

NJ TRANSIT

State of Good Repair



July 2010

NJ TRANSIT Overview

- **NJ TRANSIT is the nation's second largest transit agency and the largest statewide public transit agency.**
- **Key Characteristics:**



Over 200 bus routes serving over 17,000 stops



3 light rail lines serving 60 stations

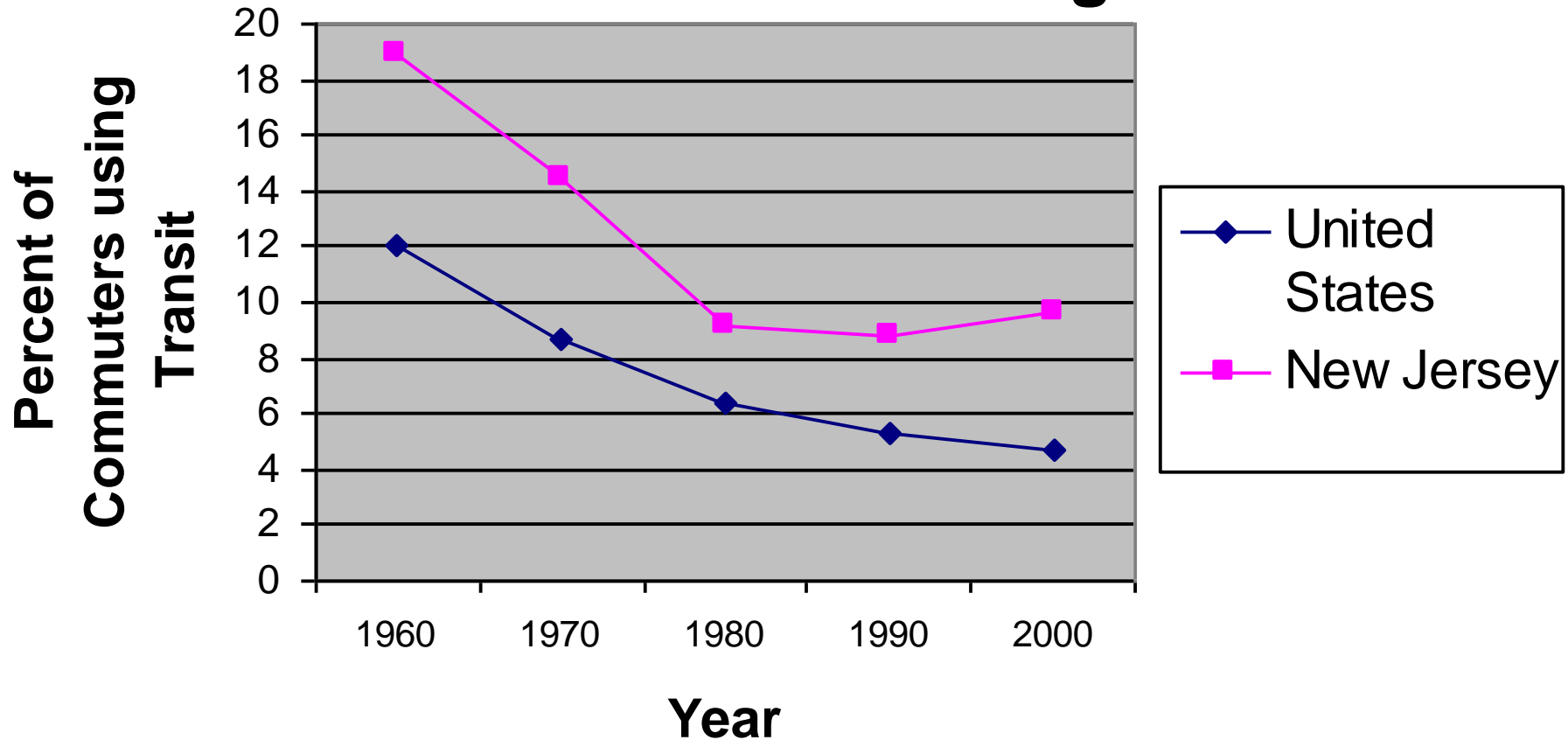


Largest commuter rail network in the United States with 11 commuter rail lines serving 164 stations

NJ TRANSIT Overview

- **Unique characteristics:**
 - Operate in four states.
 - Vast majority of subsidy is provided by the state of New Jersey, not local government.
- **Annual Operating Budget:** \$1.7 B
- **Annual Capital Program:** \$1.3 B
- **Fleet:**
 - 167 locomotives
 - 1,137 railcars
 - 93 light rail vehicles
 - 3,052 buses

Percent of Commuters using Transit



- According to data from the 2000 Census, the state of New Jersey has the second highest transit use of any state.
- 1 out of every 10 workers in New Jersey use transit, double the national average.

