programs that may have limited potentially beneficial impact on conditions associated with the evaluated performance outcome. This designation may apply to an investment

	category with a range of project types with only some having positive impacts. Alternatively, a neutral-positive designation may apply if certain guidelines are followed in implementation to ensure these projects and programs yield a positive performance outcome.
Neutral-Negative	The investment category contains specific impacts that will largely be negative for the evaluated performance outcome, even if other positive performance outcomes justify its investments. Guidelines for investment categories provide considerations to mitigate these impacts.
Negative-Neutral-Positive	The investment category contains a range of projects and programs that may have varying impacts depending on how they are designed and implemented. These may not have an explicit purpose aligned with the performance outcome and unintended impacts may result in negative outcomes if not considered. Investment categories include guidelines for how positive impacts can be achieved and negative outcomes can be avoided or mitigated.

Investment Category	Anticipated Impact on Performance Outcomes			
	Environmental improvement and climate resilience	Prosperity, equity, and vibrant communities	Safety and health	Travel accessibility and reliability
System Improvement				
A Transit Enhancement	Positive	Positive	Neutral	Positive
B Transit Expansion	Positive	Positive	Neutral	Positive
C Road Enhancement	Negative-Neutral-Positive	Negative-Neutral-Positive	Negative-Neutral-Positive	Positive
D Road Expansion	Negative-Neutral	Negative-Neutral-Positive	Neutral	Negative-Neutral-Positive
E Dedicated Freight	Neutral-Positive	Neutral-Positive	Neutral	Positive
F Pedestrian and Bicycle	Positive	Positive	Positive	Positive
G Direct Safety	Neutral	Neutral-Positive	Positive	Neutral
H ITS & Incident Management	Neutral-Positive	Neutral	Neutral	Positive
I Travel Demand Management	Neutral-Positive	Neutral	Neutral	Positive
J Environment and Climate	Positive	Neutral-Positive	Neutral	Neutral
K Placemaking and Land Use	Positive	Positive	Positive	Neutral-Positive
System Support				
A Program Management	Neutral-Positive	Neutral-Positive	Neutral-Positive	Neutral-Positive
B Local System Reserve	Neutral-Positive	Neutral-Positive	Neutral-Positive	Neutral-Positive
System Preservation				
A Bridge Preservation	Neutral	Neutral-Positive	Neutral	Neutral-Positive
B Transit Preservation	Positive	Positive	Neutral	Neutral-Positive
C Road Preservation	Neutral	Neutral-Positive	Neutral	Neutral-Positive