

New York City Sub Regional ITS Architecture "Sausage Diagram"

Remote Traveler Support
AMTRAK/LIRR/NJ Transit Penn Station Information Displays
Long Island Transit Operators Customer Info Systems
Mid Hudson South Transit Operators Customer Info Systems
MTA LIRR Customer Info Systems
MTA LIRR Fare Point of Sale
MTA LIRR Security Equipment
MTA LIB Customer Info Systems
MTA LIB Fare POS
MTA LIB Security Equip
MTA MNR Customer Info Sys
MTA MNR Fare Point of Sale
MTA MNR Security Equipment
MTA NYCT Bus Security Equipment
MTA NYCT Customer Info Systems
MTA NYCT Fare Point of Sale
MTA NYCT Subway Security Equip
MTA Regional Transit Fare POS
NYC DOITT Kiosks
NYCDOT Division of Ferry Operations Customer Info Systems
NYCDOT Franchise Bus Info Sys.
PANYNJ Airports In-Terminal Customer Information Systems
PANYNJ Bus Terminals/Stations In-Terminal Customer Info Systems
PANYNJ PATH Fare Point of Sale
PANYNJ PATH PATHVISION
TRANSCOM Kiosks
WC Bee Line Customer Info Sys.

Emergency Management (1)
AMTRAK Emergency Dispatch
FDNY Fire/EMS Dispatch
MTA NYCT Security
MTA Police Dispatch / Command Center
Municipal/County EOCs
Municipal/County Public Safety Dispatch
NYCDEP Dispatch Center

Emergency Management (2)
NYCDOT Office of Emergency Response
NYCOEM Watch Command Center
NYPD 911 Communications Center Dispatch
NYPD Dispatch
NYPD Operations
NYPD TMC
NYPD Transit Bureau
NYS Police Dispatch
NYSDEC Systems
PANYNJ PAPD 211 Communications Center Dispatch
State EOCs

Information Service Provider (1)
Agency Run Traveler Info Systems
E-ZPass CSC Web Site
MTA Bridges/Tunnels Public Relations Office
MTA Bridges/Tunnels Web Site
MTA LIRR Customer Info Center
MTA LIRR Web Site
MTA LIB Customer Info Center
MTA LIB Web Site
MTA MNR Customer Info Center
MTA MNR Web Site
MTA NYCT Customer Info Center
MTA NYCT Web Site
New York State Emergency Road Reporting System
NYCDOT Bus Franchise Website

Information Service Provider (2)
NYCDOT Bus Franchise Operators Website
NYCDOT Traveler Info Web Site
NYCDOT/DCP Parking Info System
NYSDOT Traveler Info Systems
PANYNJ PATH Web Site
PANYNJ Port Commerce CARGO*MATE Web Site
PANYNJ Port Commerce FIRST Web Site
PANYNJ Traveler Info Systems
Private ISPs
TRANSCOM RA Servers
TRIPS123
WC Bee Line Traveler Info System
WC Bee Line Web Site

Maintenance & Construction Management
Municipal/County PWD Operations
NYCDOS Dispatch
NYCDOT Bridge Maintenance
NYCDOT OCMC
NYCDOT Street and Arterial Maintenance Division
NYS Bridge Authority Mid Hudson Bridges Maintenance
NYSDOT Construction Operations
NYSDOT Maintenance Ops
PANYNJ Tunnels/Bridges/Terminals Maintenance Unit
Emissions Management
NYCDEP Office of Environmental Analysis

Commercial Vehicle Admin
MTA Bridges/Tunnels Engineers Office
MTA Bridges/Tunnels Facility Operations Center
MTA Bridges/Tunnels OCCC
NYC DEP HAZMAT Permitting
NYCDOT Commercial Vehicle Permits Office
PANYNJ Port Commerce CARGO*MATE
PANYNJ Port Commerce Credentialing Back Office (SEALINK)
PANYNJ Port Commerce Operations Centers
PANYNJ Tunnels/Bridges/Terminals Communications Desk/Operations Center
Private Terminal Operators Systems