NJ TRANSIT History

- **1979**
 - **ORIGIN:** Created by an act of the New Jersey legislature in 1979.
- **1980s**
 - **INTERMODAL INTEGRATION:** NJ TRANSIT's original focus was integrating the transit services inherited from predecessor railroads, bus and trolley companies.
- **1990s:**
 - **LIGHT RAIL/TOD:** The 1990s, a new focus on light rail projects and transit oriented development.
- **NEW MILLENNIUM:**
 - **STATE OF GOOD REPAIR & CAPACITY:** NJ TRANSIT has taken a “back to basics” approach, emphasizing State of Good Repair and capacity.



STATE OF GOOD REPAIR

Step 1: Policy Prioritization

Prioritization

- **Capital Investment Strategy:**
 - Requirement of the state Transportation Trust Fund (TTF) reauthorization.
 - Prioritizes:
 - 1) State of Good Repair,
 - 2) Capacity and finally,
 - 3) Expansion

NJ TRANSIT ORDERS MODERN RAIL AND BUS EQUIPMENT

Capital budget supports equipment modernization; operating budget assumes lowest growth rate in history

July 14, 2010

NEWARK, NJ — The NJ TRANSIT Board of Directors today approved new equipment acquisitions as part of the agency's Fiscal Year 2011 (FY11) capital budget and approved an operating budget that reflects the agency's commitment to operate efficiently and reliably.

The FY11 capital program targets NJ TRANSIT's most critical infrastructure and state-of-good repair needs and supports an ongoing fleet modernization program, which includes the continued procurement of more than 1,400 buses, more than 300 multilevel rail cars and more than 50 electric and dual-powered locomotives.

Rail state-of-good repair projects will be supported by \$85.5 million in the capital program, including \$37.3 million to replace track and ties and inspect and replace bridges. A total of \$11 million will advance electric traction and signal improvements, and \$5 million will fund ongoing locomotive reliability programs.

The capital program also includes \$84.9 million for bus and light rail state-of-good repair needs, including \$2 million for Newark Light Rail infrastructure improvements and \$72 million toward the purchase of new buses.

In addition, NJ TRANSIT will invest \$11 million in rail station improvements at Newark Penn Station and Ridgewood Station, as well as inspections and repairs at stations throughout the system.

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NJ TRANSIT BOARD ADOPTS OPERATING, CAPITAL BUDGETS

**More bus and rail service planned; expenses curtailed
July 27, 2005**

NEWARK, NJ NJ TRANSIT customers can look forward to new buses and trains, as well other service improvements, thanks to a new budget approved today. The NJ TRANSIT Board of Directors adopted the \$1.41 billion Operating Budget and a \$1.15 billion Capital Program for Fiscal Year 2006 (FY06), funding the Corporation's core services and new service initiatives through June 30, 2006. Once again, the Board contained expenses and froze the level of funds transferred from the capital program.

The FY06 Operating Budget:

The operating budget's expenditures are offset by \$687.6 million in fares and other system-generated revenue, \$278.7 million in state operating assistance, \$356 million from the capital budget and \$90.7 million from other state and federal reimbursements. Excluding extraordinary surges in fuel prices and security costs, as well as continuing increases in service frequency, NJ TRANSIT has contained expense growth to 2.9 percent.

Capital Program

Recognizing the importance of maintaining the existing system in a state of good repair, the companion capital program invests \$414 million in basic track, bridge and signal improvements on the

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are all funded under
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Step 2: Management Tools

Step 2: Management Tools

- NJ TRANSIT initiated a series of new internal capital program management tools in 2005.
 - The new system tracks funding, project budget and prioritizes needs.
- Moved from an annual process to a real-time prioritization process.
 - Interdisciplinary
 - Transparent
 - Dynamic
 - Flexible

NJ TRANSIT Project Prioritization

- **Internal Project Prioritization Process**
 - Multiyear evaluation
 - Constrained future years
 - Accountability with respect to project costs
 - Internal meetings three times each year by category:
 - Rail infrastructure
 - Rail rolling stock
 - Rail, Light Rail and Bus passenger facilities
 - Bus infrastructure and rolling stock
 - Technology
 - Decision making pushed down to those closest to the infrastructure conditions.

