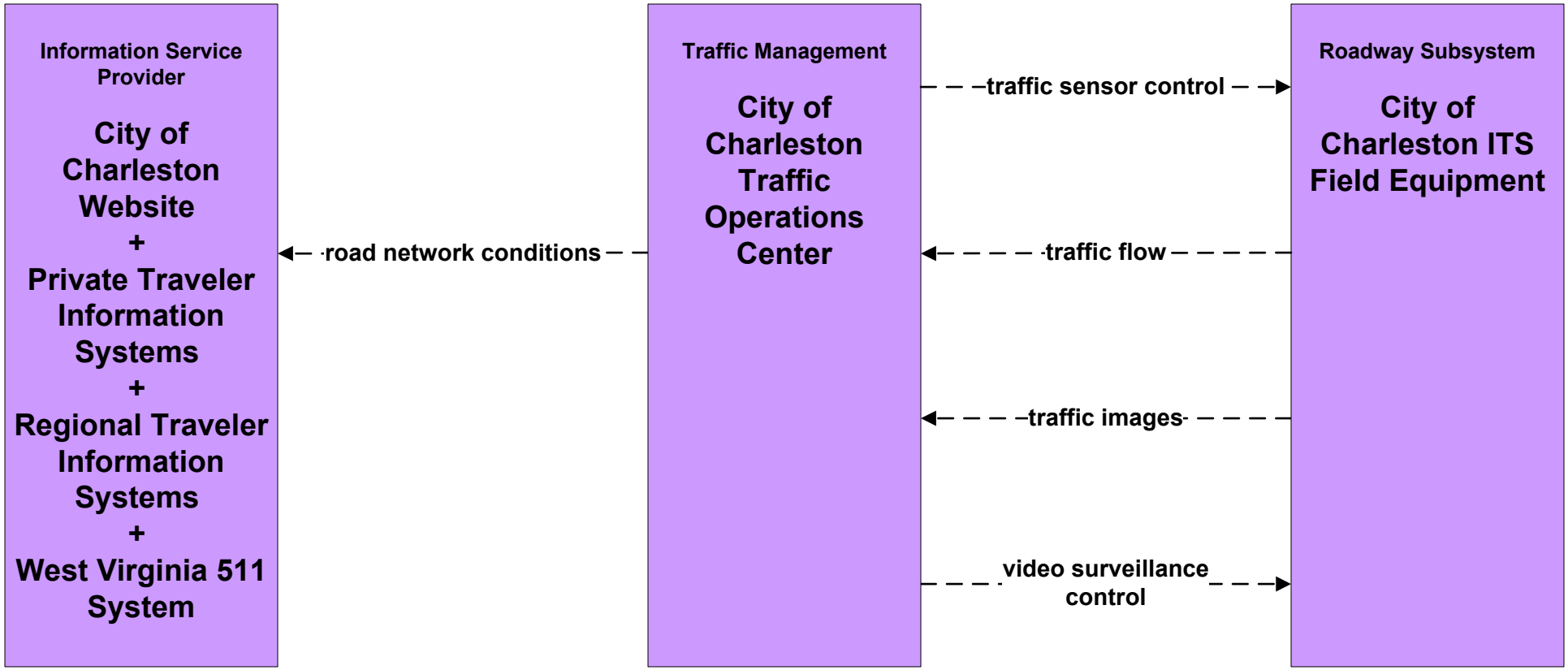
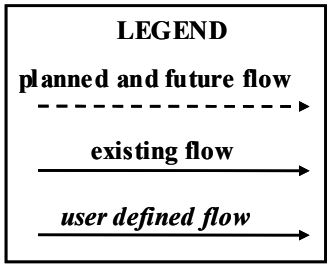
West Virginia Statewide ITS Architecture

Customized Market Package Diagrams

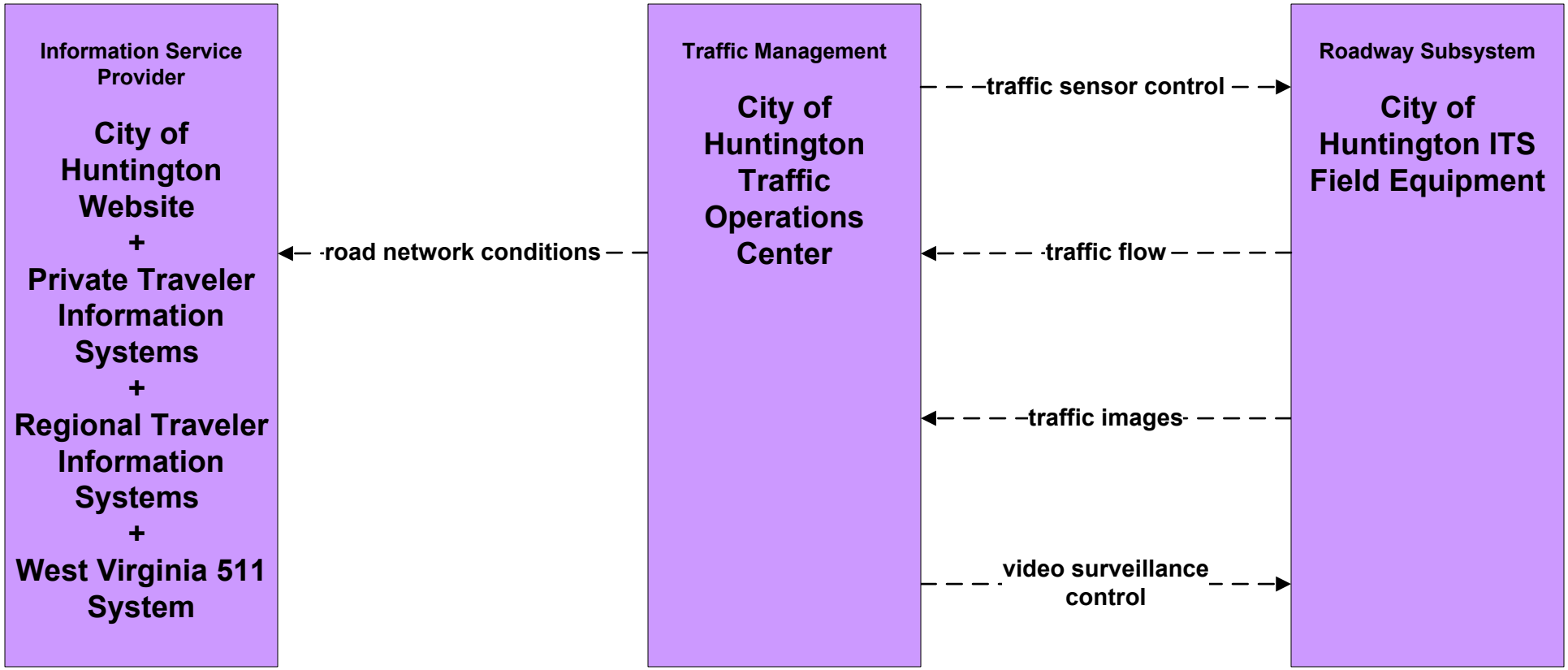
Advanced Traffic Management Systems (ATMS)

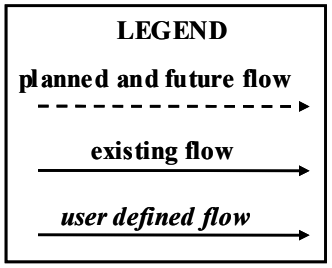
ATMS01 - Network Surveillance
City of Charleston Traffic Operations Center