Transit Management Subsystem
Long Island Transit Operators Maintenance
Long Island Transit Operators Systems
Mid Hudson South Transit Operators Maintenance Facilities
Mid Hudson South Transit Operators Systems
MTA Agencies Transit Maintenance
MTA LIRR Fare Mgmt System
MTA LIRR Maintenance Yards
MTA LIRR Operations Center
MTA LIB Depot / Garage
MTA LIB Fare Mgmt System
MTA LIB Fixed Route Bus Ops
MTA LIB Paratransit Operations
MTA MNR Fare Mgmt System
MTA MNR Maintenance Yards
MTA MNR Operations Center Sys.
MTA MetroCard Fare Mgmt System
MTA NYCT Bus Command Center - Operations
MTA NYCT Bus Depot Central Road Operations
MTA NYCT Bus Depot Central Road Service Unit
MTA NYCT Customer Info Center
MTA NYCT Fare Mgmt System
MTA NYCT Paratransit Command
MTA NYCT Service Planning
MTA NYCT Staten Island Railway Control Facility
MTA NYCT Subway Rail Control Center
MTA NYCT Subway Yard
MTA NYCT Transit Bus Depot Maintenance
NJT Bus Operations Systems
NJT Fare Mgmt System
NJT Rail Operations Systems
NYCDOT (Franchise Bus) Systems
NYCDOT Division of Ferry Operations Systems
NYCDOT Franchise Bus Operators Systems
PANYNJ Airports AirTrain Ops
PANYNJ Airports Communications Desk/Operations Center
PANYNJ Bus Terminals/Stations Communications Desk/Ops Center
PANYNJ PATH Fare Mgmt System
PANYNJ PATH Operations Center
PANYNJ PATH Vehicle Maint
Private Ferry Operators Systems
Private Long-Distance Bus Ops
Private Paratransit Operators
Regional Transit Fare Reciprocity
TRANSCOM Other Member / Non-Member Agencies Systems
TRIPS123
WC Bee Line Fare Mgmt System
WC Bee Line Operations Center
WC Bee Line Transit Maintenance

Archived Data Management
Hudson Valley Traveler ITS Operators Operational DB
Long Island ITS Operators Operational DB
MTA B/T, Bus, and Rail ITS Archives
NYC ITS Operators ITS Archive
NYMTC Member Agencies Data Collection Systems
NYMTC/DCP Regional Planning Database
NYSDMV Accident Reporting Sys.
NYSDOT Accident Reporting Sys.
TRANSCOM Archived Data System

Toll Administration
E-ZPass CSC
E-ZPass Reciprocity Network

Fleet and Freight Management
PANYNJ Port Commerce CARGO*MATE
Private Commercial Vehicle and Fleet Dispatch
Private Terminal Operators Systems

Emergency Vehicle Subsystem
FDNY EMS Vehicles
FDNY Fire Vehicles
MTA Bridges/Tunnels Emergency and Maintenance Vehicles
MTA Bridges/Tunnels OCCC Special Operations Vehicles
MTA NYCT Bus Depot Road Service Trucks
MTA Police Vehicles
Municipal/County Public Safety Veh.
NYCDOT OER Emergency Vehicles
NYCOEM Watch Command Veh.
NYPD Vehicles
NYS Police Vehicles
NYSDOT/NYPD Help Vehicles
PANYNJ Tunnels/Bridges/Terminals Emergency Response Vehicles

Commercial Vehicle
Private Commercial and Fleet Vehicles

Maintenance & Const Vehicle
MTA Bridges/Tunnels Emergency and Maintenance Vehicles
Municipal/County PWD Vehicles
NYCDOS Vehicles
NYCDOT Maintenance Vehicles
NYSDOT Maintenance Vehicles
PANYNJ Tunnels/Bridges/Terminals Maintenance Vehicles

Personal Information Access
Private Travelers Computing Dev
TRANSCOM Mobile Comm Devices
TRIPS123 Subscriber Systems