NJ TRANSIT Project Prioritization Criteria

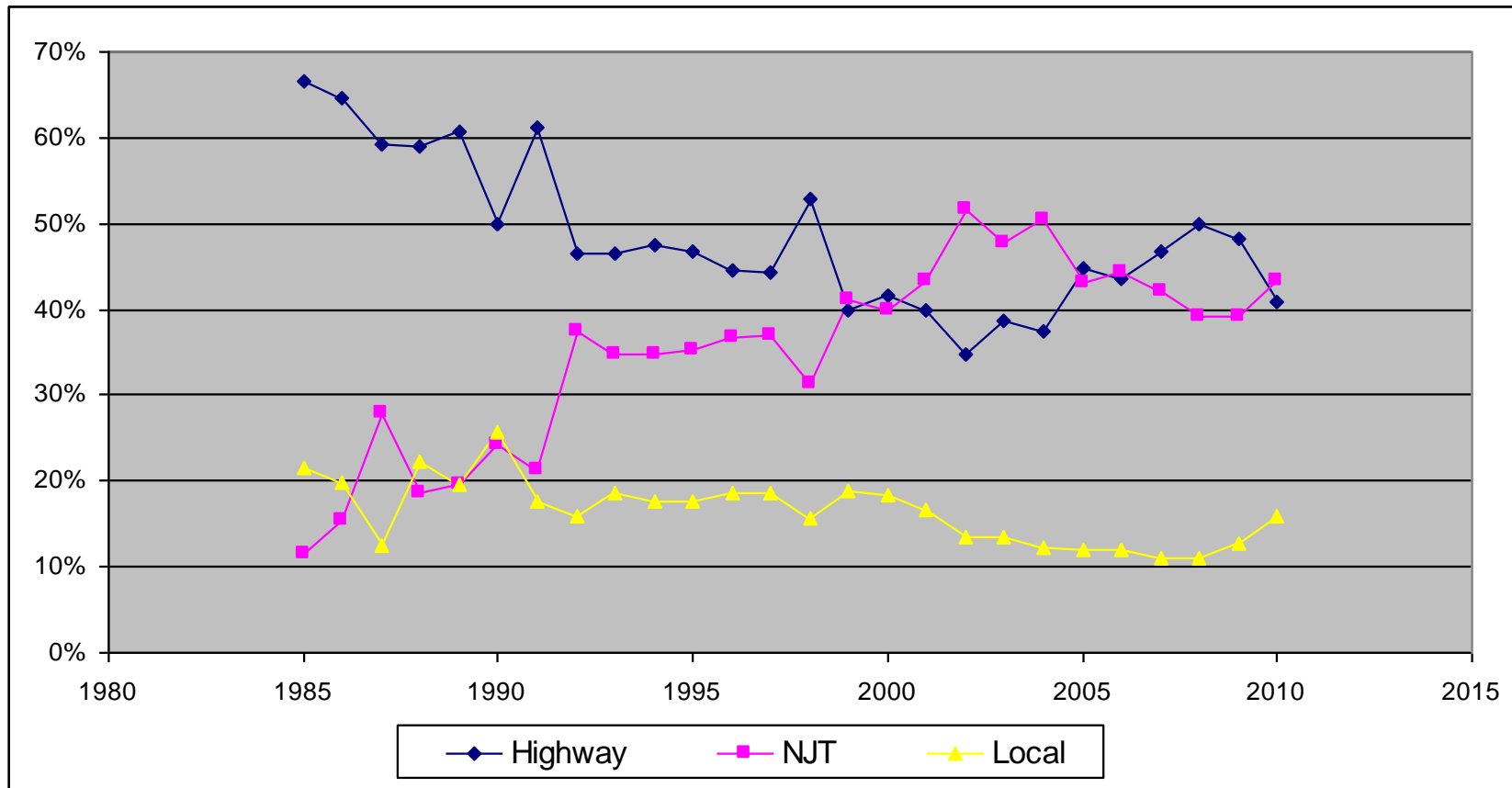
- **Expansion Projects:** New Starts Cost Effectiveness
- **Technology:** Condition, Return on Investment, State of the Art
- **Rolling Stock:** Procurement Efficiency, Parts Efficiency, Uniformity, Replace vs. Rehab, Technology (multi-levels, dual powers), capacity, fleet plan.
- **Track:** Condition inspection, technology (concrete ties), no slow orders
- **Bridges:** Condition inspection, capacity
- **Signals:** Condition, regulatory requirements, technology (ATC/PTC), capacity.