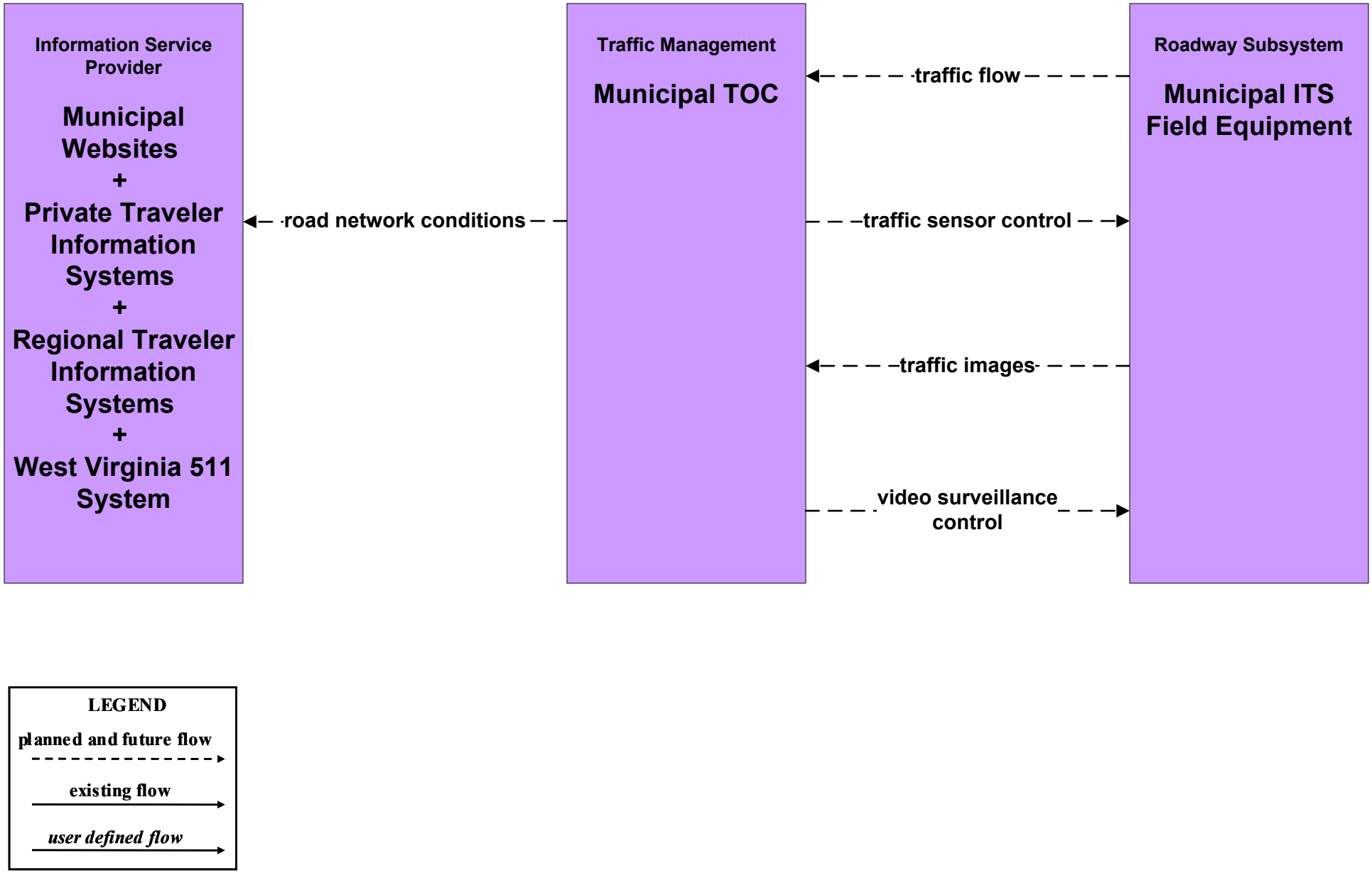


ATMS01 - Network Surveillance
City of Huntington Traffic Operations Center

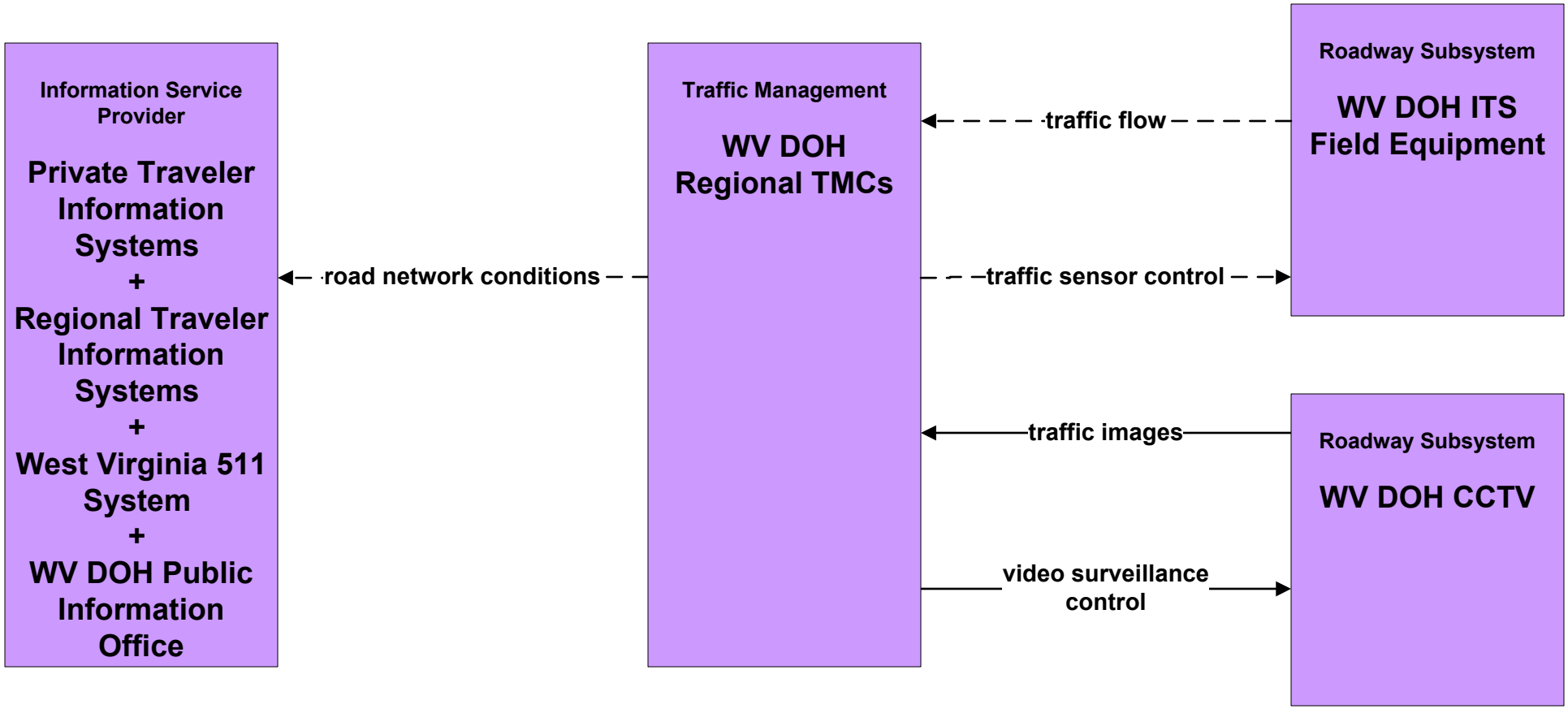




ATMS01 - Network Surveillance
Municipal TOC



ATMS01 - Network Surveillance
WV DOH Regional Traffic Management Centers



NOTE: Includes Wheeling Tunnel TMC

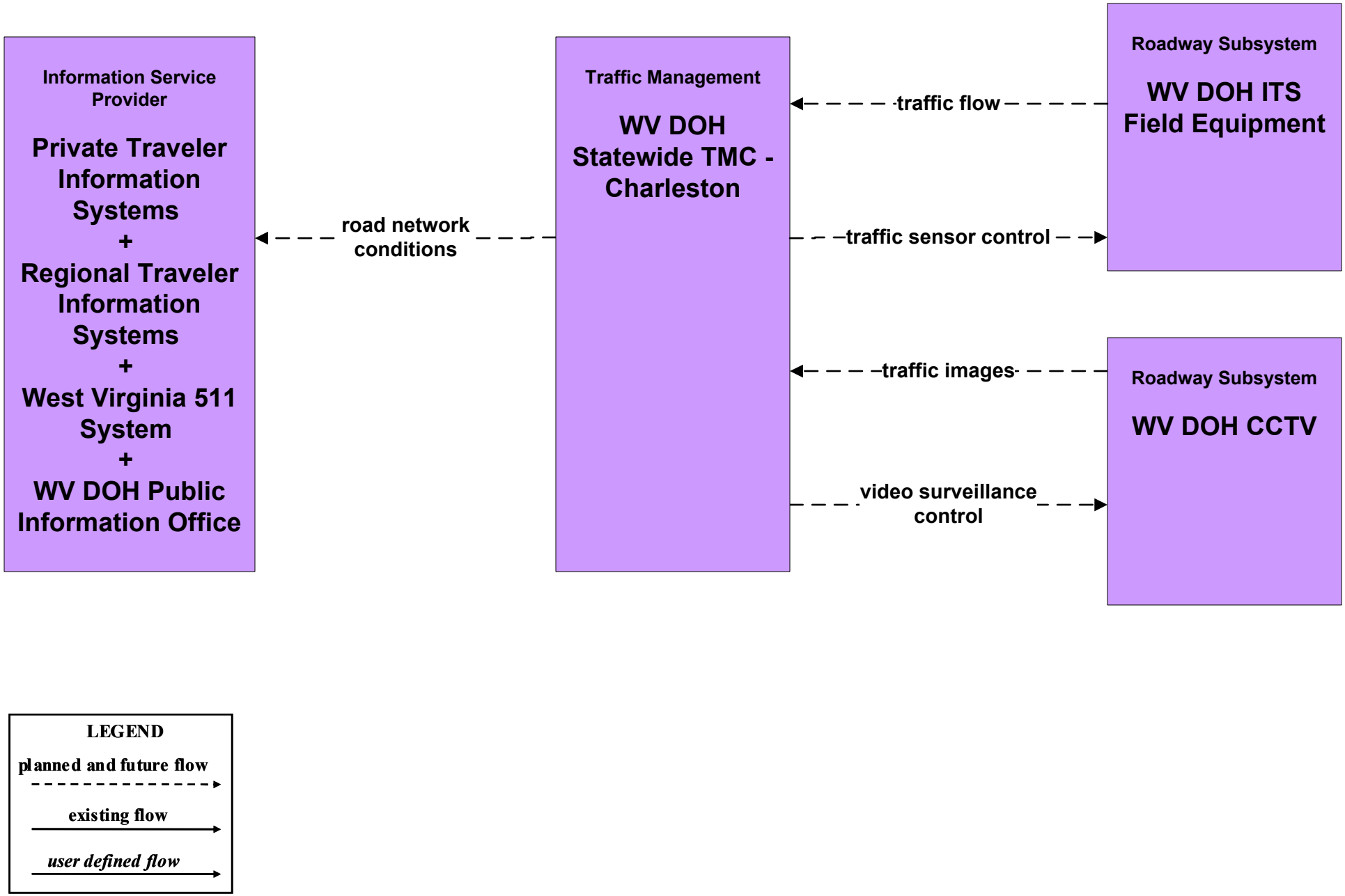
LEGEND

planned and future flow

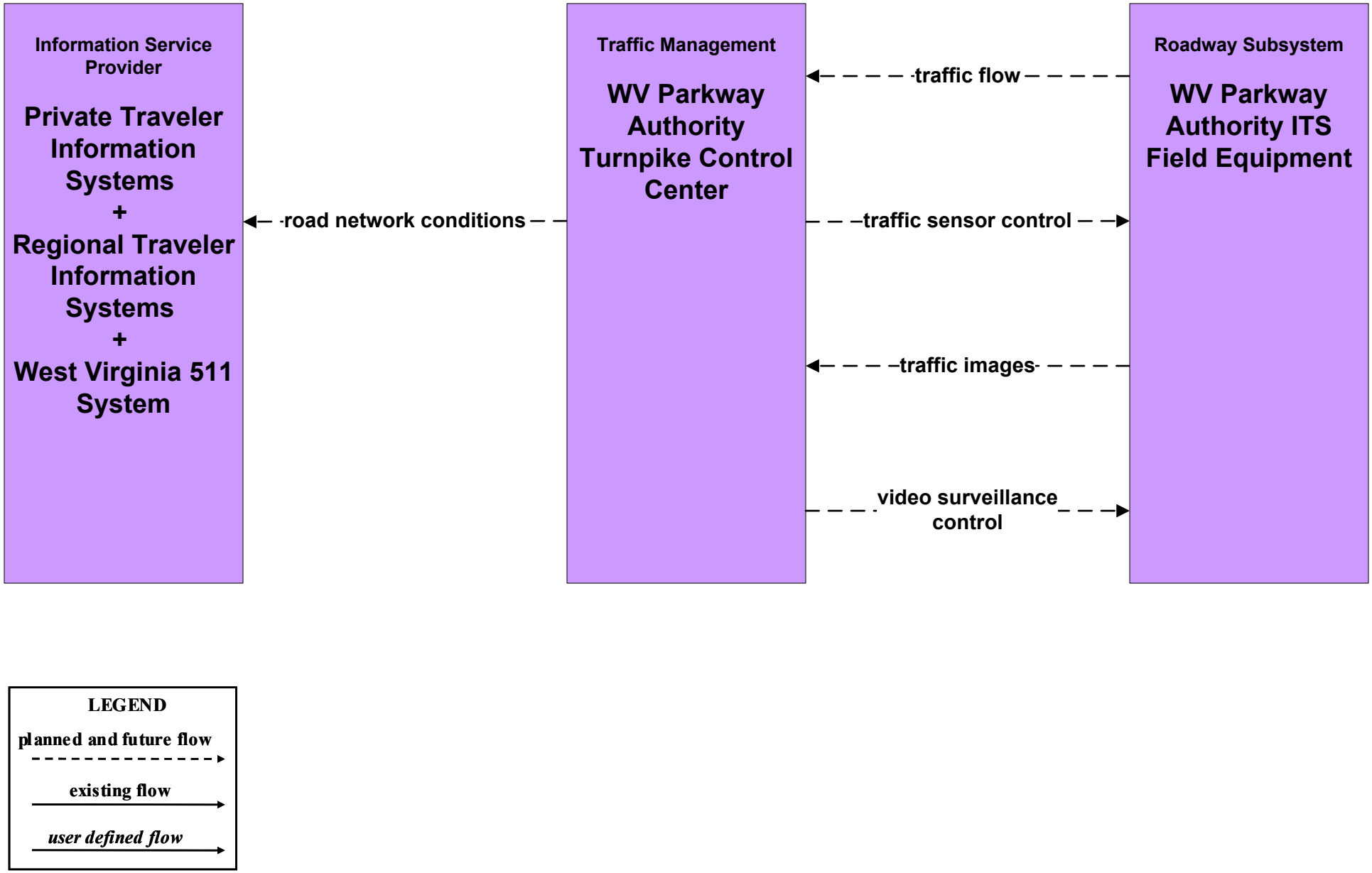
existing flow

user defined flow

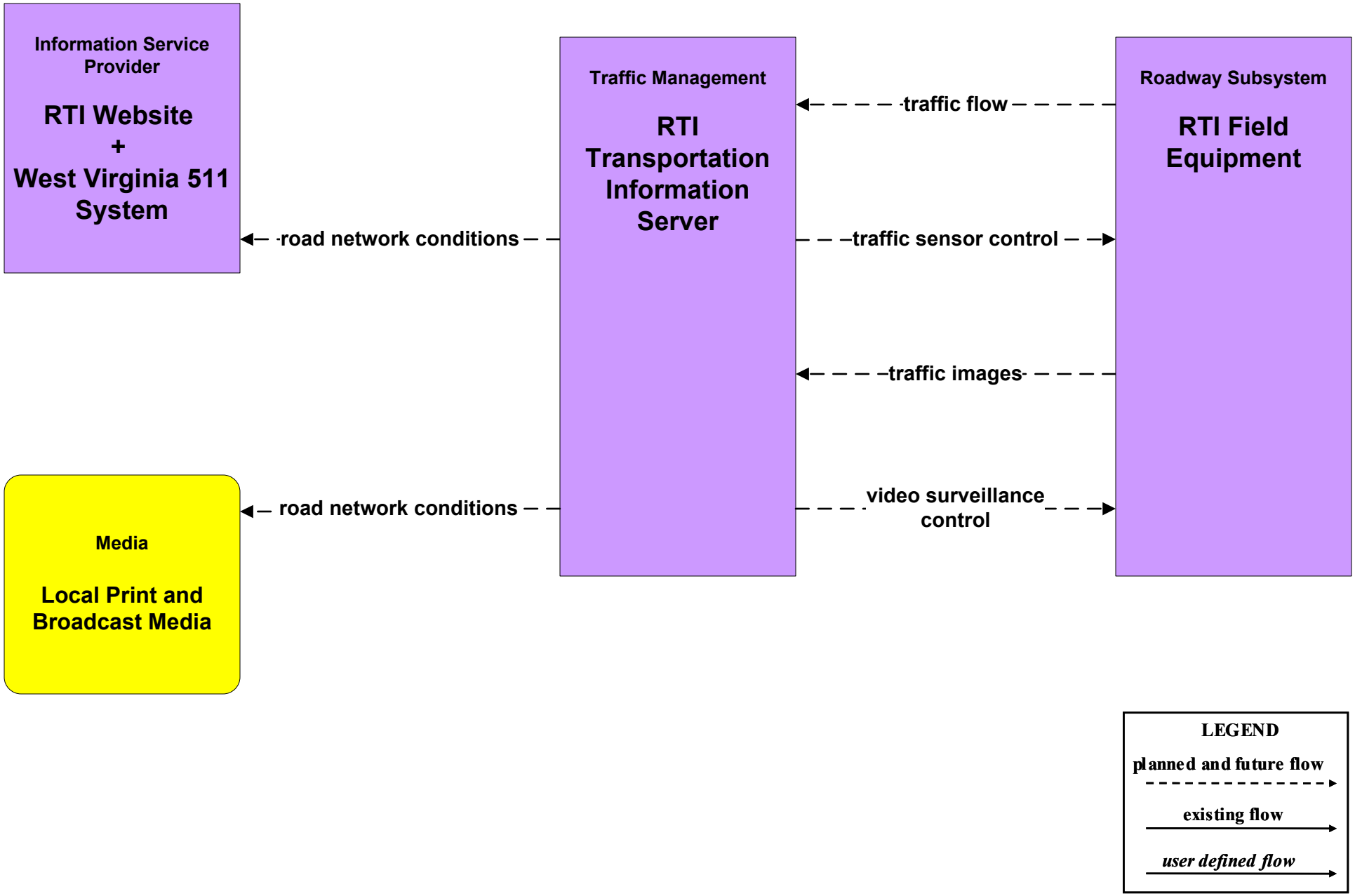
ATMS01 - Network Surveillance
WV DOH Statewide TMC



