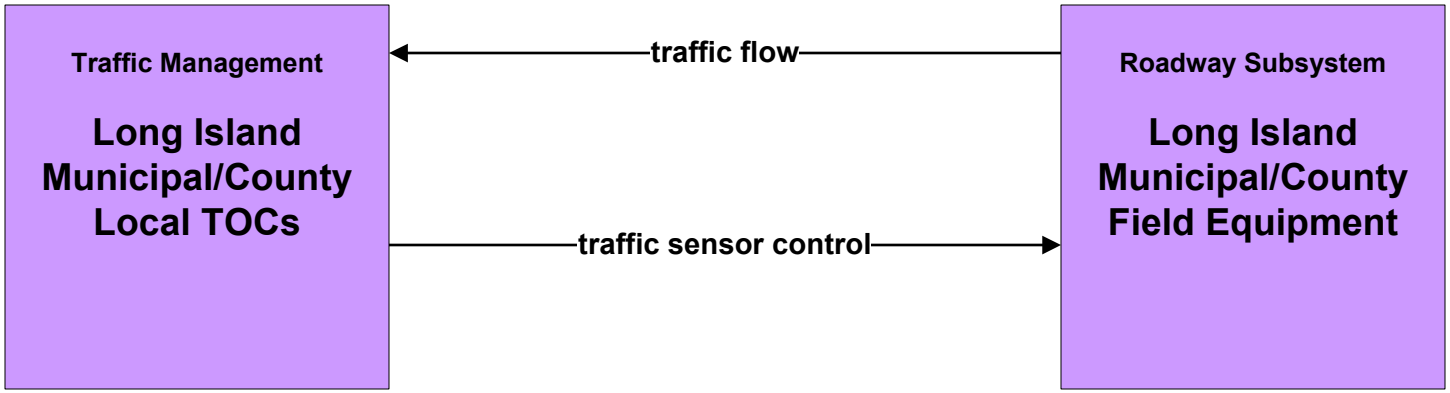
NYMTC ITS Integration Strategy

Customized Market Package Diagrams

Advanced Traffic Management Systems (ATMS)

ATMS01 - Network Surveillance
Long Island Municipal/County TMCs

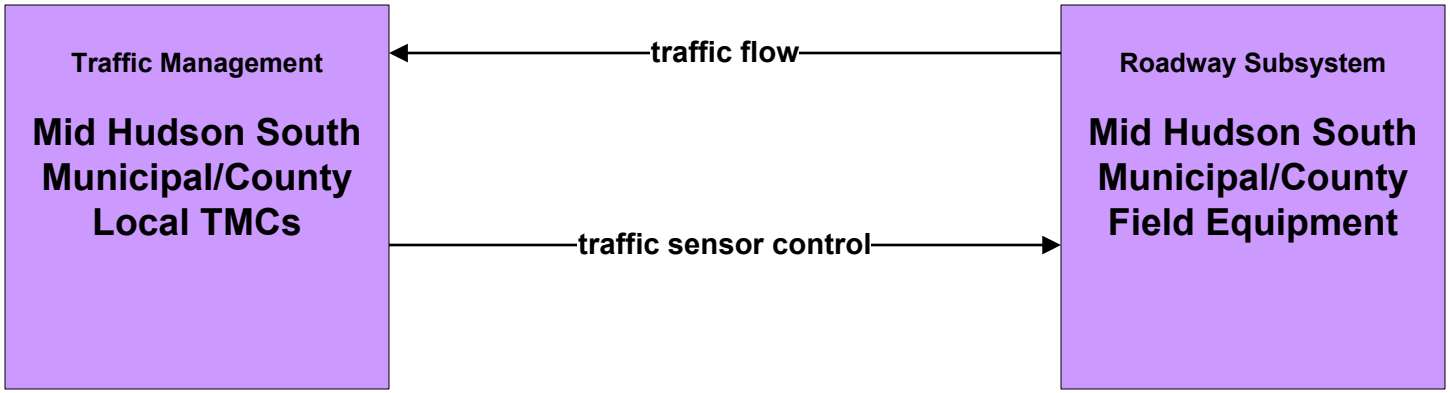


planned/future flow

existing flow

user defined flow

ATMS01 - Network Surveillance
Mid Hudson South TMCs

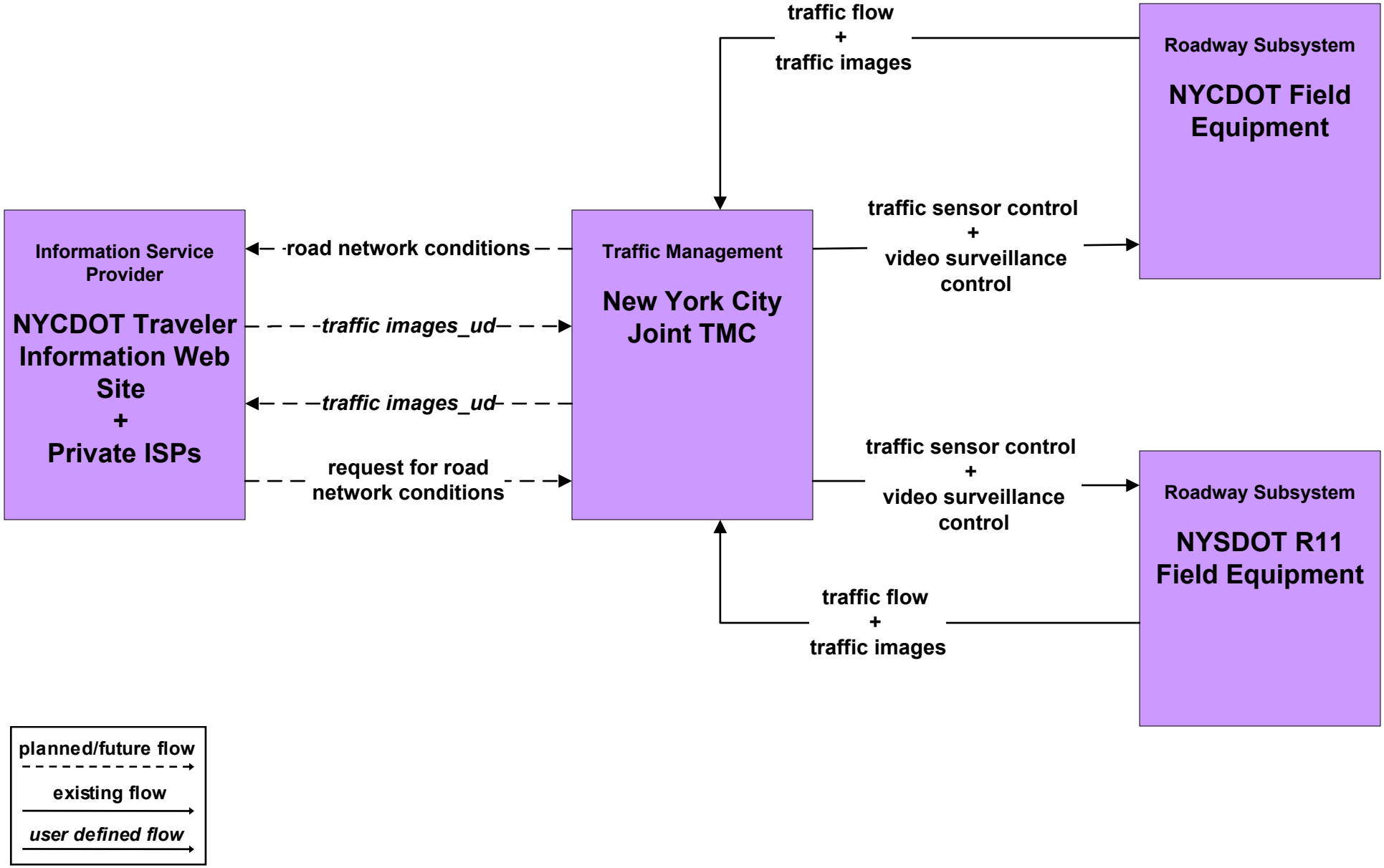


planned/future flow

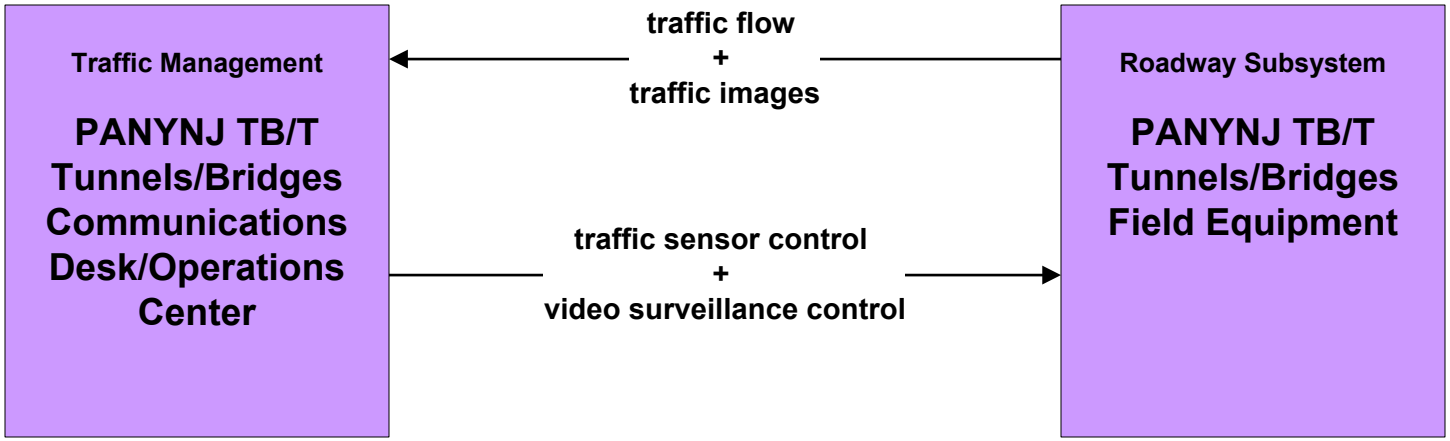
existing flow

user defined flow

ATMS01 - Network Surveillance
New York City Joint TMC



ATMS01 - Network Surveillance
PANYNJ Tunnels/Bridges



planned/future flow

existing flow

user defined flow

ATMS01 - Network Surveillance
PANYNJ Airports

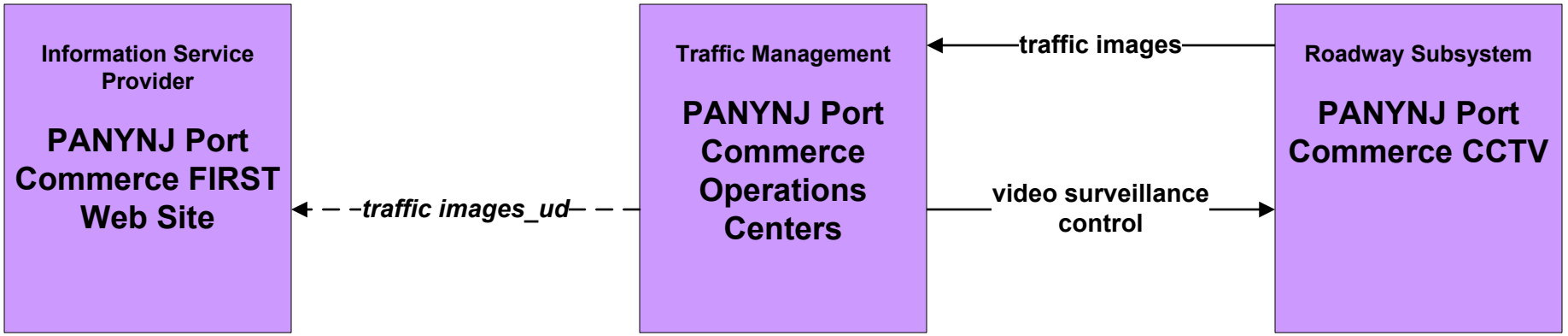
Includes highway advisory telephone.

planned/future flow

existing flow

user defined flow

ATMS01 - Network Surveillance
PANYNJ Port Commerce

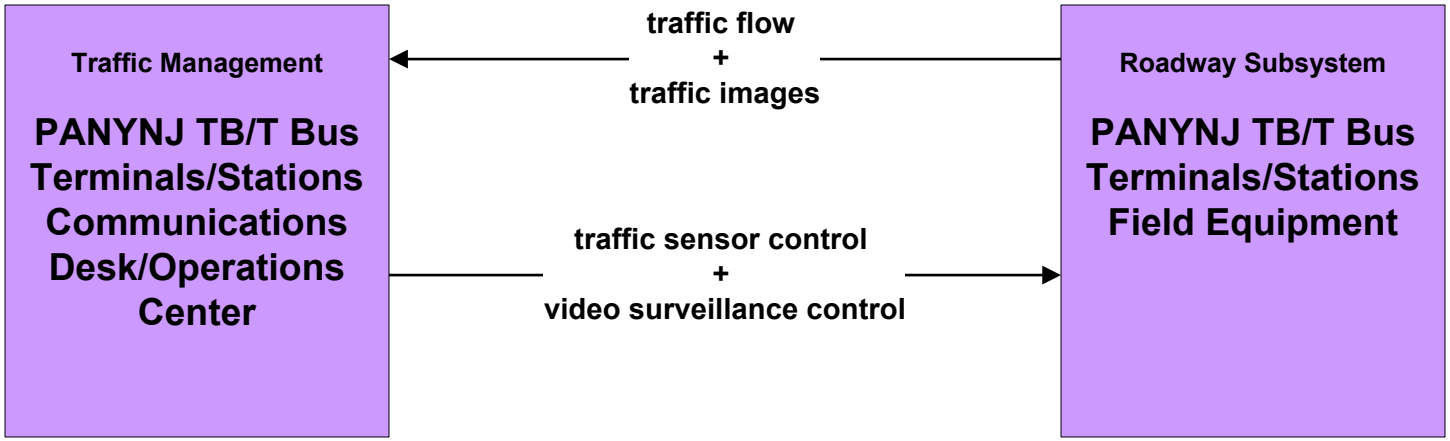


planned/future flow

existing flow

user defined flow

ATMS01 - Network Surveillance
PANYNJ Bus Terminals/Stations

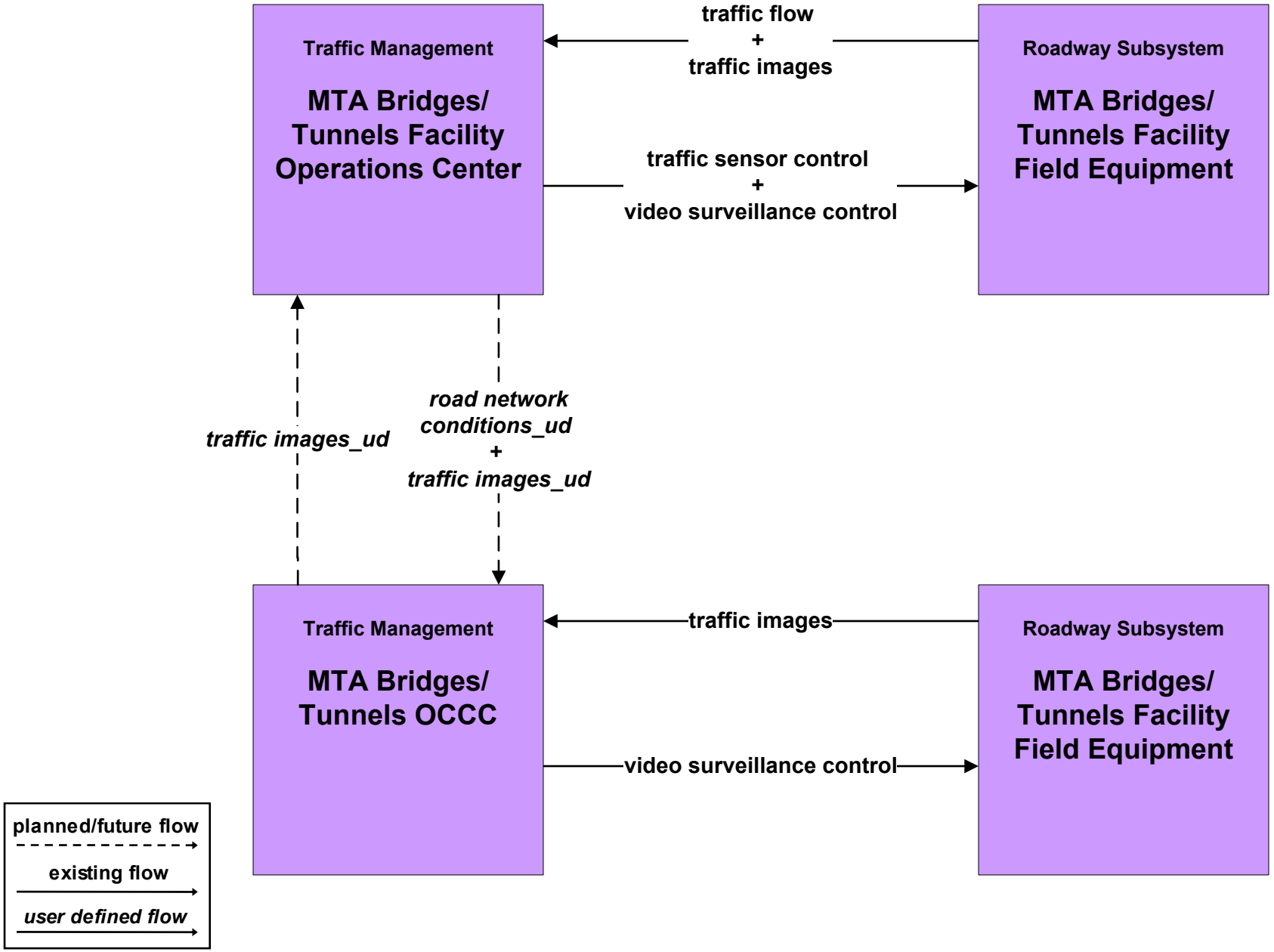


planned/future flow

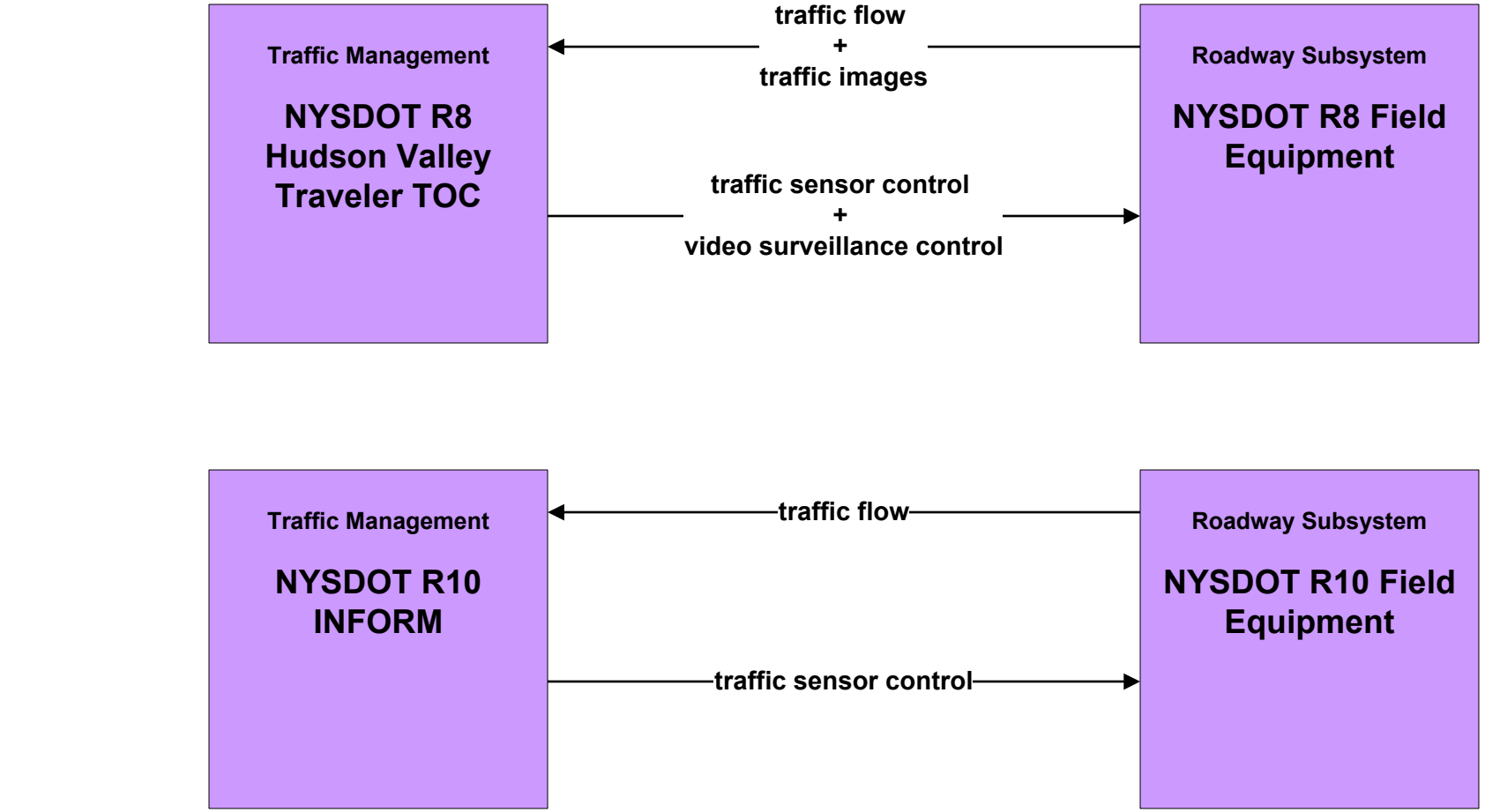
existing flow

user defined flow

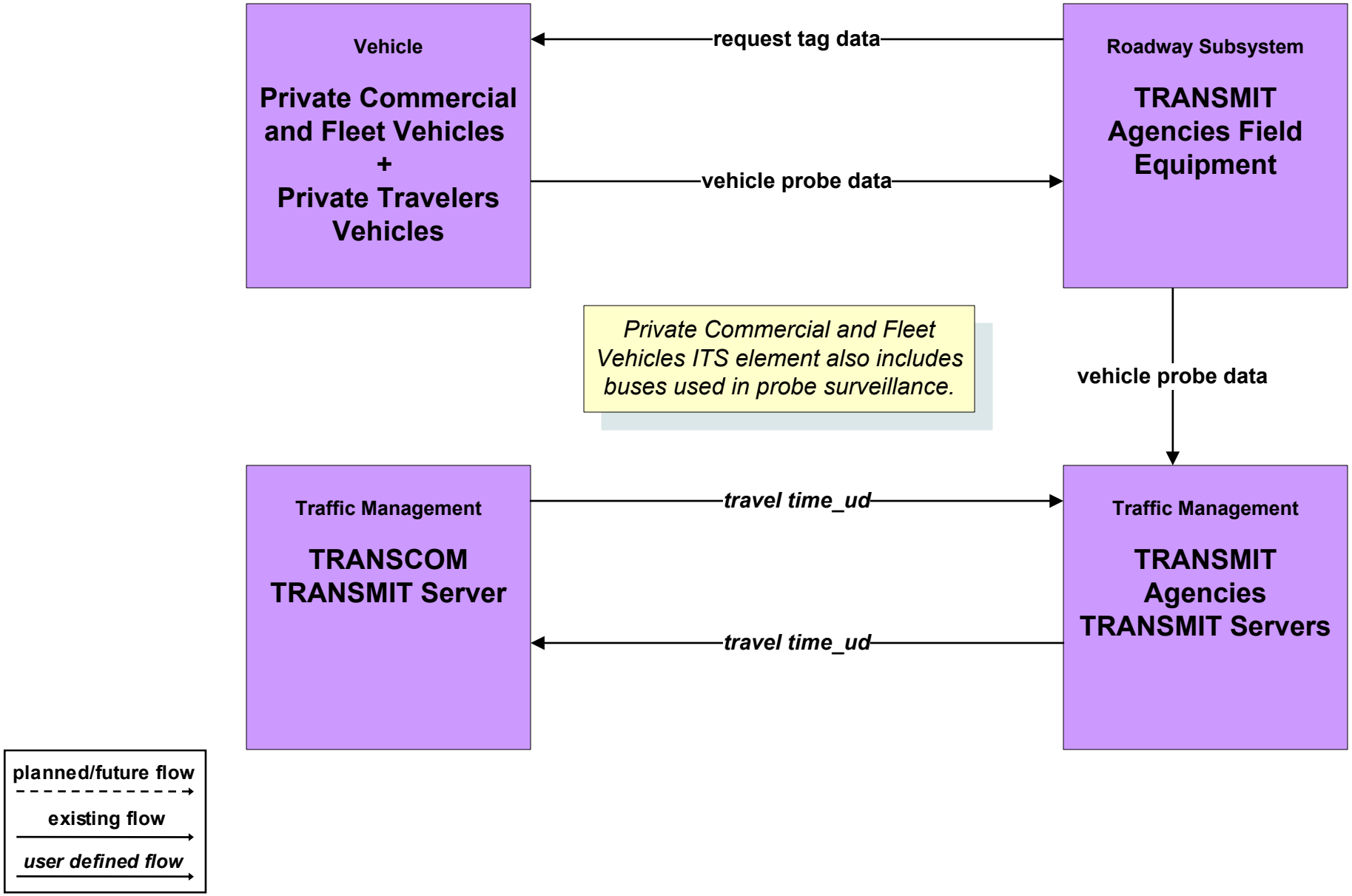
ATMS01 - Network Surveillance
MTA Bridges and Tunnels



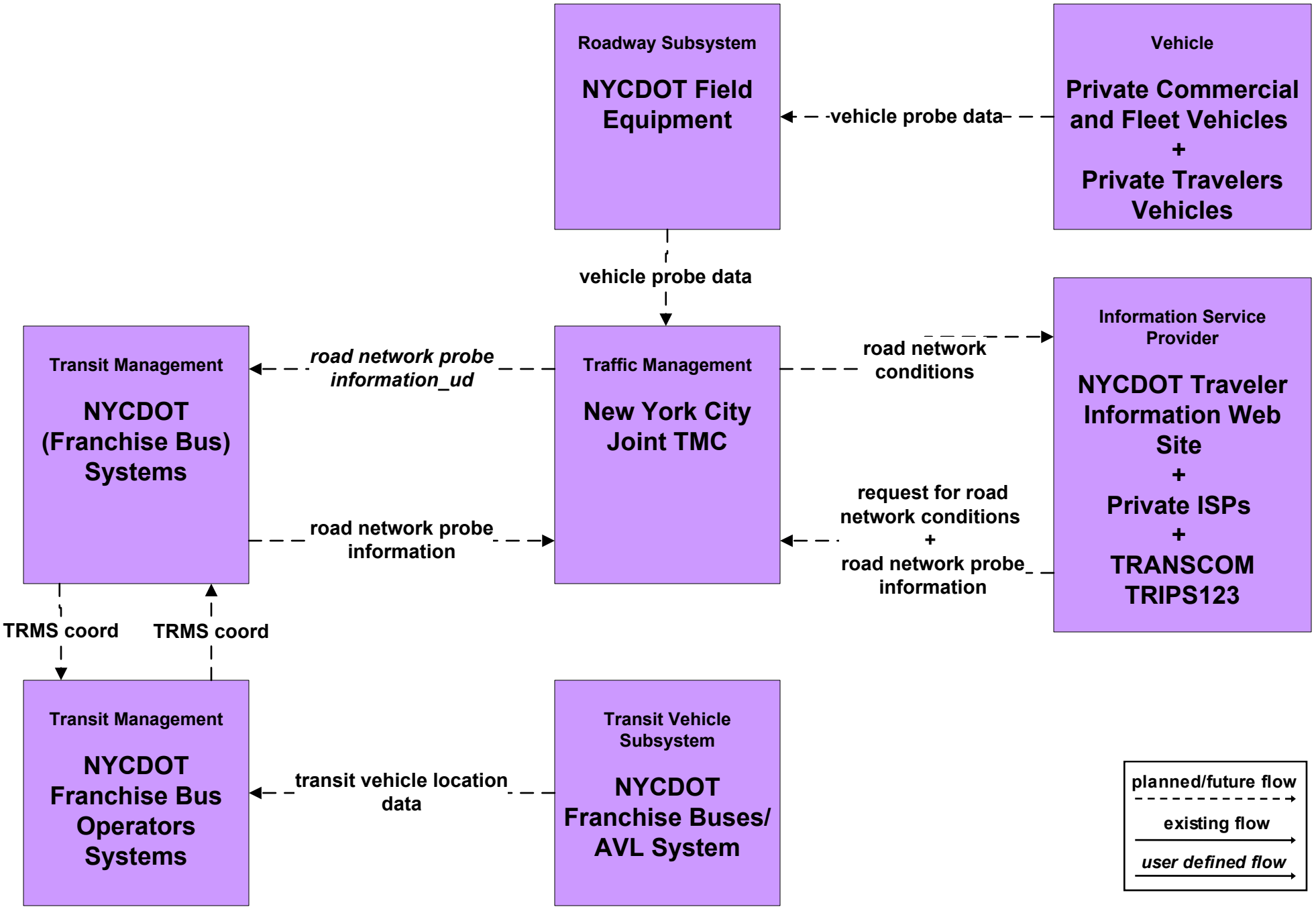
ATMS01 - Network Surveillance
NYSDOT R8 and NYSDOT R10



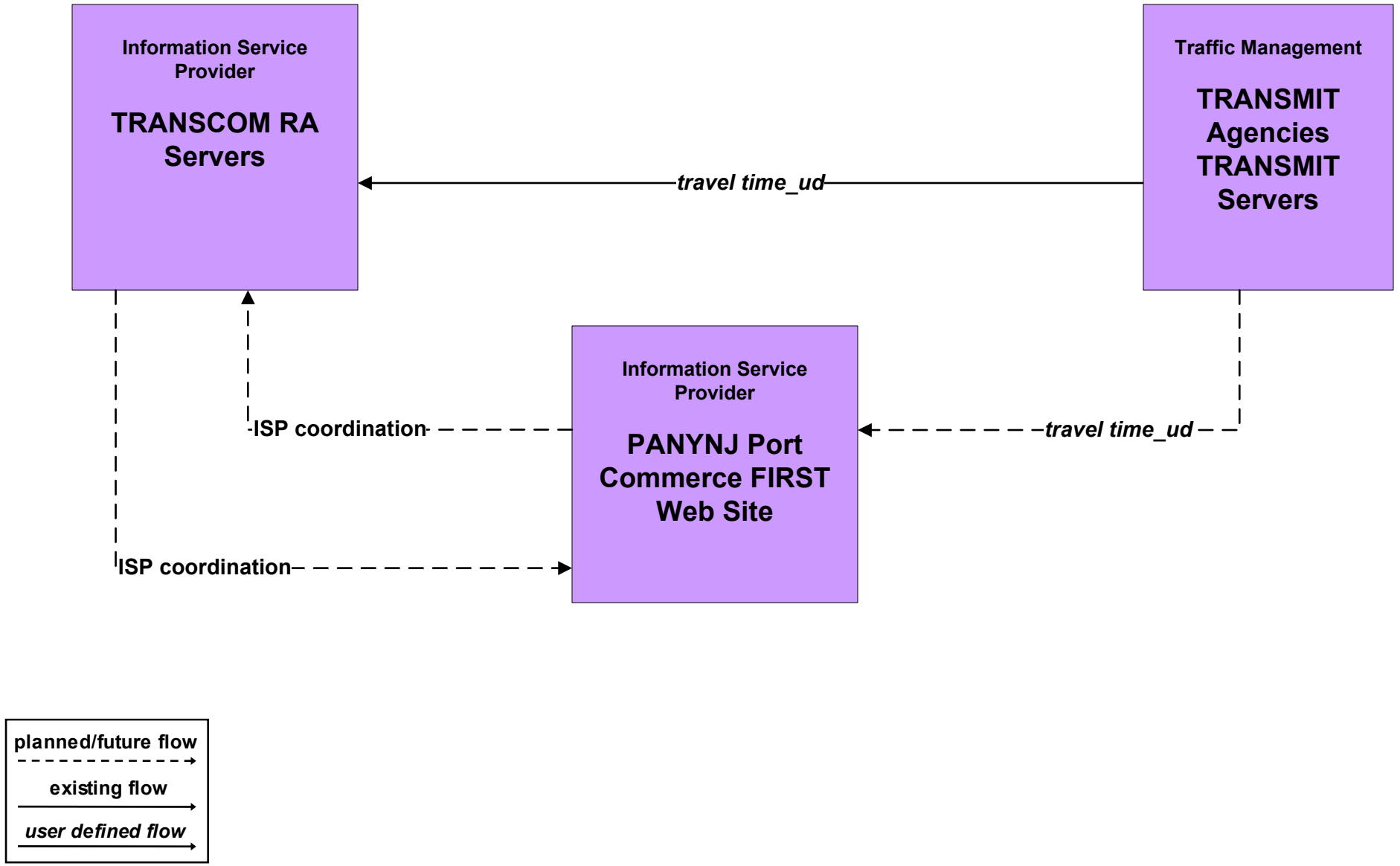
ATMS02 - Probe Surveillance
TRANSMIT



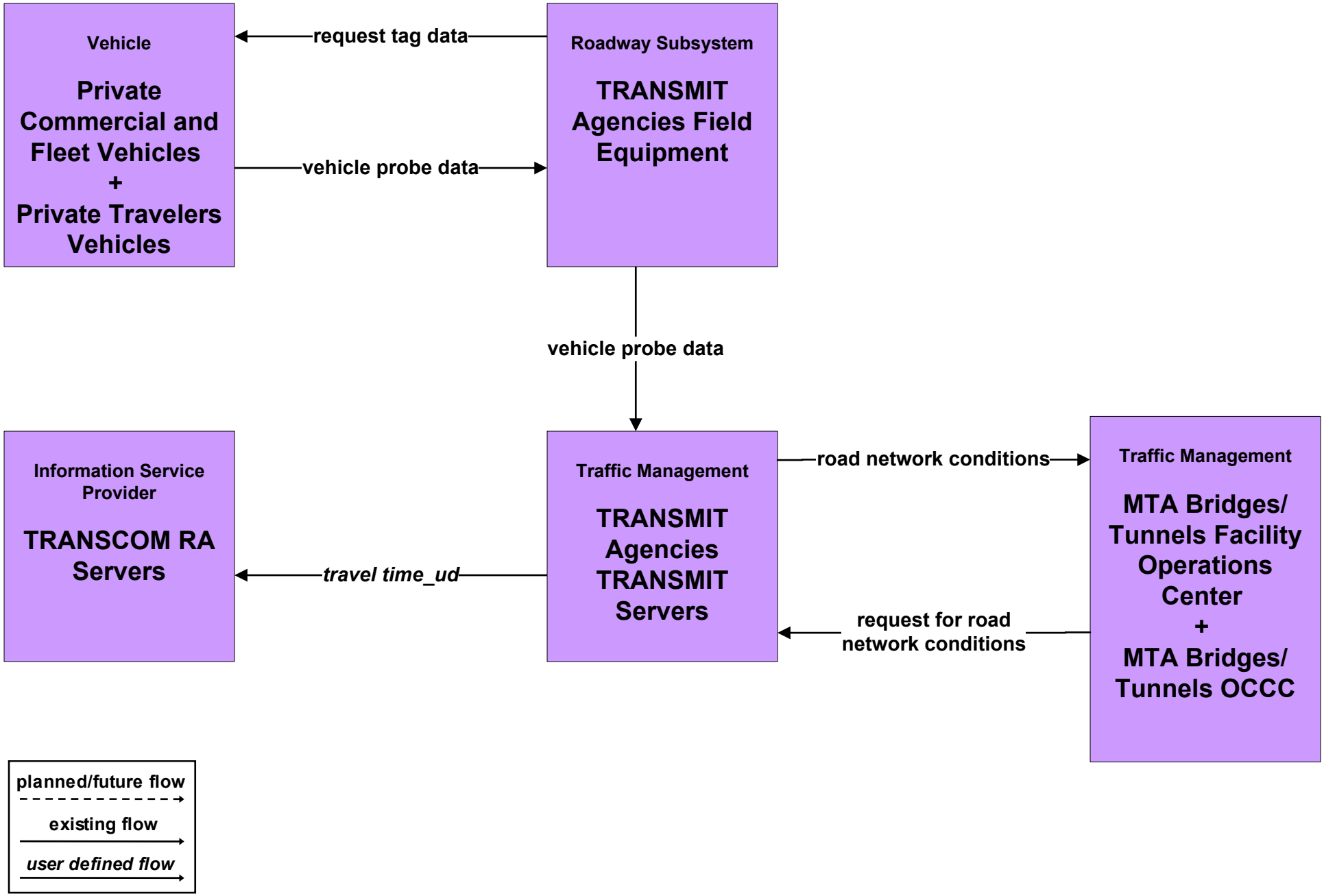
ATMS02 - Probe Surveillance
New York City Joint TMC