NJ TRANSIT Project Prioritization Criteria

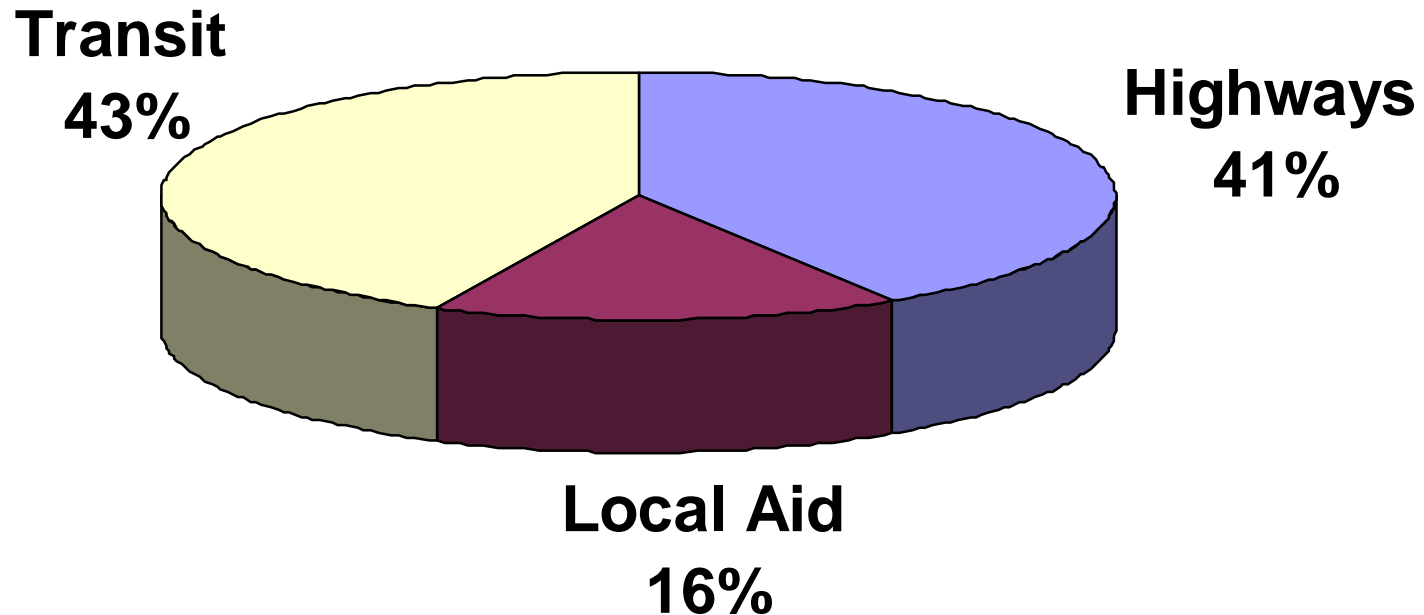
- **Electric Traction:** Condition, efficiency
- **Yards/Maintenance Facilities:** Rolling stock, technology changes, regulatory changes, deadhead efficiency, yard efficiency, real estate, fleet plan.
- **Stations:** Condition inspection, ADA, capacity, dedicated funding, transit oriented development
- **Parking:** Public Private Partnerships, capacity, transit oriented development
- **Capacity Projects:** Ridership estimates, cost-effectiveness, timing/coordination with other projects – i.e., if expanding fleet, need yards and parking too.
- **All Projects:** Bid environment.