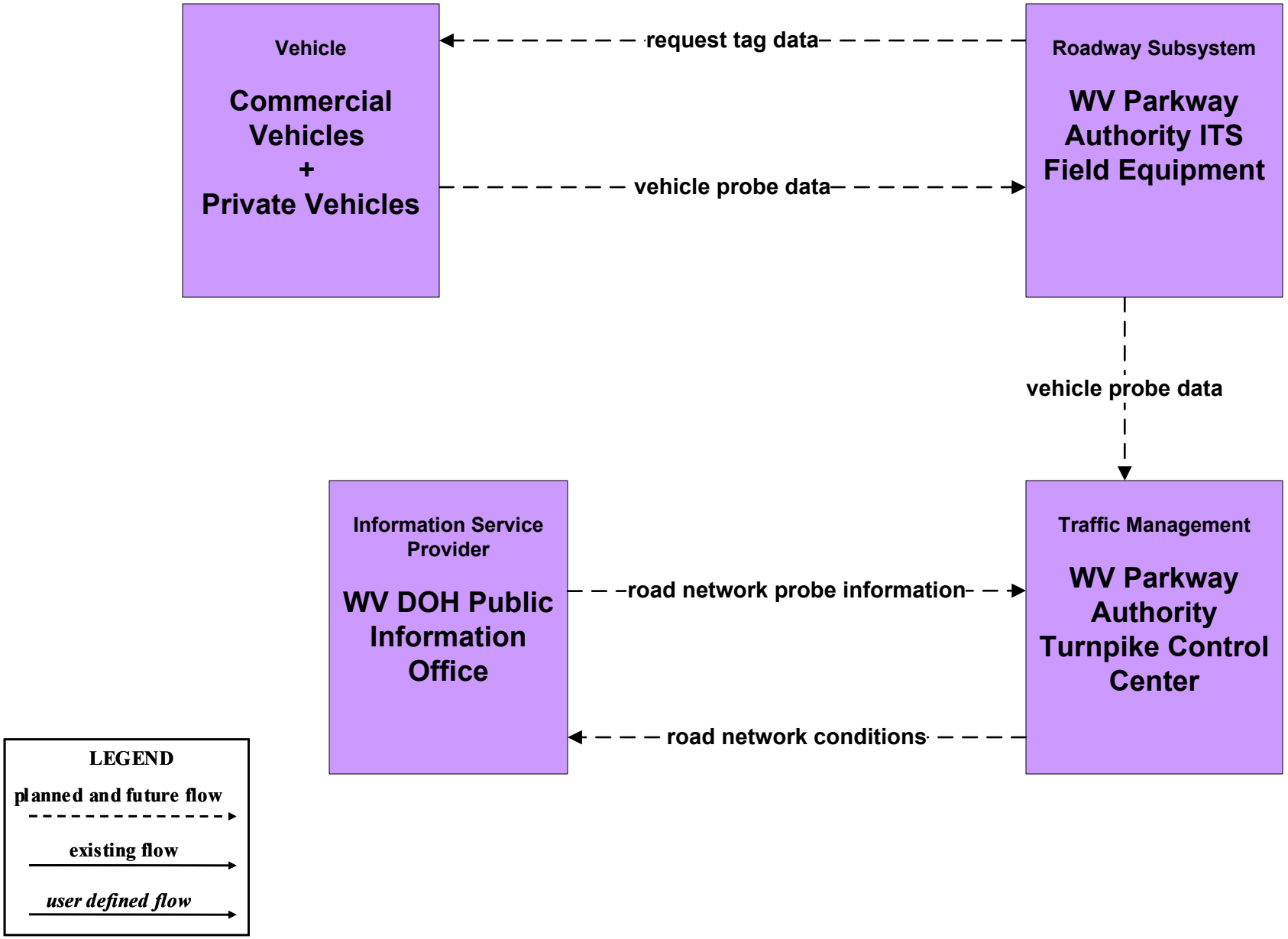
ATMS01 - Network Surveillance
WV Parkway Authority Turnpike Control Center



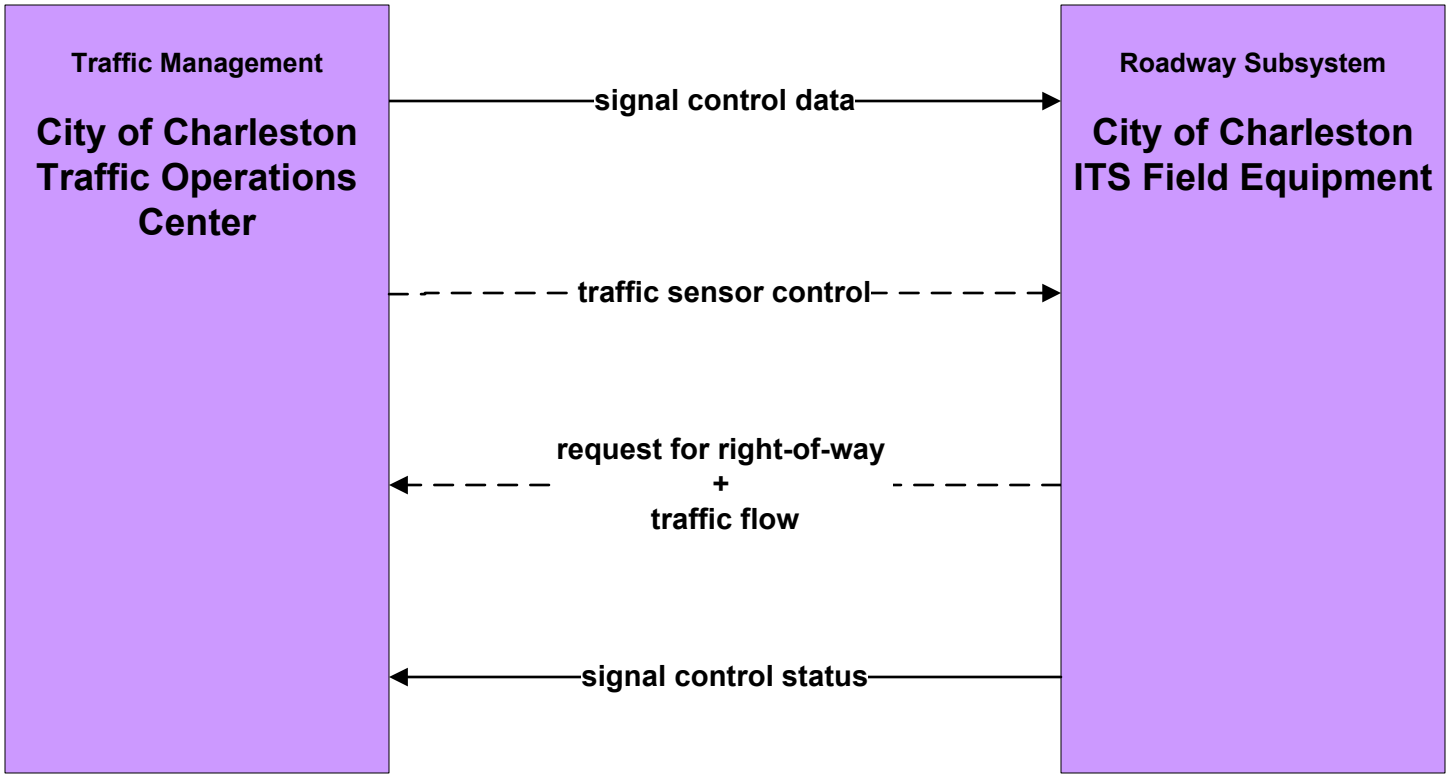
ATMS01 - Network Surveillance
RTI

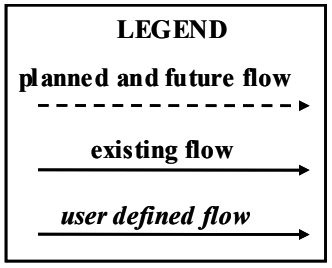


ATMS02 - Probe Surveillance
WV Parkway Authority

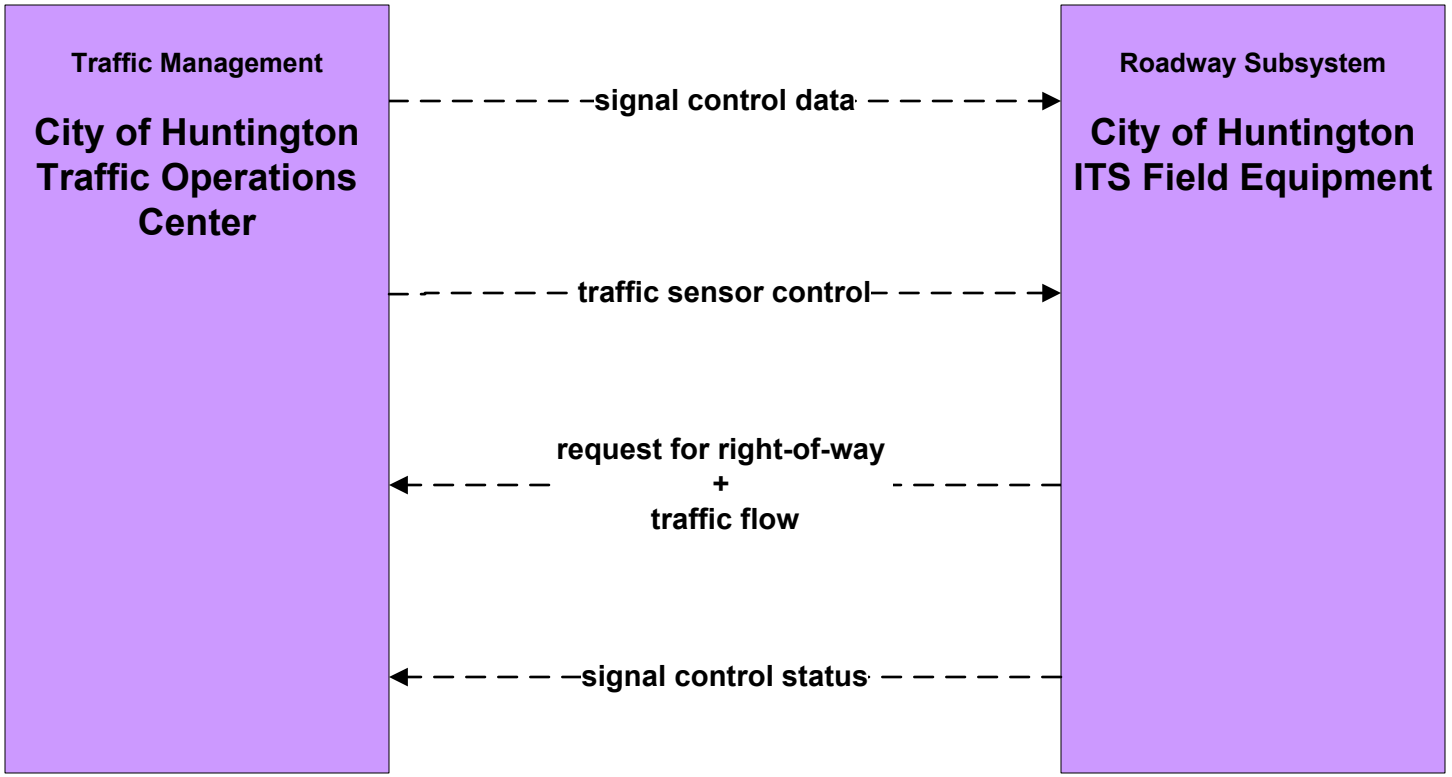


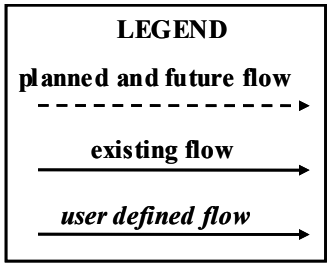
ATMS03 - Surface Street Control
City of Charleston Traffic Operations Center





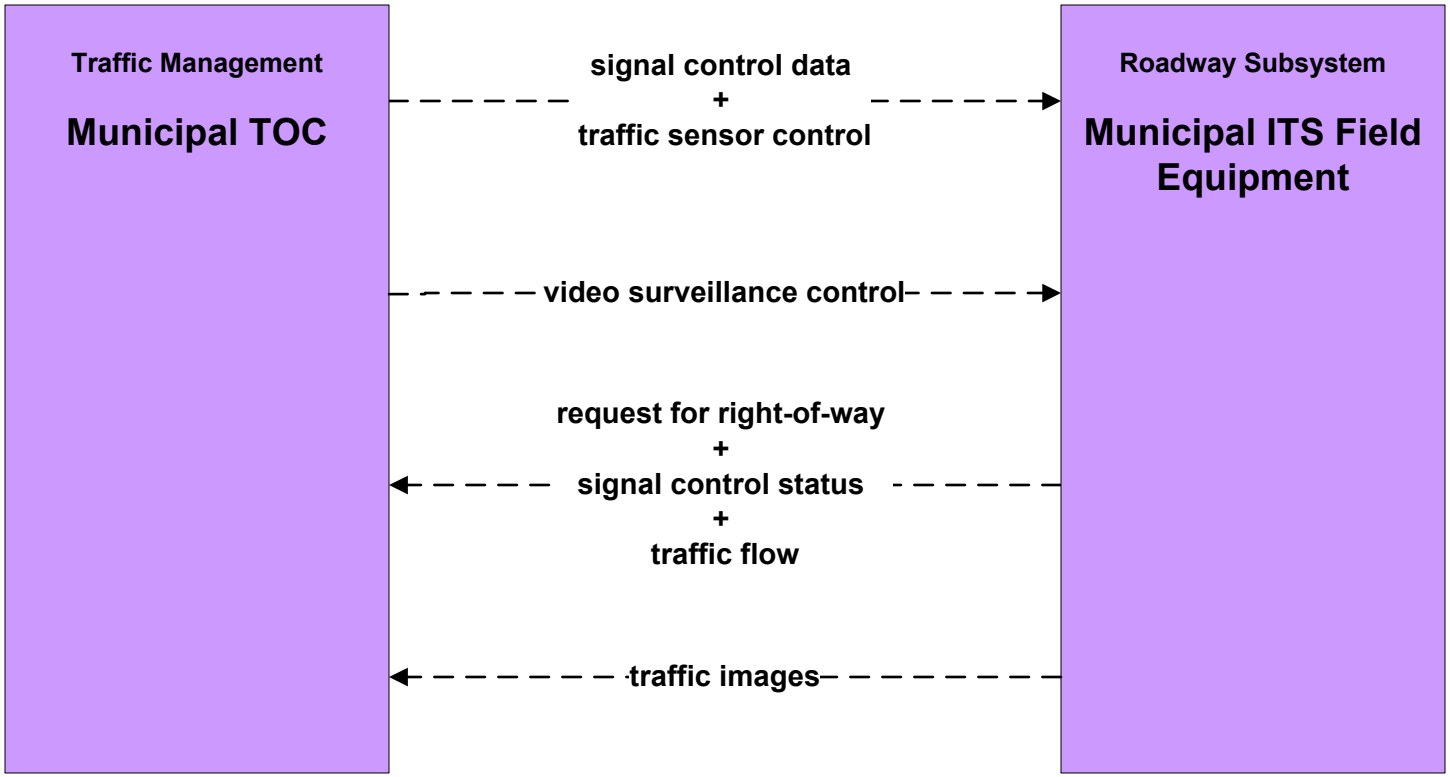
ATMS03 - Surface Street Control
City of Huntington Traffic Operations Center