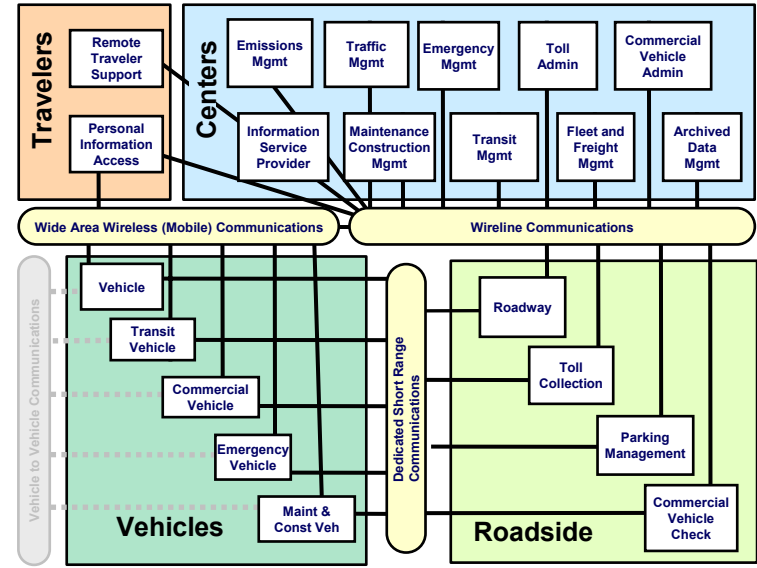
Transit Vehicle
Long Island Transit Operators Veh
Mid Hudson South Transit Operators Vehicles
MTA LIRR Trains
MTA LIB Buses
MTA LIB Paratransit Buses
MTA MNR Trains
MTA MetroCard Reader
MTA NYCT Buses
MTA NYCT Staten Is. Railway Veh
MTA NYCT Subway Vehicles
NYCDOT Ferry Operations Ferries
NYCDOT Franchise Buses/AVL
PANYNJ PATH Transit Vehicles
Private Long-Distance Bus Buses
Private Paratransit Vehicles
WC Bee Line Buses
WC Bee Line Paratransit Vehicles
Vehicle
Private Travelers Vehicles

Parking Management Subsystem
E-ZPass Plus Systems
MTA MNR Parking Facilities
NYCDOT Parking Facilities
NYCDOT/DCP Parking Facilities
NYCDOT/DCP Parking Info System
Public & Private Park and Ride Sys.

Toll Collection
E-ZPass Plus Systems
MTA Bridges/Tunnels Facility Toll Collection Equipment
NYS Bridge Authority Mid Hudson Bridges Toll
NYSTA Toll Collection Equipment
PANYNJ Airports Vehicle Identification Systems
PANYNJ Tunnels/Bridges/Terminals Electronic Toll Collection Equipment

Roadway Subsystem
Long Island Municipal/County Field Equipment
Mid Hudson South Municipal/County Field Equipment
MTA Bridges/Tunnels Facility Field Equipment
MTA Bridges/Tunnels Lift Span Control System
MTA Bridges/Tunnels Security Equipment
MTA LIRR Drawbridge Control Sys
MTA MNR Drawbridge Control Sys
NYCDEP Environmental Monitoring Stations
NYCDOT Drawbridge Control Sys
NYCDOT Field Equipment

Roadway Subsystem
NYSDOT R8 Field Equipment
NYSDOT R10 Field Equipment
NYSDOT R11 Field Equipment
PANYNJ Airports Field Equipment
PANYNJ Bus Terminals/Stations Field Equipment
PANYNJ PATH Vehicle Detection System
PANYNJ Port Commerce Field Equipment
PANYNJ Tunnels/Bridges/Terminals Field Equipment
Private Terminal Operators Roadside Tag Readers
TRANSMIT Agencies Field Equip.



Traffic Management Subsystem
I-95 CC Information Exchange Network
Long Island Municipal/County Local TOCs
Mid Hudson/County Local TMCs
MTA Bridges/Tunnels Facility Operations Center
MTA Bridges/Tunnels OCCC
New York City Joint TMC
NYCDOT Drawbridge Control Booths
NYS Bridge Authority Mid Hudson Bridges
NYSDOT R10 INFORM
NYSDOT R8 Hudson Valley Traveler TOC
NYSDOT Statewide IEN
NYSTA TSOC
PANYNJ Airports Communications Desk/Ops Center
PANYNJ Port Commerce Ops Centers
PANYNJ TB&T Communications Desk/Ops Center
TRANSCOM IRVN Server
TRANSCOM Other Member / Non-Member Agencies Systems
TRANSCOM RA Servers
TRANSCOM Regional Architecture Workstations
TRANSCOM TRANSMIT Server
TRANSMIT Agencies TRANSMIT Servers
Commercial Vehicle Check
MTA Bridges/Tunnels Facility Commercial Vehicle Check
PANYNJ Port Commerce Terminal Access Equipment
PANYNJ Tunnels/Bridges/Terminals Commercial Vehicle Check
Private Terminal Operators Roadside Tag Readers