Step 3: Funding

State Transportation Trust Fund Transit/Highway Allocation

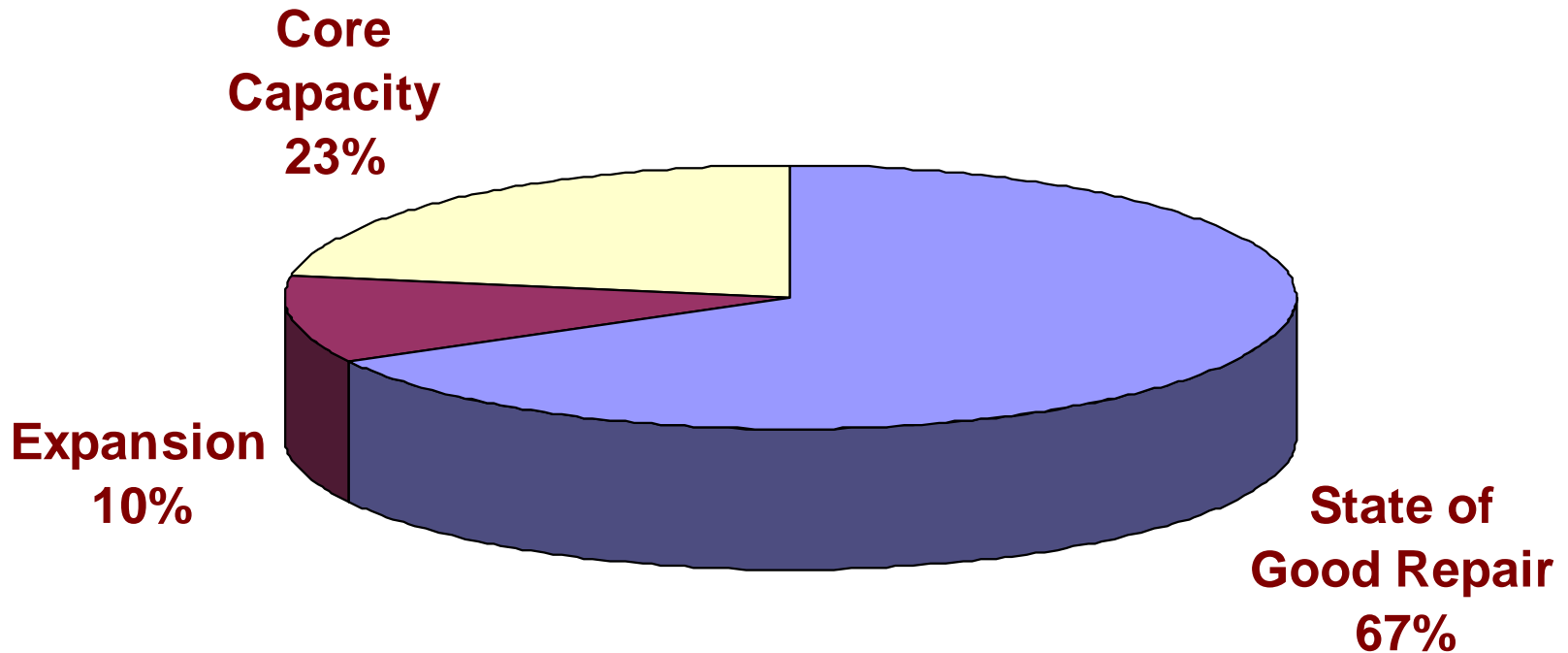


State Transportation Trust Fund Allocation




















In addition to TTF funding, \$100 M+ FHWA funding is “flexed” to transit.

NJ TRANSIT Capital Program Uses



RESULTS:
WHERE WE WERE
WHERE WE ARE
WHERE WE ARE GOING

BUS		SOG Rating 2000		Projects completed since 2000		SOG Rating 2010		Projects completed by 2020		SOG Rating 2020	
Element				Funded FY10/Prior				Funded FY10/Prior		Funded FY11 and Beyond	
Rolling Stock		Cruiser Purchase (1438)	\$ 726			NABI Purchase (balance of 1145)	\$ 324				
		Artic Purchase (85)	\$ 49			Artic Replacement(85) /30 Ft (11)	\$ 83				
		NABI Purchase (approx 300)	\$ 120			45 Foot Low Floor High Capacity	\$ 70				
		Subtotal	\$ 895			Cruiser Replacement (Startup)	\$ 446				
						Subtotal	\$ 923				
Garages						Ongoing Program					
Terminals		Irvington Terminal Rehab	\$ 5			Paterson Terminal Rehab	\$ 2				
		Hackensack Terminal Rehab	\$ 3			Ongoing Program					
		Alwood Road Park & Ride	\$ 4								
		Route 23 Park & Ride	\$ 21								
Technology		Farebox Replacement	\$ 32			Bus Radio Replacement	\$ 65				
TOTAL		\$ 947				\$ 65		\$ 923			