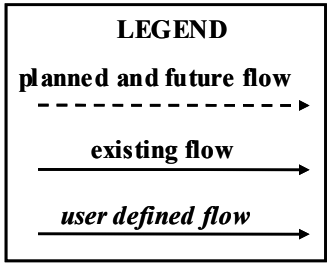




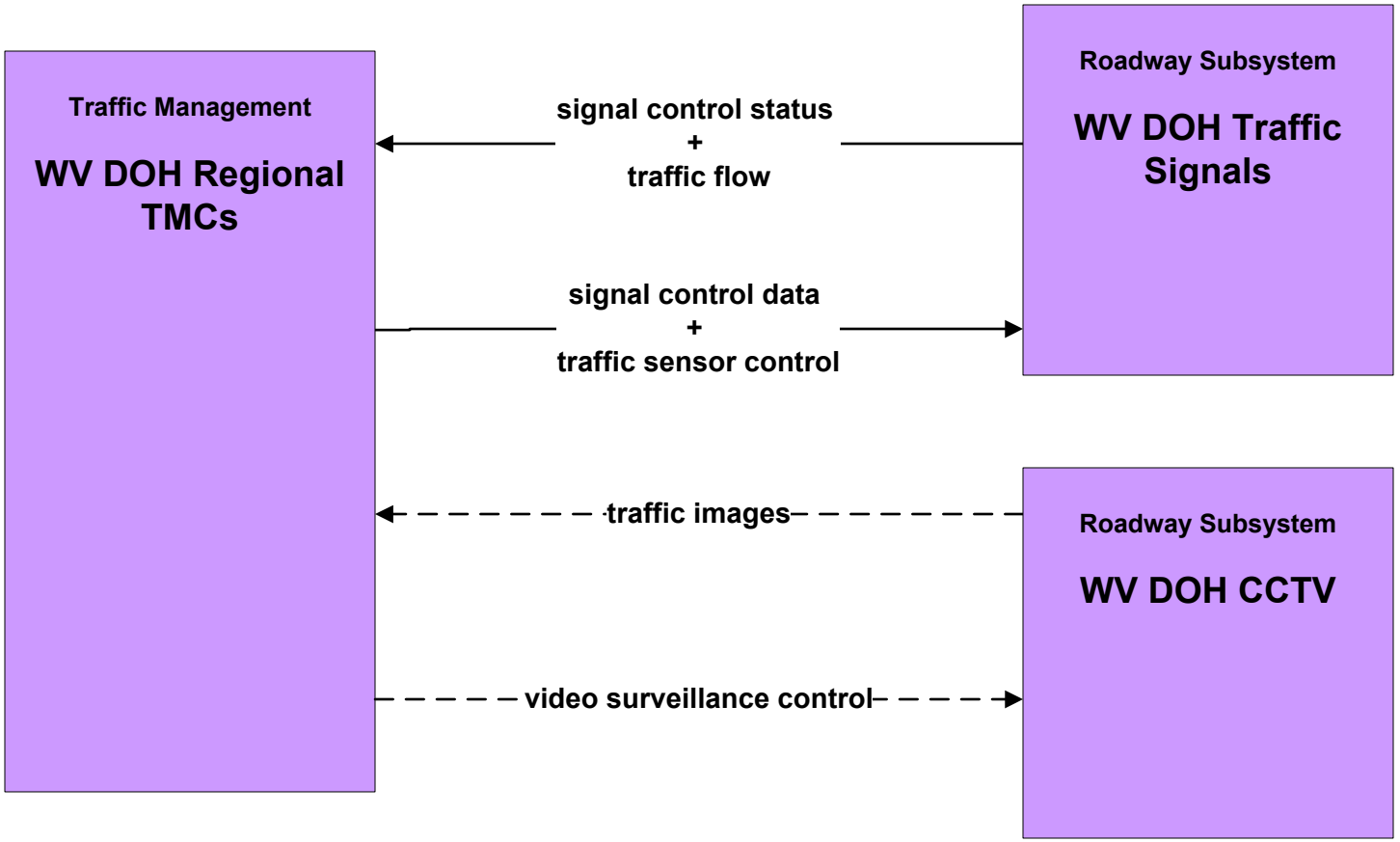
NOTE: WV DOH Statewide TMC can interface with City of Huntington TOC to access and control traffic signals. Interface is under ATMS07-1.

ATMS03 - Surface Street Control
Municipal TOC





ATMS03 - Surface Street Control
WV DOH Regional TMCs



NOTE: This diagram represents the control of traffic signals on state owned roads that are within the counties and municipalities throughout the State.

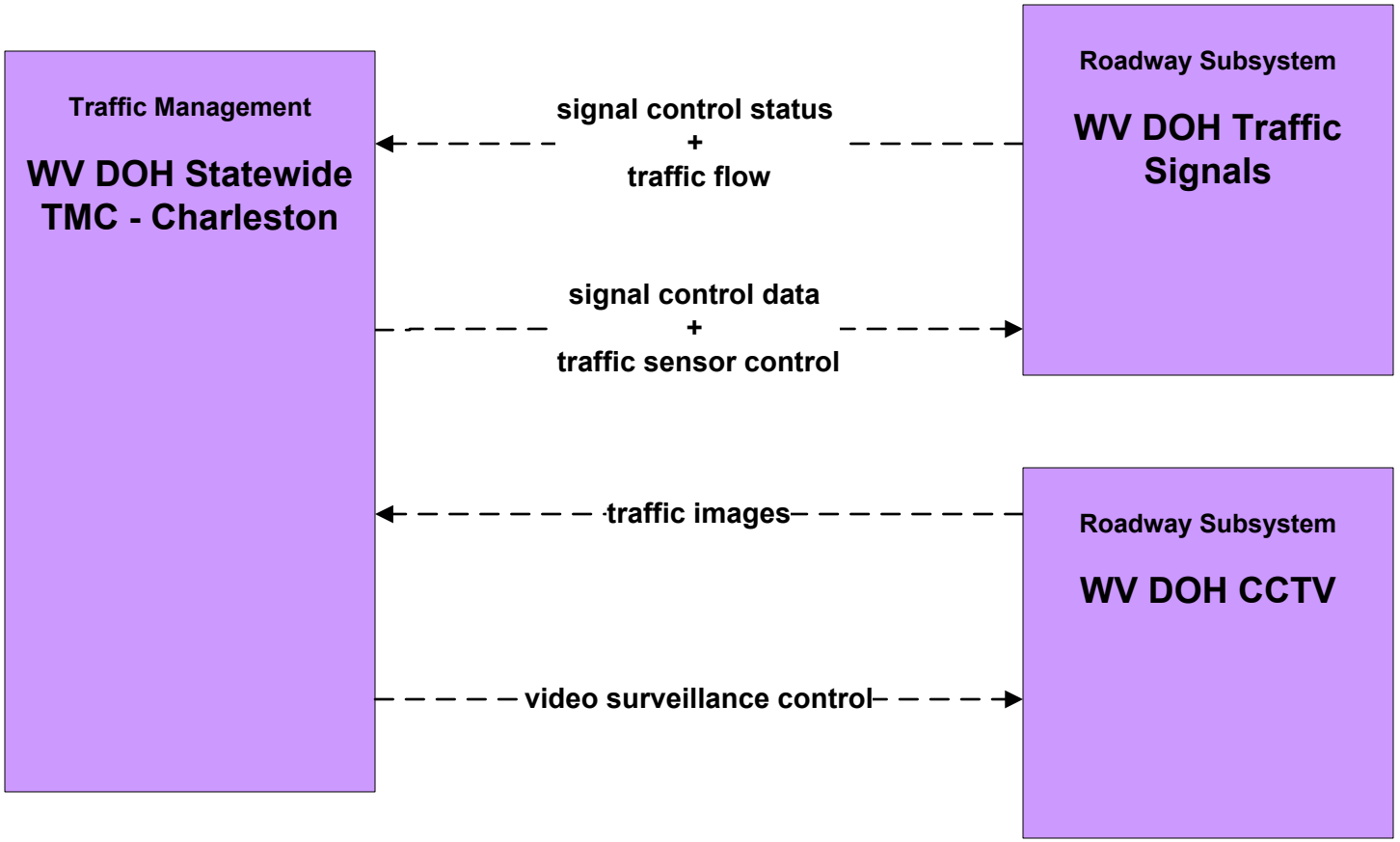
LEGEND

planned and future flow

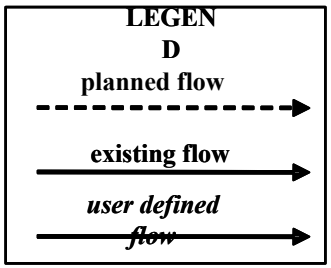
existing flow

user defined flow

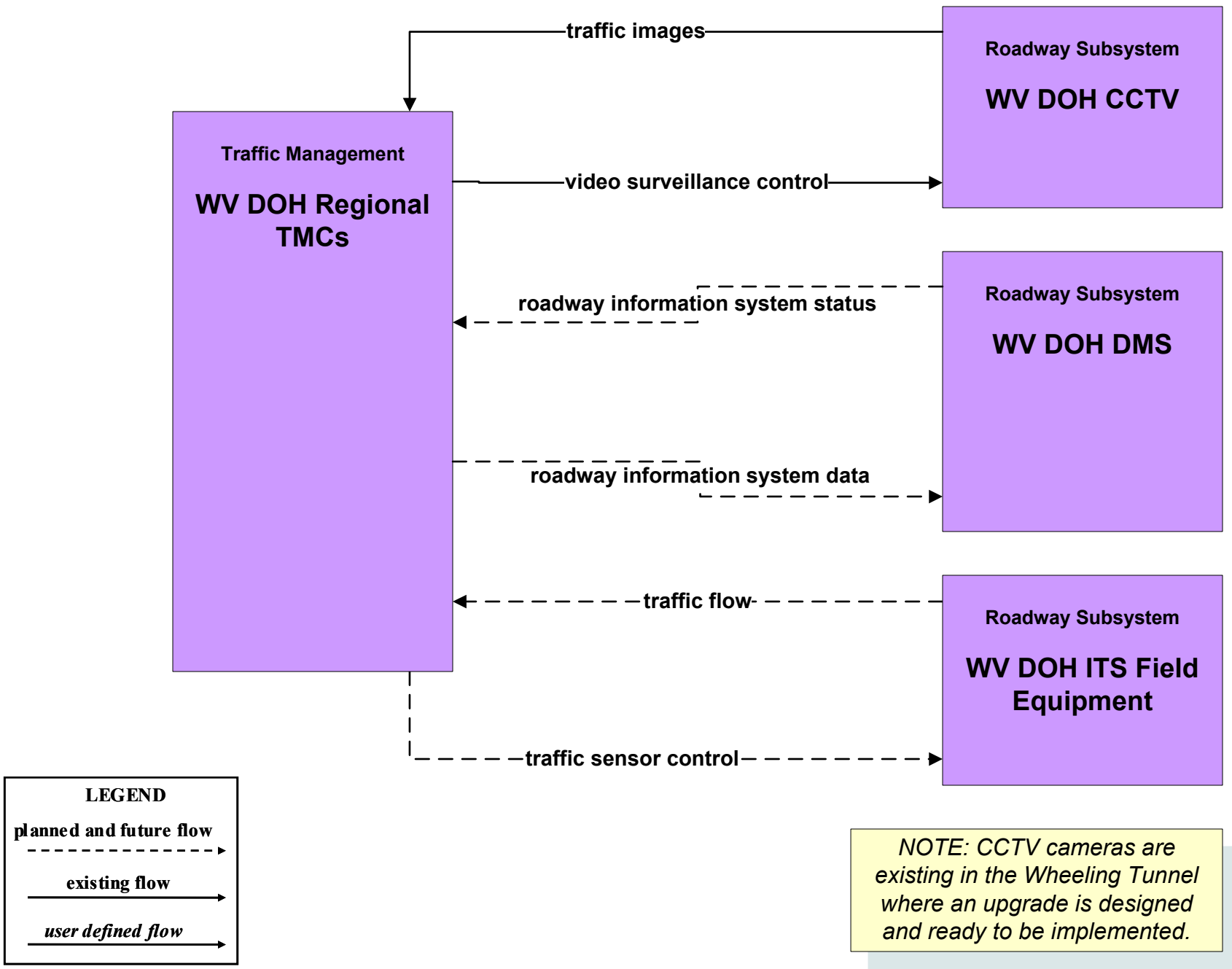
ATMS03 - Surface Street Control
WV DOH Statewide TMC



NOTE: WV DOH signals include video detection for all signals.