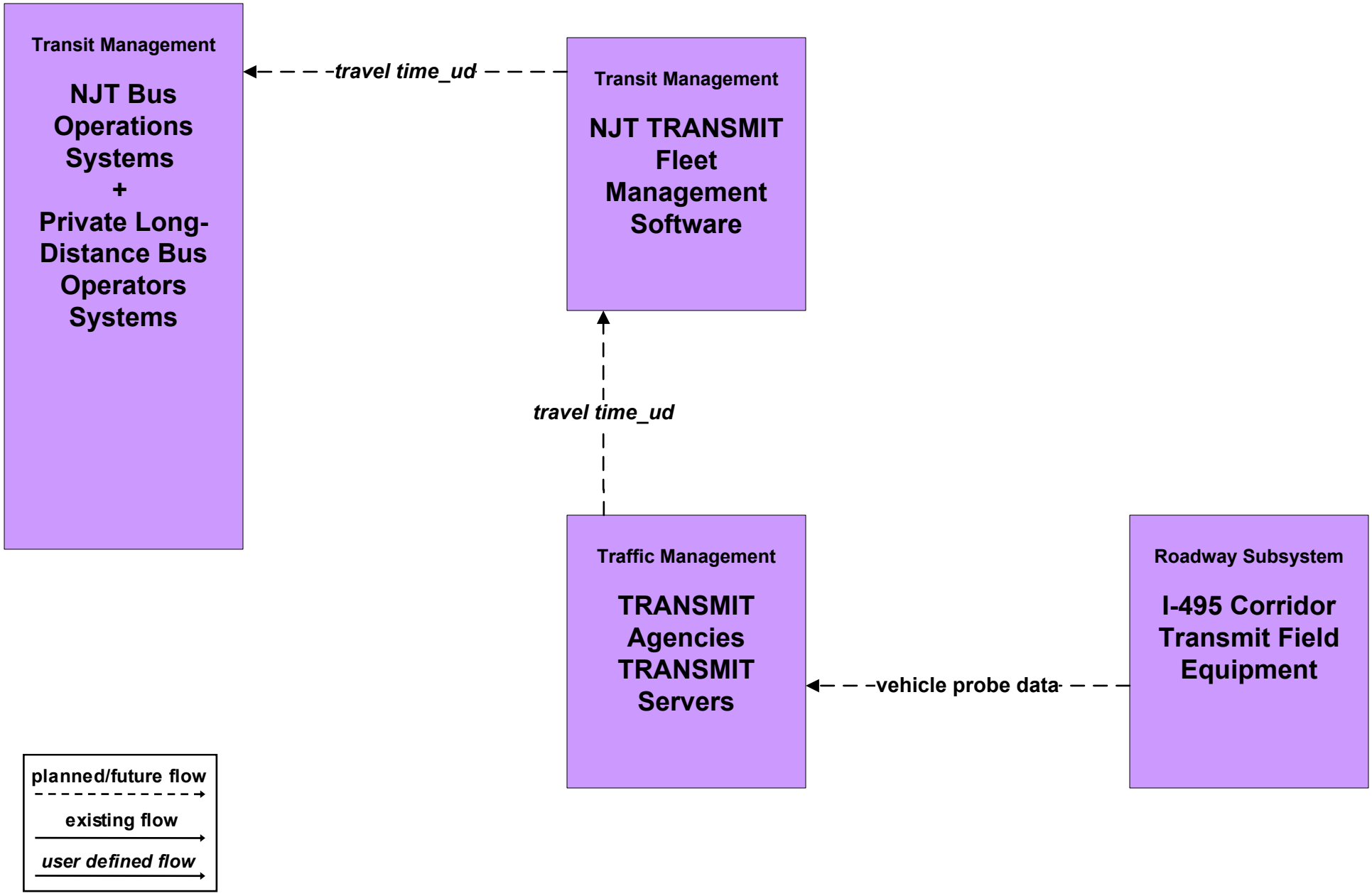
ATMS02 - Probe Surveillance
PANYNJ Port Commerce FIRST (Freight Information for Real-Time System for Transport)



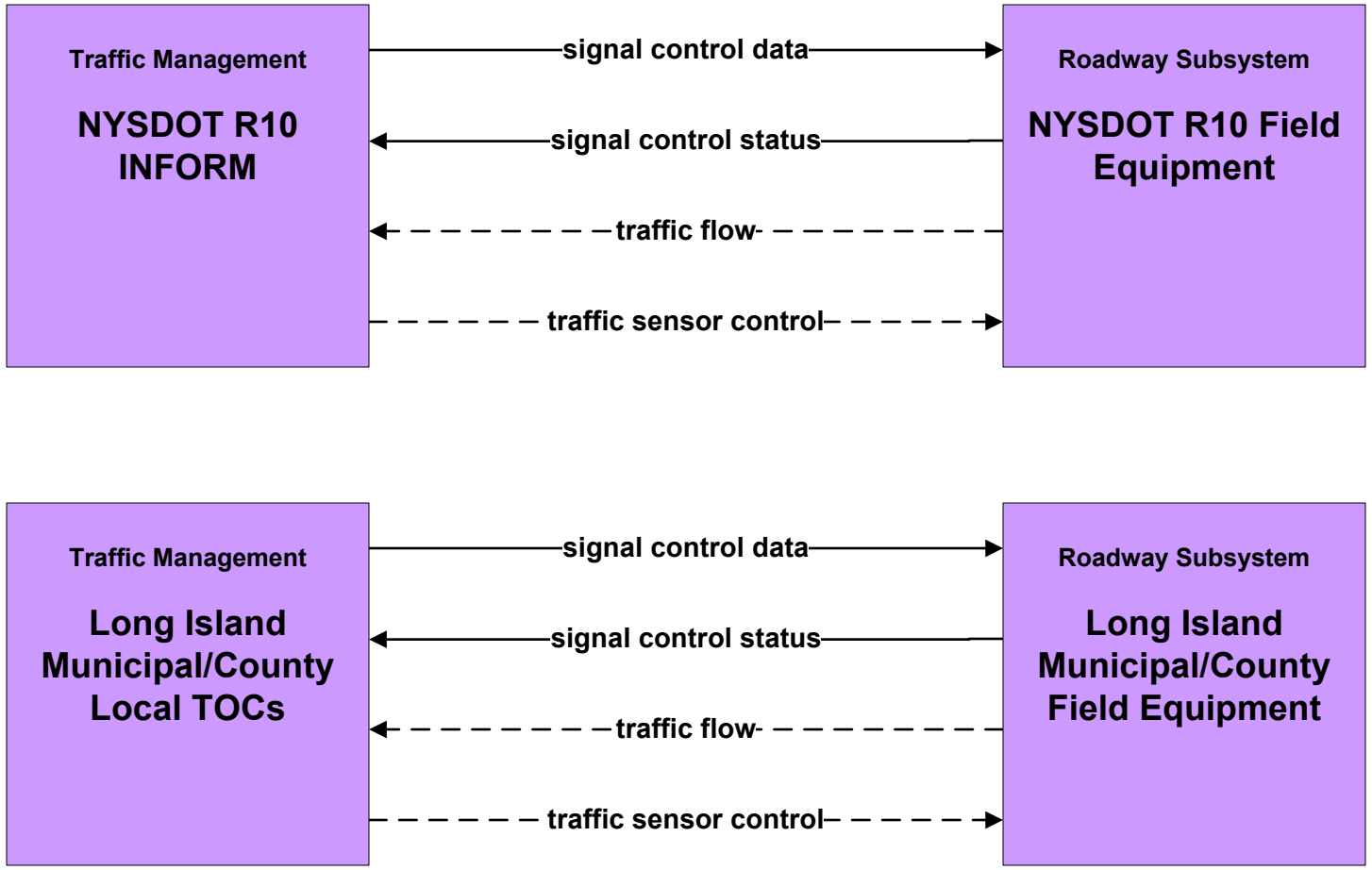
ATMS02 - Probe Surveillance
MTA Bridges and Tunnels

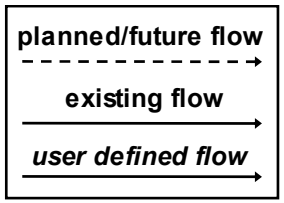


ATMS02 - Probe Surveillance
PANYNJ Tunnels/Bridges, PANYNJ Bus Terminal

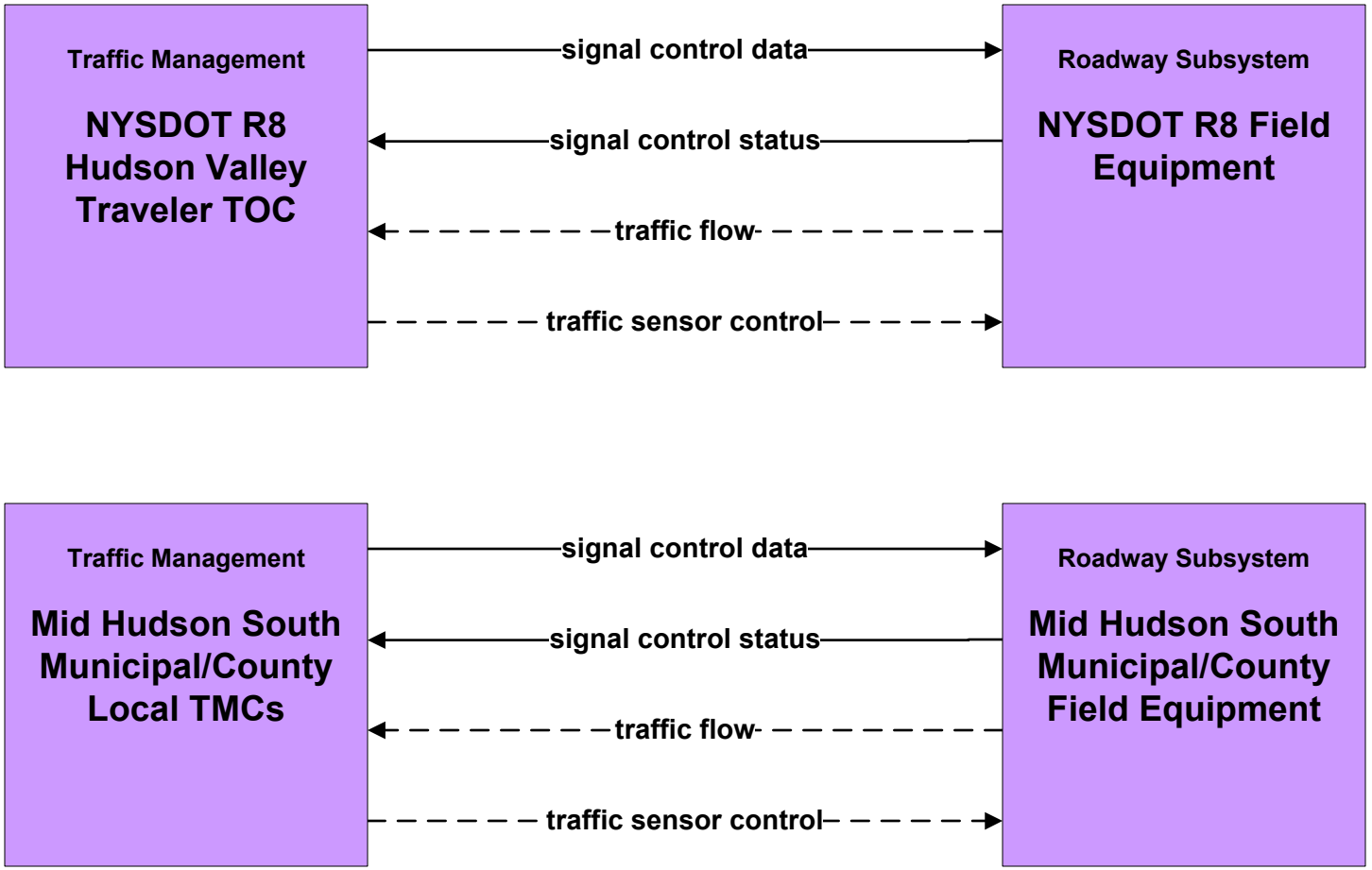


ATMS03 - Surface Street Control
NYSDOT R10 INFORM / Long Island Municipal/County TMCs





ATMS03 - Surface Street Control
NYSDOT R8 TOCs/ Mid Hudson South TMCs

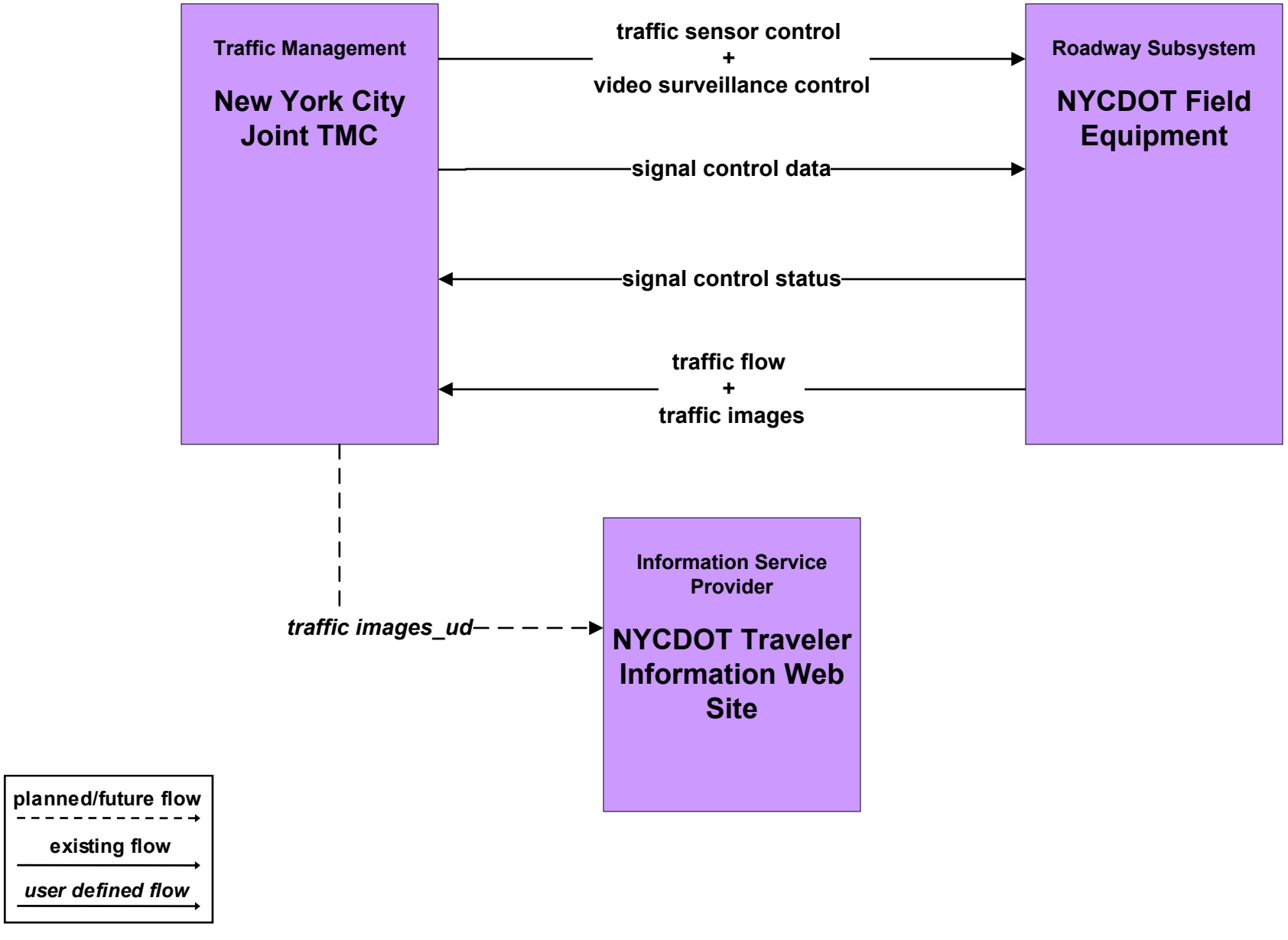


planned/future flow

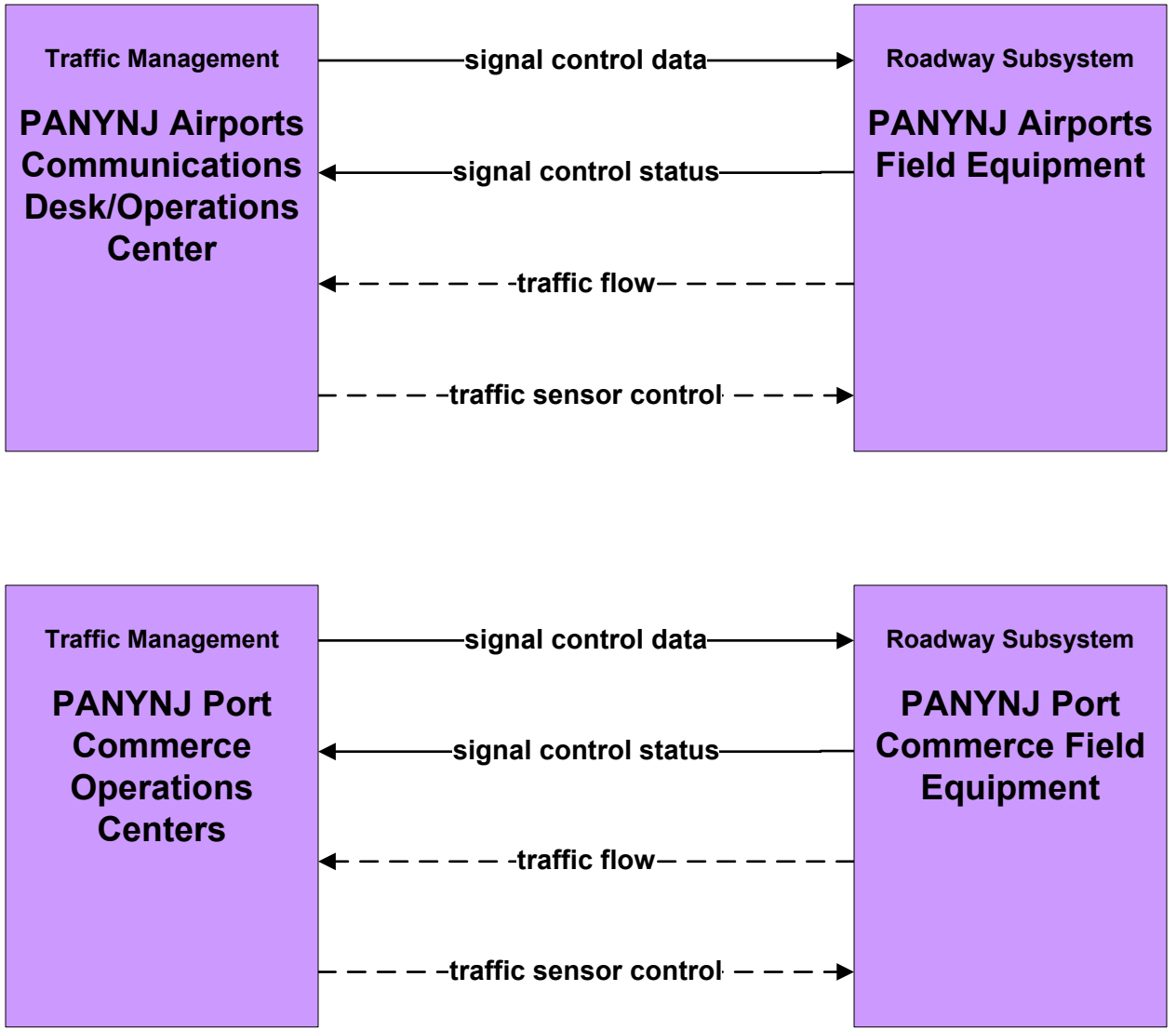
existing flow

user defined flow

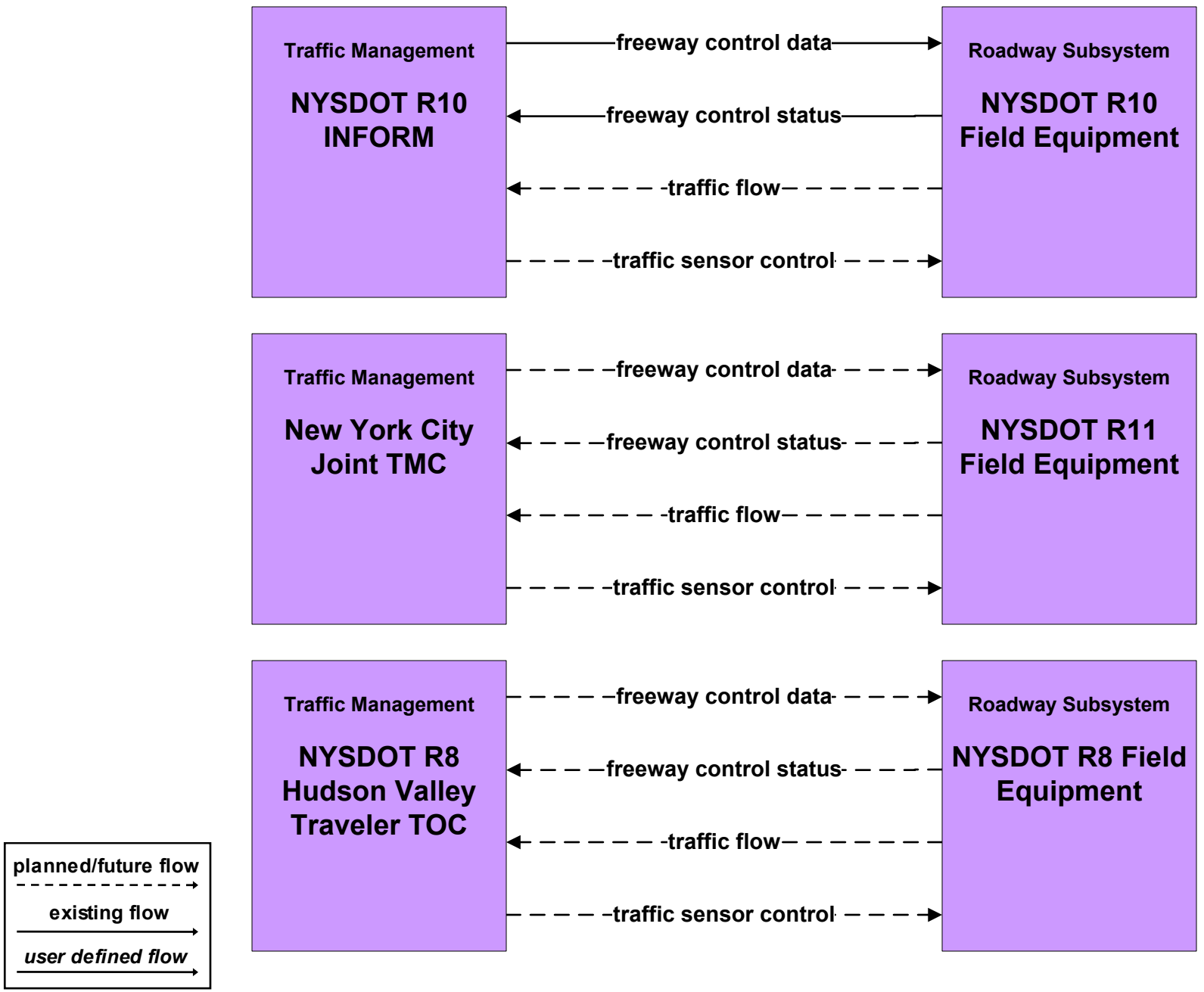
ATMS03 - Surface Street Control
NYCDOT



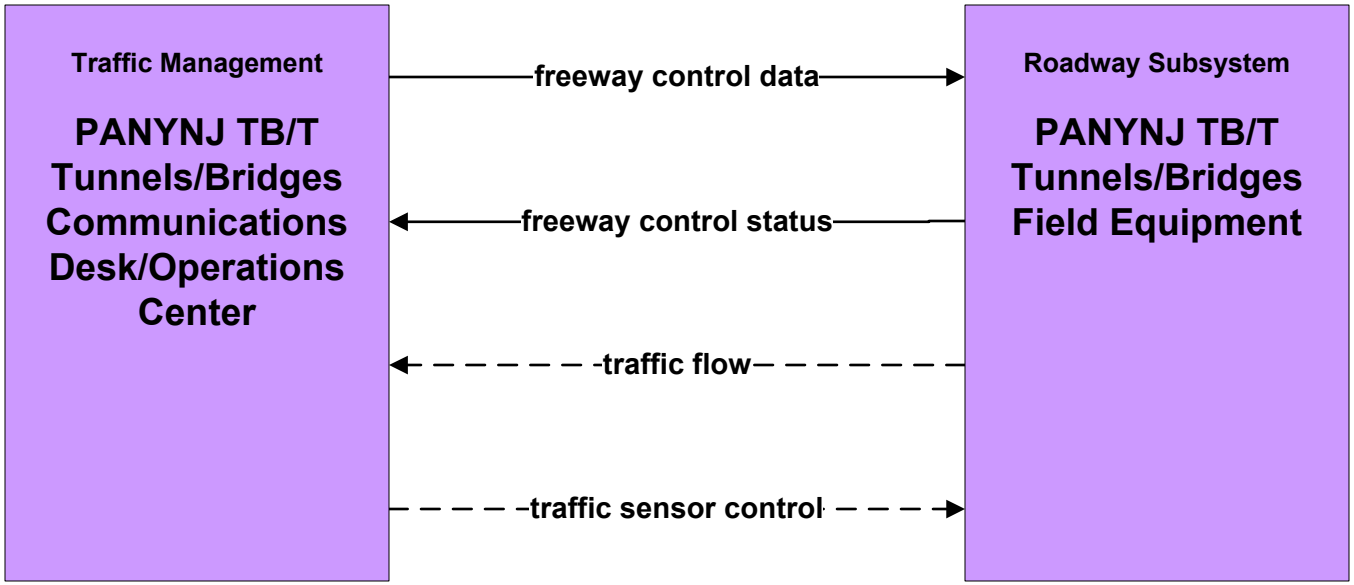
ATMS03 - Surface Street Control
PANYNJ Airports and Port Commerce