KEY	
Good	
	
Fair	
	
Poor	

Before



After



Before



After















Before



After



LRT		SOG Rating 2000		Projects completed since 2000		SOG Rating 2010		Projects completed by 2020		SOG Rating 2020	
Element		Funded FY10/Prior			Funded FY10/Prior	Funded FY11 and Beyond					
Newark LR		LRT Replacement	\$ 80		Bloomfield Avenue Rehab	\$ 6	Ongoing Program				
		Newark/Washington Rehab	\$ 34								
		Orange St Rehab/Bridge	\$ 8								
		Vehicle Base Facility & Extension	\$ 84								
		Retaining Wall (at Portal)	\$ 7								
		Broad St Extension	\$ 212								
		Subtotal	\$ 425								
HBLR		System Construction	\$ 2,192		ARRA Danforth Interlocking	\$ 15	HBLR 8th Street Extension	\$ 46			
					HBLR 8th Street Extension	\$ 54					
River Line		System Construction	\$ 1,100		ARRA CAB Signal	\$ 24	Ongoing Program				
					ARRA Pennsauken	\$ 40					
TOTAL		\$ 3,717			\$ 139		\$ 46				













Access Link		Projects completed since 2000		Projects completed by 2020			
Element	SOG Rating 2000	Funded FY10/Prior		SOG Rating 2010	Funded FY10/Prior	Funded FY11 and Beyond	SOG Rating 2020
Vehicles		ARRA Vehicle Purchase	\$ 14			Ongoing Program	

Before



After



RAIL		Projects completed since 2000				Projects completed by 2020			
Element	SOG Rating 2000	Funded FY10/Prior		SOG Rating 2010	Funded FY10/Prior		Funded FY11 and Beyond		SOG Rating 2020
Track		PVL Siding	\$ 30		ARRA Enhanced Track Program	\$ 22	<i>Ongoing Program</i>		
		Hudson/Dock Interlocking Mods	\$ 20						
		Main Line Double Track	\$ 37						
		Subtotal	\$ 86						
Signals & Communication		Automatic Train Control (ATC)	\$ 90		Positive Train Control (PTC)	\$ 103	<i>Ongoing Program</i>		
					ARRA M&E Reverse Signal	\$ 25			
					Subtotal	\$ 128			
Electric Traction		Gladstone Pole Replacement (Phase 1)	\$ 22				<i>Ongoing Program</i>		
		Montclair Electrification (included in yard)							
Bridges/ Structures		RVL Bridges (4)	\$ 16		ARRA Lower Hack Rehab (Ph2)	\$ 30	Portal Bridge South	\$ 776	
		Newark Draw Rehab	\$ 37				Additional Bridge Funding	\$ 50	
		Big Shark Approaches	\$ 18					\$ 826	
		Clinton, Plainfield, HX Rehab	\$ 9						
		Ambrose	\$ 10						
		Morgan	\$ 6						
		M&E Retaining Wall	\$ 8						
		M&E Viaduct	\$ 38						
		Broad Street Bridges (included w/ station)							
		Lower Hack Rehab Phase 1	\$ 22						
		Navesink	\$ 7						
		Secaucus Main/Bergen Connector	\$ 69						
		Bergen Tunnel Rehab	\$ 82						
		Subtotal	\$ 323						