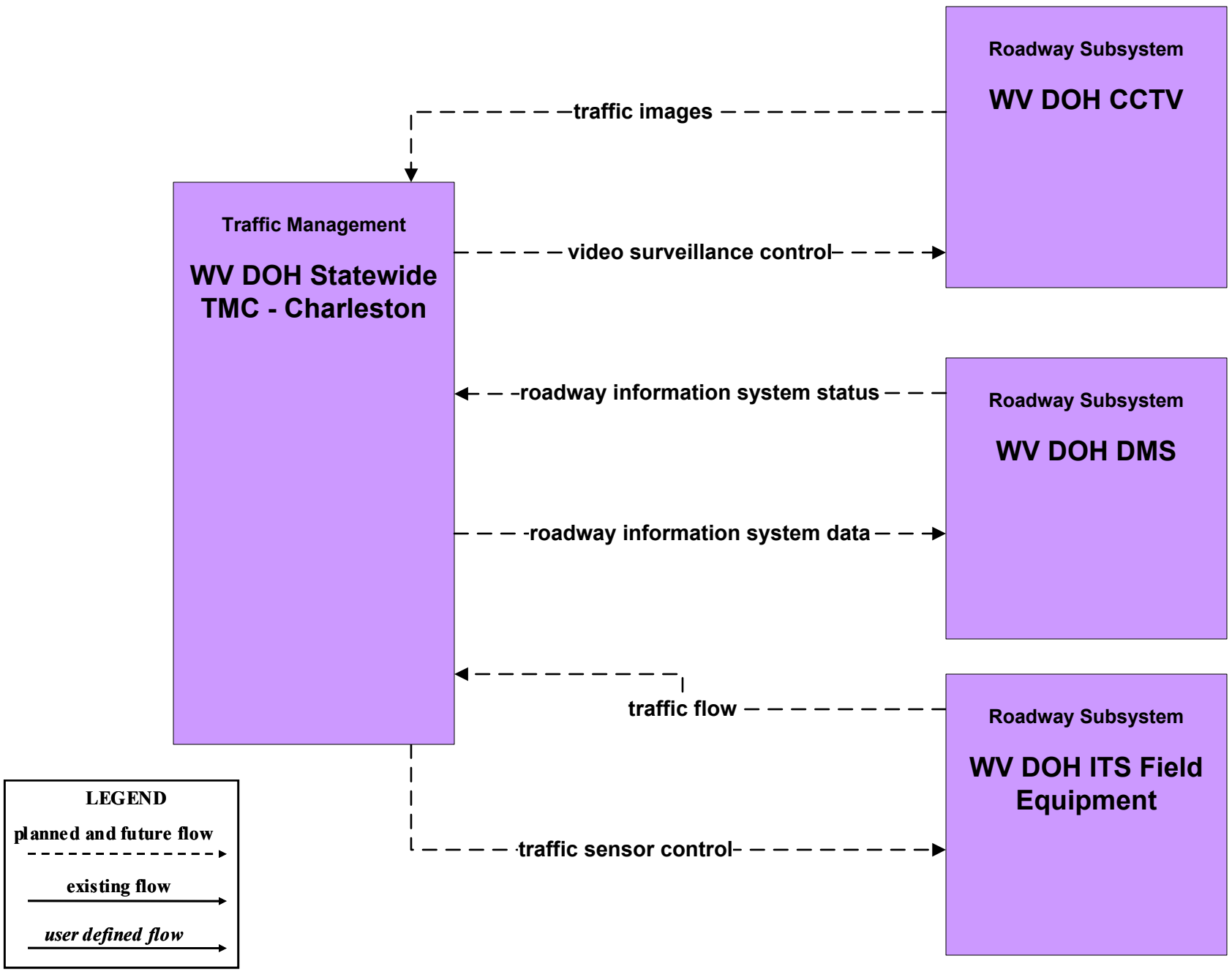


ATMS04 - Freeway Control
WV DOH Regional TMCs

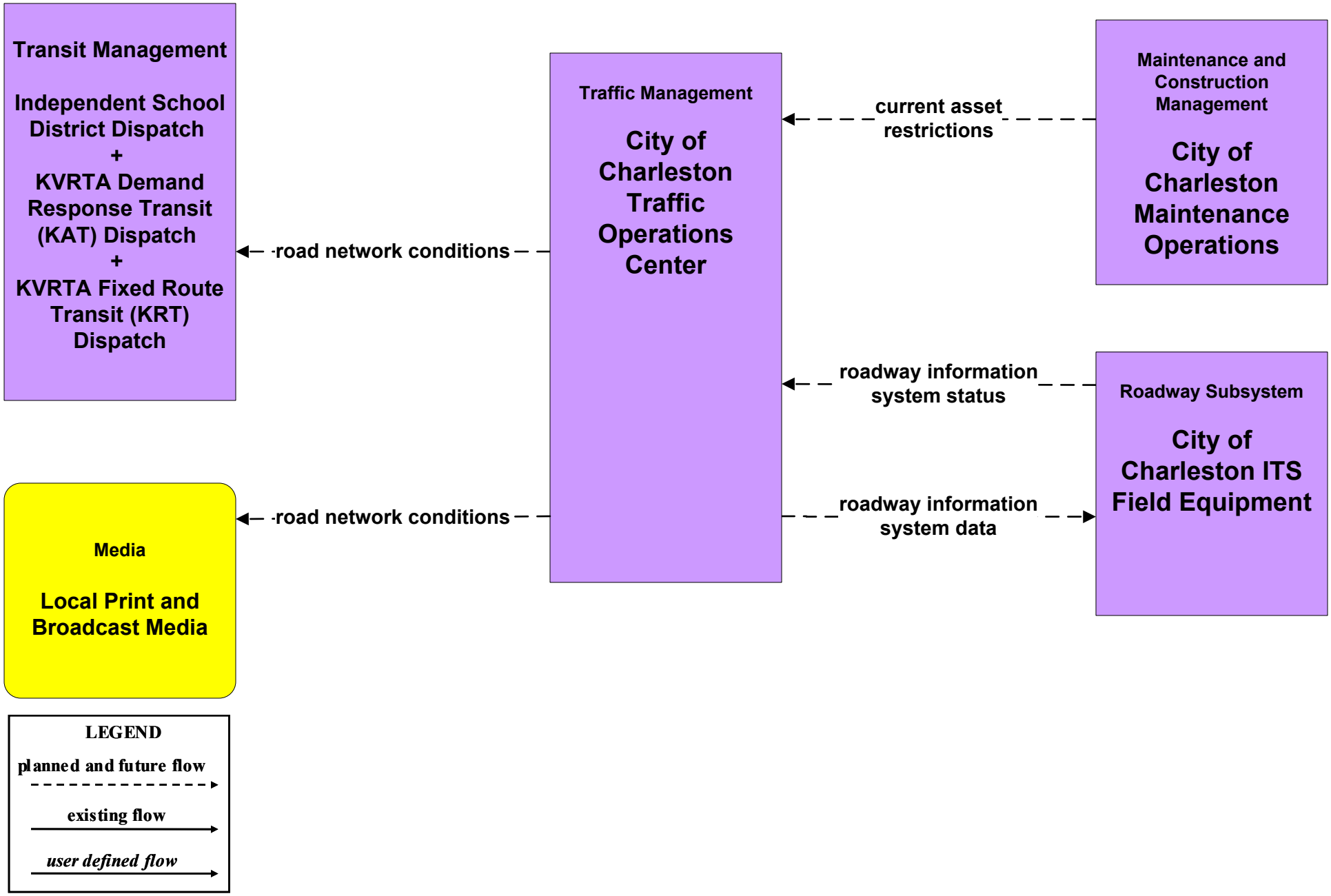


NOTE: CCTV cameras are existing in the Wheeling Tunnel where an upgrade is designed and ready to be implemented.

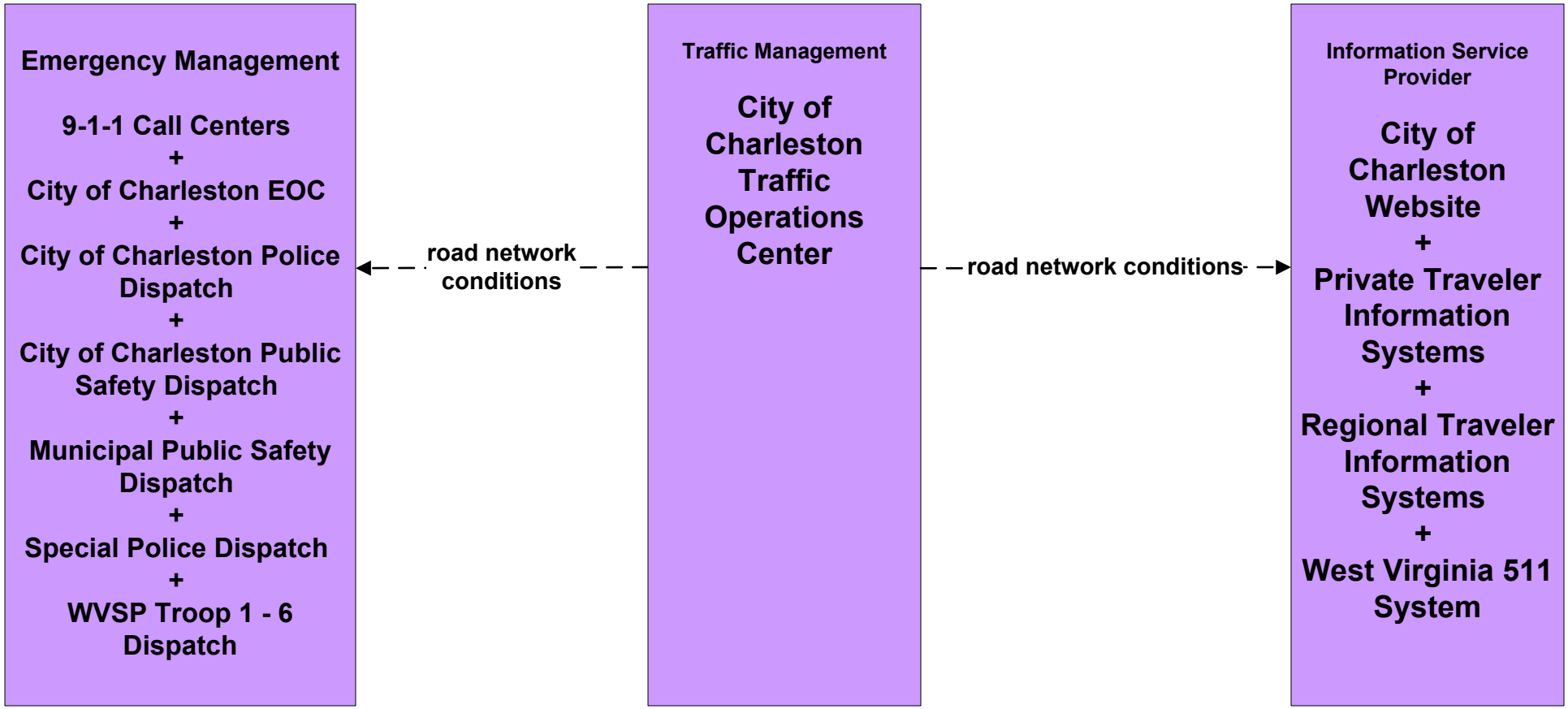
ATMS04 - Freeway Control
WV DOH Statewide TMC

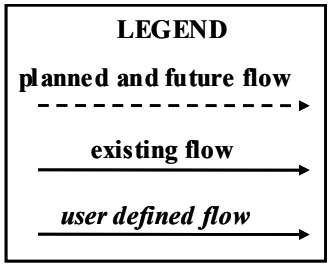


ATMS06 - Traffic Information Dissemination
City of Charleston TOC (1 of 2)

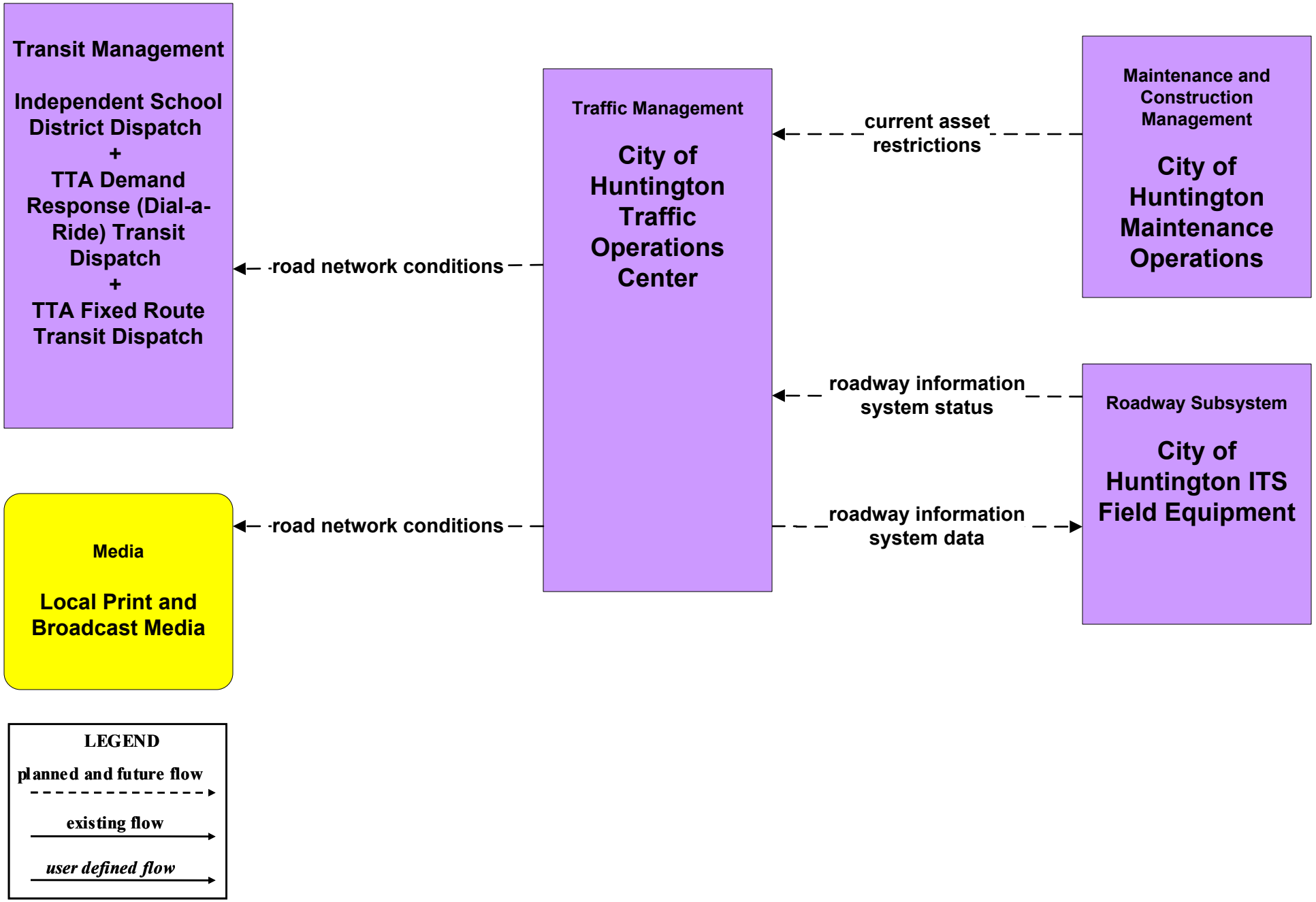


ATMS06 - Traffic Information Dissemination
City of Charleston TOC (TM to EM / ISP) (2 of 2)