ATMS04 - Freeway Control
NYSDOT R8/R10/R11



ATMS04 - Freeway Control
PANYNJ Tunnels/Bridges

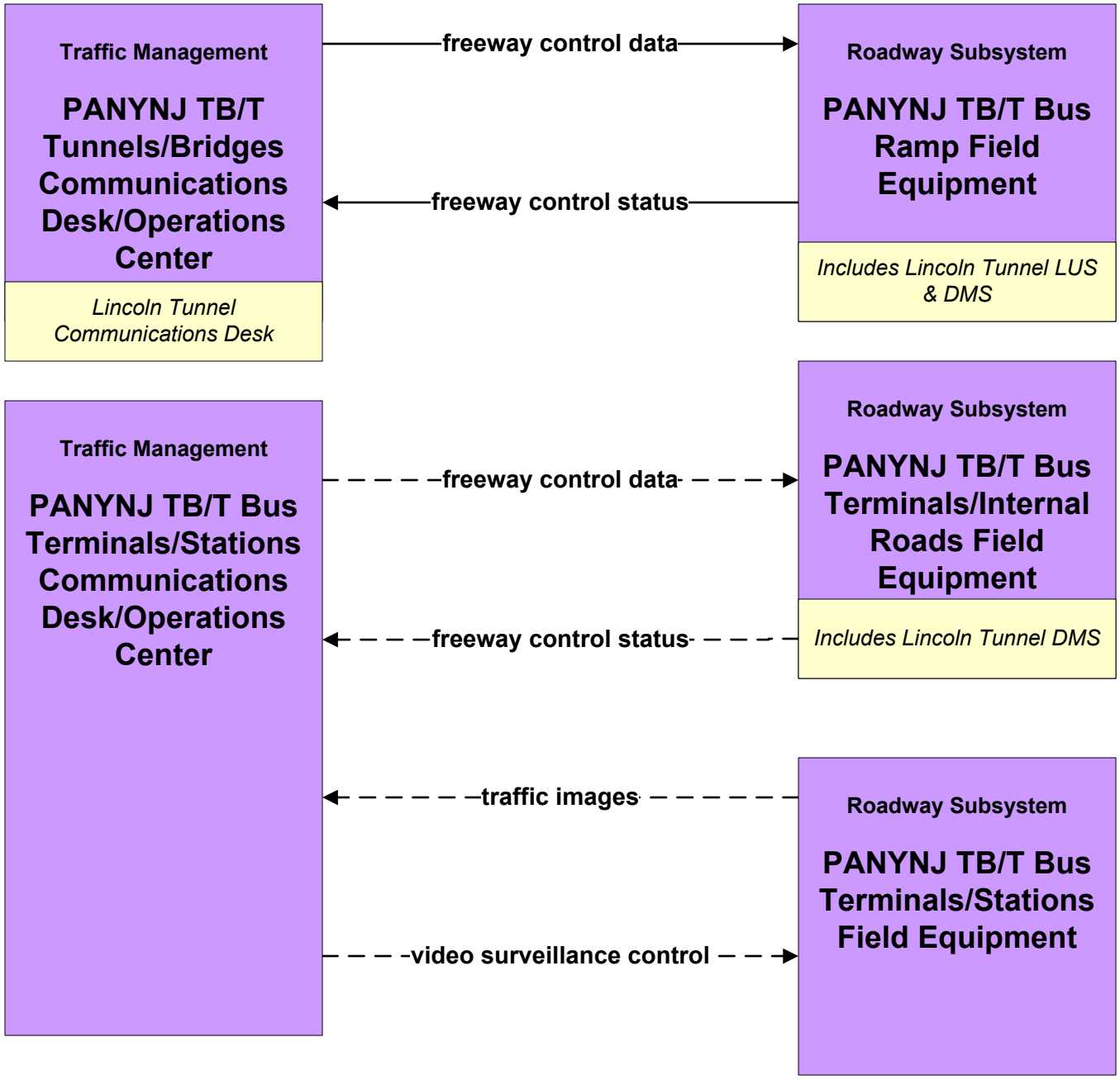


planned/future flow

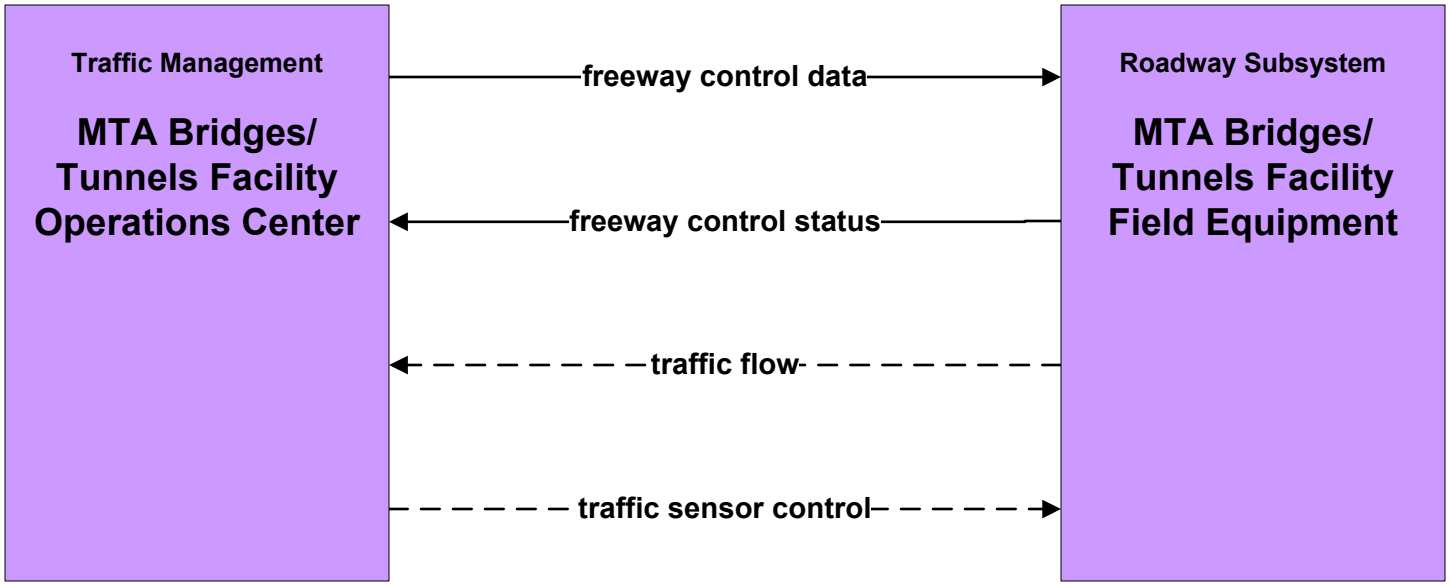
existing flow

user defined flow

ATMS04 - Freeway Control
PANYNJ Bus Terminal



ATMS04 - Freeway Control
MTA Bridges and Tunnels

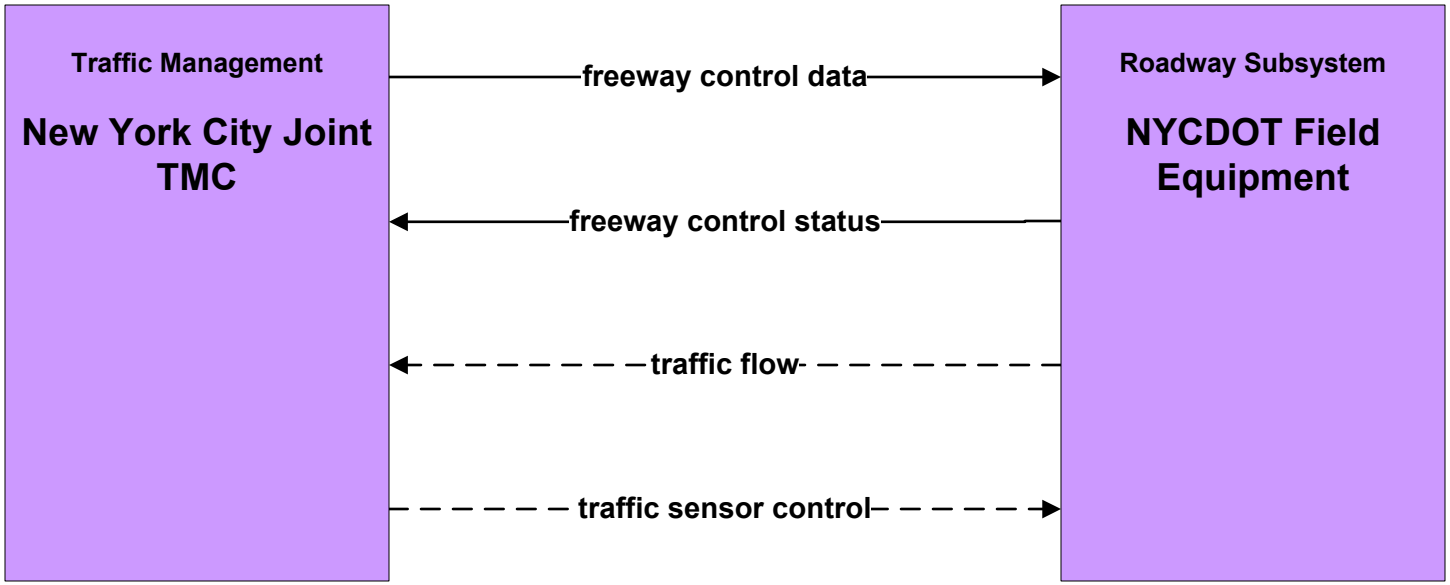


planned/future flow

existing flow

user defined flow

ATMS04 - Freeway Control
NYCDOT

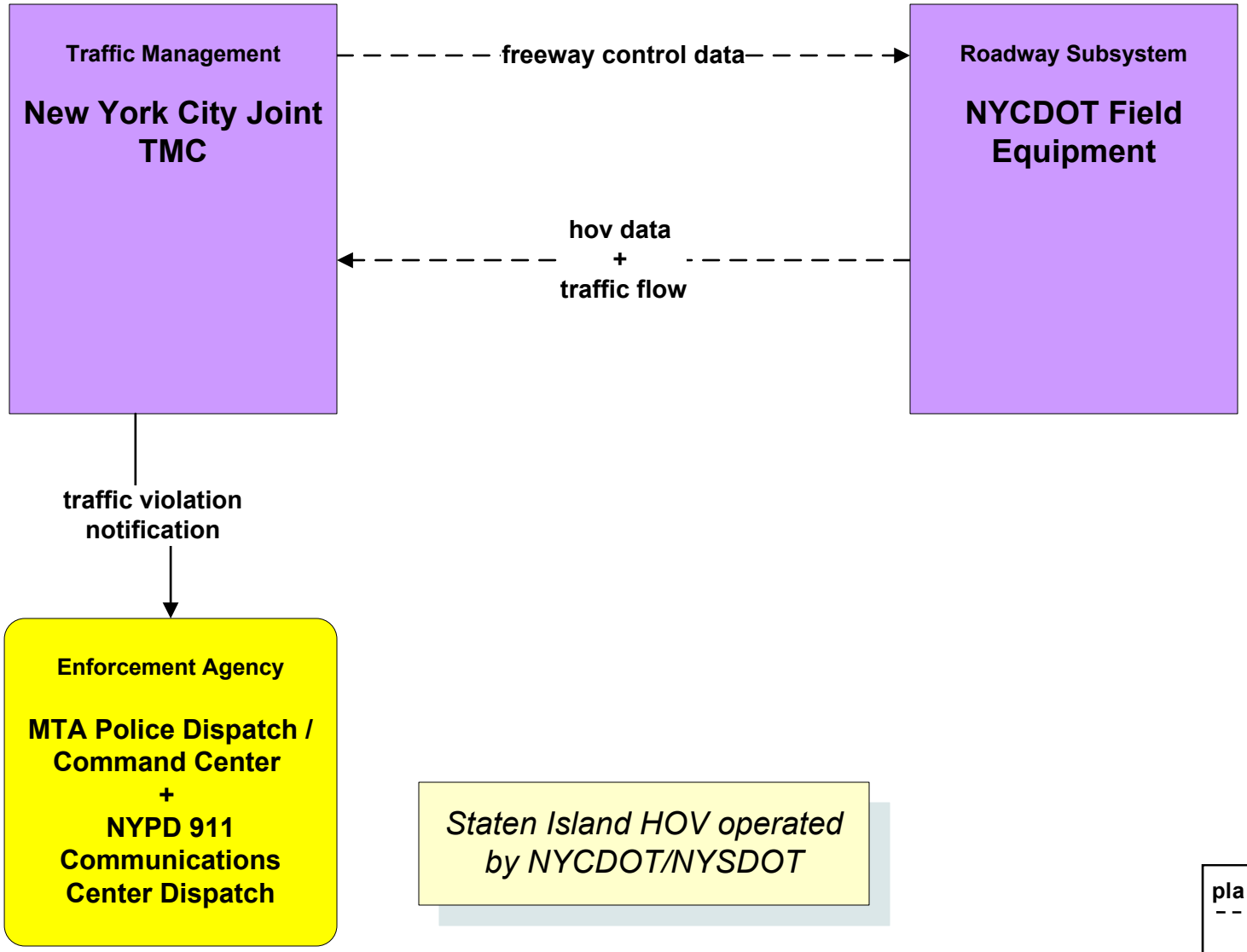


planned/future flow

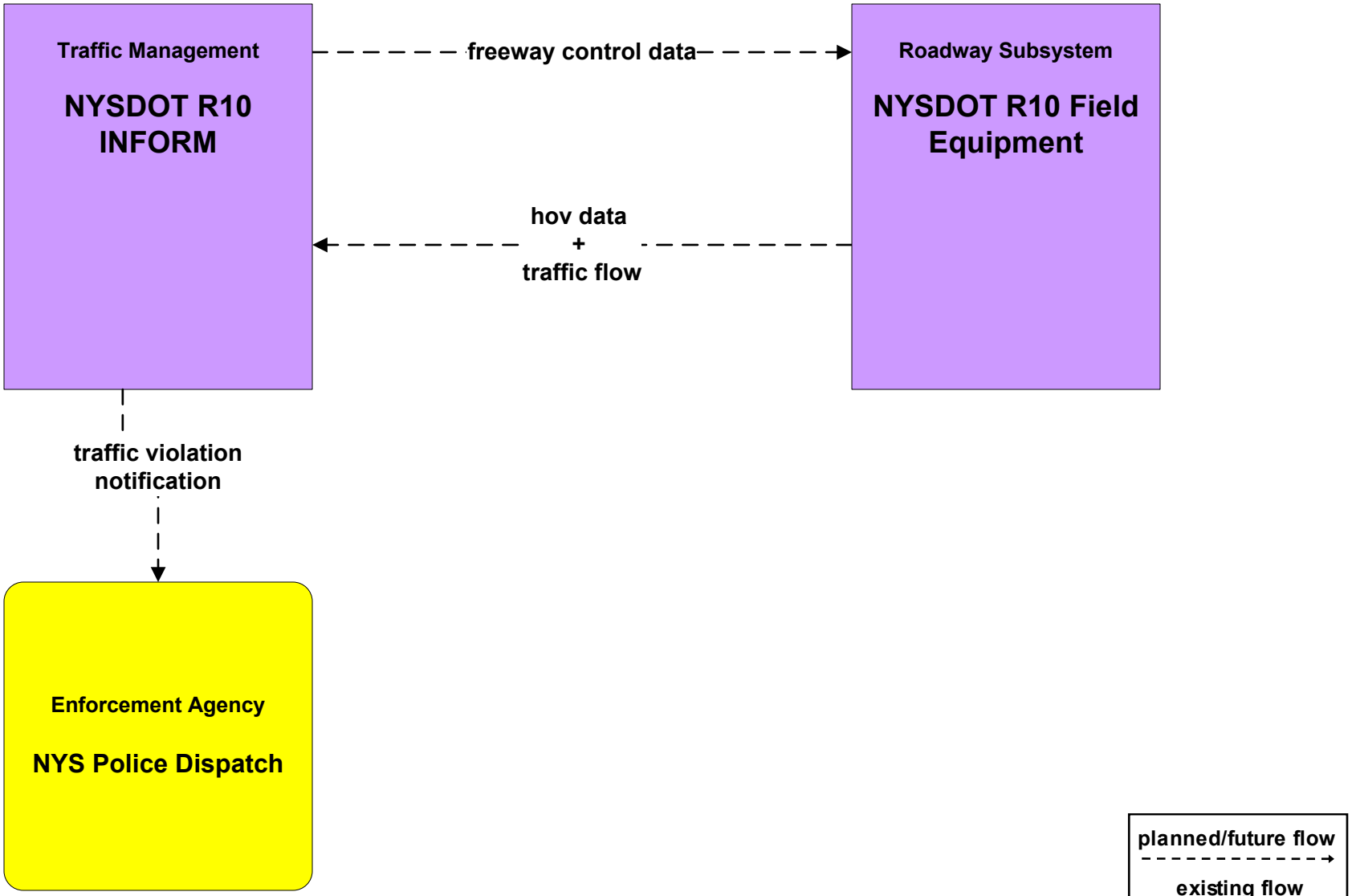
existing flow

user defined flow

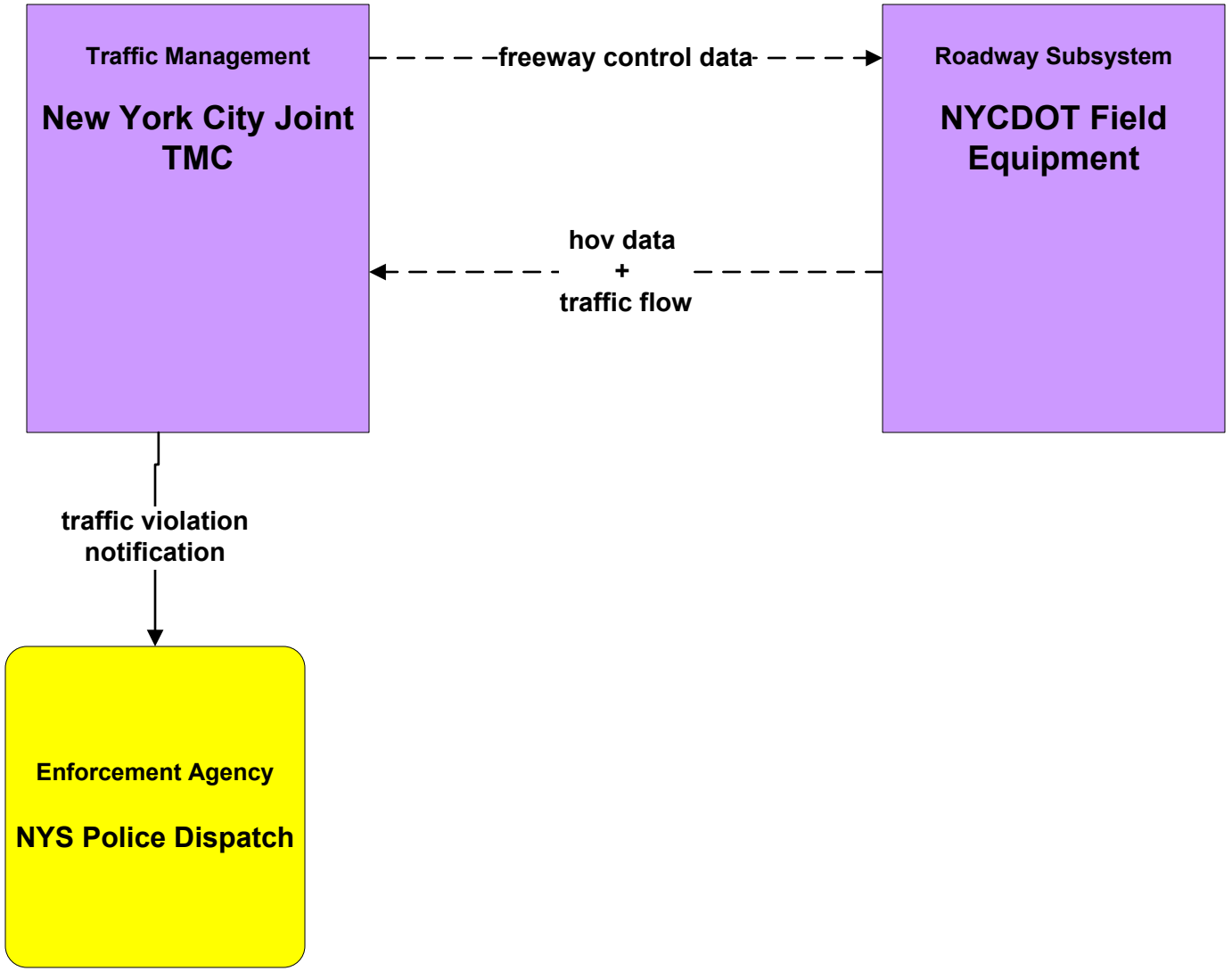
ATMS05 - HOV Lane Management
NYCDOT - LIE/BQE/SIE HOV



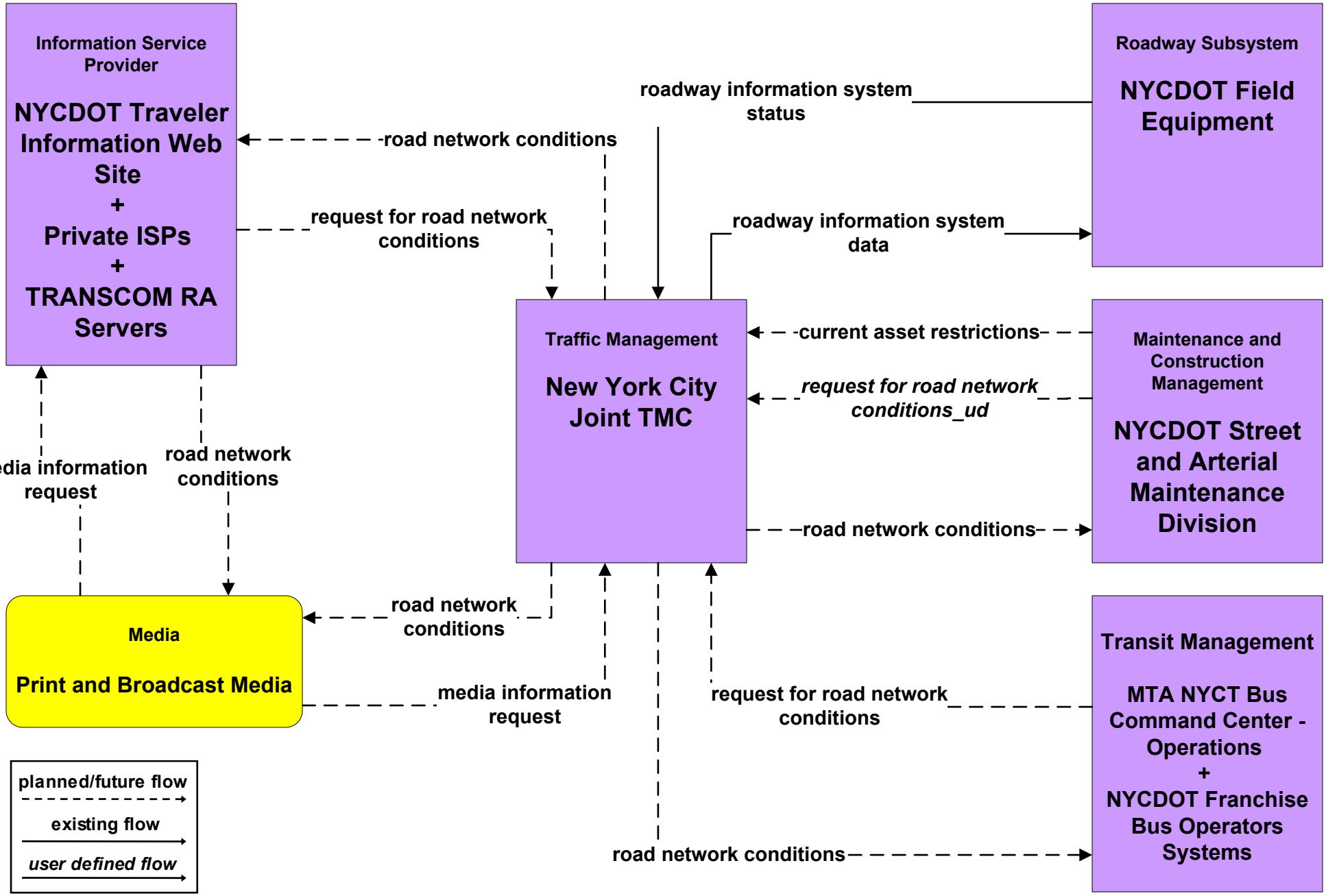
ATMS05 - HOV Lane Management
NYSDOT R10 INFORM



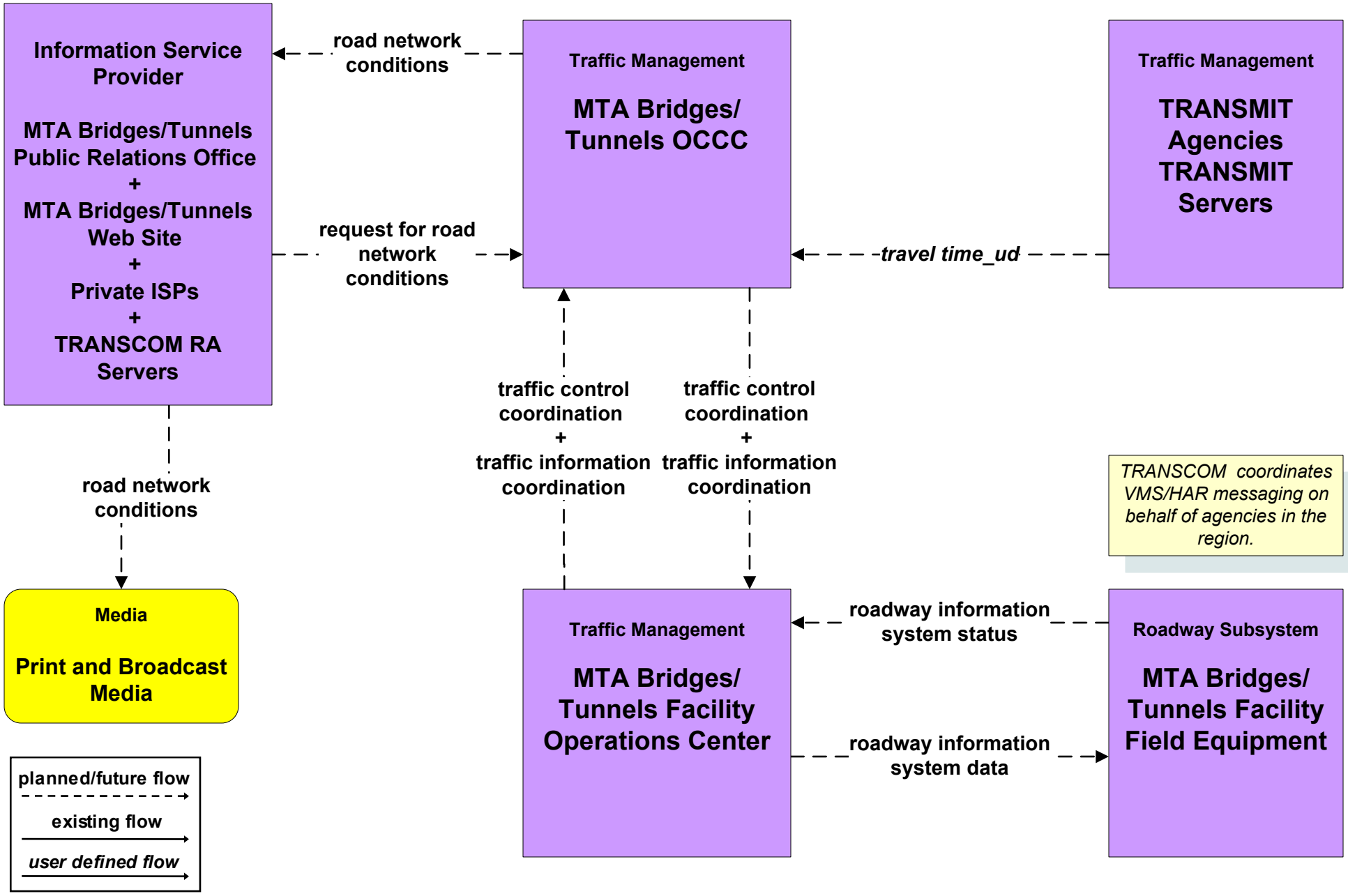
ATMS05 - HOV Lane Management
NYCDOT - East River Bridge Crossings HOV



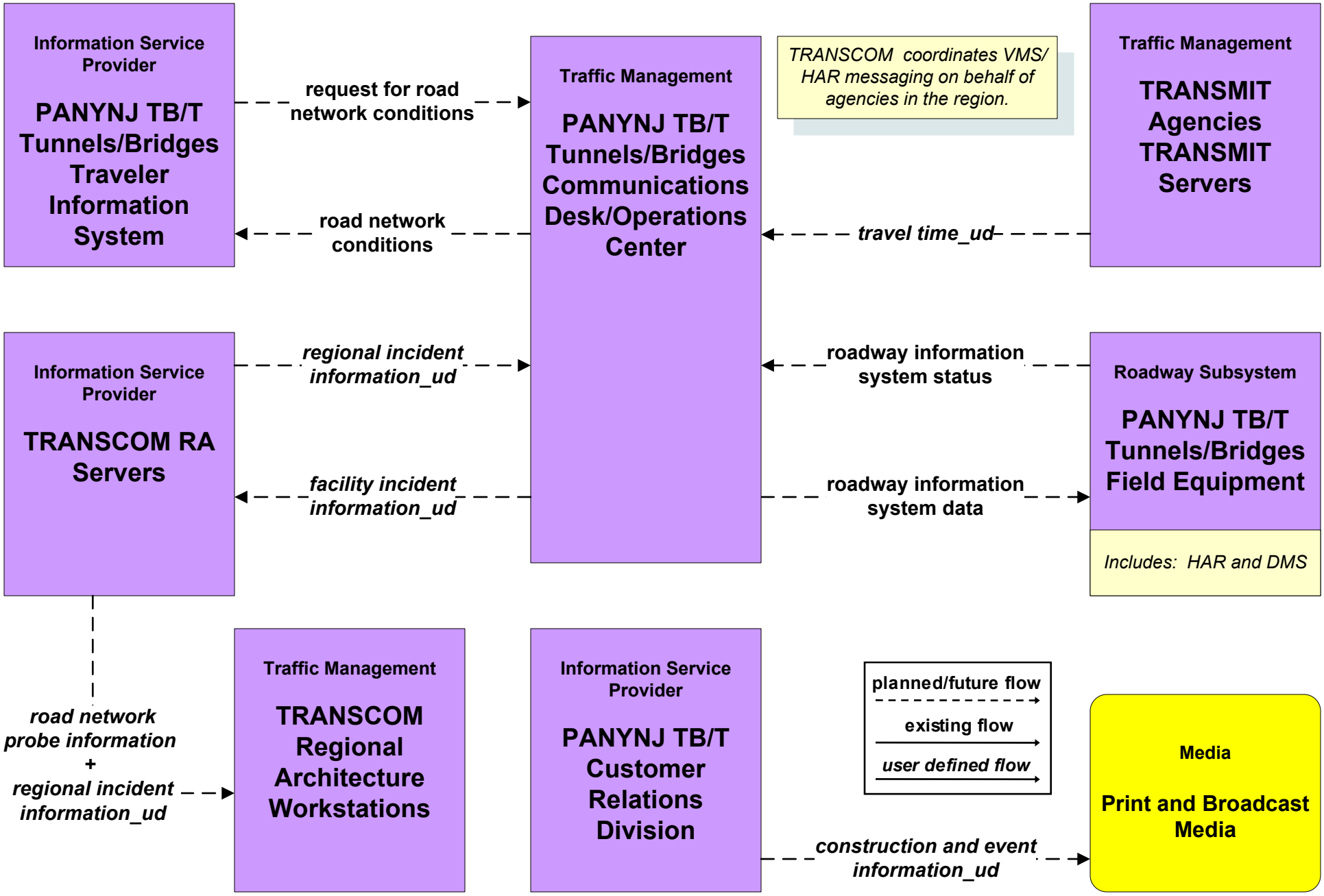
ATMS06 - Traffic Information Dissemination
New York City Joint TMC



ATMS06 - Traffic Information Dissemination
MTA Bridges and Tunnels



ATMS06 - Traffic Information Dissemination
PANYNJ Tunnels/Bridges



ATMS06 - Traffic Information Dissemination
PANYNJ Airports

Traveler Information Systems include web server and voice response telephone.

Information Service Provider

PANYNJ Airports Traveler Information Systems

road network conditions

request for road network conditions

Traffic Management

PANYNJ Airports Communications Desk/Operations Center

travel time_ud

Traffic Management

TRANSMIT Agencies TRANSMIT Servers

Information Service Provider

TRANSCOM RA Servers

regional incident information_ud

facility incident information_ud

roadway information system status

roadway information system data

Roadway Subsystem

PANYNJ Airports Field Equipment

Includes: HAR and DMS

TRANSCOM coordinates VMS/ HAR messaging on behalf of agencies in the region.

road network probe information
+
regional incident information_ud

Traffic Management

TRANSCOM Regional Architecture Workstations

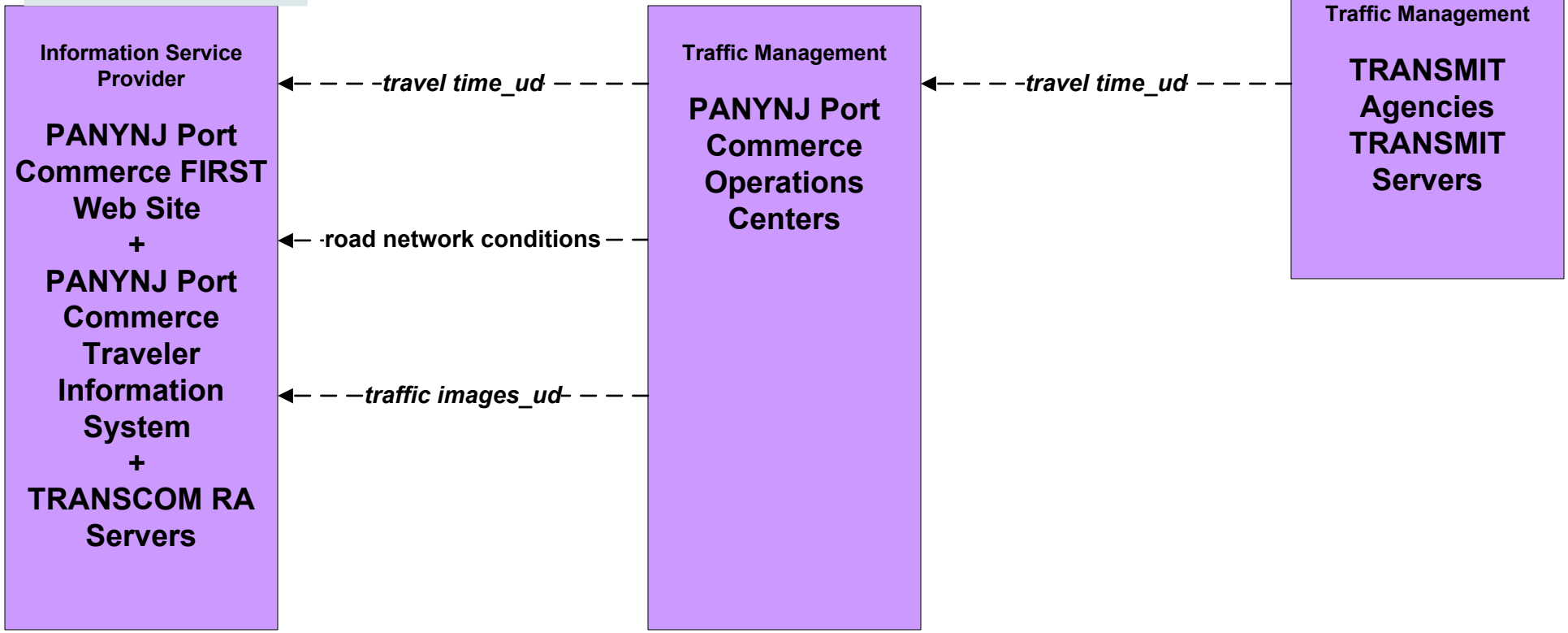
planned/future flow

existing flow

user defined flow

ATMS06 - Traffic Information Dissemination
PANYNJ Port Commerce

Traveler Information Systems include web server and voice response telephone.

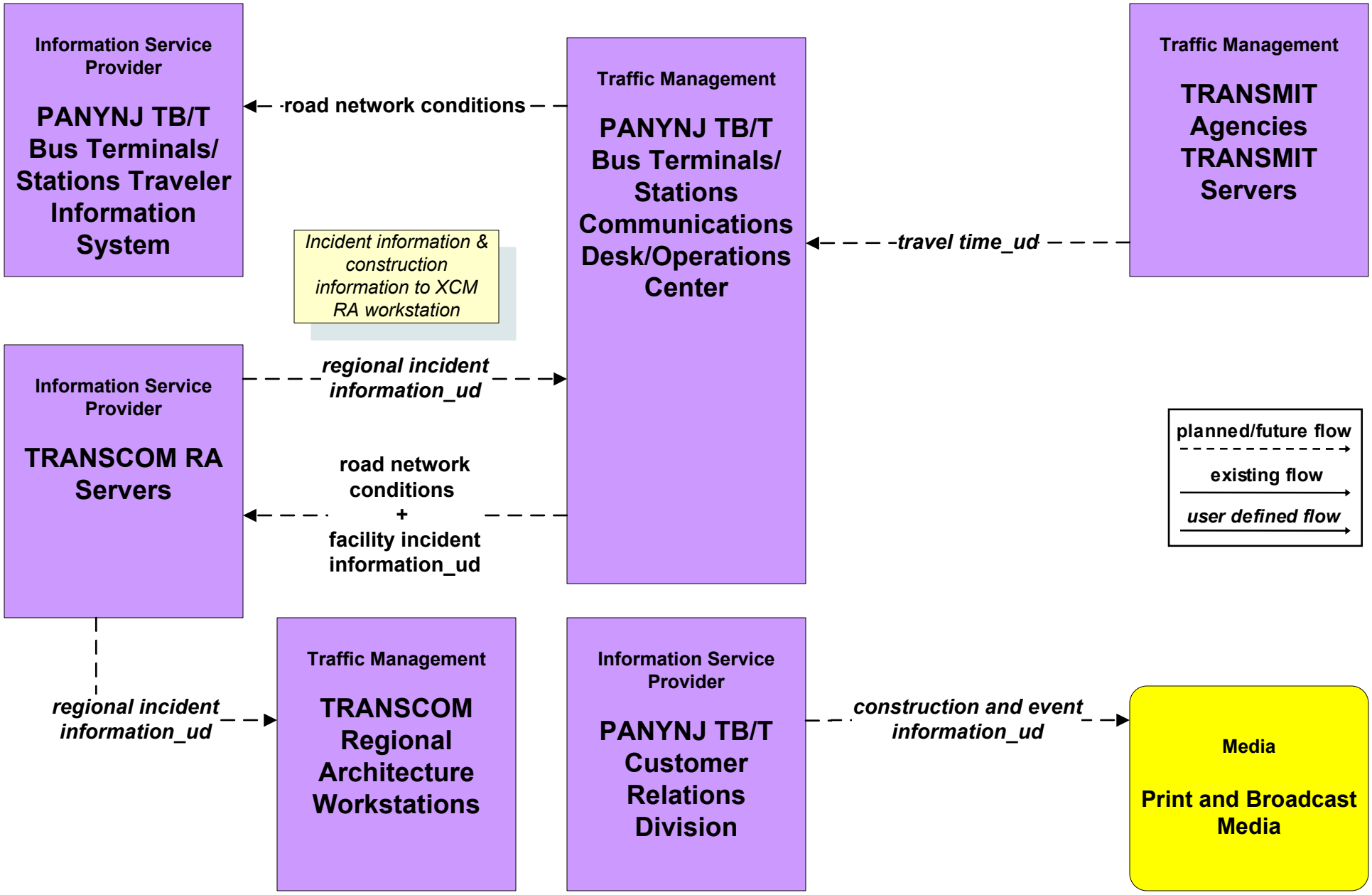


planned/future flow

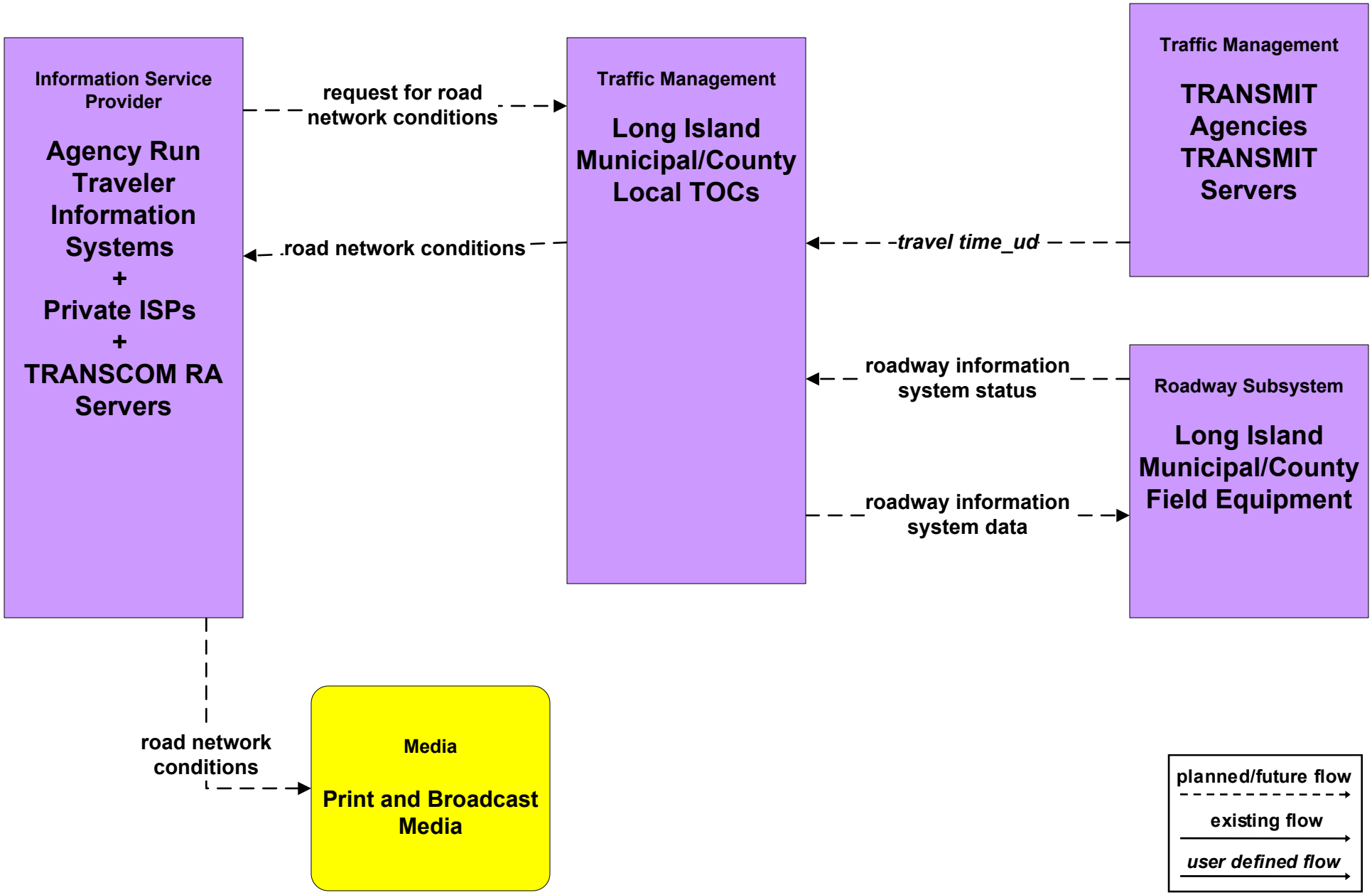
existing flow

user defined flow

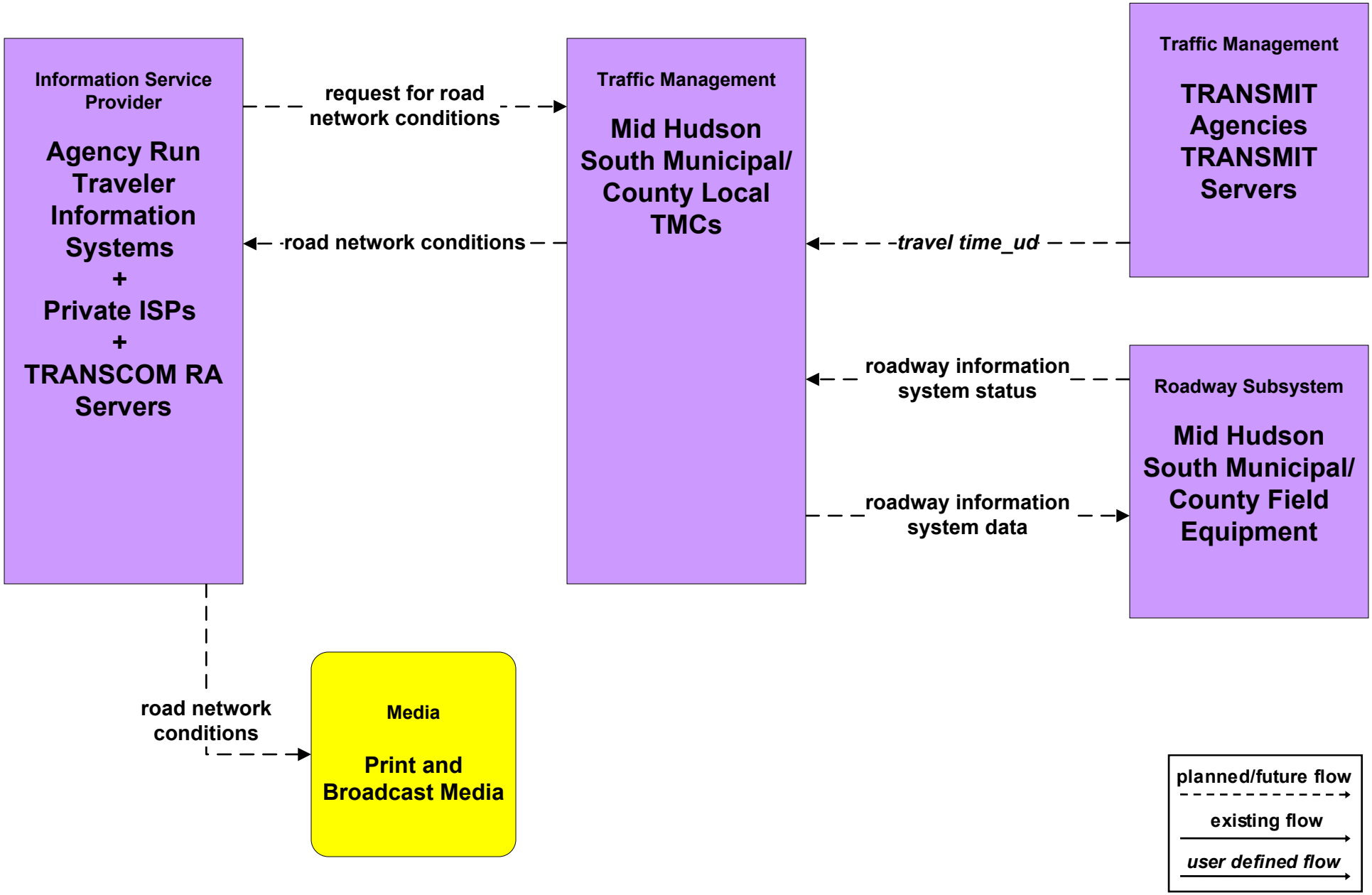
ATMS06 - Traffic Information Dissemination
PANYNJ Bus Terminals/Stations