RAIL

SOG
Rating
2000

Projects completed since 2000

SOG
Rating
2010

Projects completed by 2020

SOG
Rating
2020

Element

Funded FY10/Prior

Funded FY10/Prior

Funded FY11 and Beyond

Stations/Parking



Secaucus Construction	\$ 448
Route 23 Construction/Parking	\$ 7
MSU Construction/Parking Deck	\$ 39
Route 17 Construction/Parking Deck	\$ 35
Newark Airport Station Construction	\$ 122
Union Station Construction/Parking	\$ 26
Mount Arlington Construction/Parking	\$ 15
Bay Street Construction/Parking Deck	\$ 6
PSNY 7th Avenue Concourse	\$ 147
Trenton Rehab	\$ 82
Hoboken Main Waiting Room Rehab	\$ 10
Broad Street HLP Rehab	\$ 83
Woodbridge HLP Rehab	\$ 19
Metropark HLP Rehab	\$ 47
Morristown ADA Rehab/Parking Deck	\$ 37
Madison ADA Rehab/Historic	\$ 15
Red Bank HLP Rehab	\$ 9
South Amboy HLP Rehab	\$ 53
S Orange/Brick Chch Rehab (incl w/ Viaduct)	
Paterson HLP Rehab	\$ 12
Towaco Rehab/Parking	\$ 2
ARRA Edison Parking	\$ 15
Plauderville HLP Parking	\$ 16
North Hackensack Parking	\$ 2
Hamilton Parking Deck	\$ 26
Clifton Parking	\$ 2
Hazlet HLP	\$ 8
Plainfield HLP	\$ 12
Newark Penn Raymond Concourse	\$ 10
Watsessing Rehab	\$ 3
Subtotal	\$ 1,305



ARRA Newark Penn Plaza West	\$ 15
ARRA Plauderville Rehab	\$ 16
Ridgewood Rehab	\$ 17
Somerville Rehab	\$ 27
Hoboken Ferry Slips	\$ 119
Rutherford Restoration	\$ 4
Subtotal	\$ 198



Newark Penn Station Platforms	\$ 30
ARC Parking Program	\$ 71
Ridgewood Rehab	\$ 17
Subtotal	\$ 118

RAIL		SOG Rating 2000		Projects completed since 2000		SOG Rating 2010		Projects completed by 2020		SOG Rating 2020	
Element		Funded FY10/Prior			Funded FY10/Prior			Funded FY11 and Beyond			
Rolling Stock		Comet II Rehab (160)	\$ 124		ALP 46 Purchase (27)	\$ 345		MLV Purchase (100) (ARC)	\$ 300		
		Comet V Purchase (265)	\$ 418		Dual Power Purchase (26)	\$ 491		Dual Power Purchase (10) (ARC)	\$ 100		
		ALP 46 Purchase (29)	\$ 237		Subtotal	Dual Power Purchase (33)		\$ 550			
		PL 42 AC Purchase (33)	\$ 219			EMU Purchase (236)		\$ 1,970			
		MLV Purchase(234)(Comet I retired)	\$ 892			ALP46 Purchase (9)		\$ 76			
		Subtotal	\$ 1,890			Subtotal		\$ 2,996			
Maintenance Facilities/Yards		MMC Expansion/S&I/Wheel True	\$ 119				Outyear Yard Projects	\$ 464			
		MMC Droptable	\$ 26								
		Hoboken Wheel True	\$ 22								
		Bay Head Pedestal Track	\$ 17								
		Dover Pedestal Track	\$ 11								
		Great Notch Yard/Pedestal Track	\$ 73								
		Morrisville Yard Construction	\$ 80								
		Morrisville Expansion/S&I/Pedestal	\$ 123								
		Hoboken Yard B/Pedestal Track	\$ 46								
		Subtotal	\$ 516								
TOTAL		\$ 4,233		\$ 1,214		\$ 4,404					

Before



After



Before



....After

PROGRESS PHOTOGRAPHS
AMBROSE BROOK BRIDGE REPLACEMENT
NORTHEAST REMSCO CONSTRUCTION, INC.
MIDDLESEX, NJ

PHOTO # 5

NOV 20 2010

Before



After



RESULTS

RESULTS

- *“NJT operations may be characterized as efficient and effective.... The system is in a state of good repair, with good on-time performance and no slow zones in the entire rail network.”*

– Federal Transit Administration
Financial Capacity Report of New Jersey Transit
May 7, 2009

LESSONS LEARNED

Lessons Learned

- **Priorities:**

It starts at the top

- **Management Tools:**

You can be your own consultant

- **Process:**

Be dynamic

Give unto FTA that which is best federal

Prioritization should recognize that capital projects are interconnected

- **Approach:**

Push decision making down to those closest to conditions on the ground

QUESTIONS?