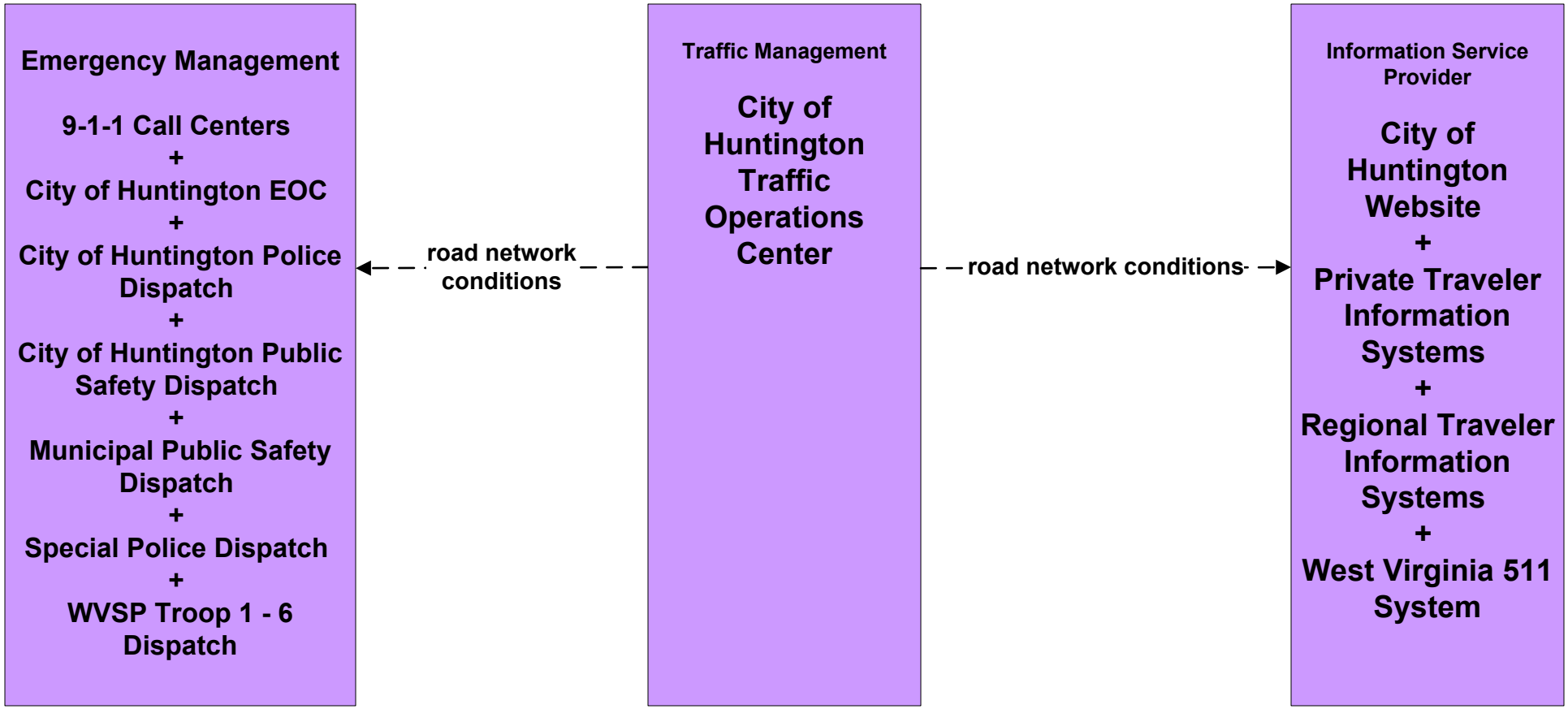


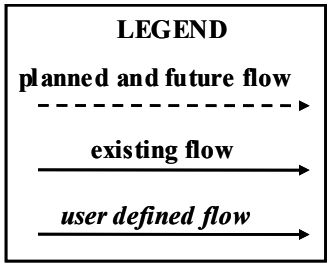


ATMS06 - Traffic Information Dissemination
City of Huntington TOC (1 of 2)

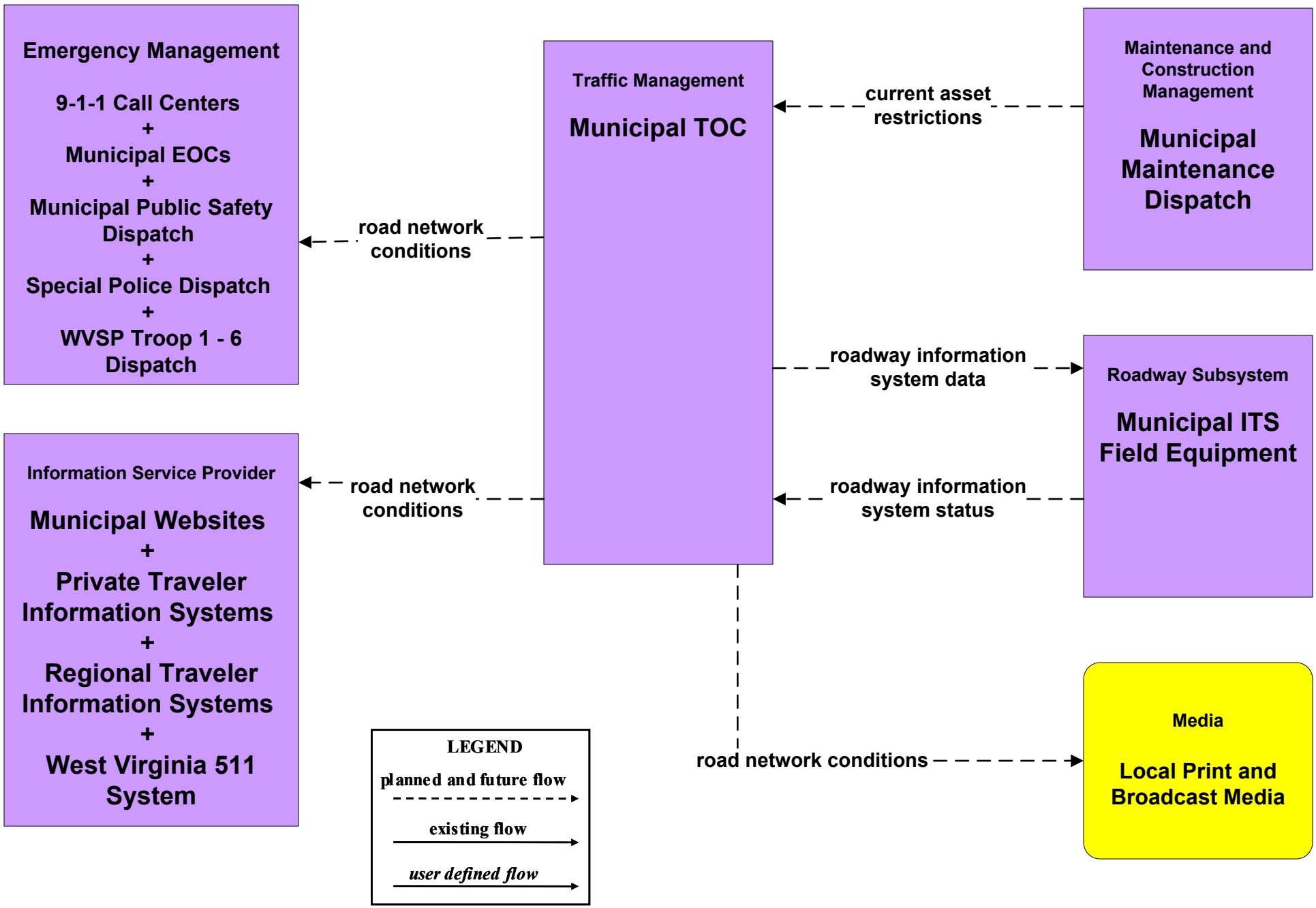


ATMS06 - Traffic Information Dissemination
City of Huntington TOC (TM to EM / ISP) (2 of 2)

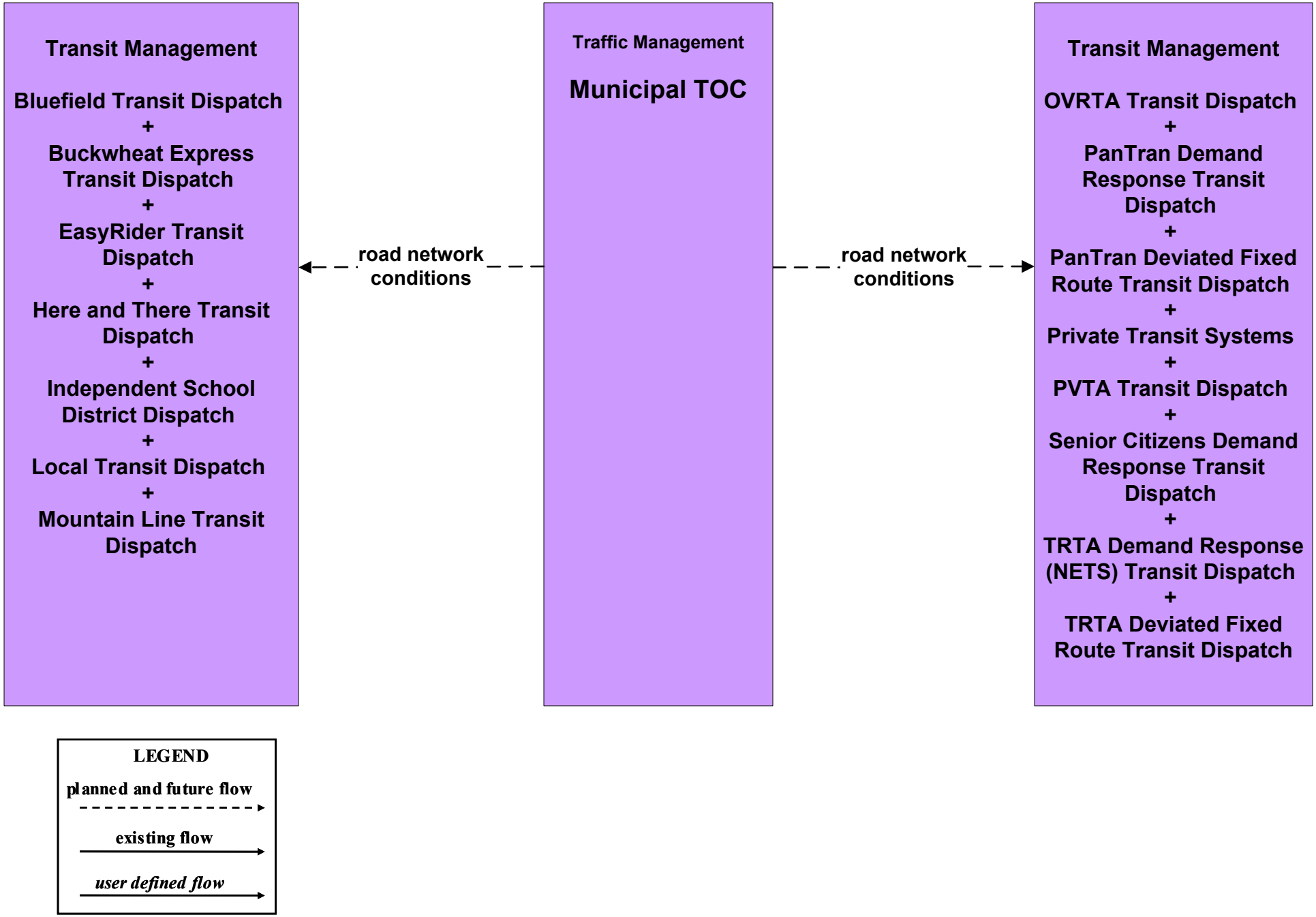




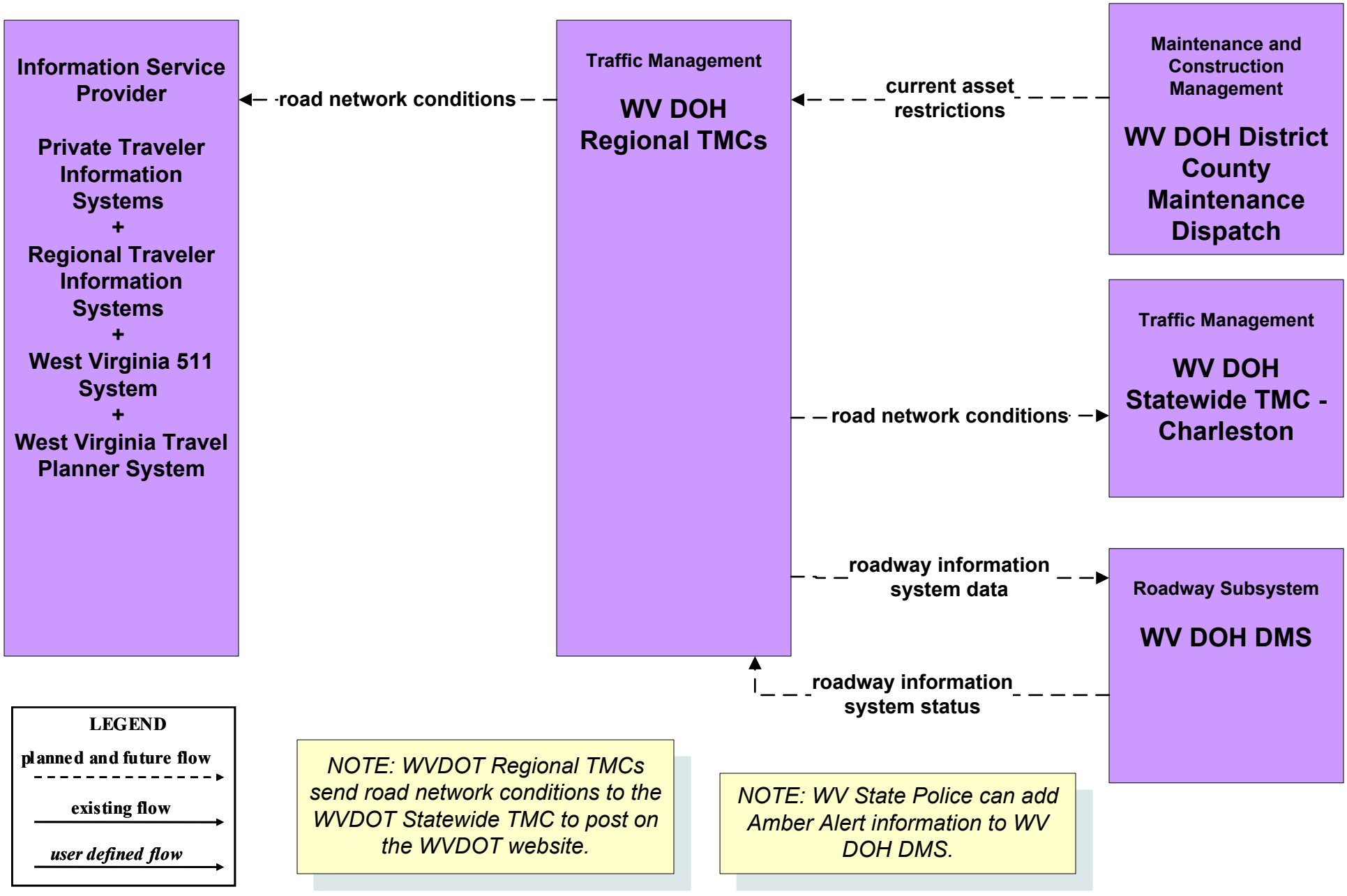
ATMS06 - Traffic Information Dissemination
Municipal TOC (1 of 2)