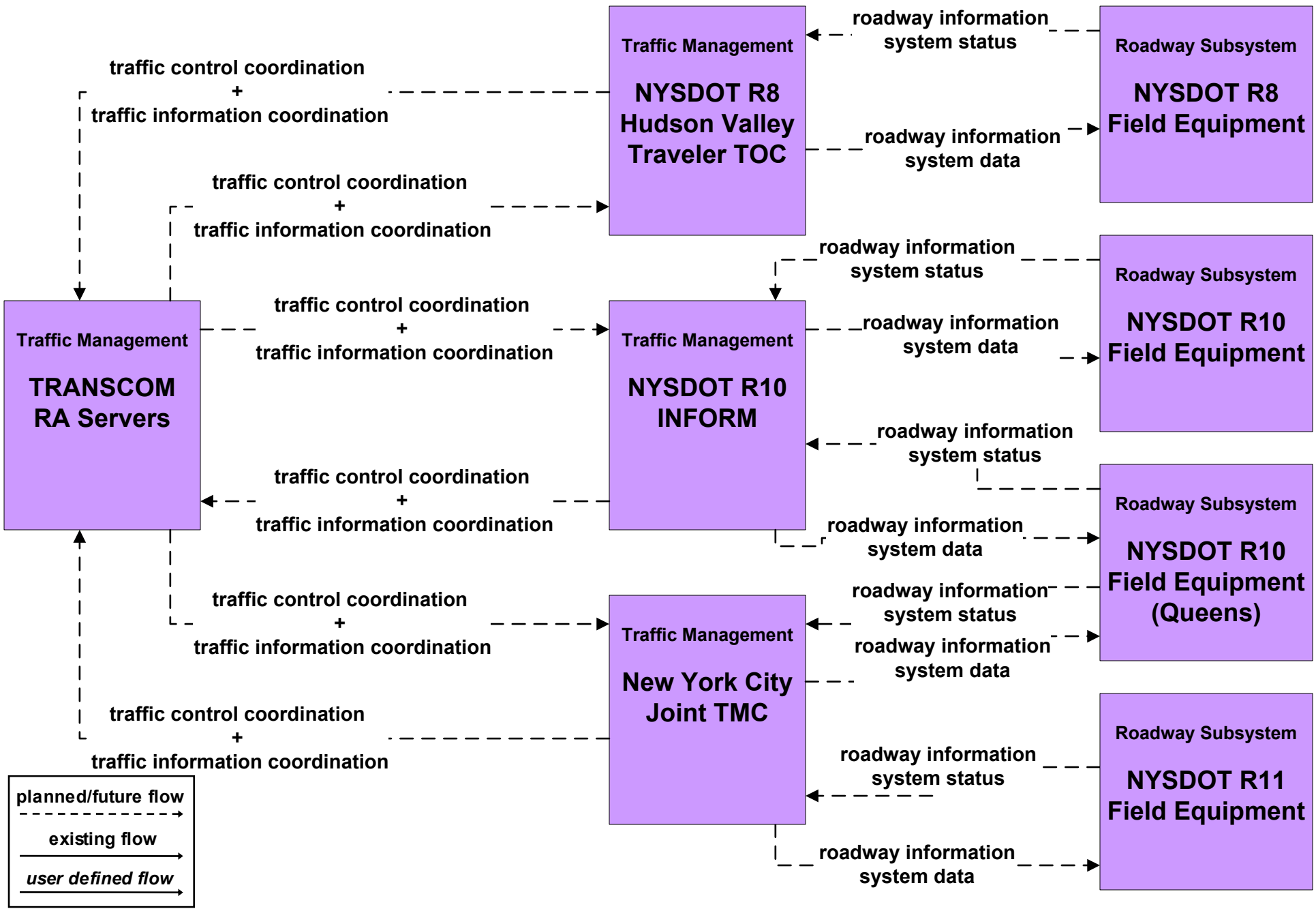
ATMS06 - Traffic Information Dissemination
Long Island Municipal/County TMCs



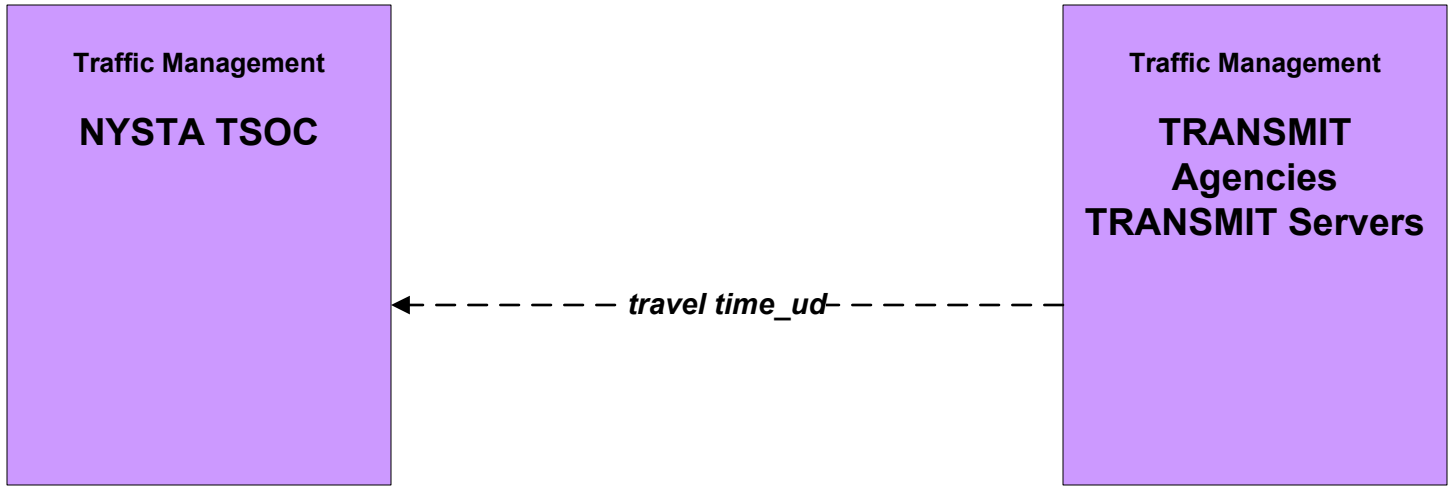
ATMS06 - Traffic Information Dissemination
Mid Hudson South Municipal/County TMCs

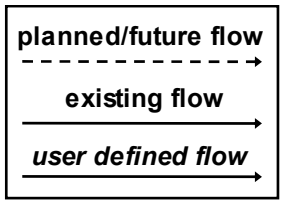


ATMS06 - Traffic Information Dissemination
NYSDOT Regions

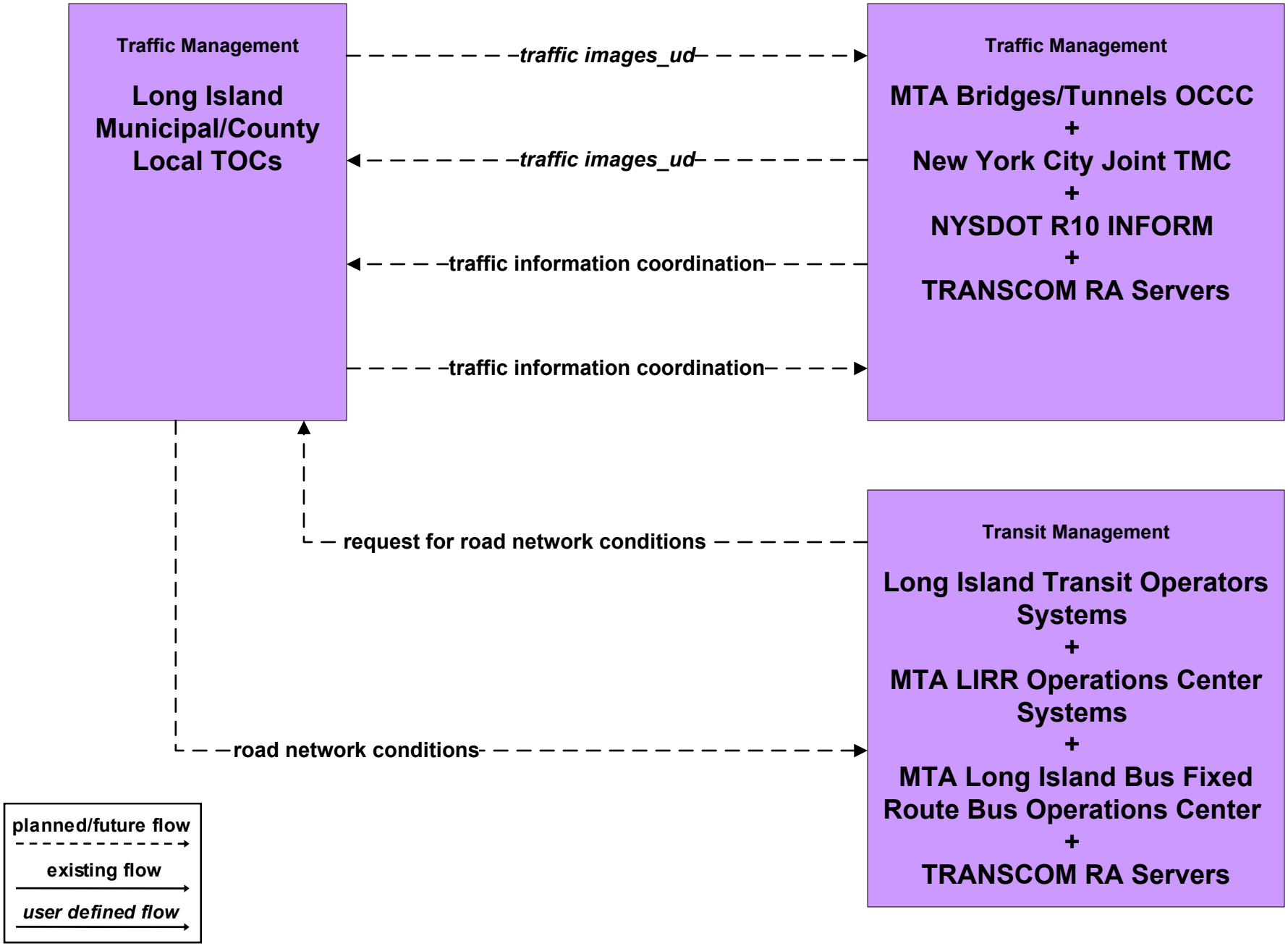


ATMS06 - Traffic Information Dissemination
NYSTA TSOC

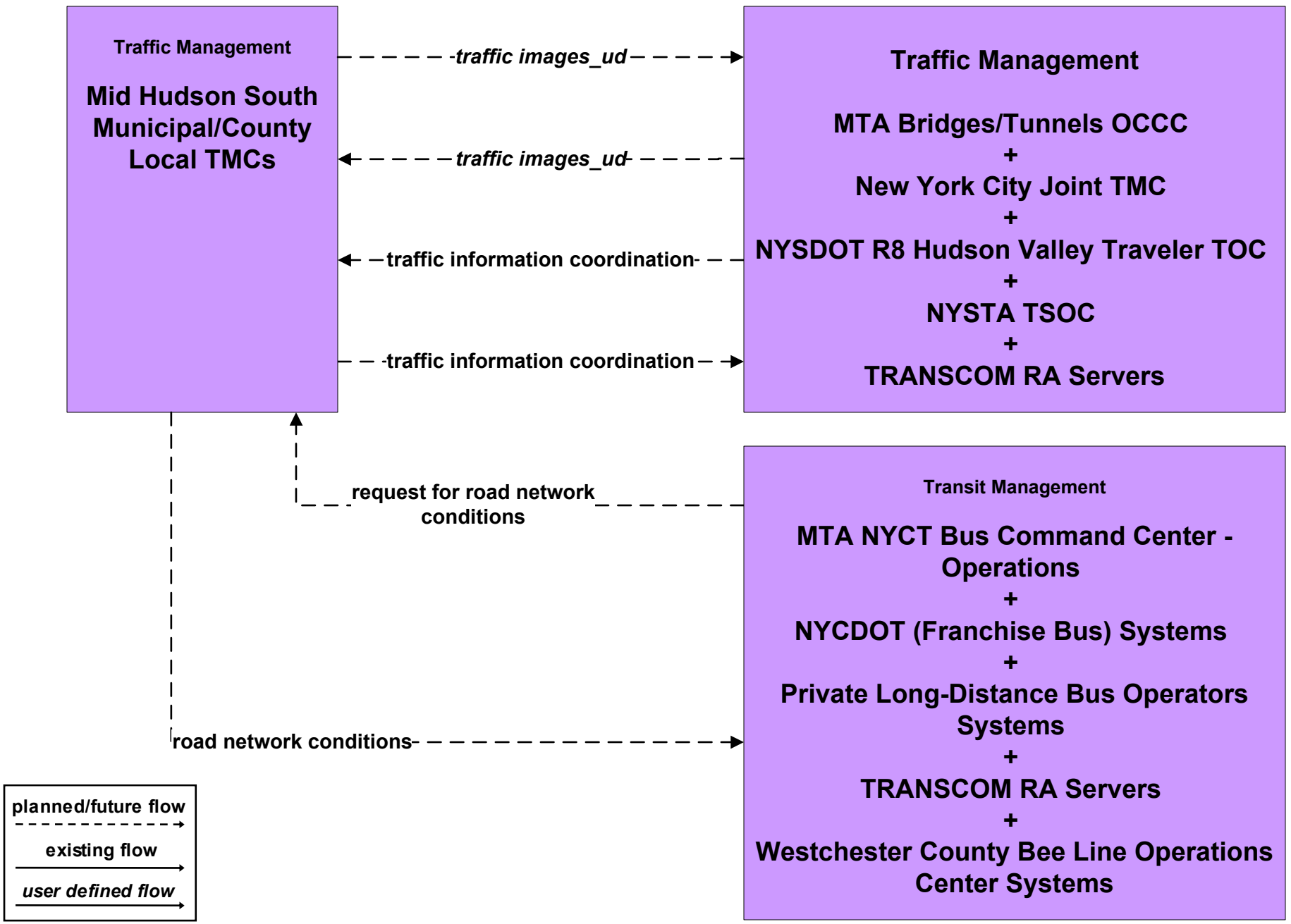




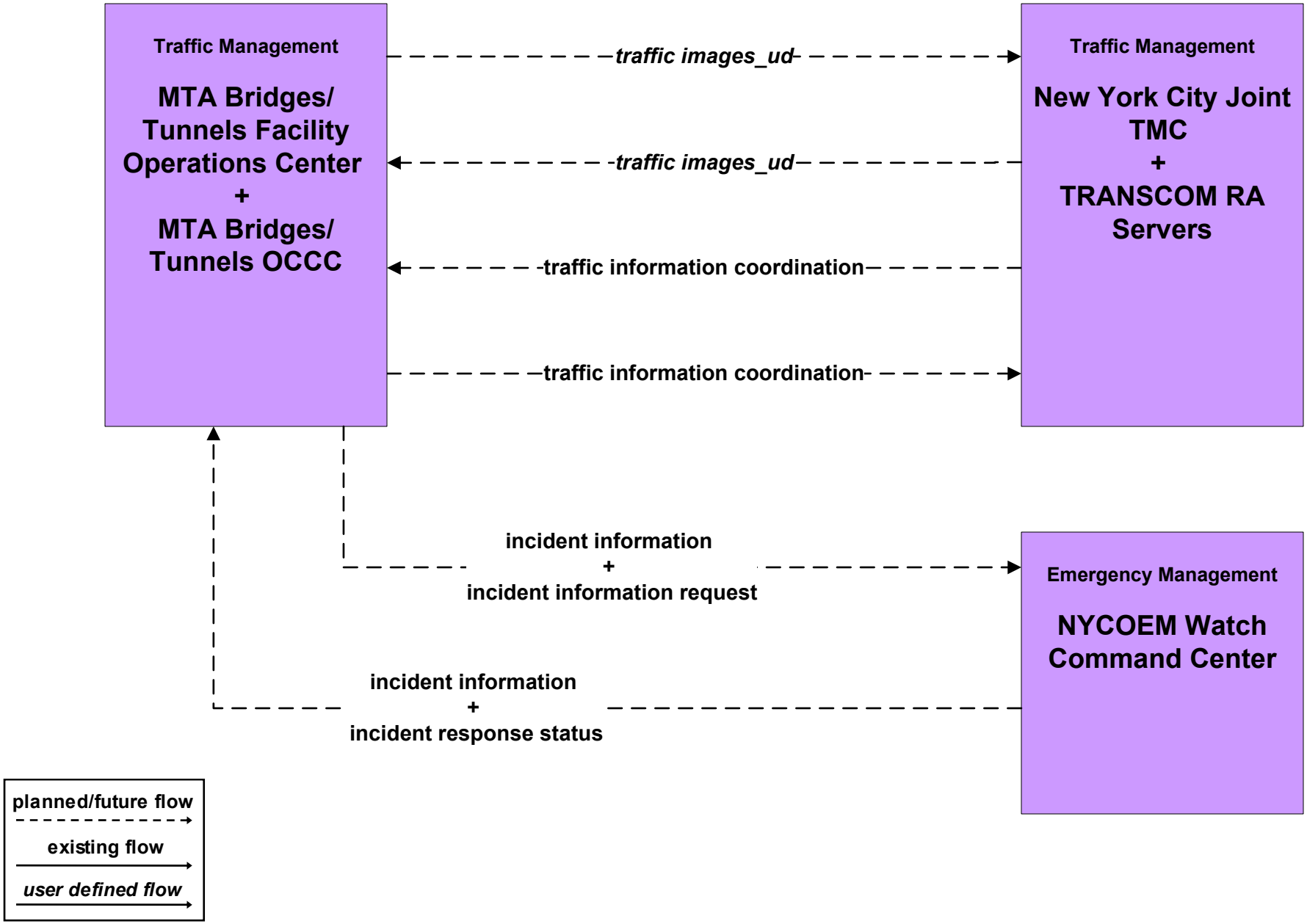
ATMS07 - Regional Traffic Control
Long Island Municipal/County TMCs



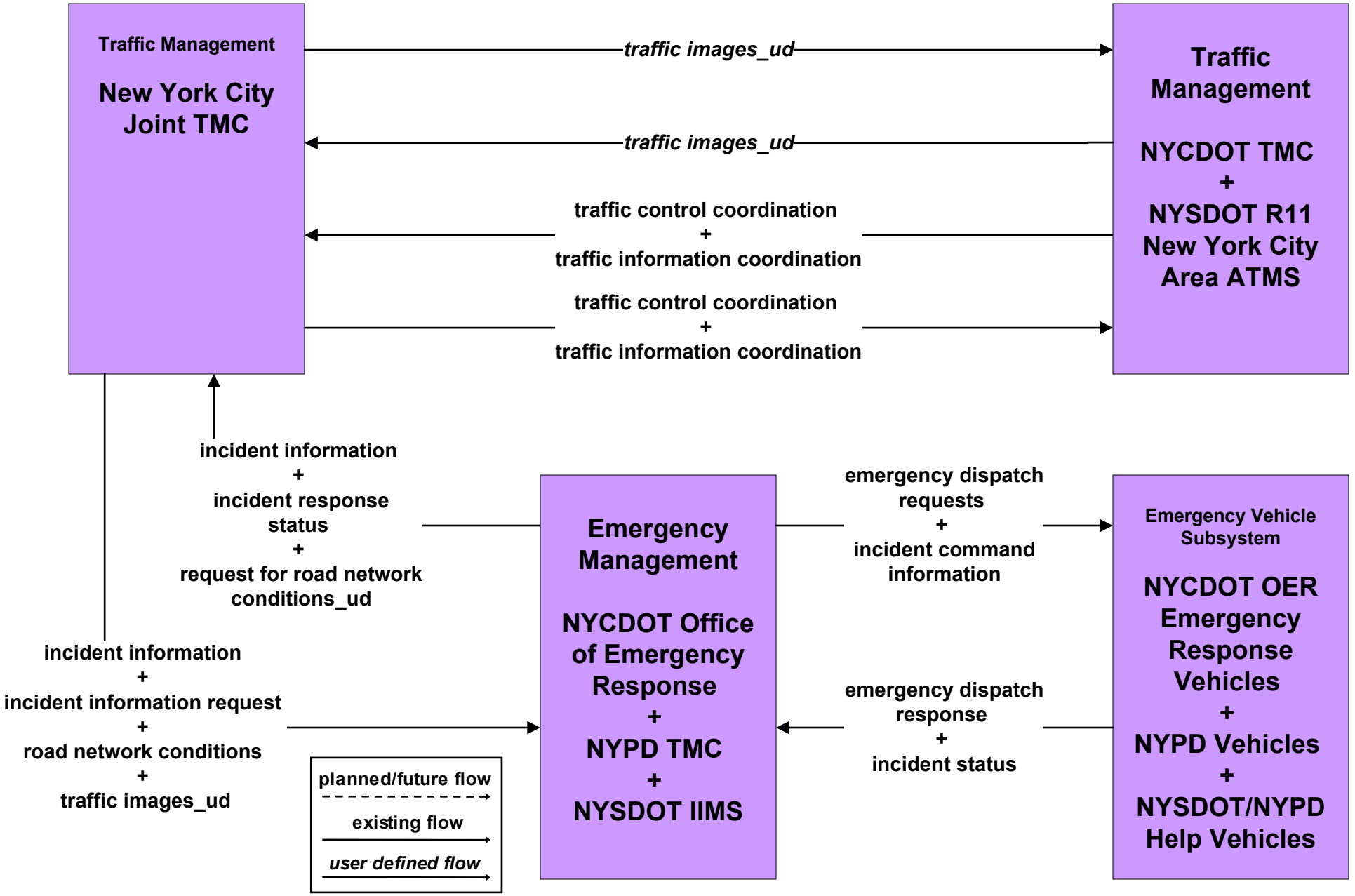
ATMS07 - Regional Traffic Control
Mid Hudson South Municipal/County TMCs



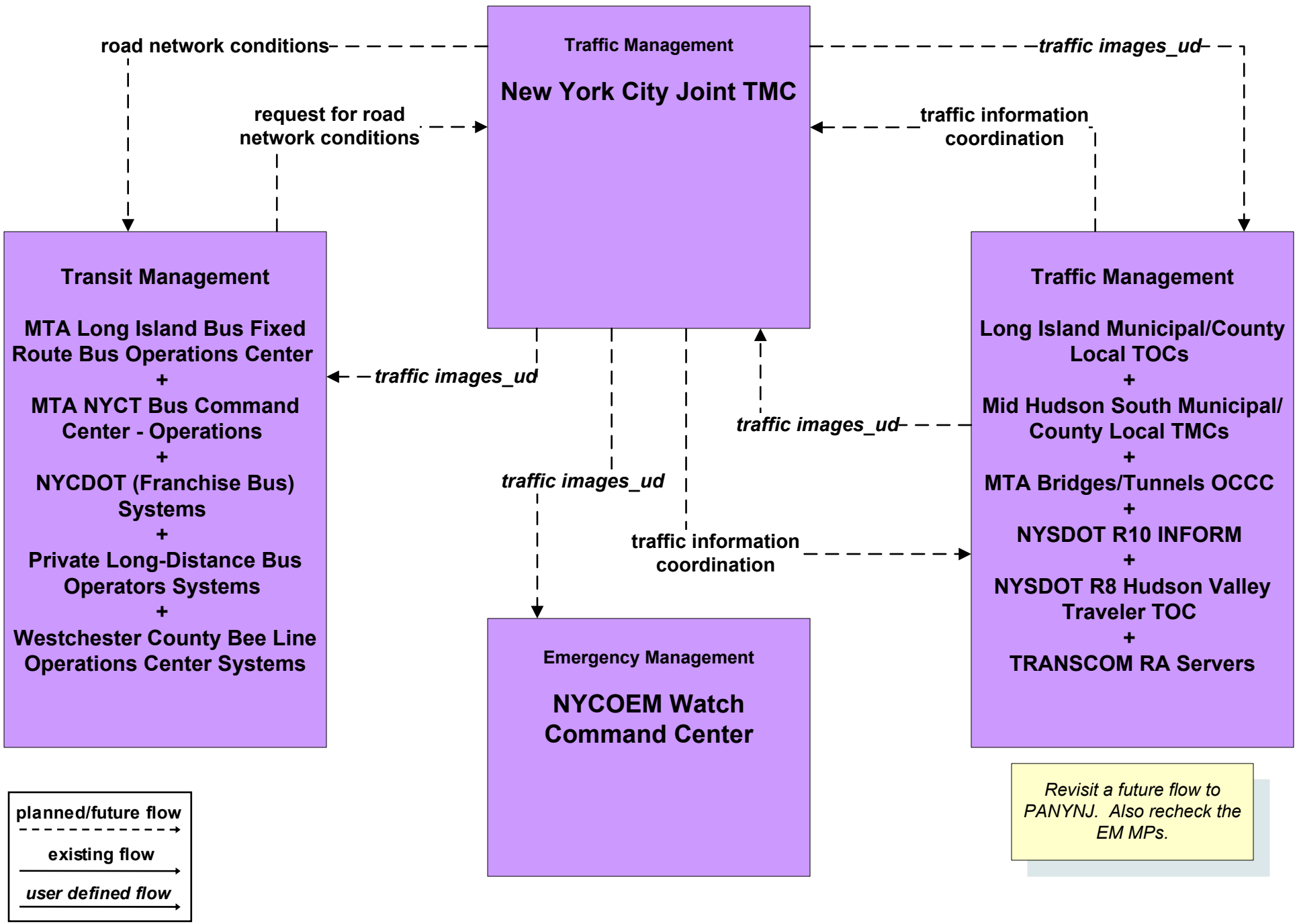
ATMS07 - Regional Traffic Control
MTA Bridges and Tunnels



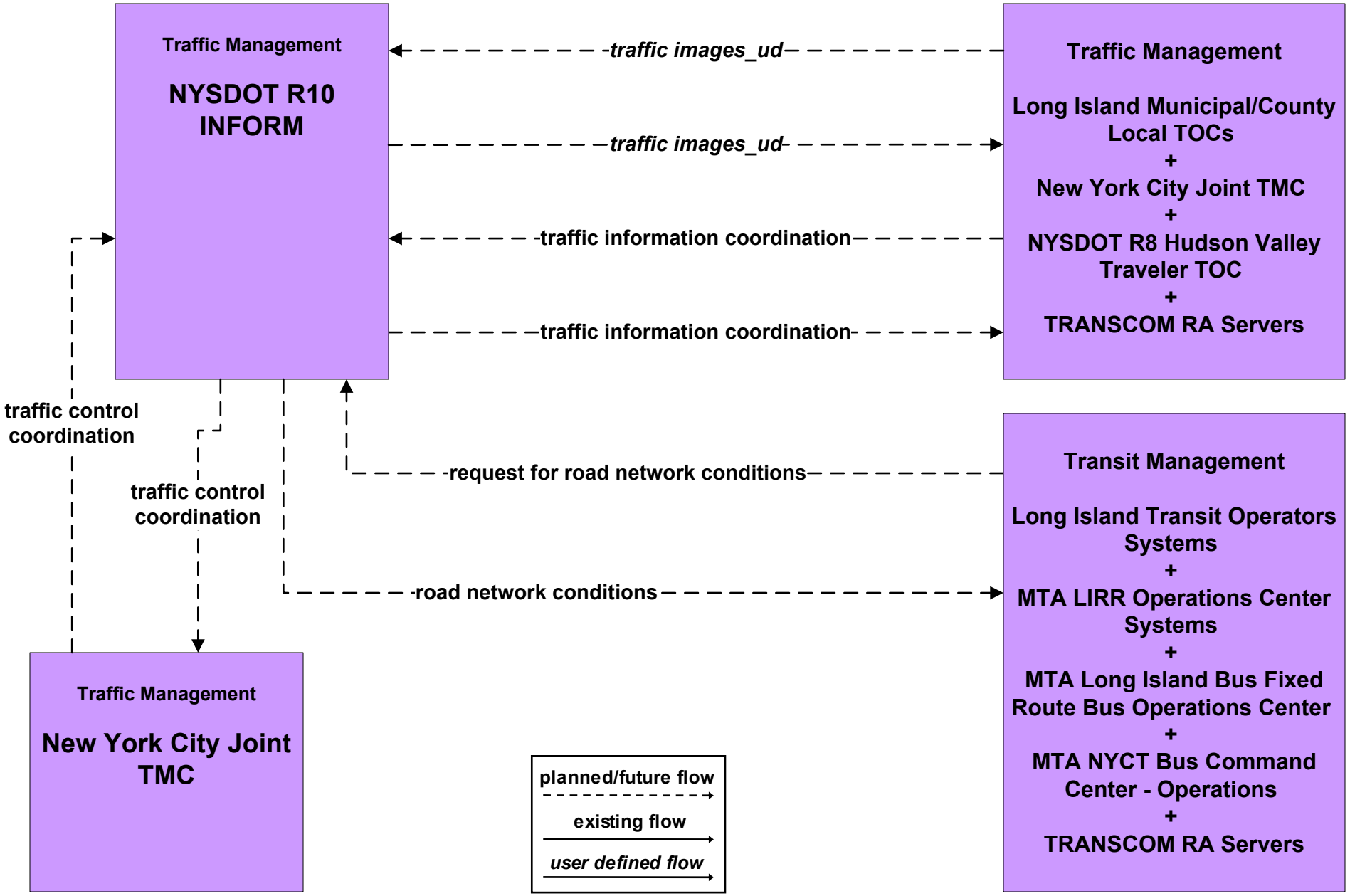
ATMS07 - Regional Traffic Control
New York City Joint TMC (1 of 2)