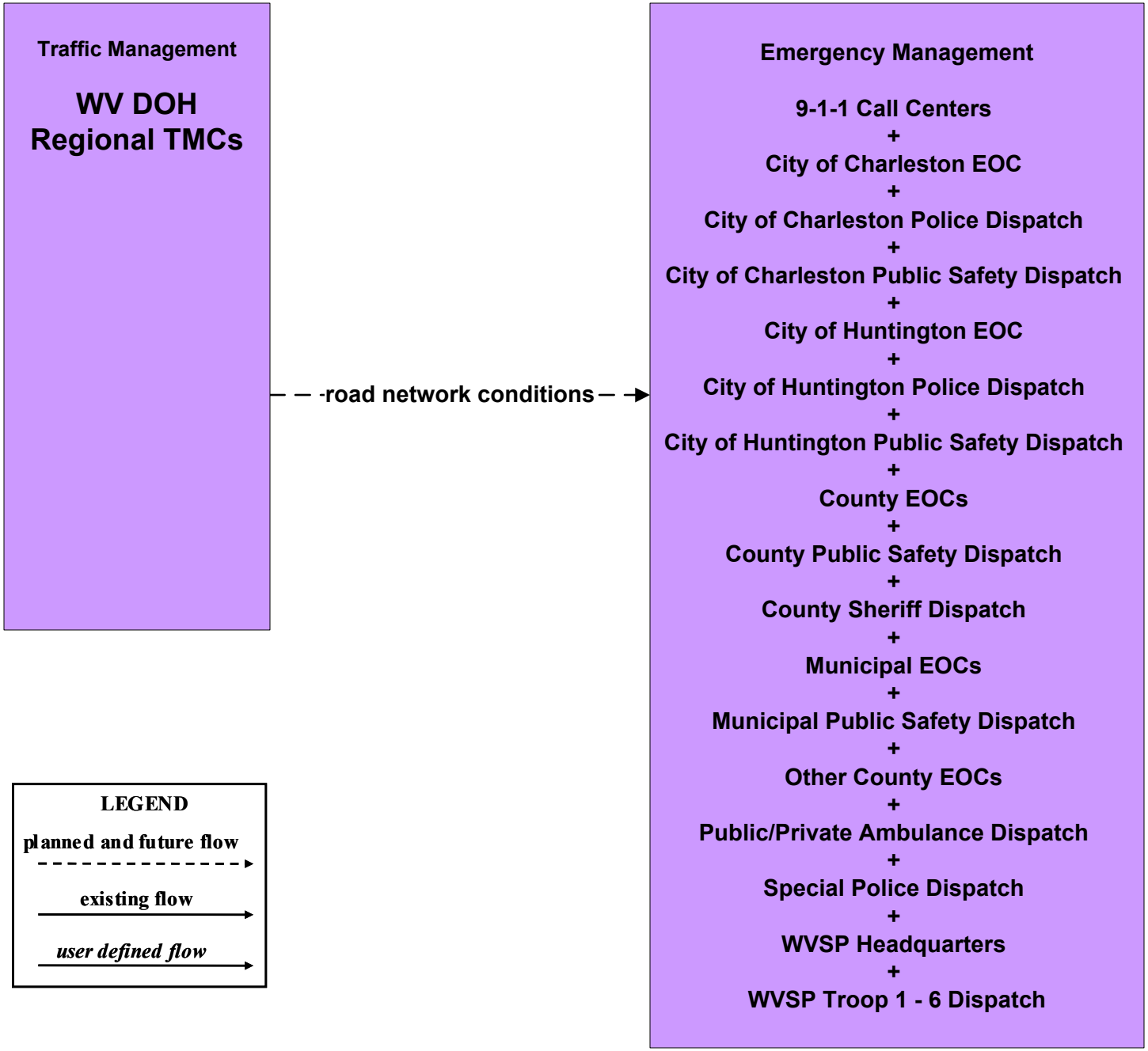
ATMS06 - Traffic Information Dissemination
Municipal TOC (TM to EM / ISP) (2 of 2)



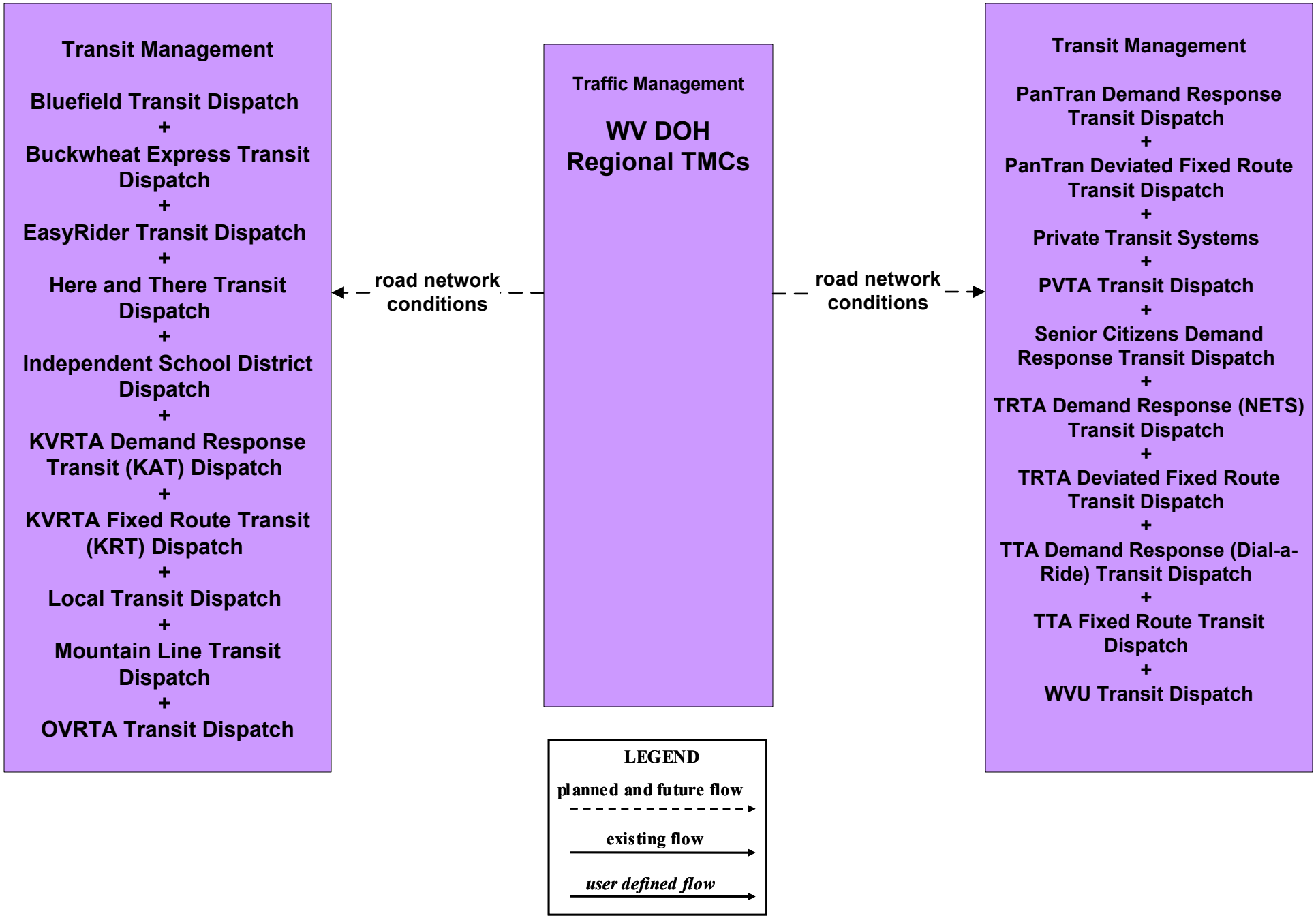
ATMS06 - Traffic Information Dissemination
WV DOH Regional TMCs (1 of 3)



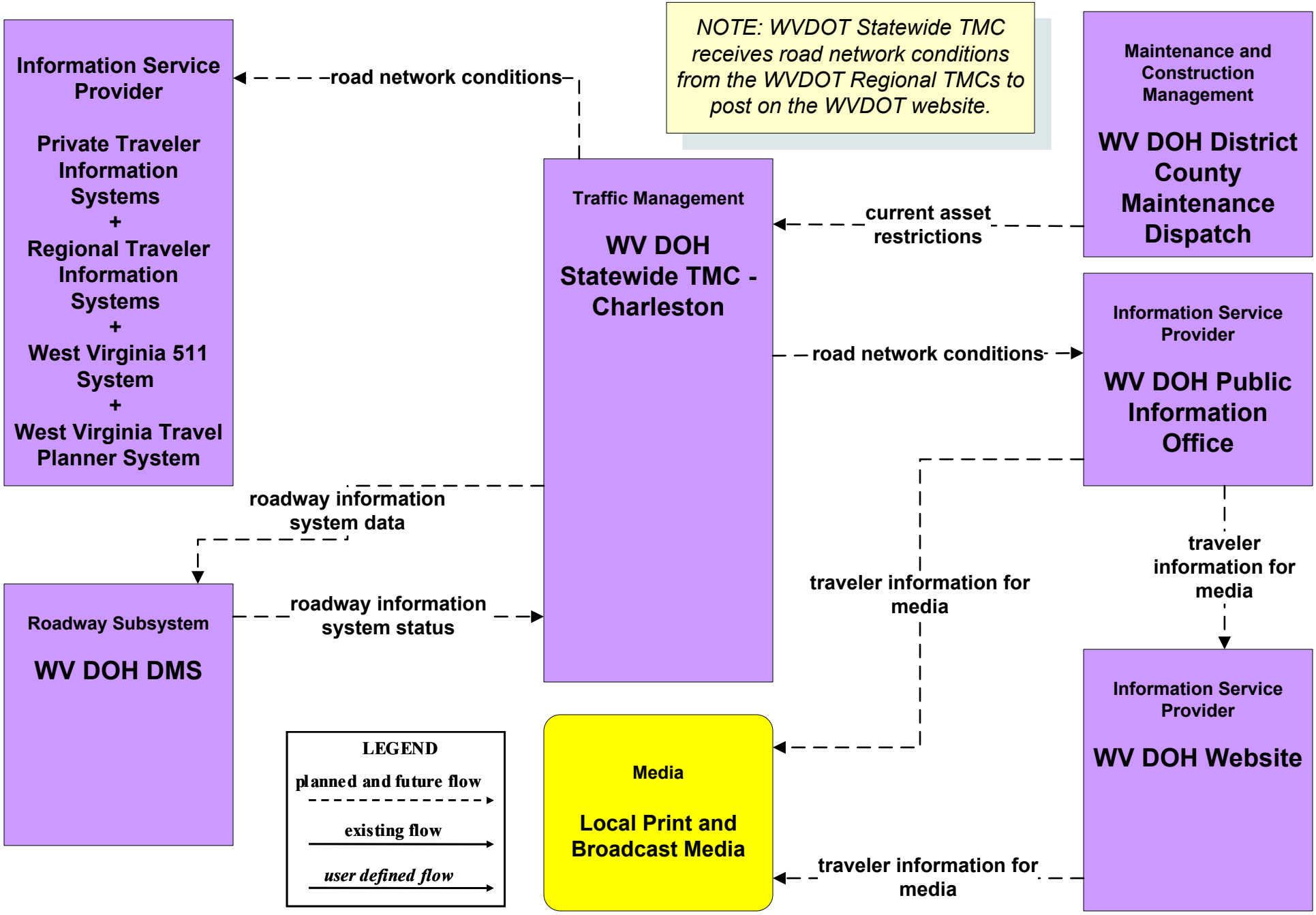
ATMS06 - Traffic Information Dissemination
WV DOH Regional TMCs (TM to EM) (2 of 3)