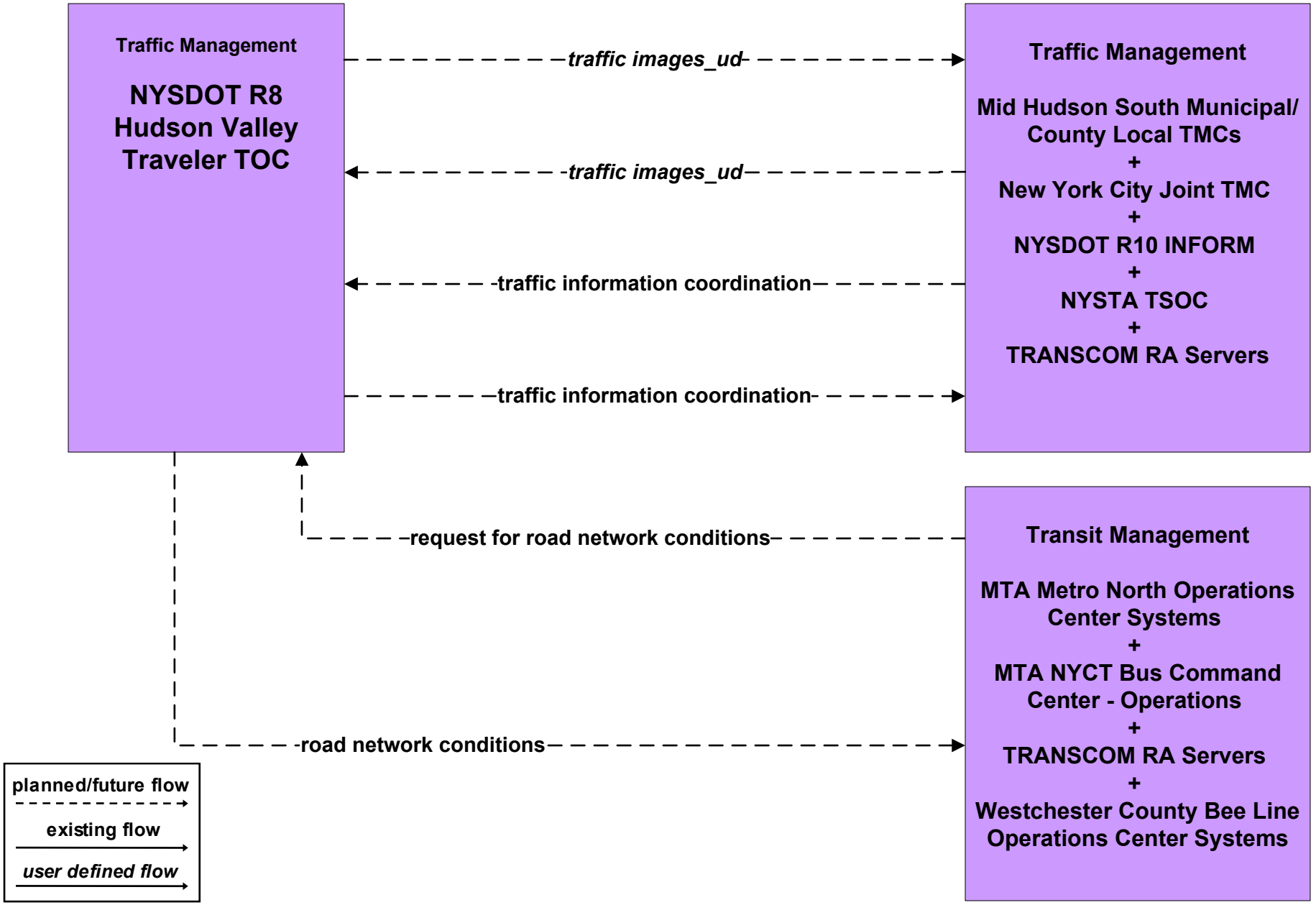
ATMS07 - Regional Traffic Control
New York City Joint TMC (2 of 2)



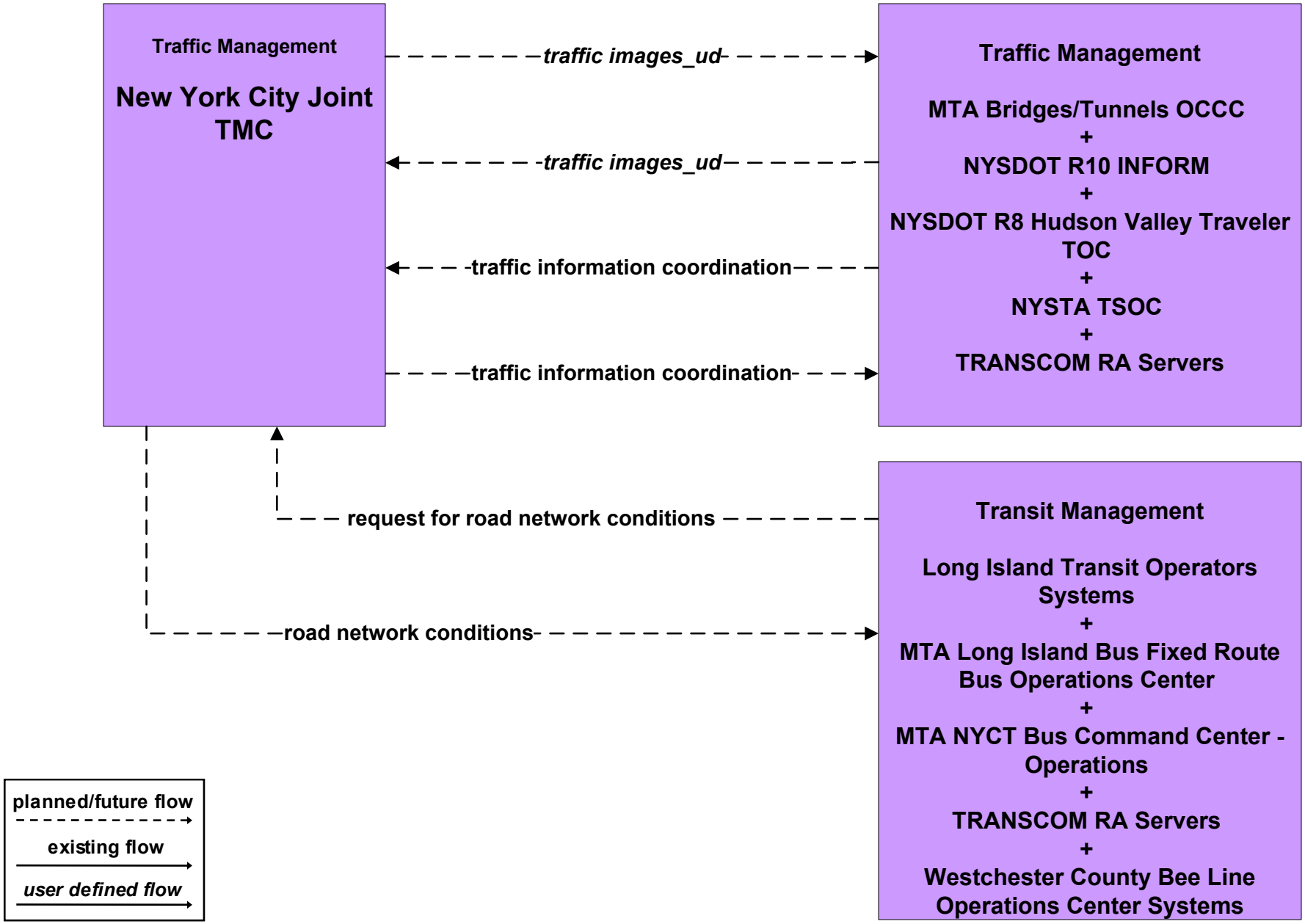
ATMS07 - Regional Traffic Control
NYSDOT R10 INFORM



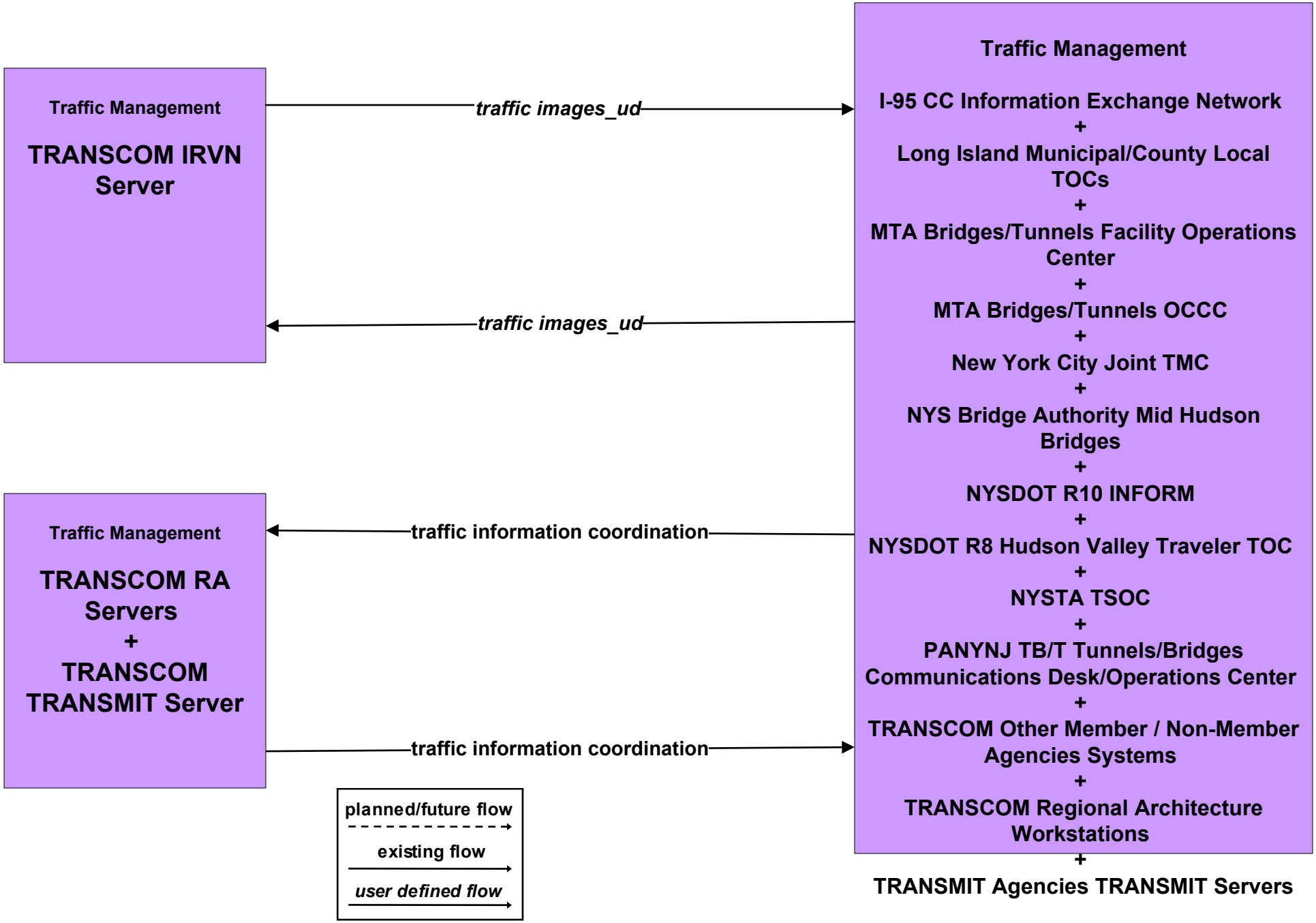
ATMS07 - Regional Traffic Control
NYSDOT R8 Hudson Valley TMC



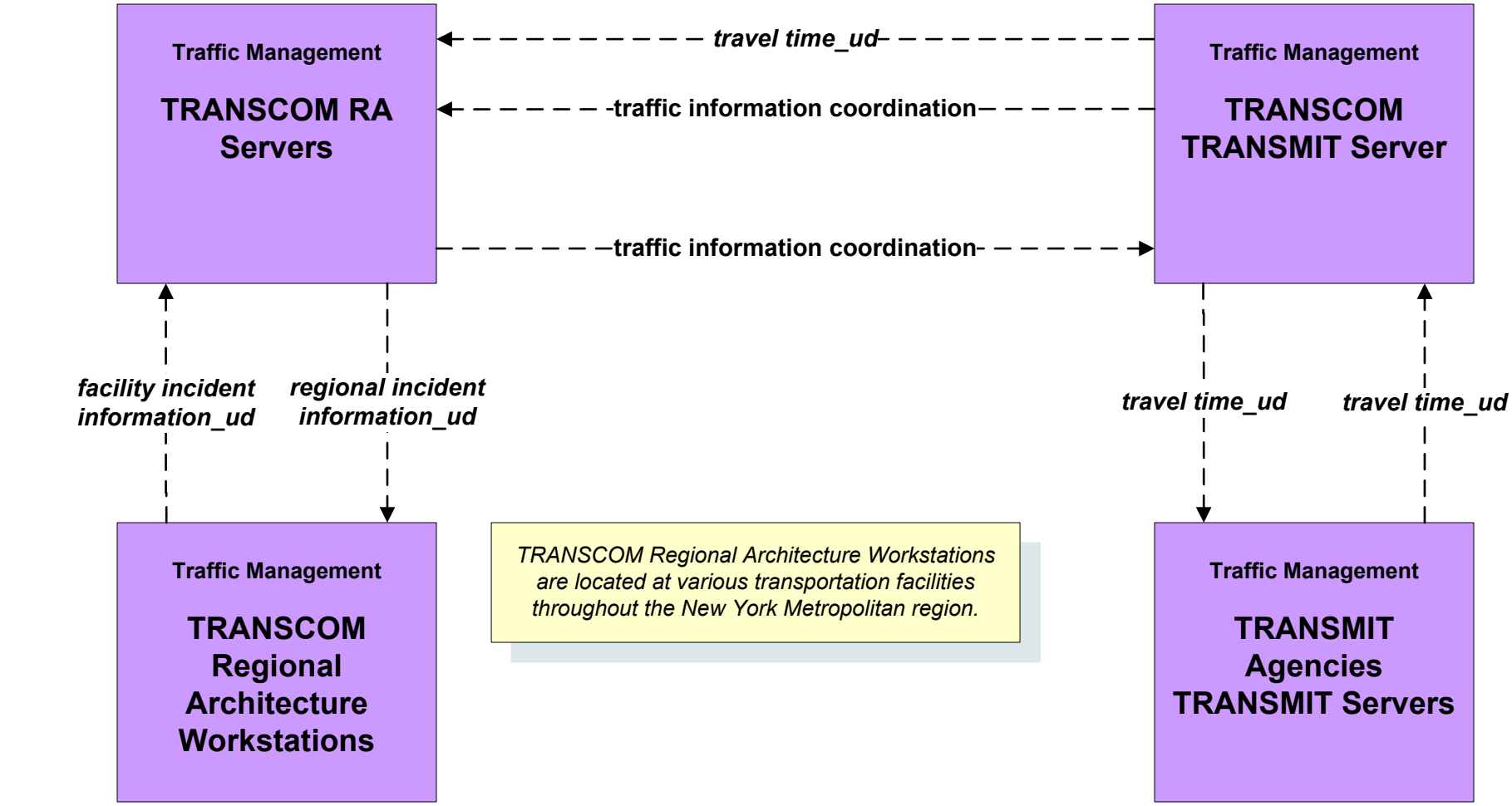
ATMS07 - Regional Traffic Control
NYSDOT R11 New York City ATMS



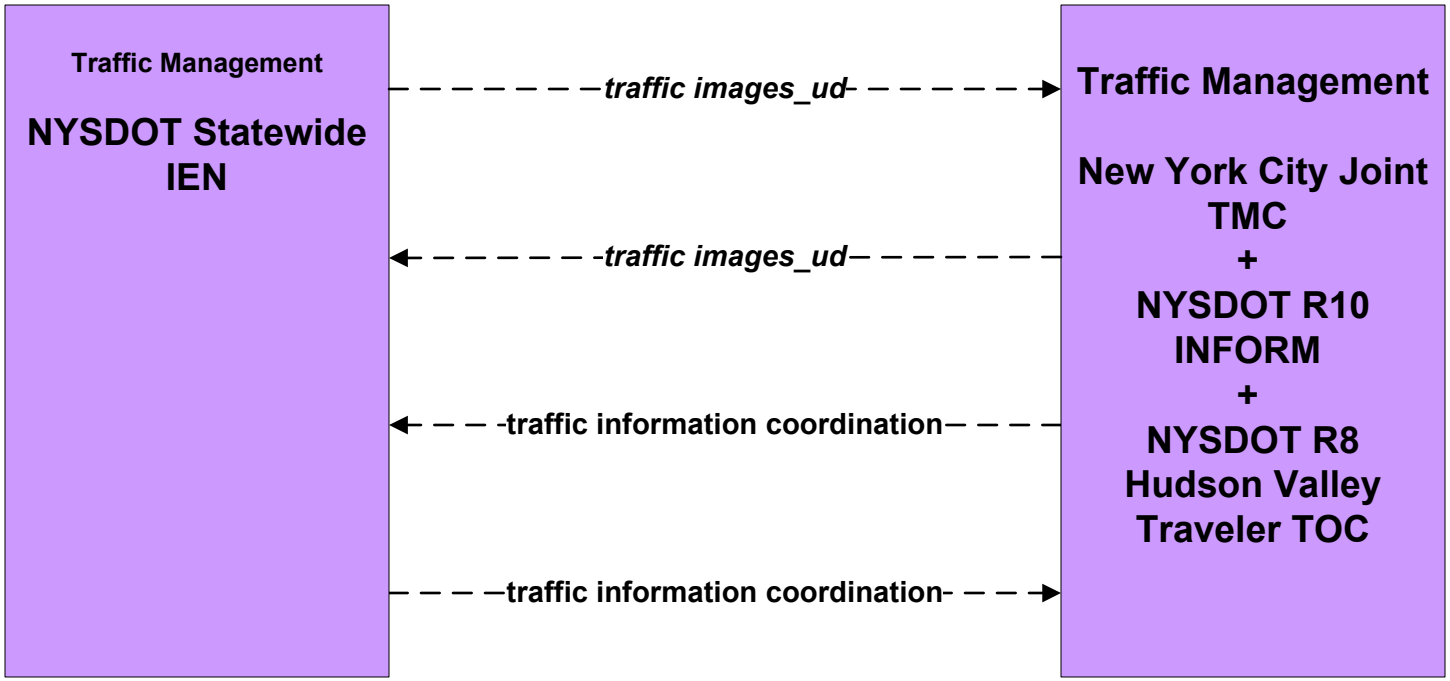
ATMS07 - Regional Traffic Control
TRANSCOM Operations Information Center



ATMS7 - Regional Traffic Control
TRANSCOM



ATMS07 - Regional Traffic Control
NYSDOT Statewide IEN



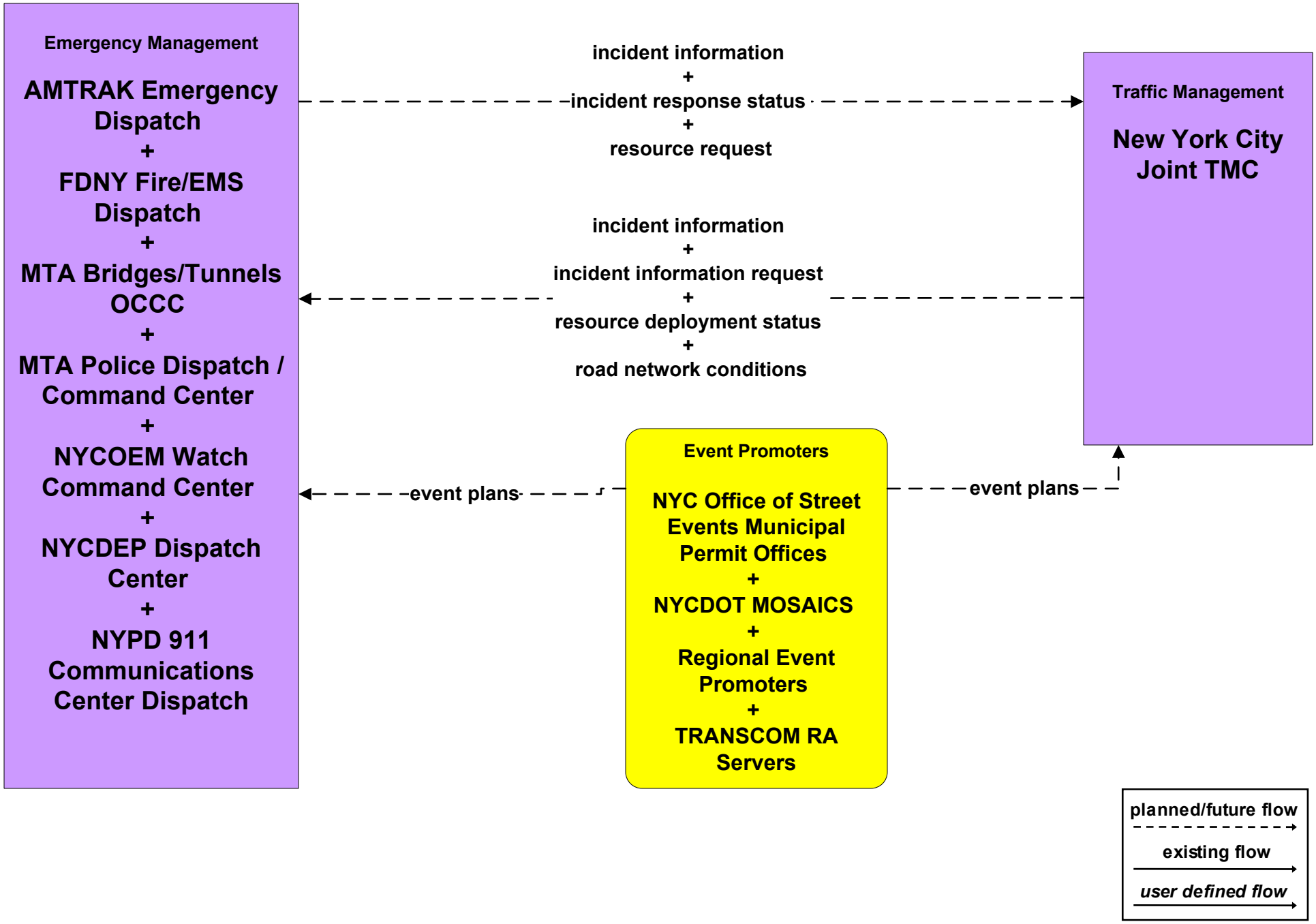
How to model public safety network, such as SWN (Statewide Wireless Network) or LETS.

planned/future flow

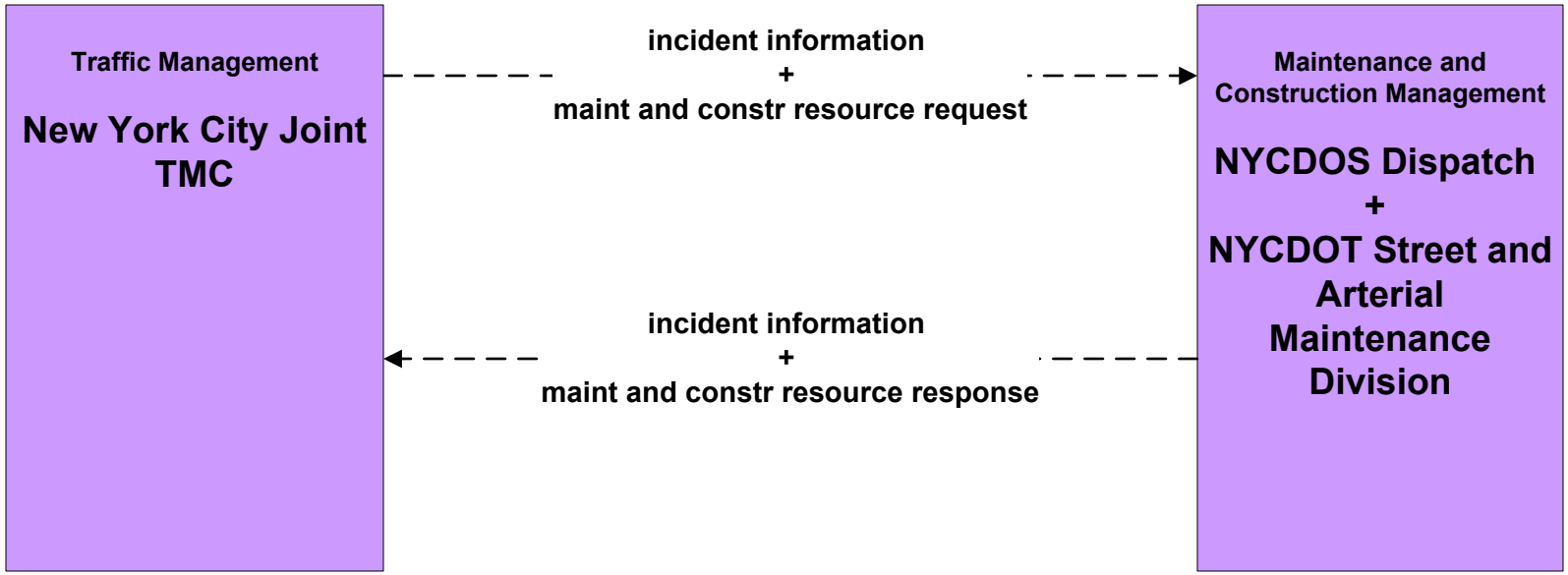
existing flow

user defined flow

ATMS08 - Incident Management
New York City Joint TMC (1 of 2)



ATMS08 - Incident Management
New York City Joint TMC (2 of 2)

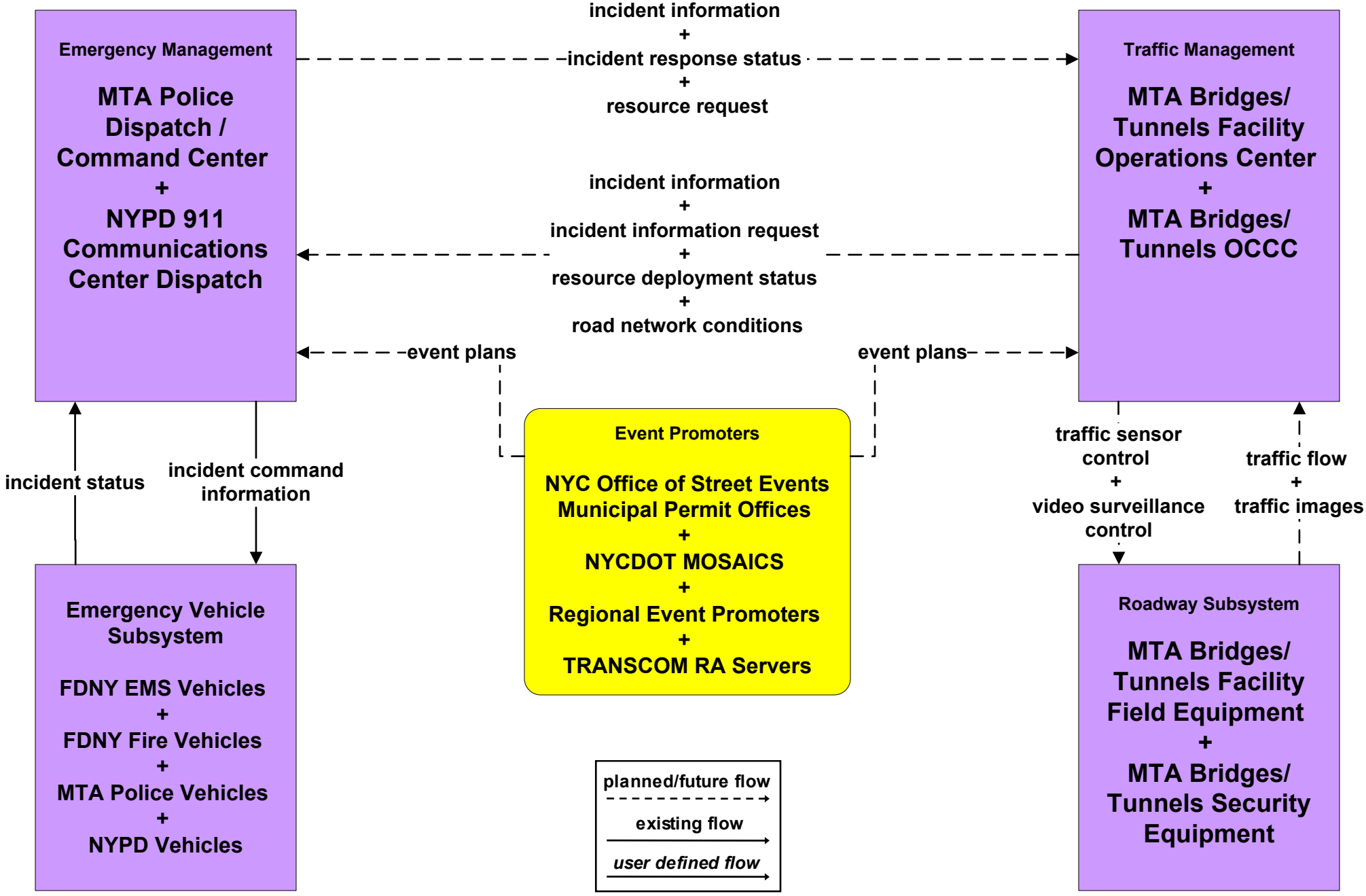


planned/future flow

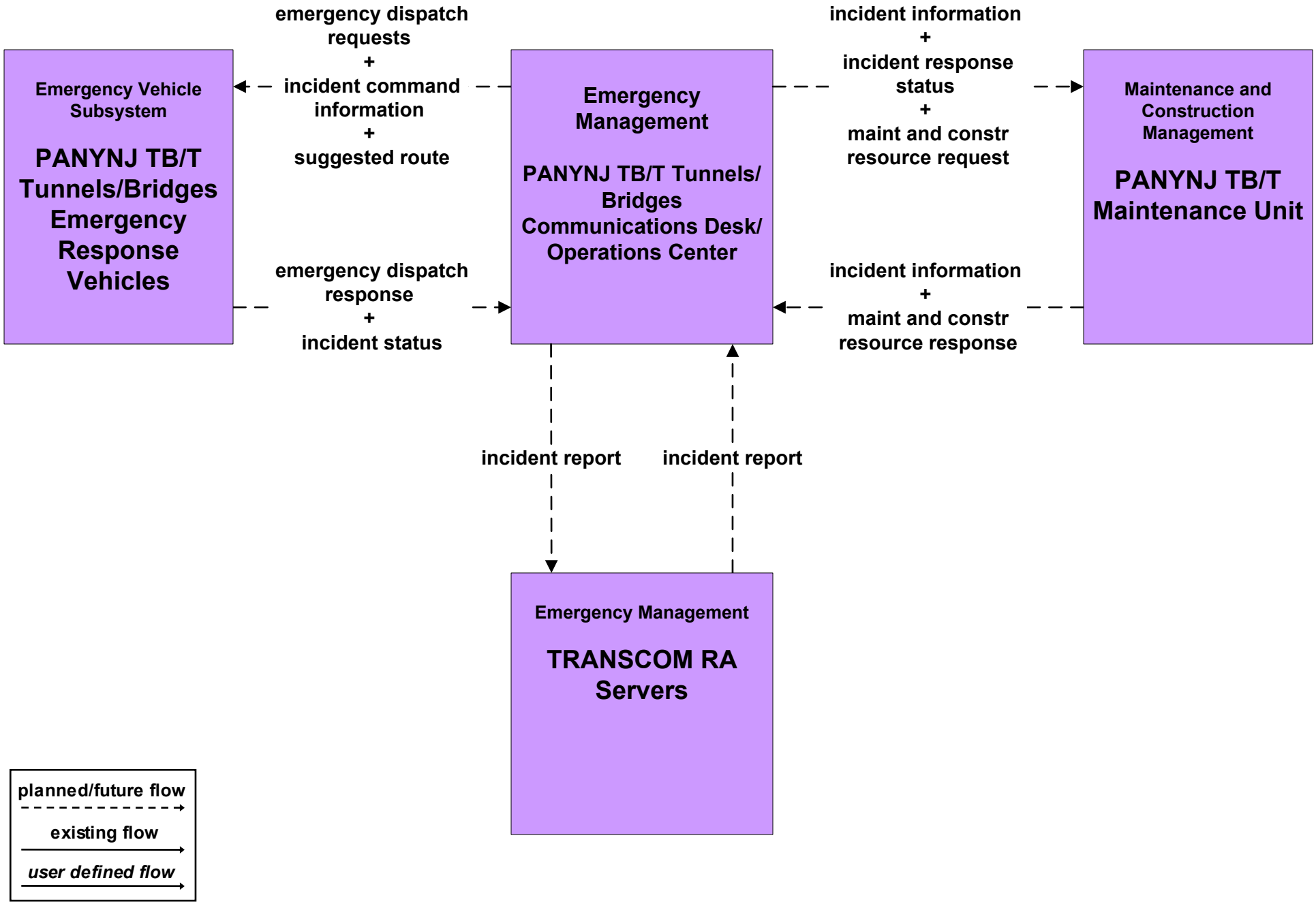
existing flow

user defined flow

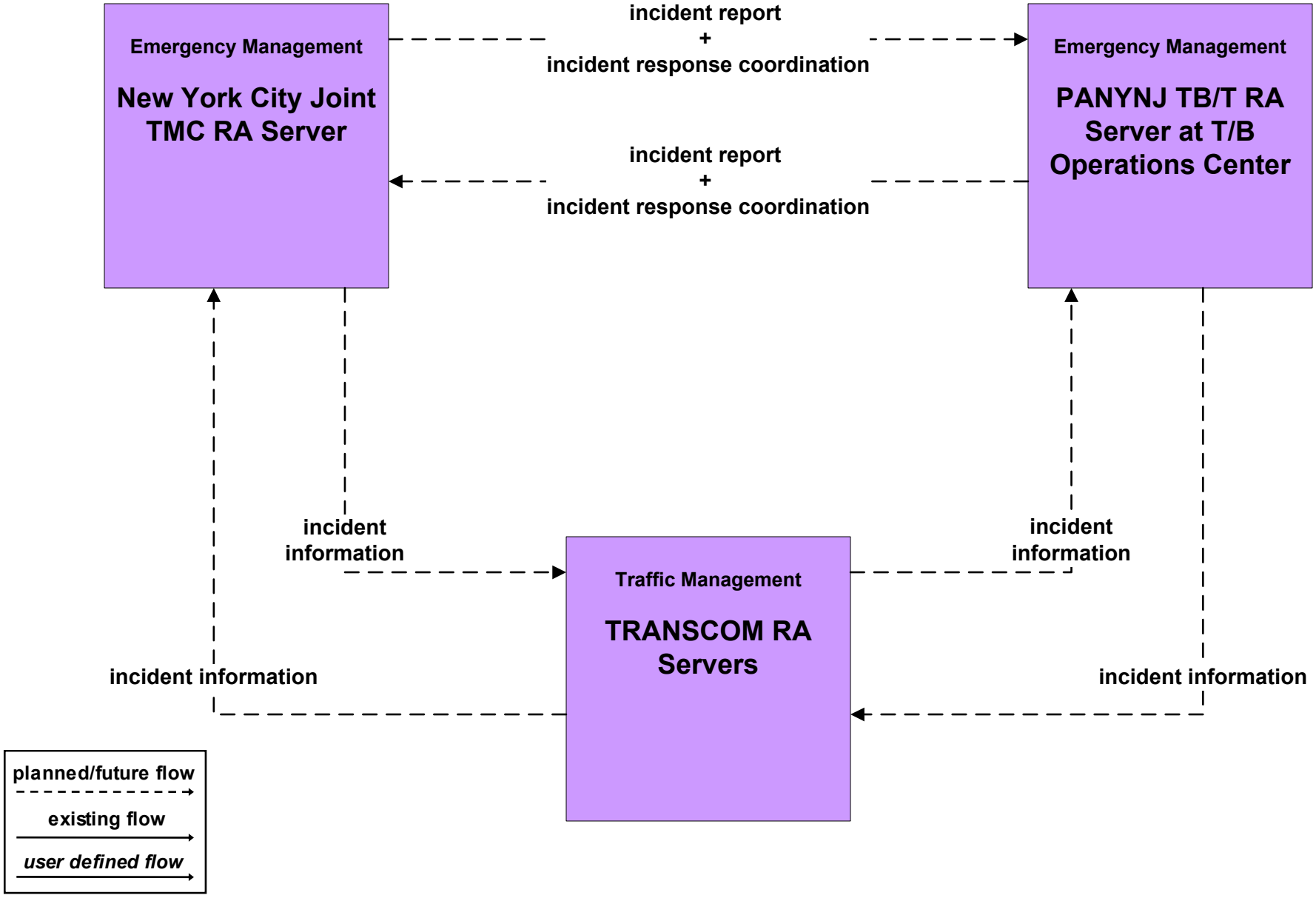
ATMS08 - Incident Management
MTA Bridges and Tunnels



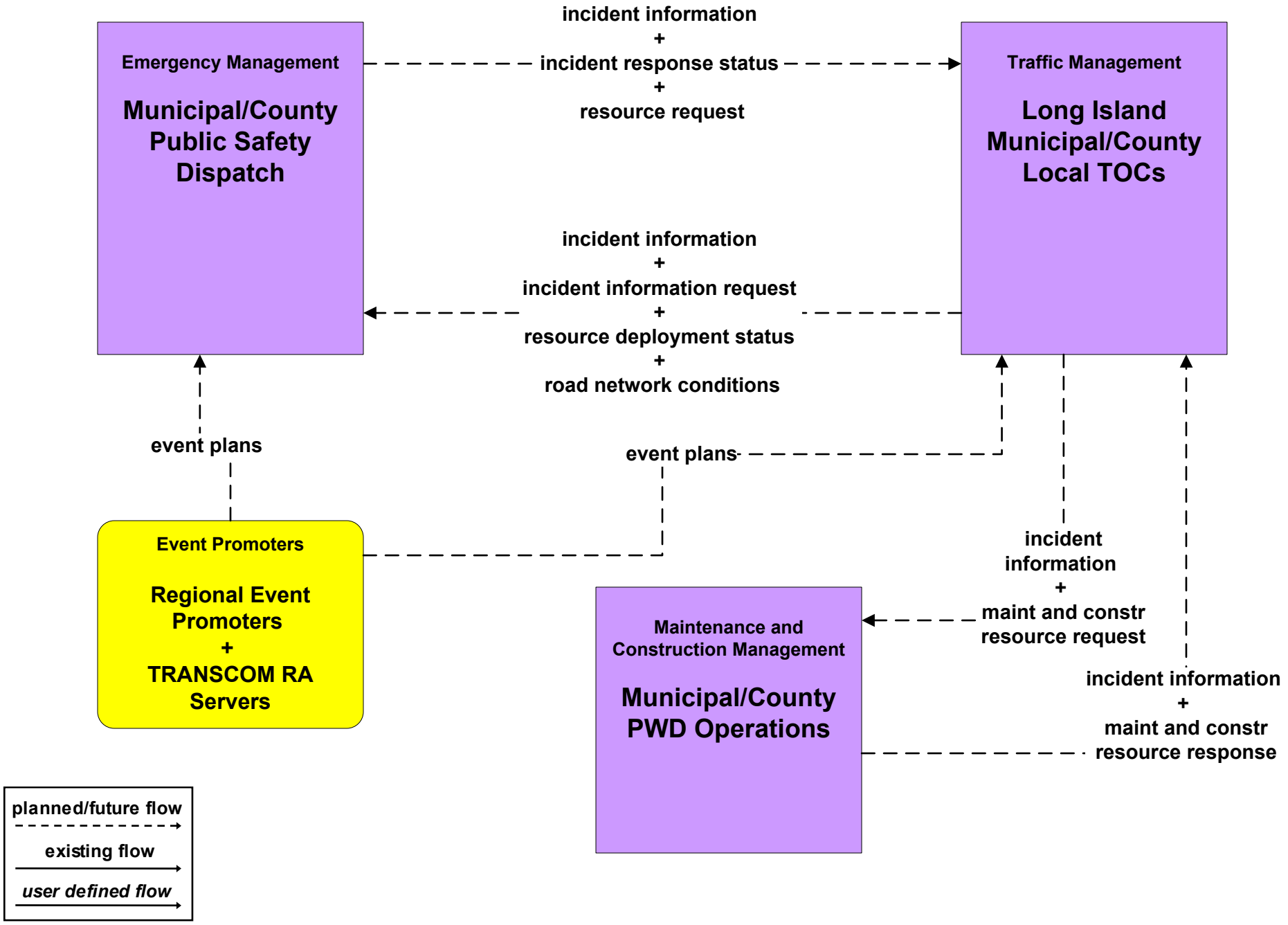
ATMS08 - Incident Management
PANYNJ Tunnels/Bridges



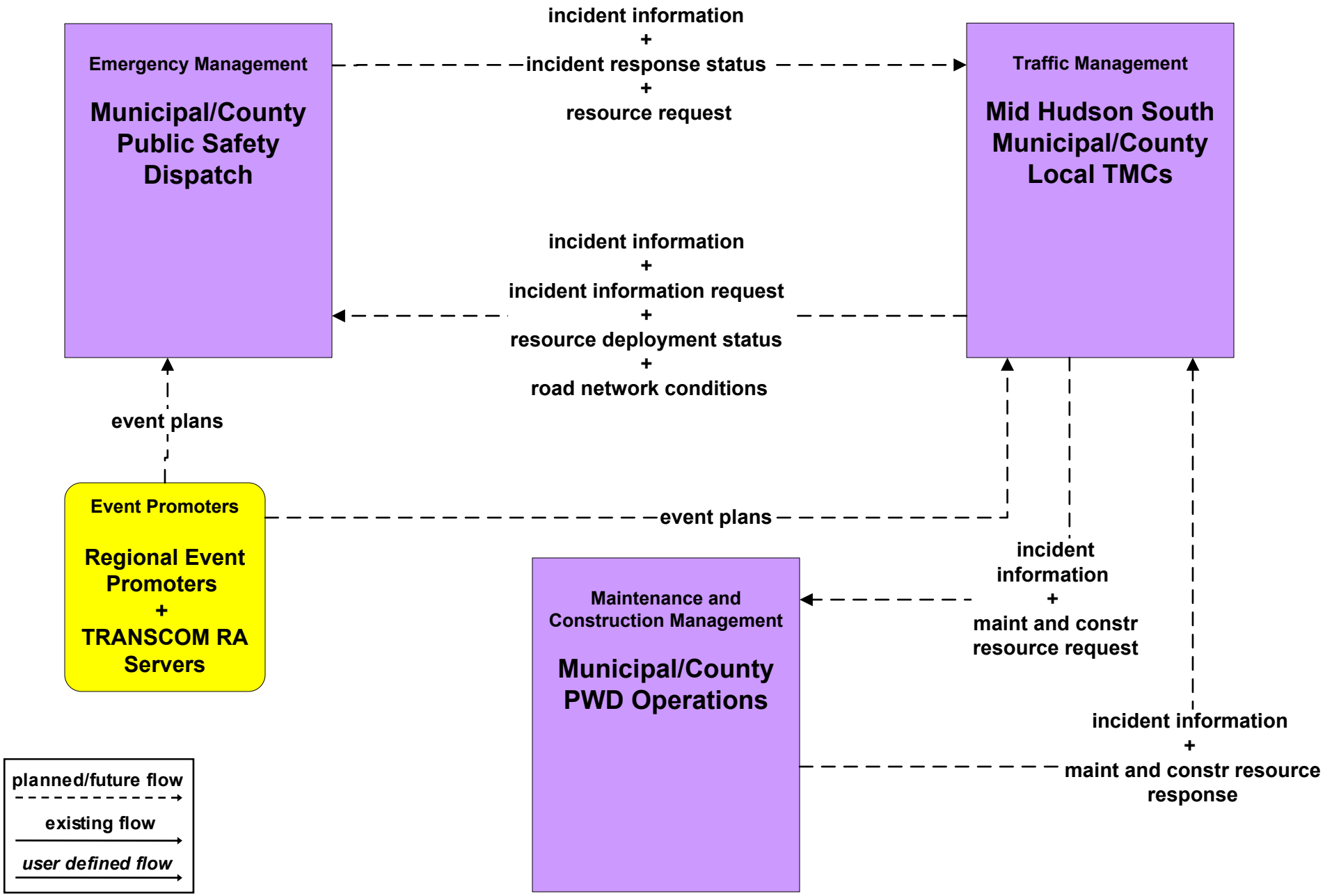
ATMS08 - Incident Management
New York City Joint TMC to PANYNJ TB&T Tunnels/Bridges



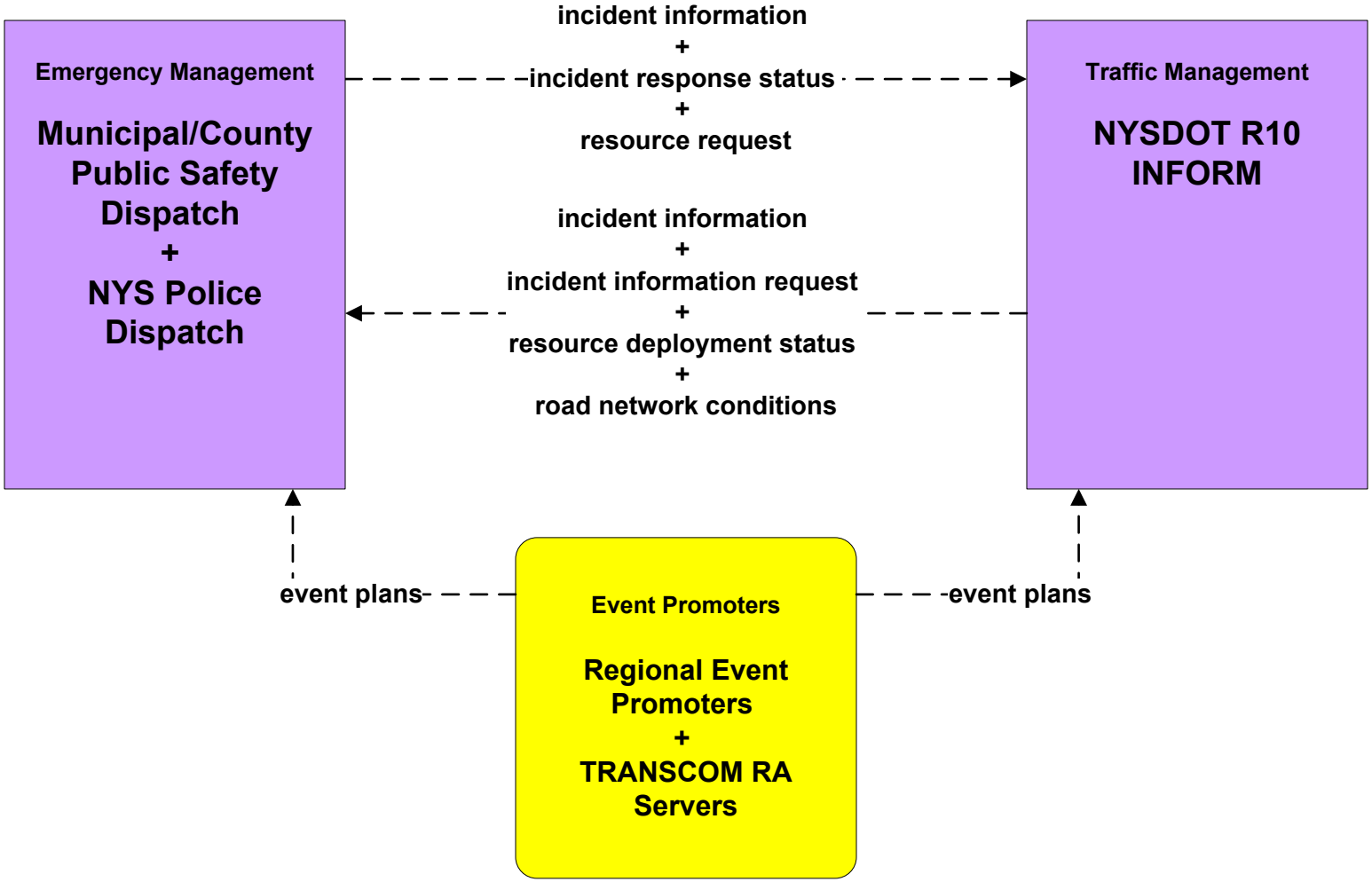
ATMS08 - Incident Management
Long Island Municipal/County TMCs



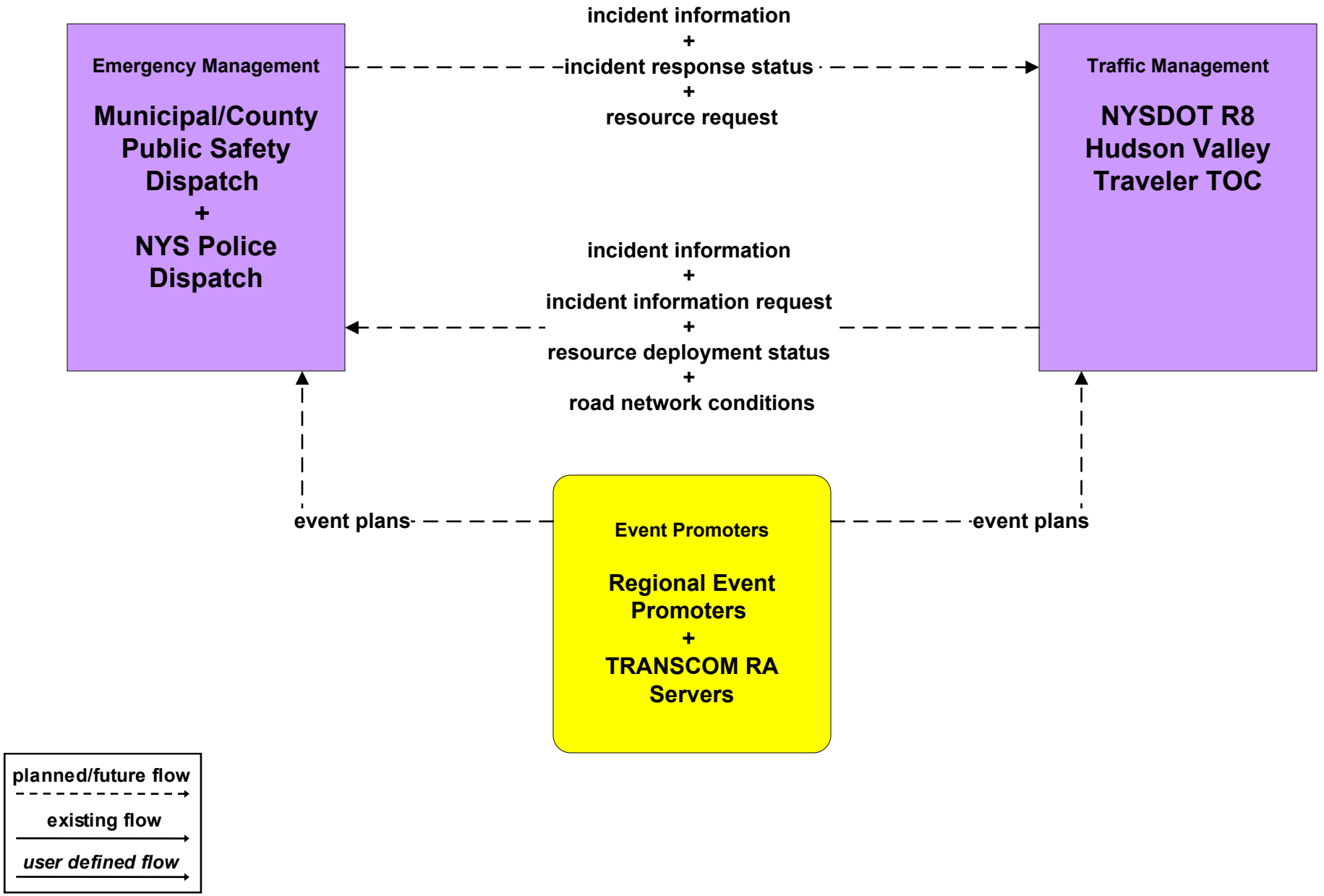
ATMS08 - Incident Management
Mid Hudson Municipal/County TMCs



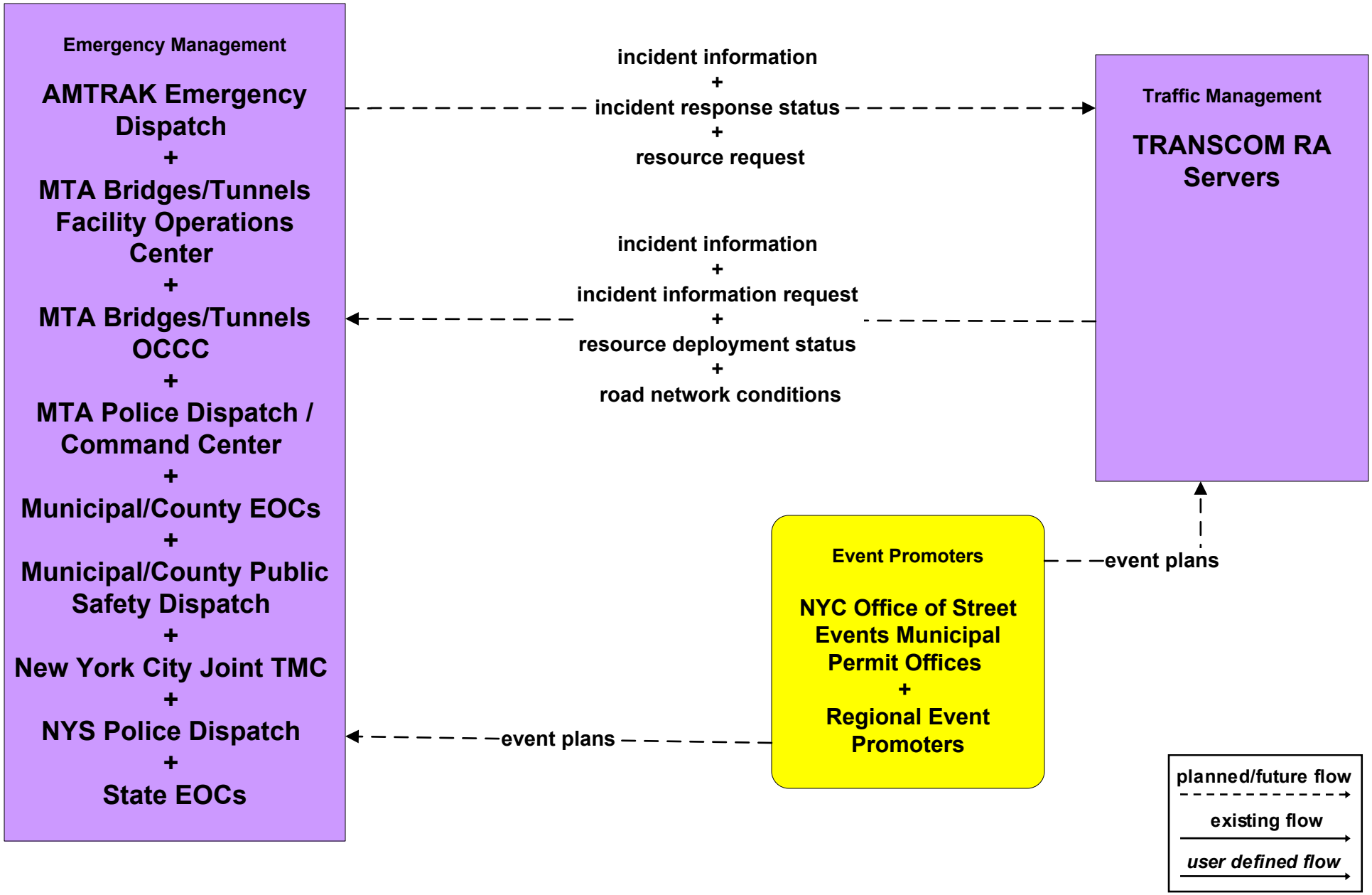
ATMS08 - Incident Management
NYSDOT R10 INFORM



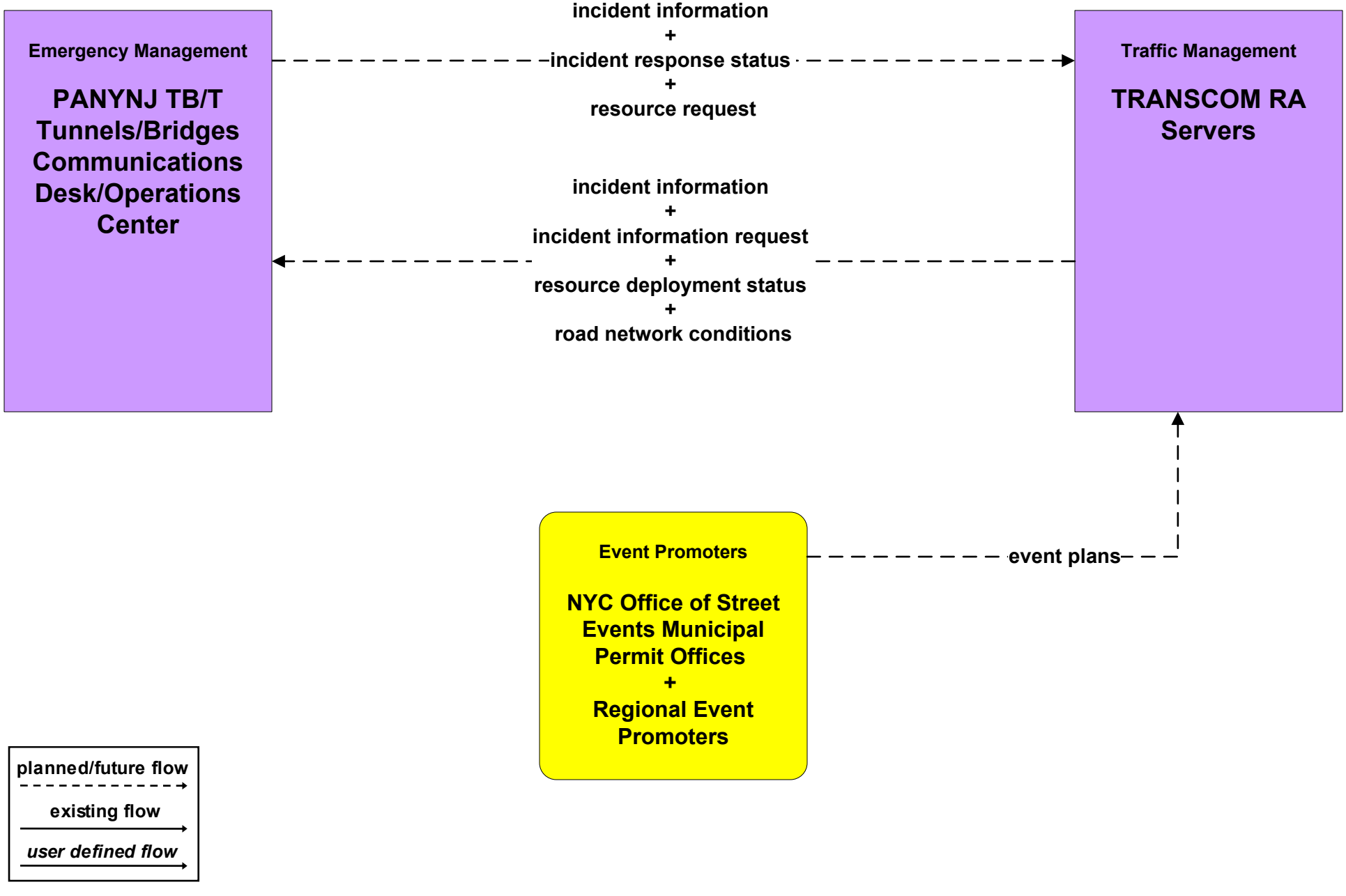
ATMS08 - Incident Management
NYSDOT R8 Hudson Valley Traveler TOC



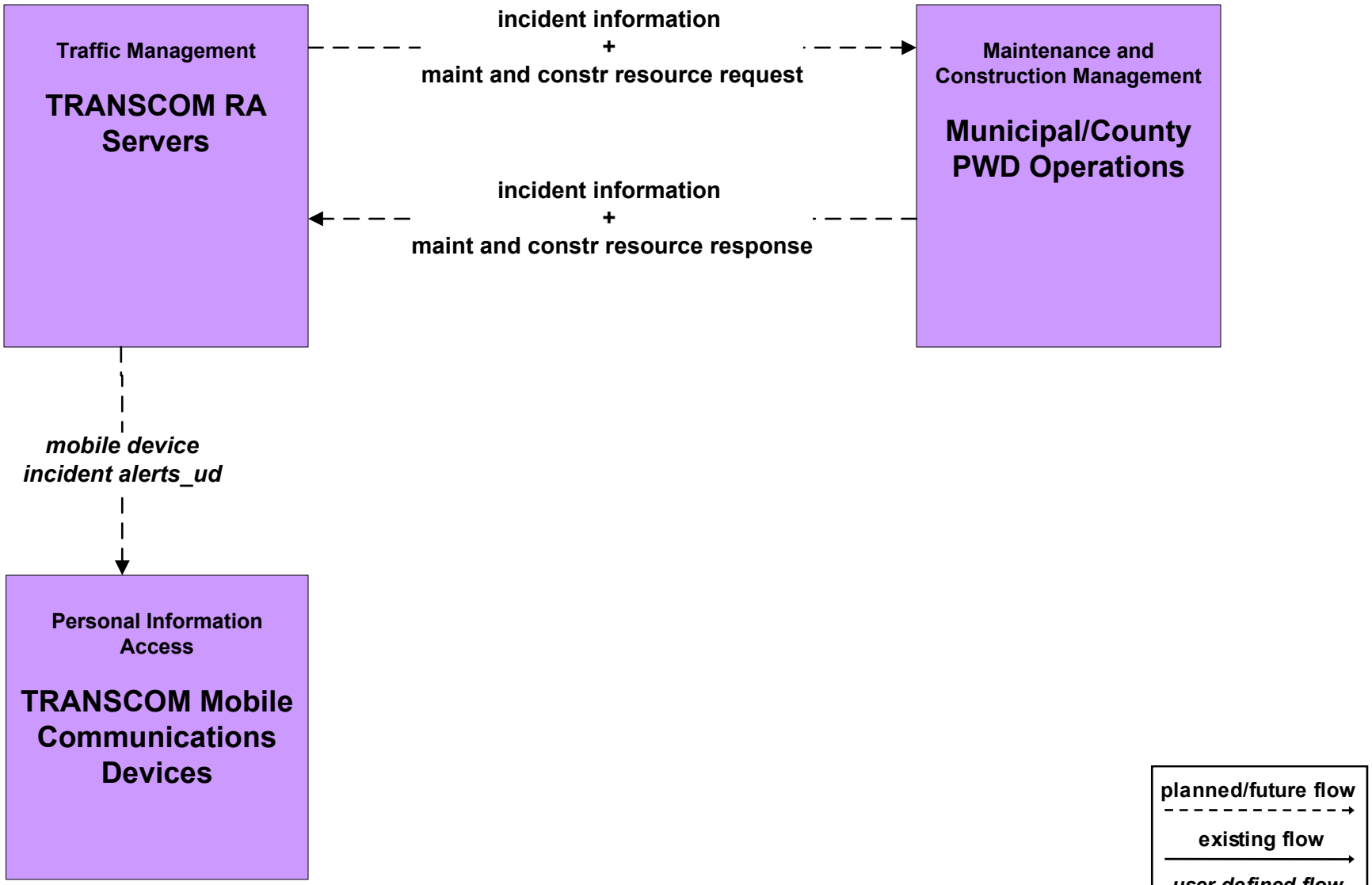
ATMS08 - Incident Management
TRANSCOM OIC (1 of 3)



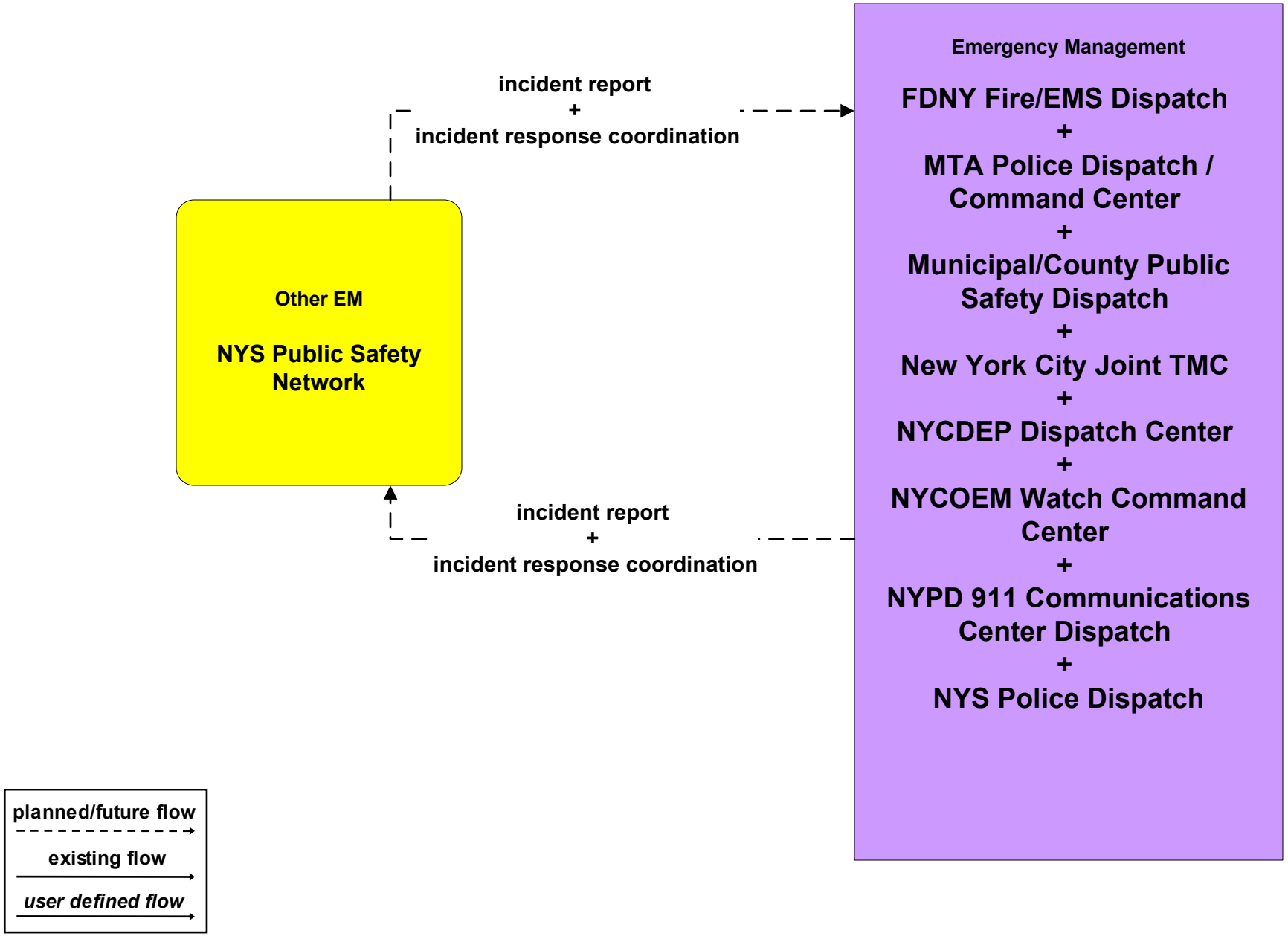
ATMS08 - Incident Management
TRANSCOM OIC (2 of 3)



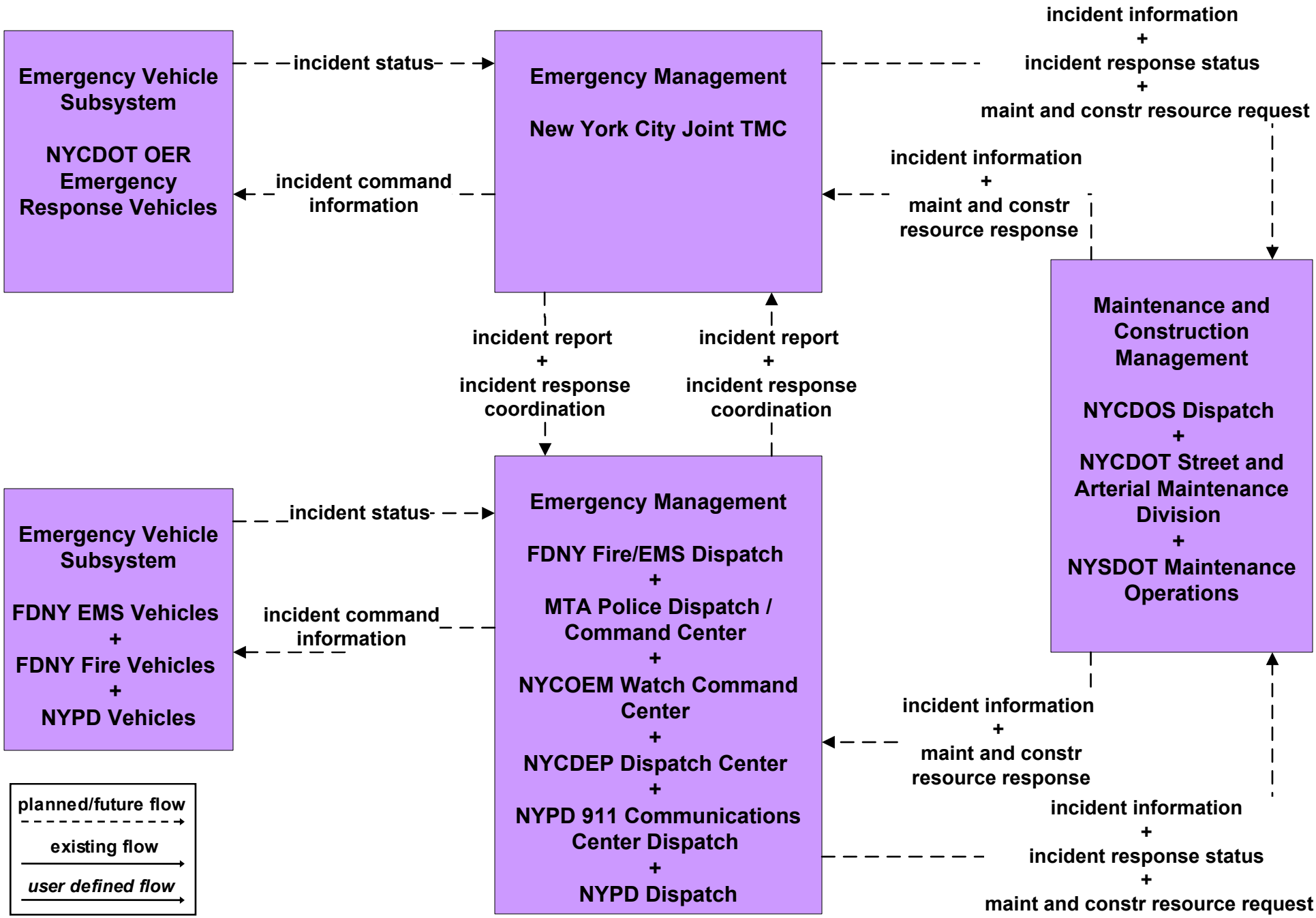
ATMS08 - Incident Management
TRANSCOM OIC (3 of 3)



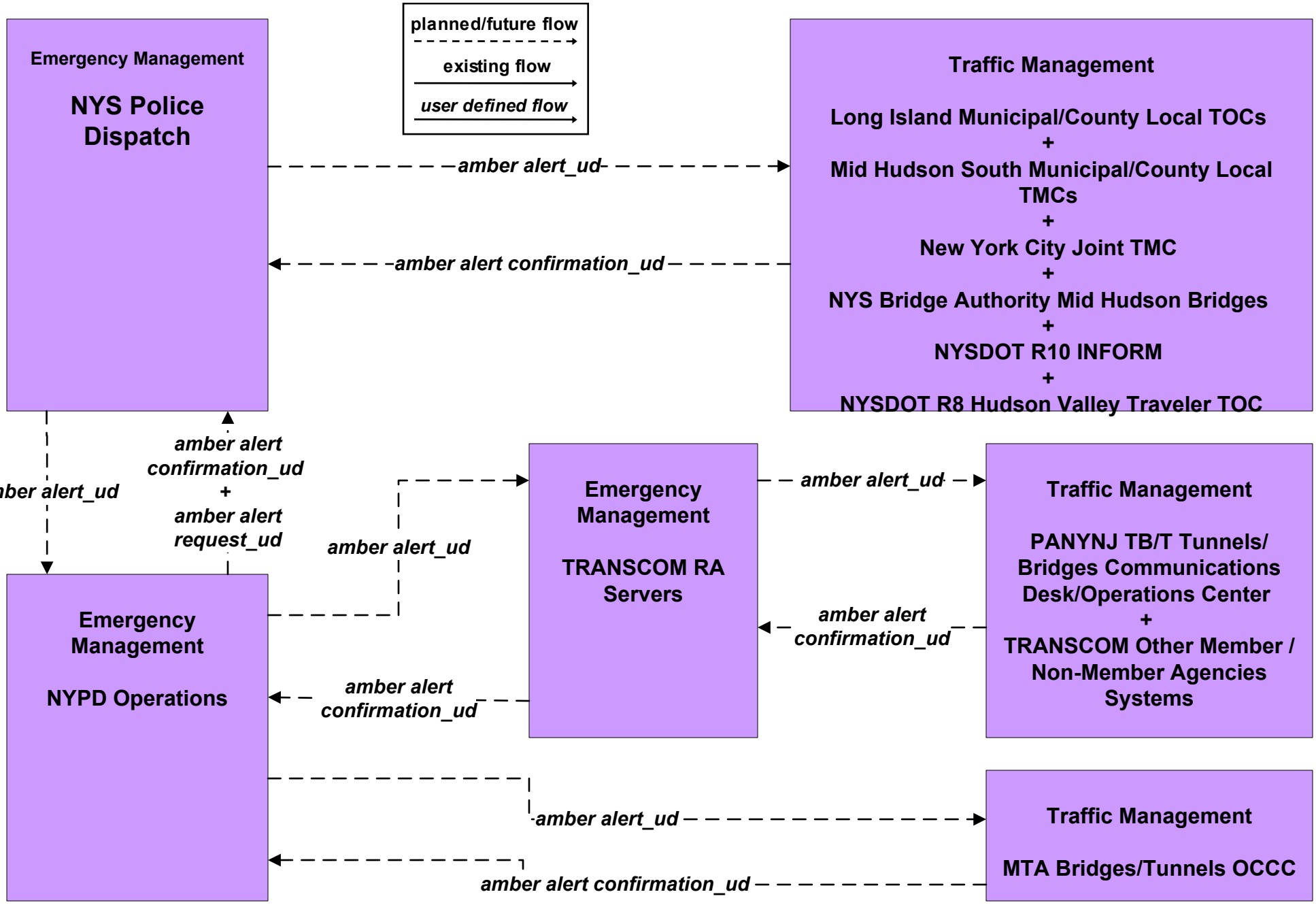
ATMS08 - Incident Management
New York State Public Safety Network



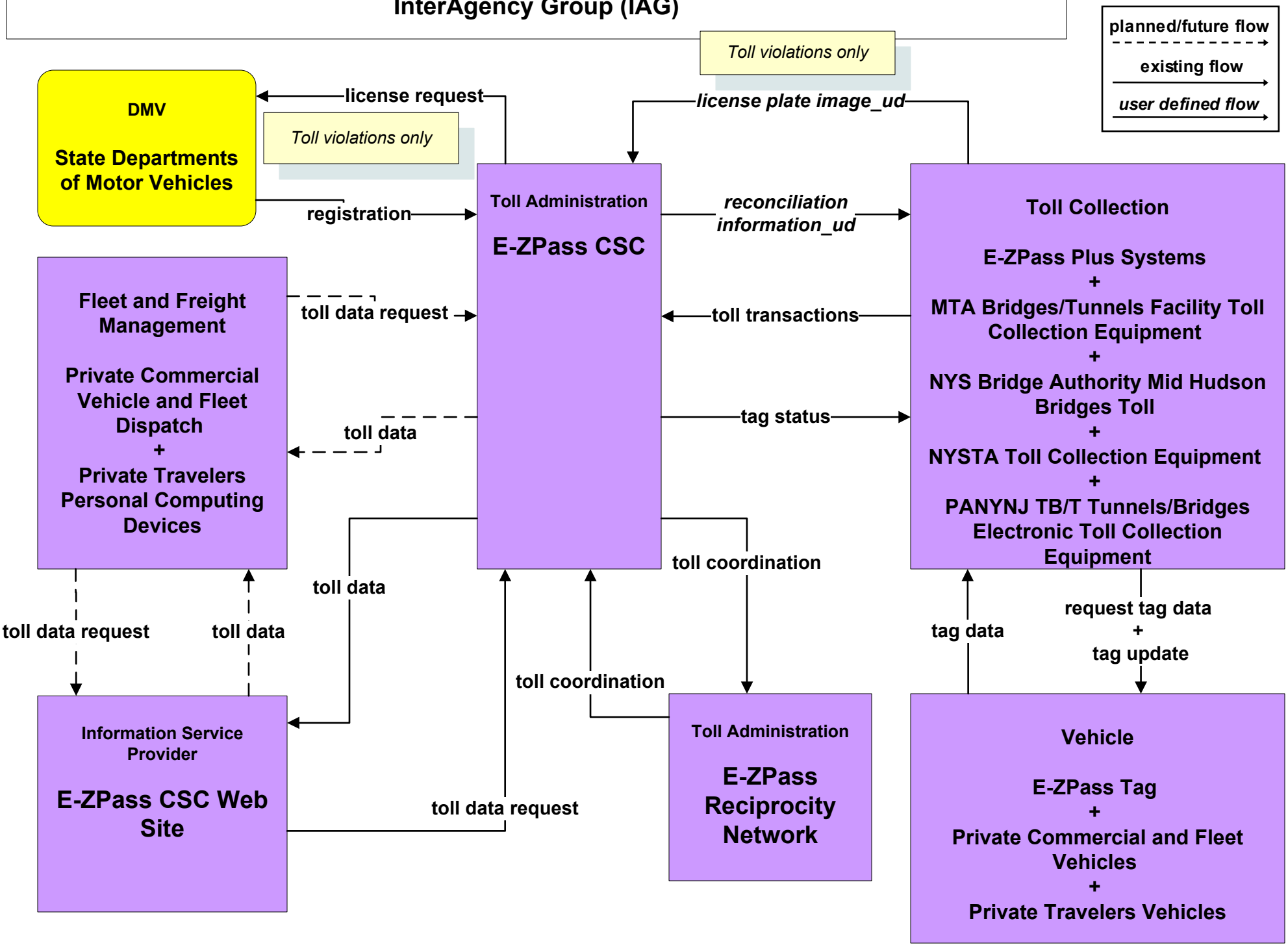
ATMS08 - Incident Management
IIMS



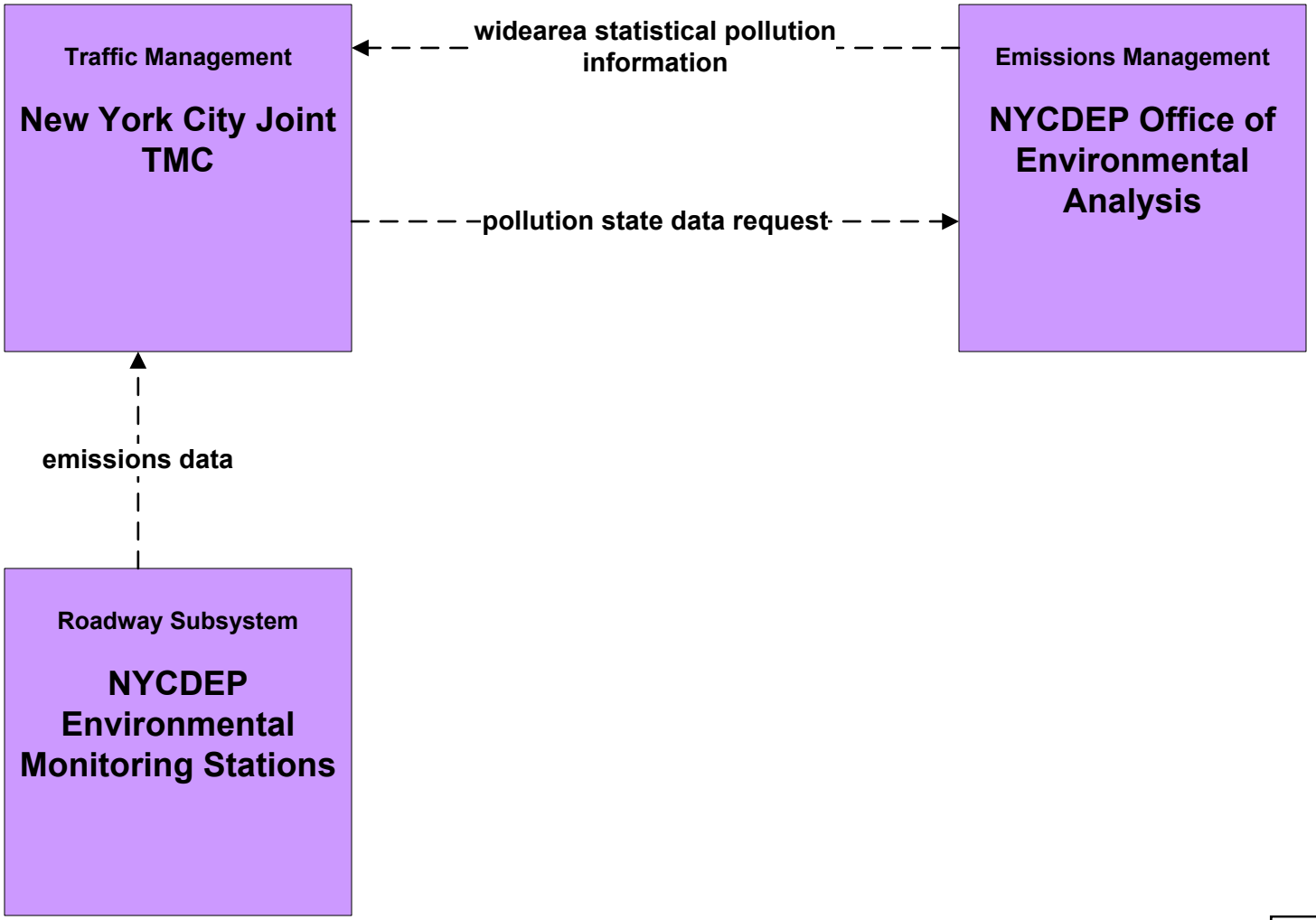
ATMS08 - Incident Management
Amber Alert



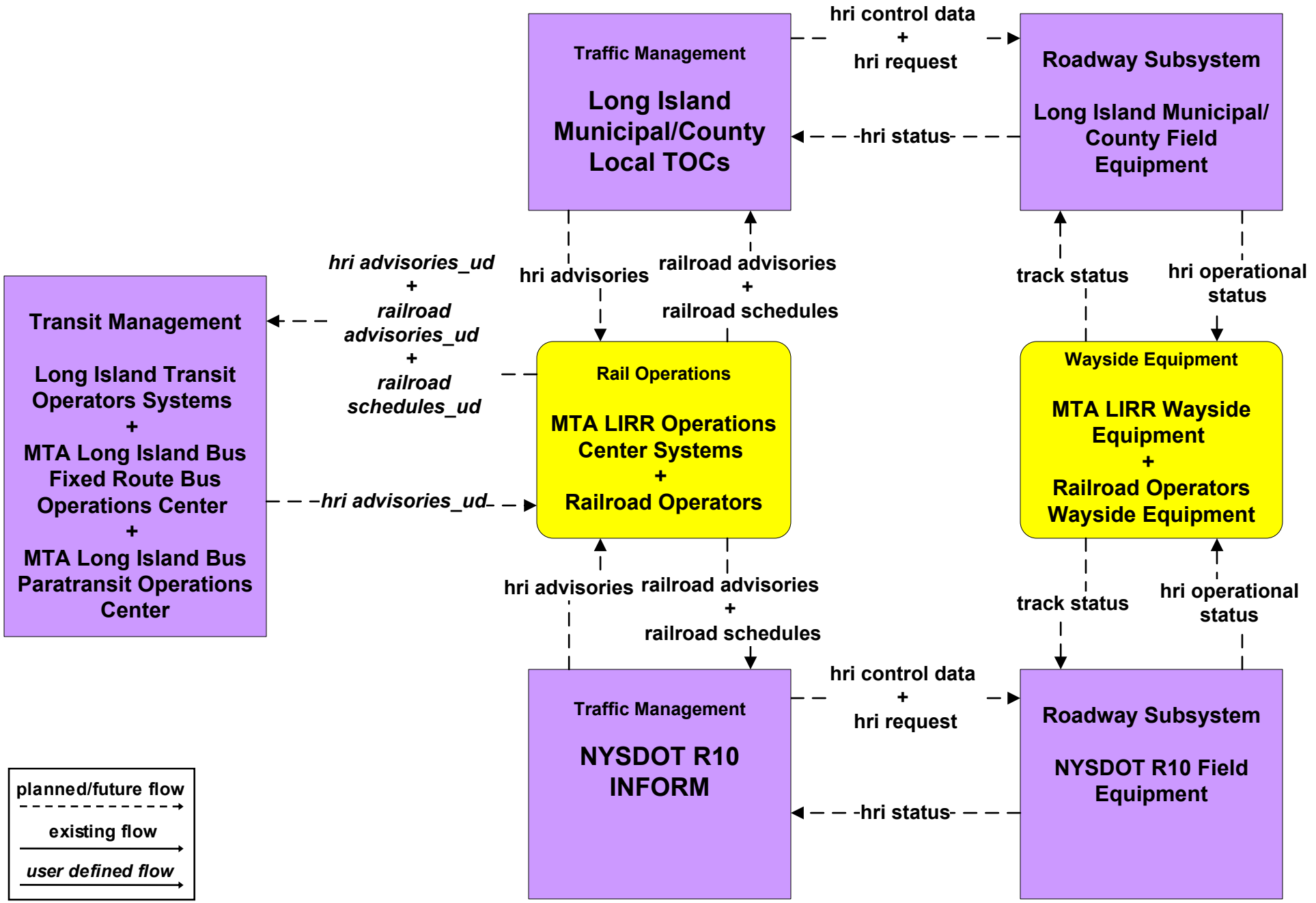
ATMS10 - Electronic Toll Collection
InterAgency Group (IAG)



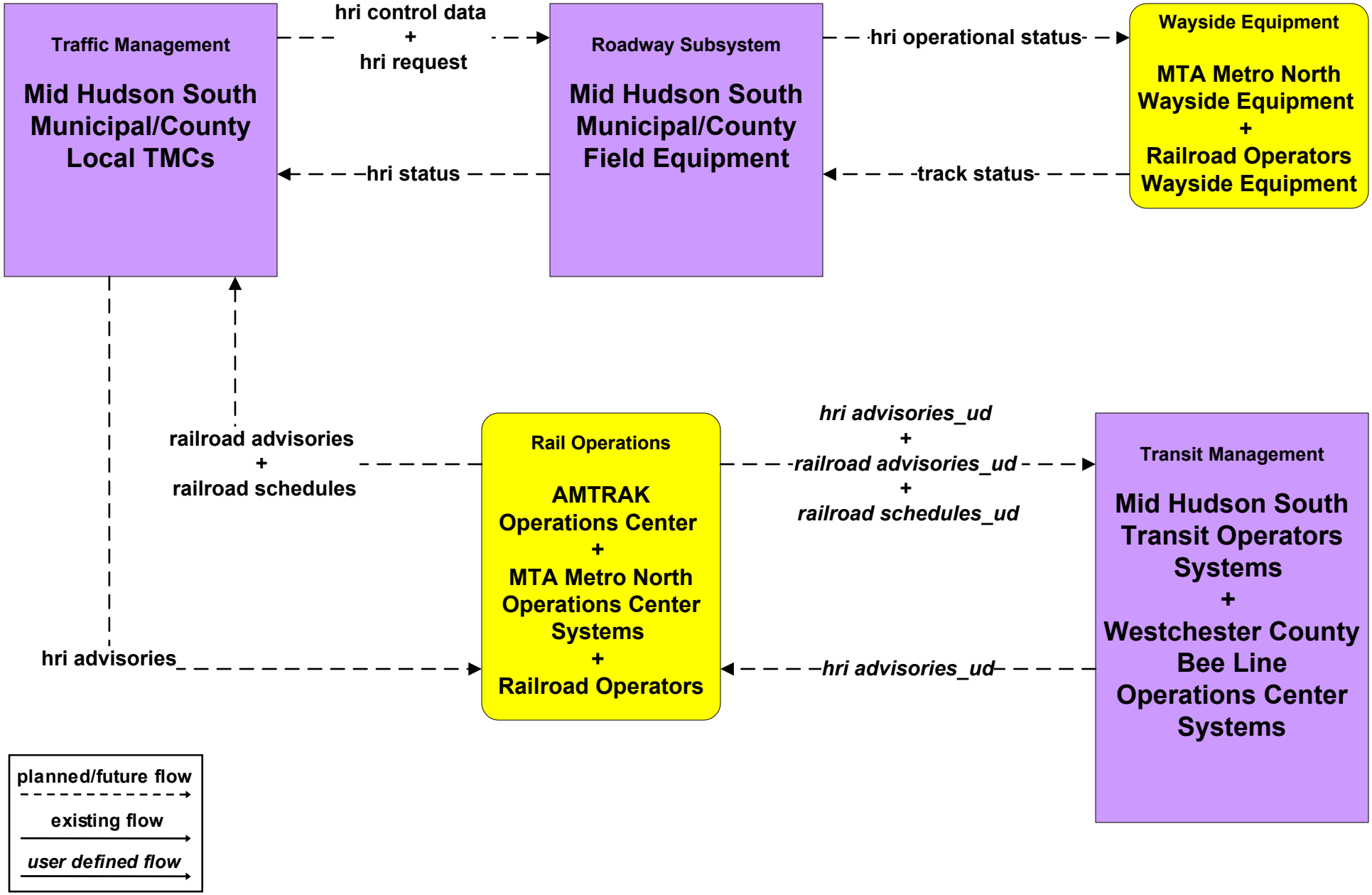
ATMS11 - Emissions Management
NYCDEP



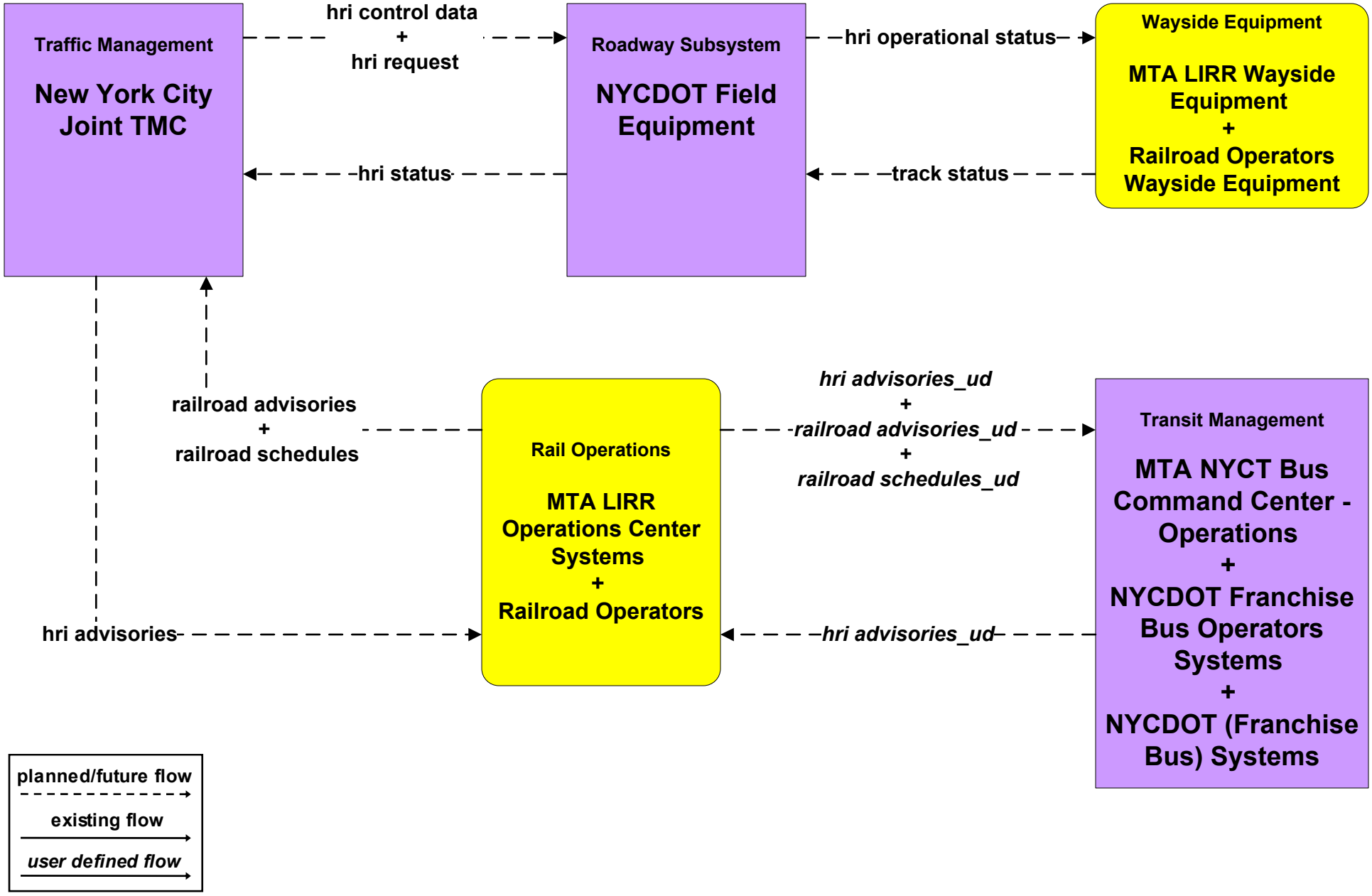
ATMS13 - Standard Railroad Crossing
Long Island TMCs and Rail Operators



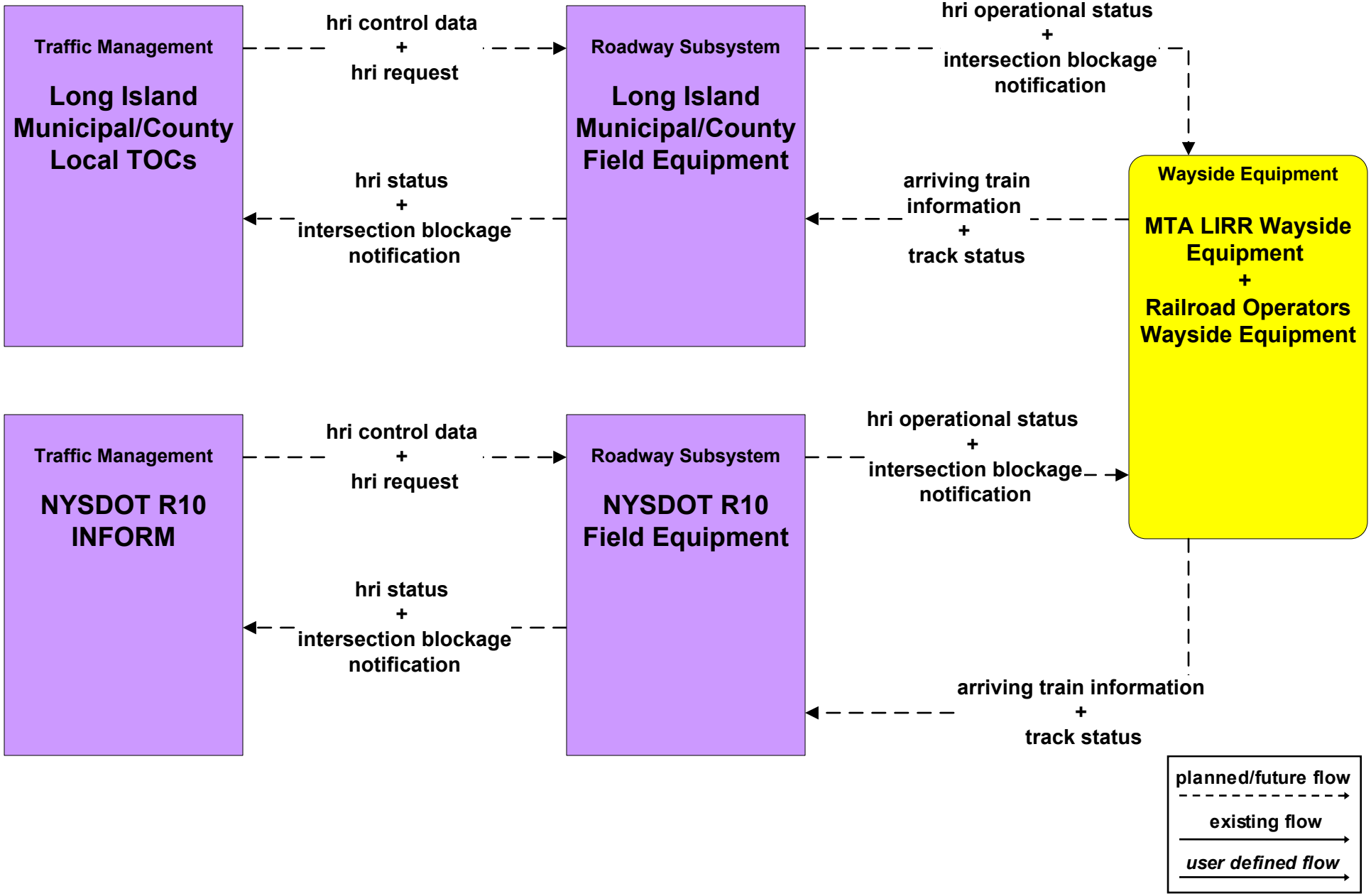
ATMS13 - Standard Railroad Crossing
Mid Hudson South TMCs and Rail Operators



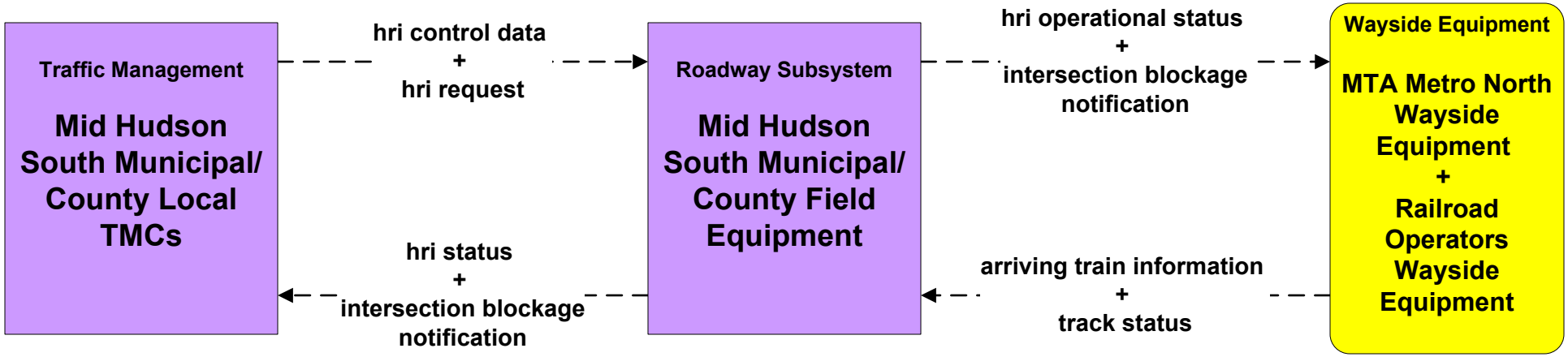
ATMS13 - Standard Railroad Crossing
New York City Joint TMC and Rail Operators



ATMS14 - Advanced Railroad Crossing
Long Island Municipal/County TMCs and Rail Operators



ATMS14 - Advanced Railroad Crossing
Mid Hudson South TMCs and Rail Operators

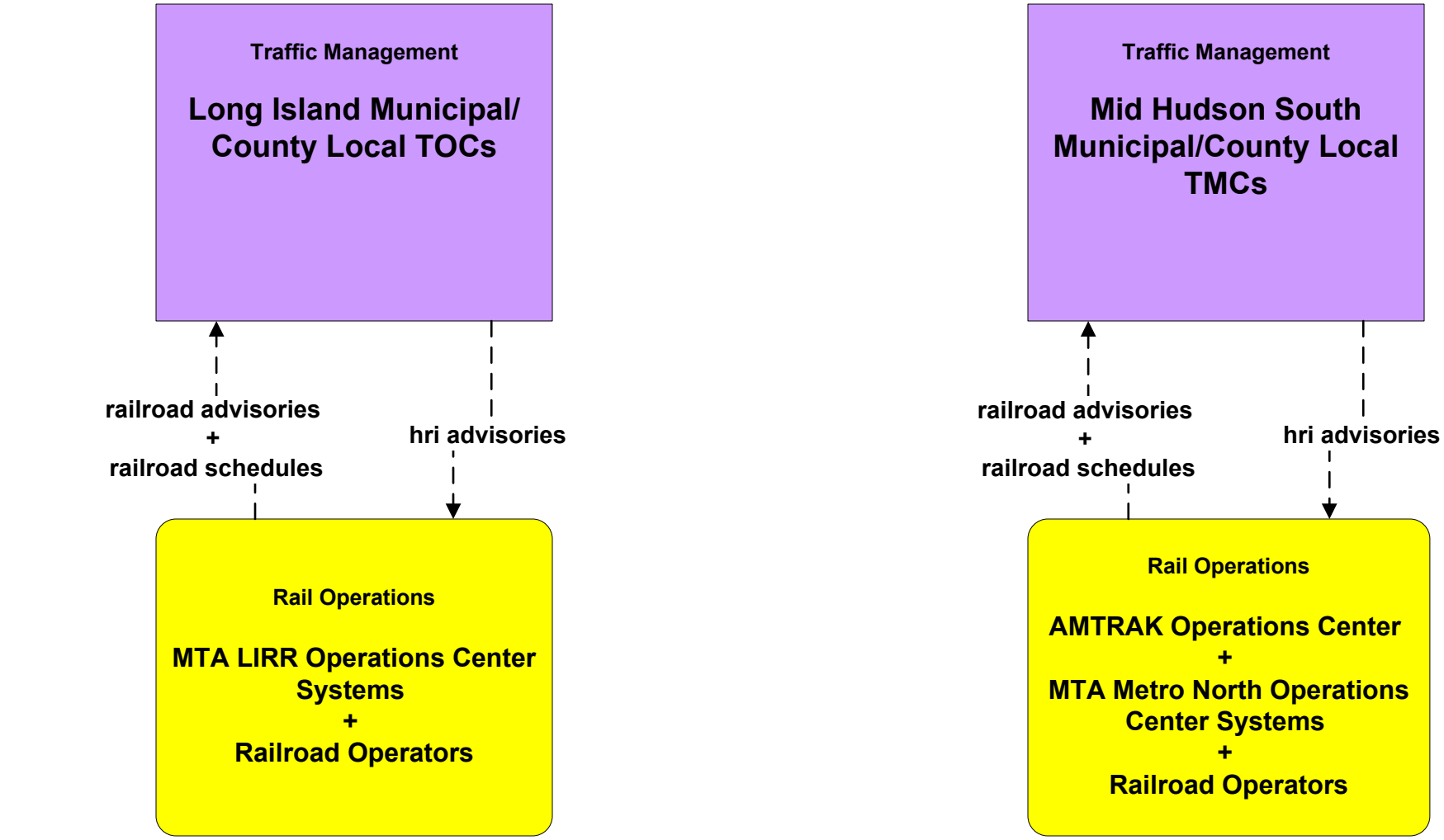


planned/future flow

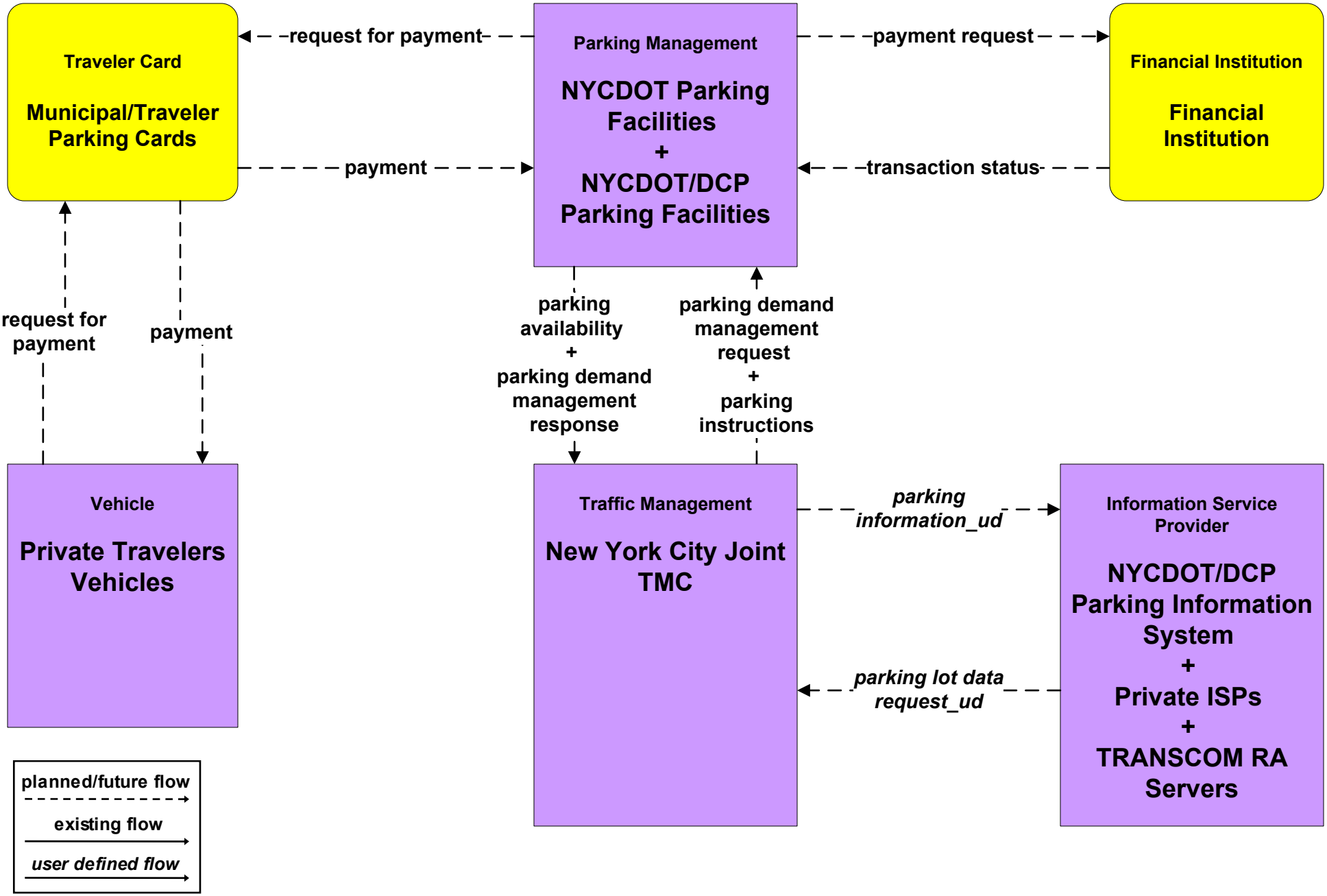
existing flow

user defined flow

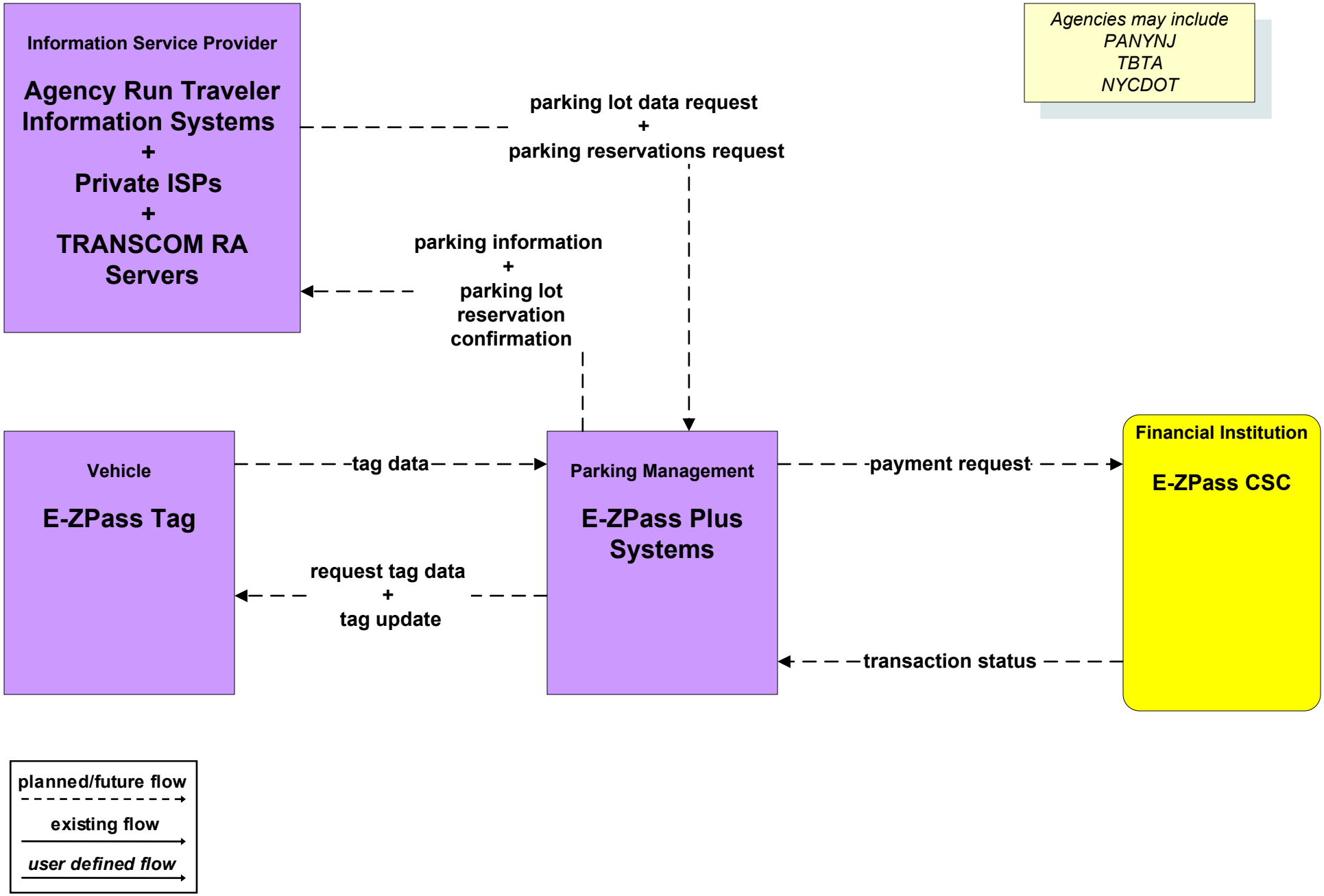
ATMS15 - Railroad Operations Coordination
Long Island and Mid Hudson South Municipal/County TMCs



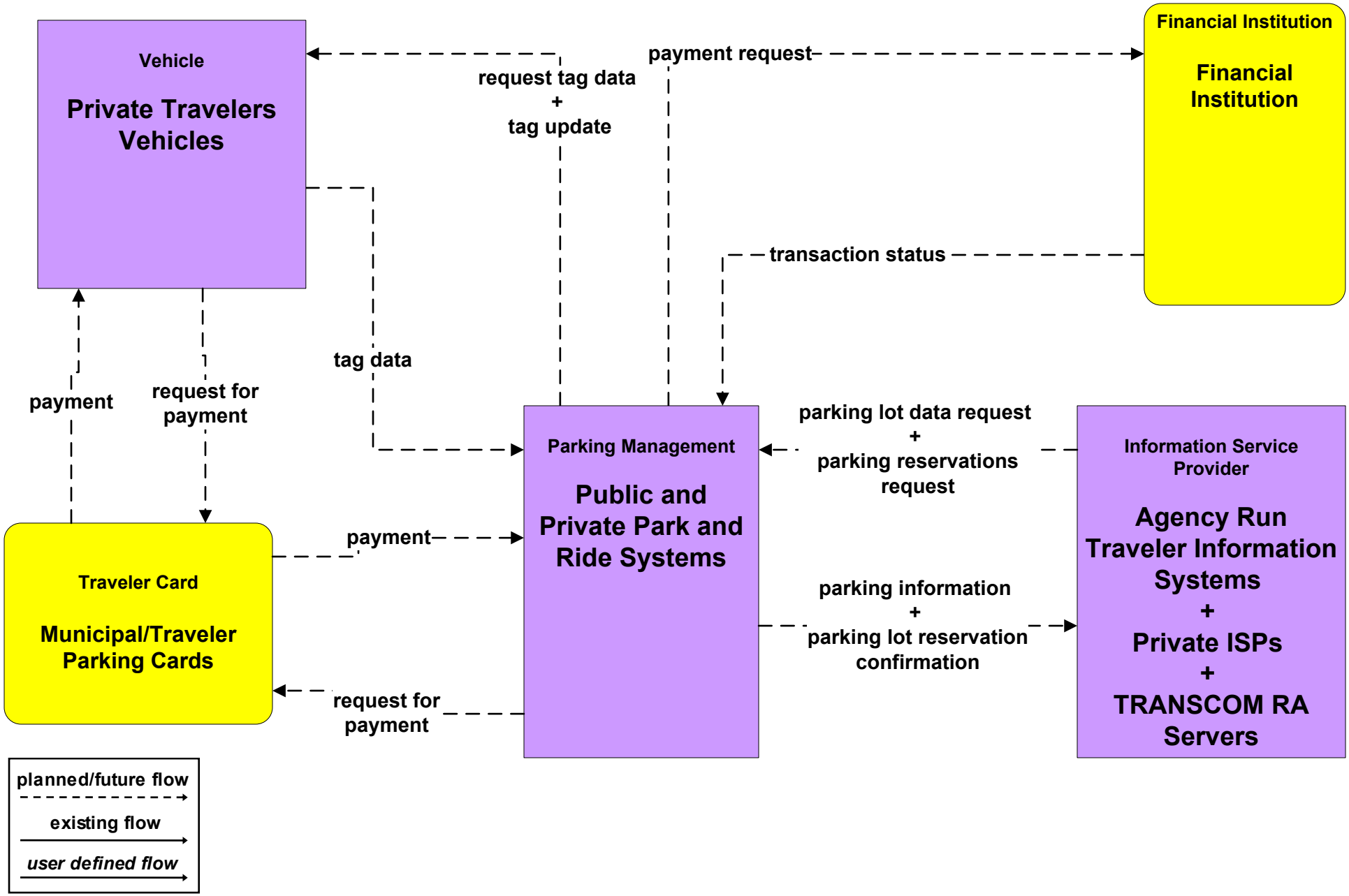
ATMS16 - Parking Facility Management
NYCDOT DOT/DCP



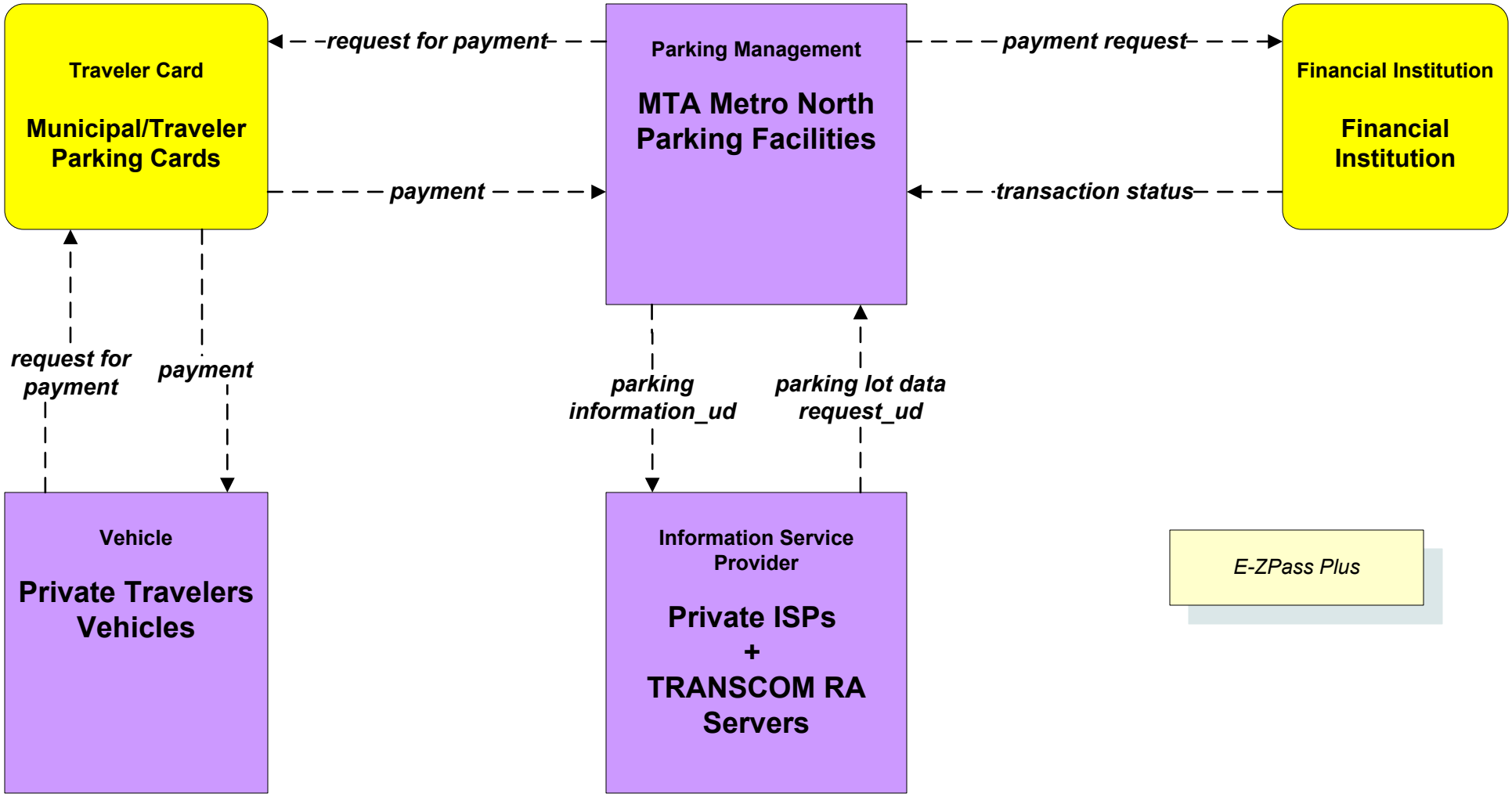
ATMS16 - Parking Facility Management
E-ZPass Plus Parking Systems



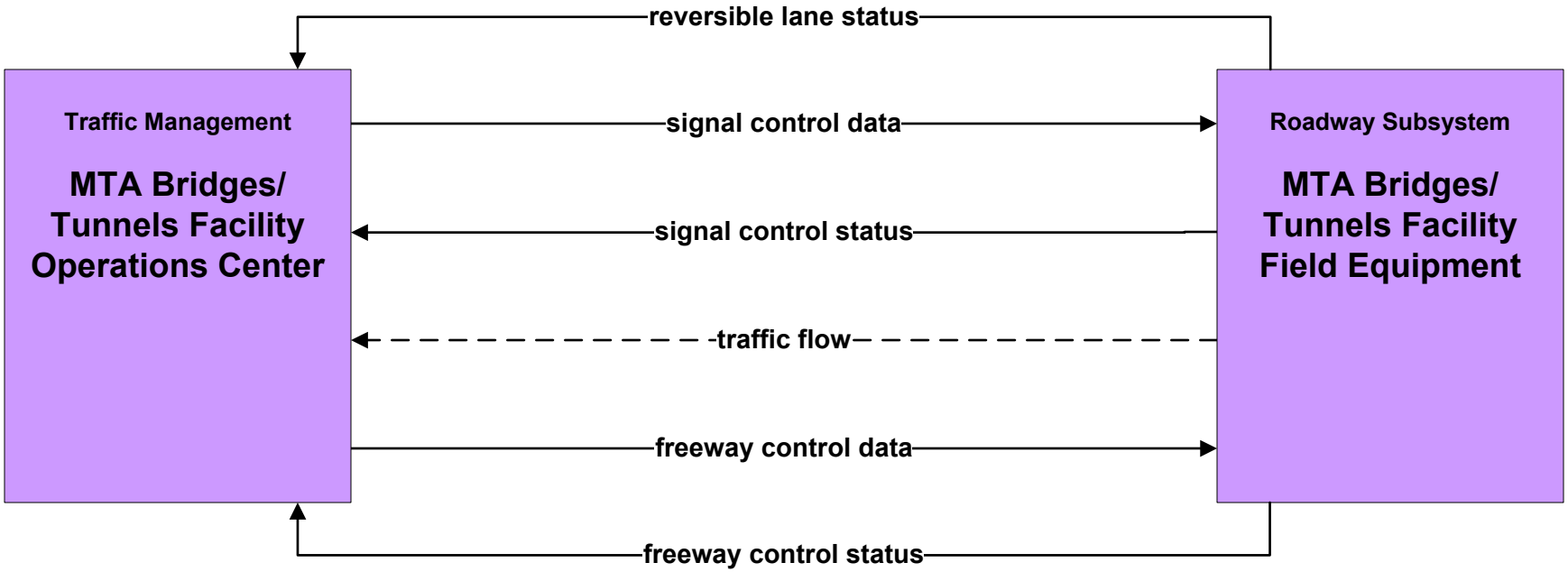
ATMS16 - Parking Facility Management
Public and Private Park and Ride



ATMS16 - Parking Facility Management
MTA Metro North Parking Facilities



ATMS18 - Reversible Lane Management
MTA Bridges and Tunnels

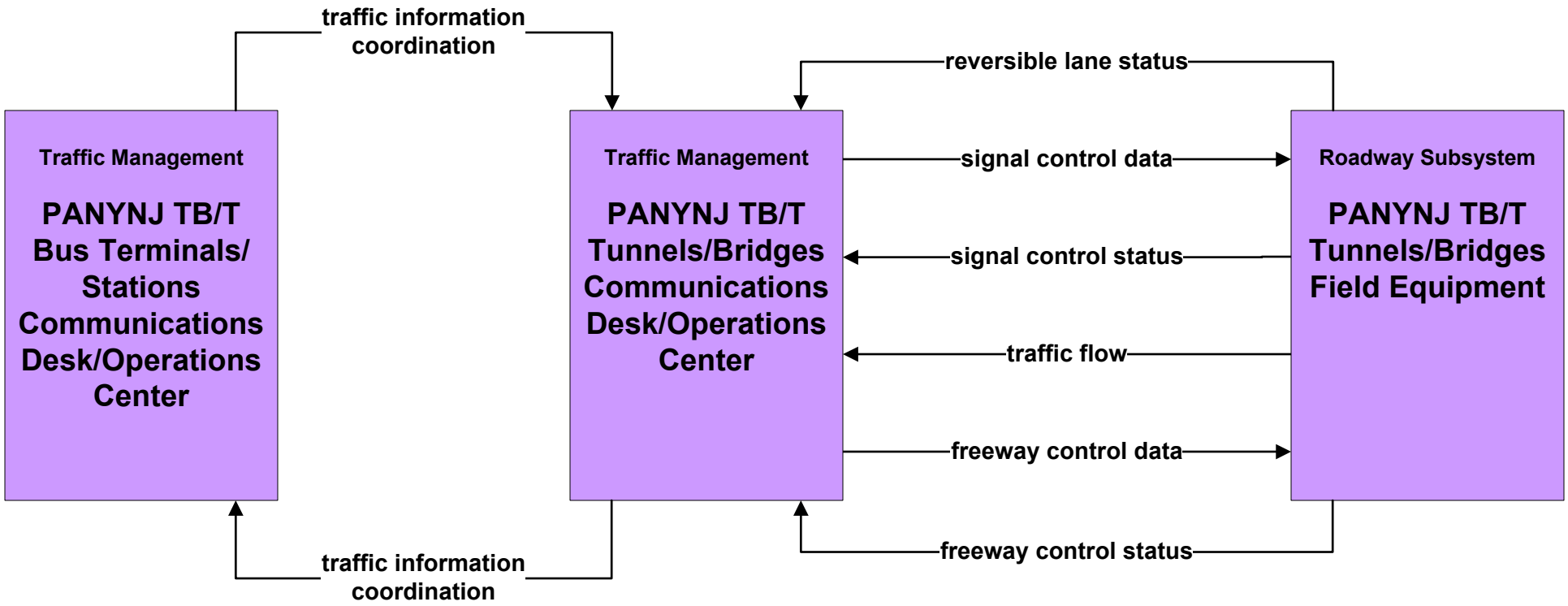


planned/future flow

existing flow

user defined flow

ATMS18 - Reversible Lane Management
PANYNJ Tunnels/Bridges



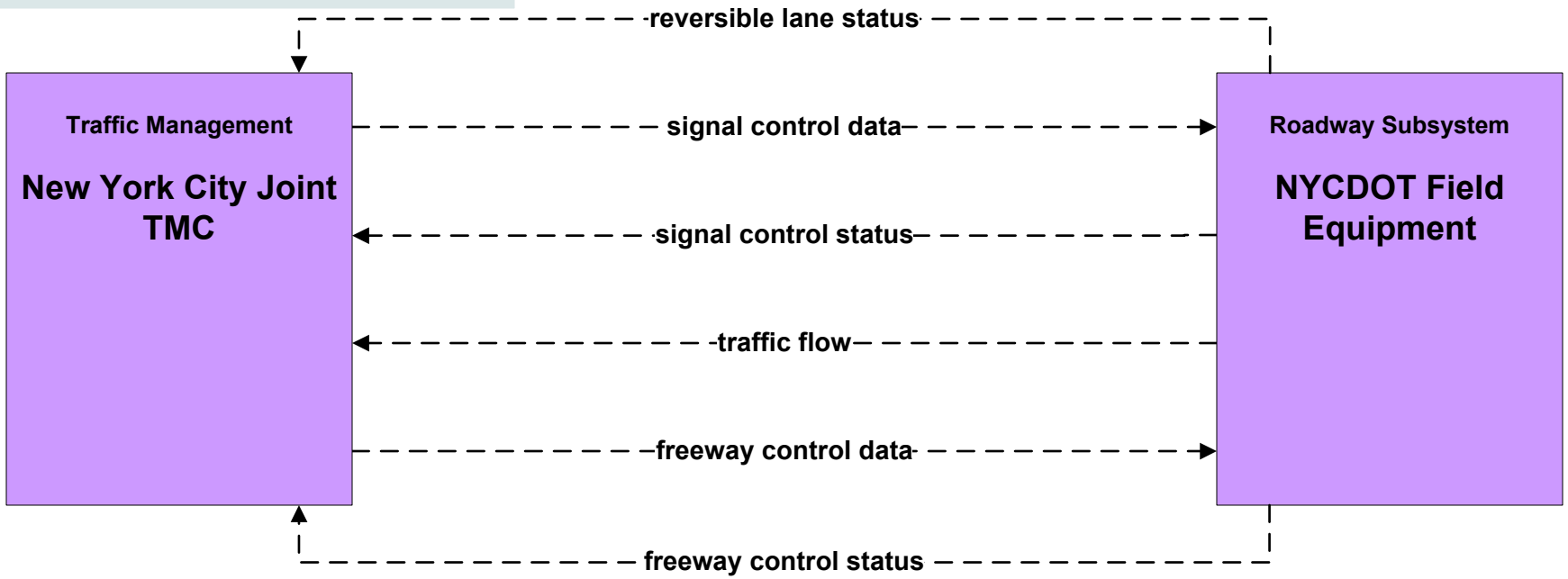
planned/future flow

existing flow

user defined flow

ATMS18 - Reversible Lane Management
NYCDOT from the New York City Joint TMC

Control of NYCDOT Field Equipment is only from NYCDOT Systems located at the New York City Joint TMC

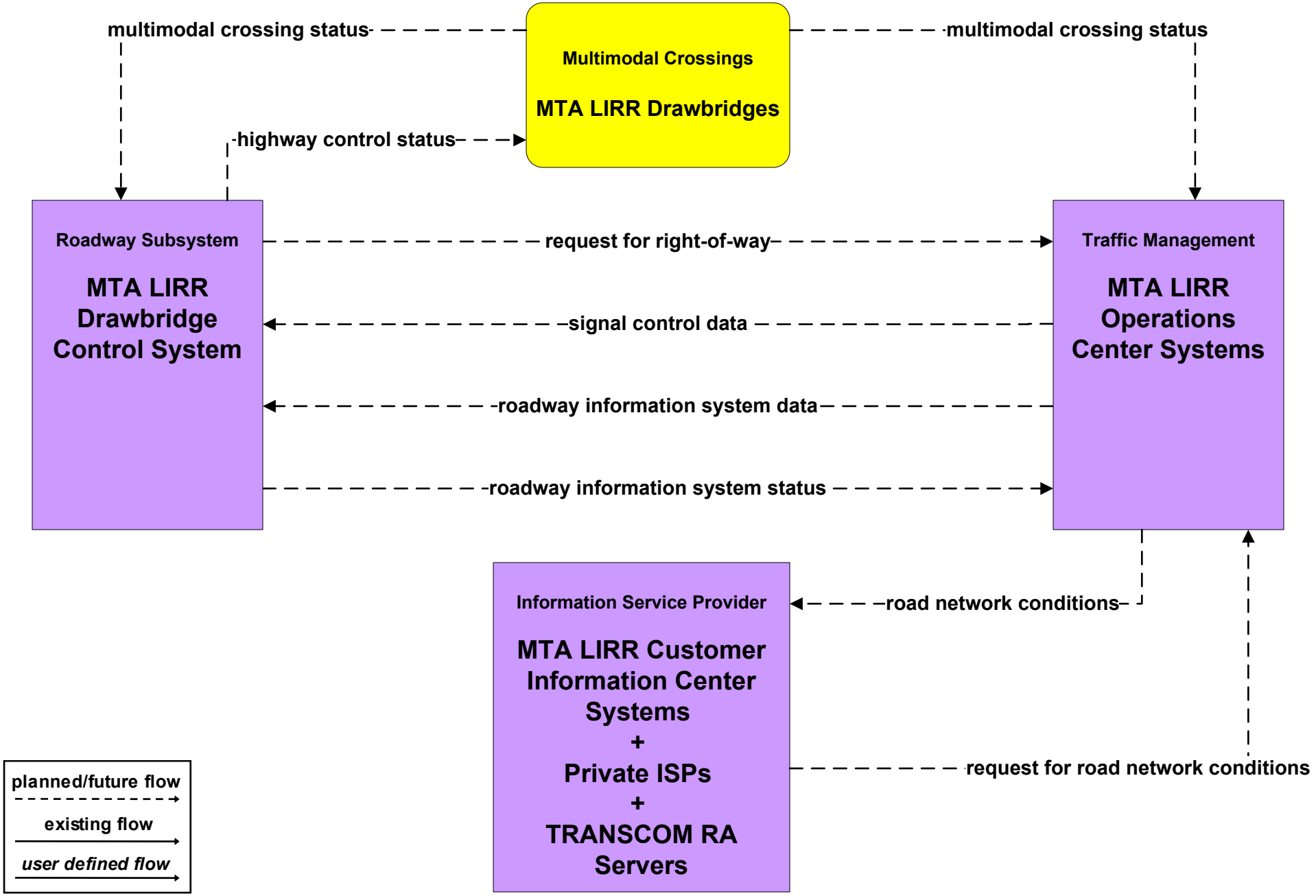


planned/future flow

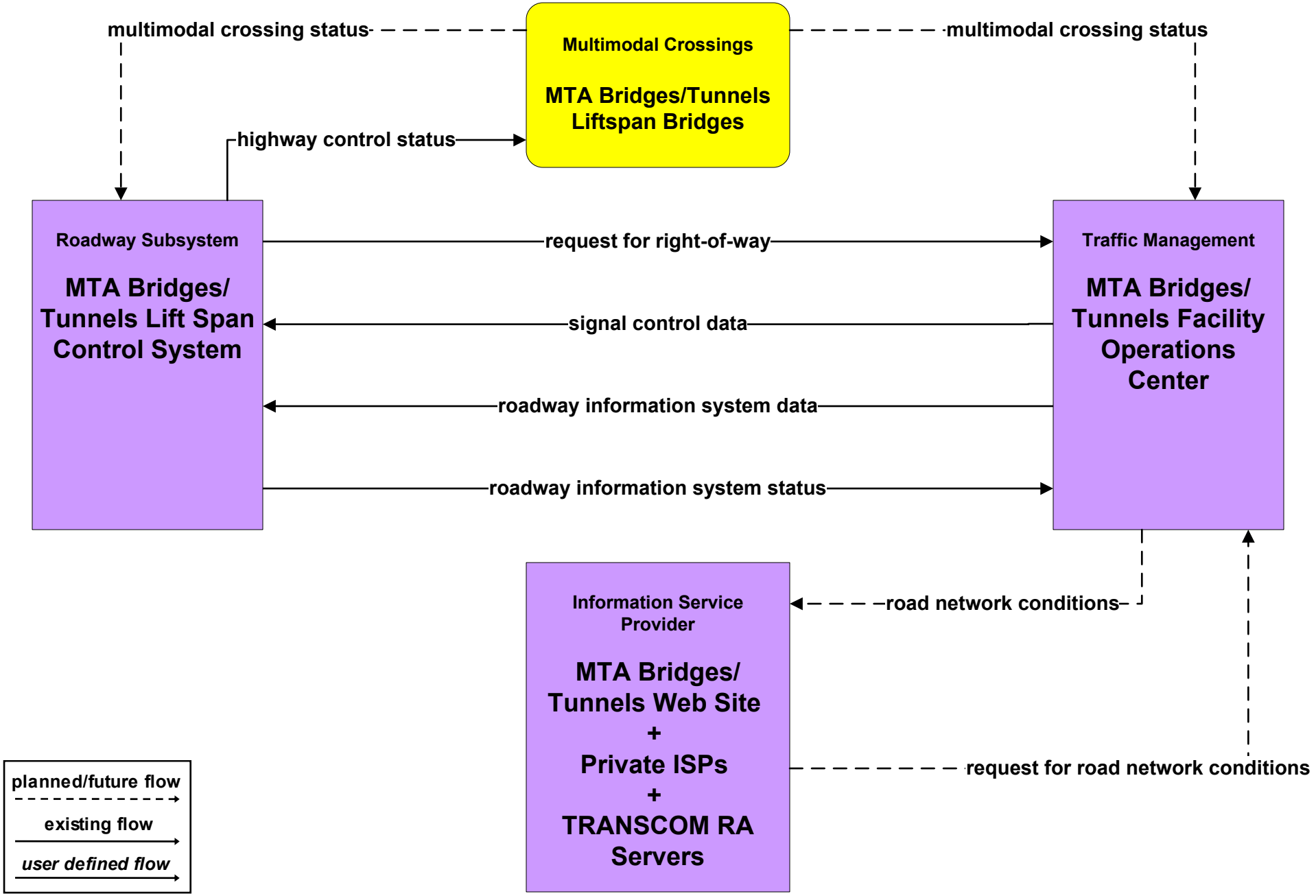
existing flow

user defined flow

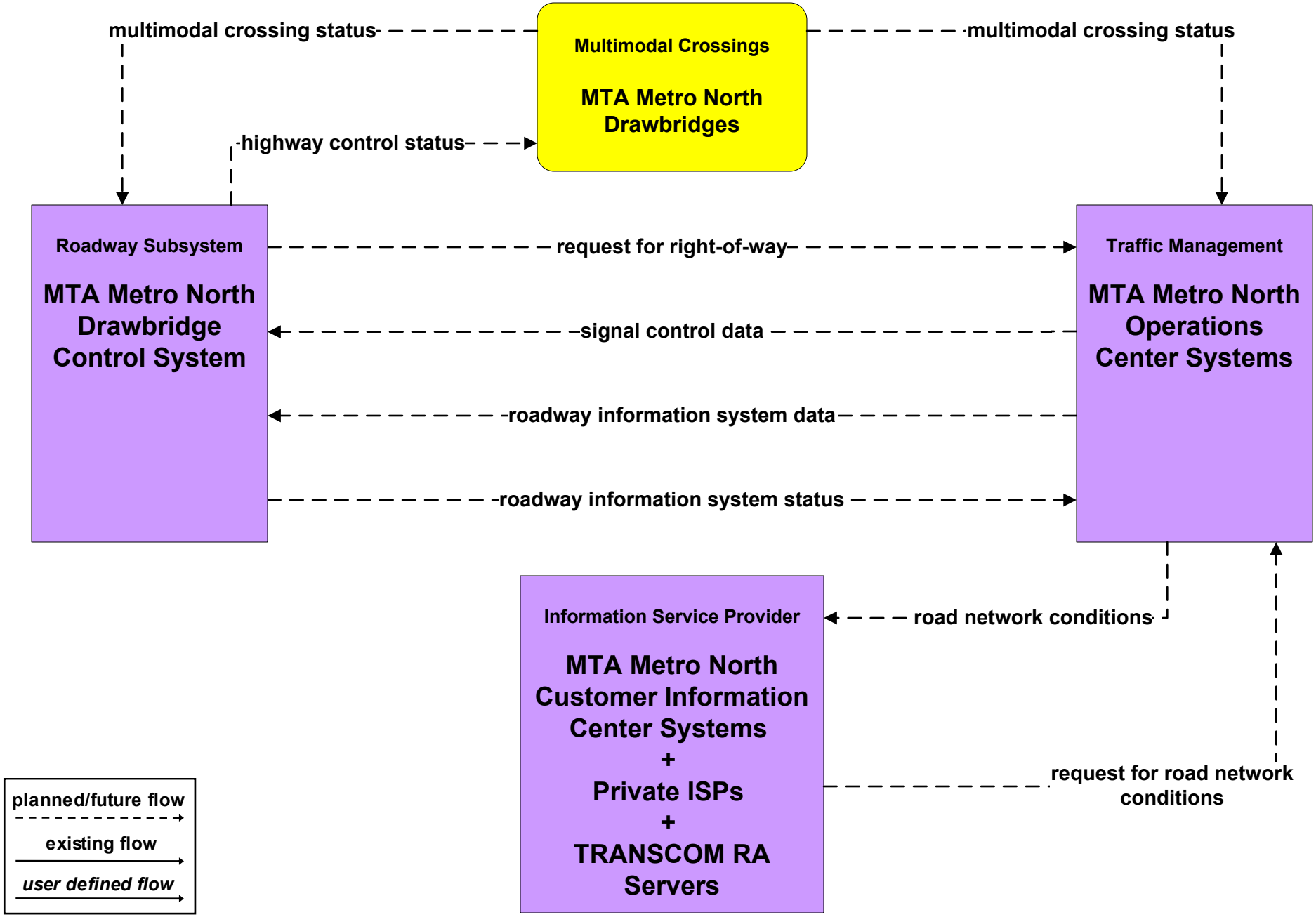
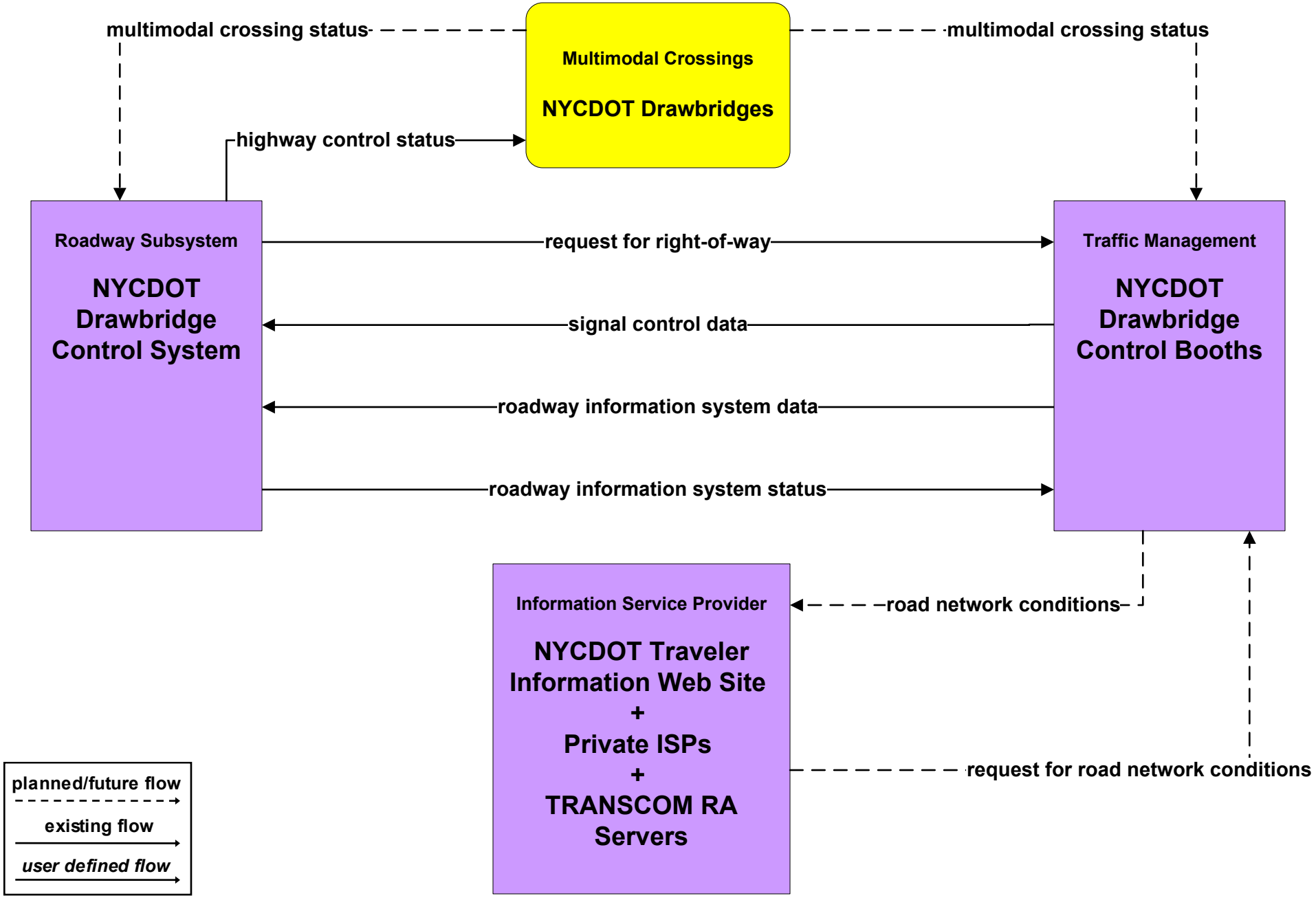
ATMS20 - Drawbridge Management
MTA Long island Railroad



ATMS20 - Drawbridge Management
MTA Bridges and Tunnels



ATMS20 - Drawbridge Management
MTA Metro North Railroad



ATMS20 - Drawbridge Management
NYC DOT