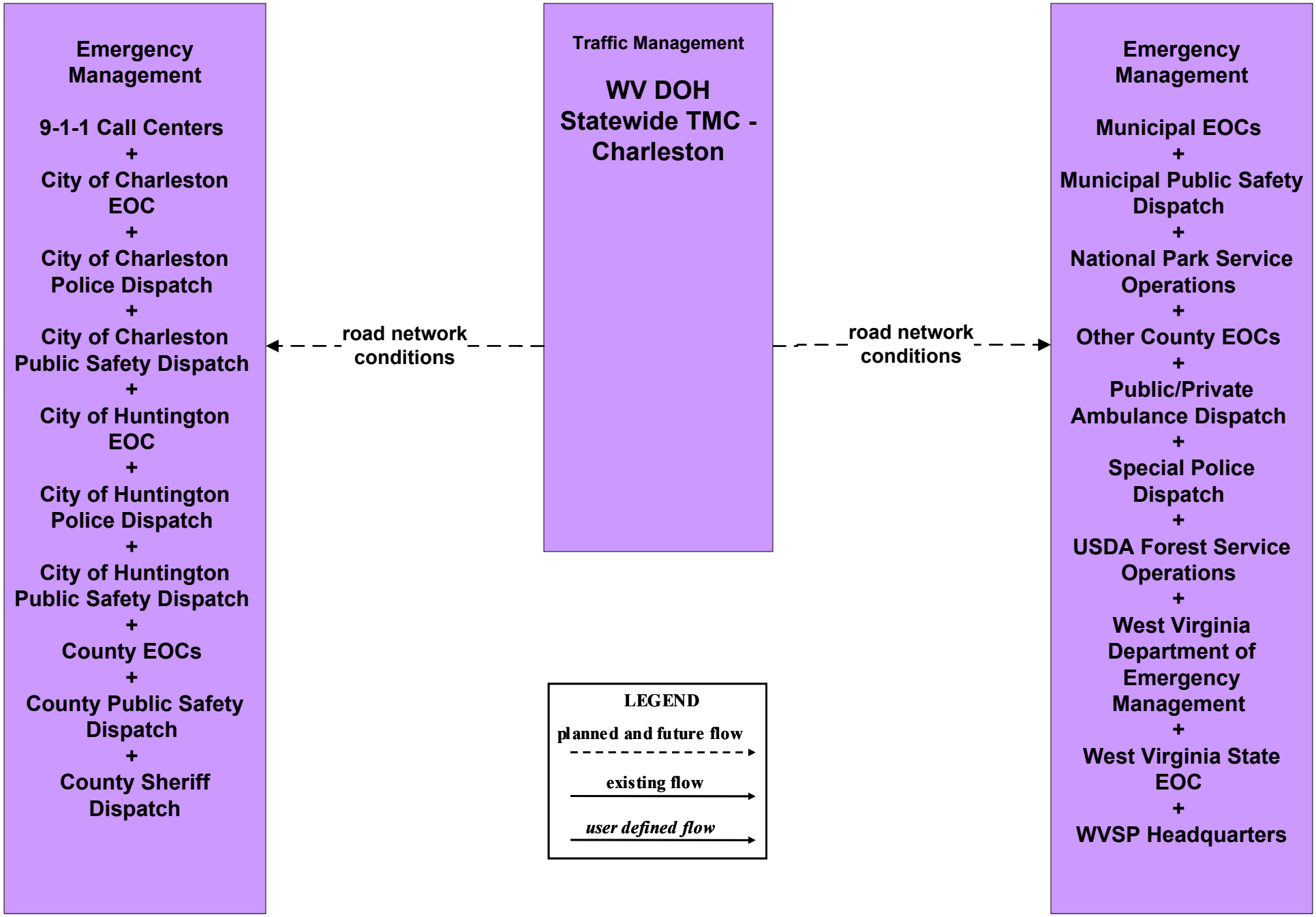
ATMS06 - Traffic Information Dissemination
WV DOH Regional TMCs (TM to TRMS) (3 of 3)



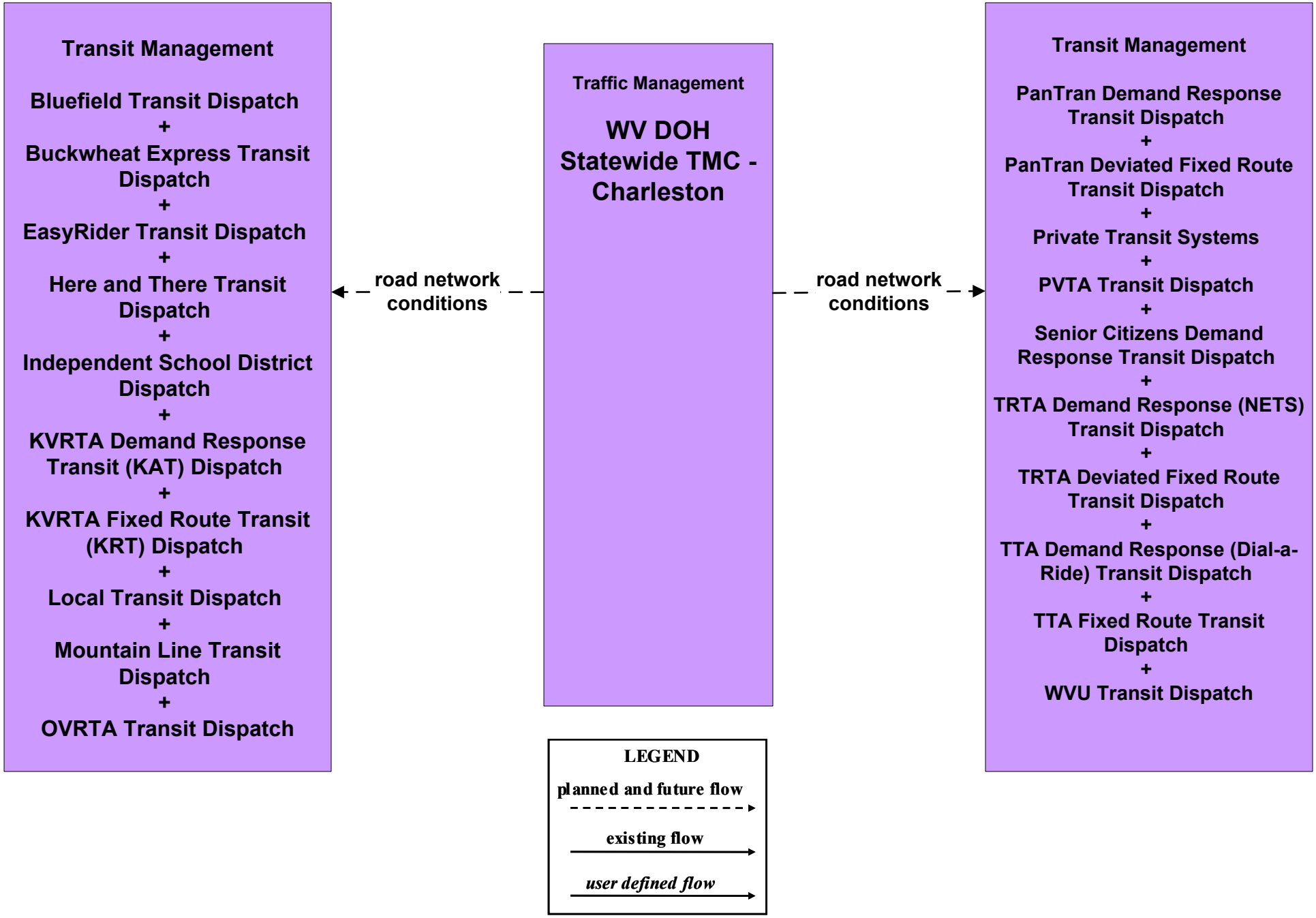
ATMS06 - Traffic Information Dissemination
WV DOH Statewide TMC (1 of 3)



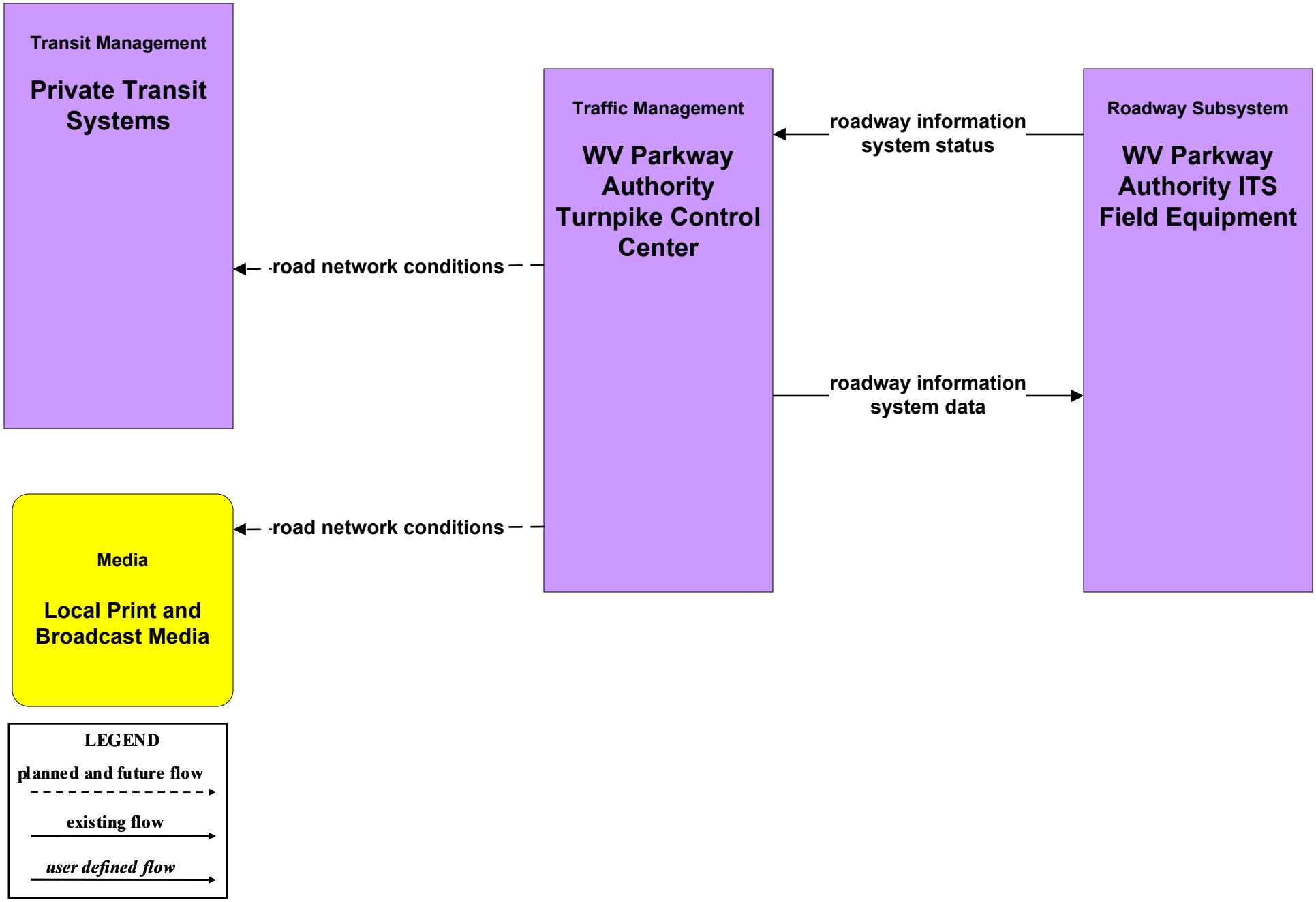
ATMS06 - Traffic Information Dissemination
WV DOH Statewide TMC (TM to EM) (2 of 3)



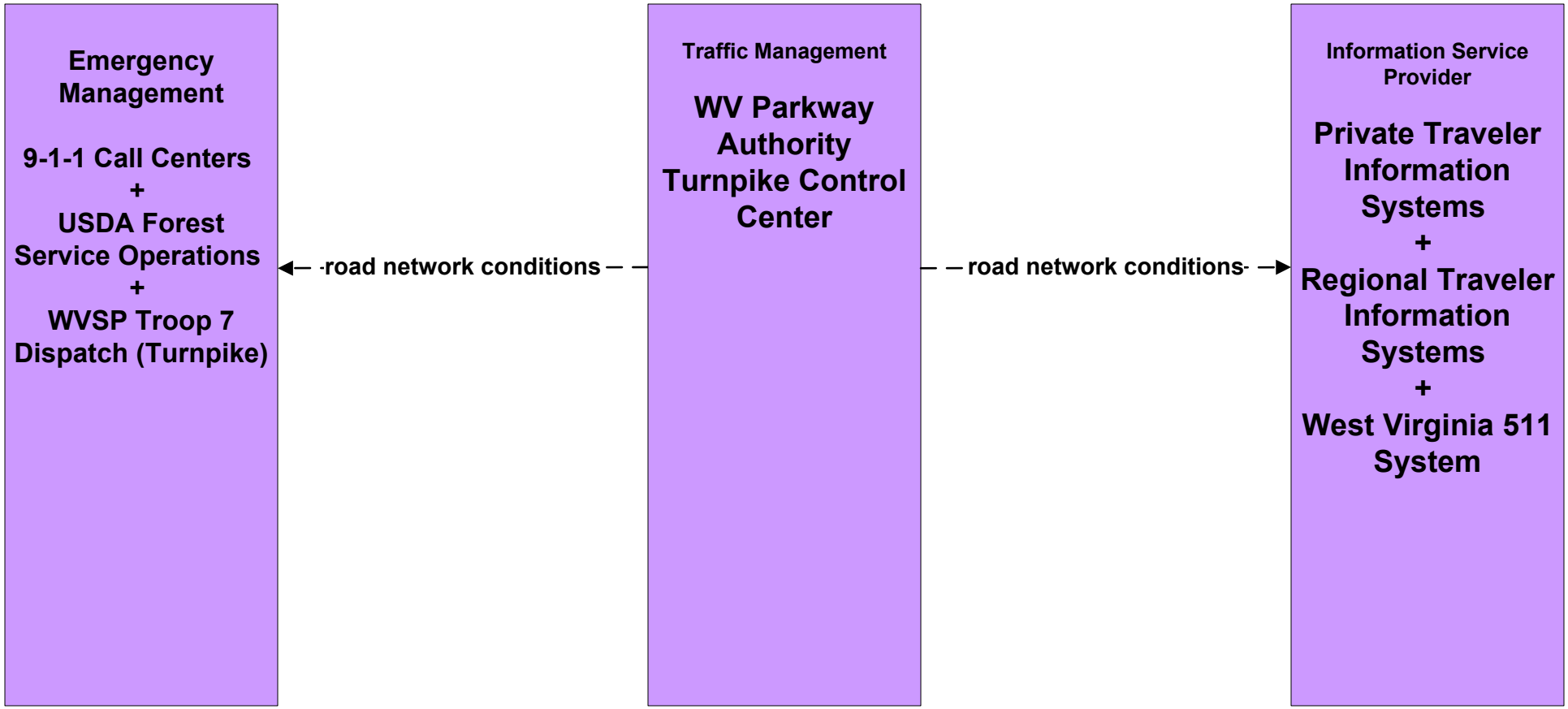
ATMS06 - Traffic Information Dissemination
WV DOH Statewide TMC (TM to TRMS) (3 of 3)

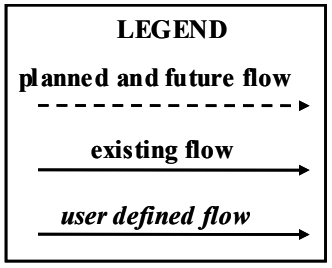


ATMS06 - Traffic Information Dissemination
WV Parkway Authority TOC (1 of 2)

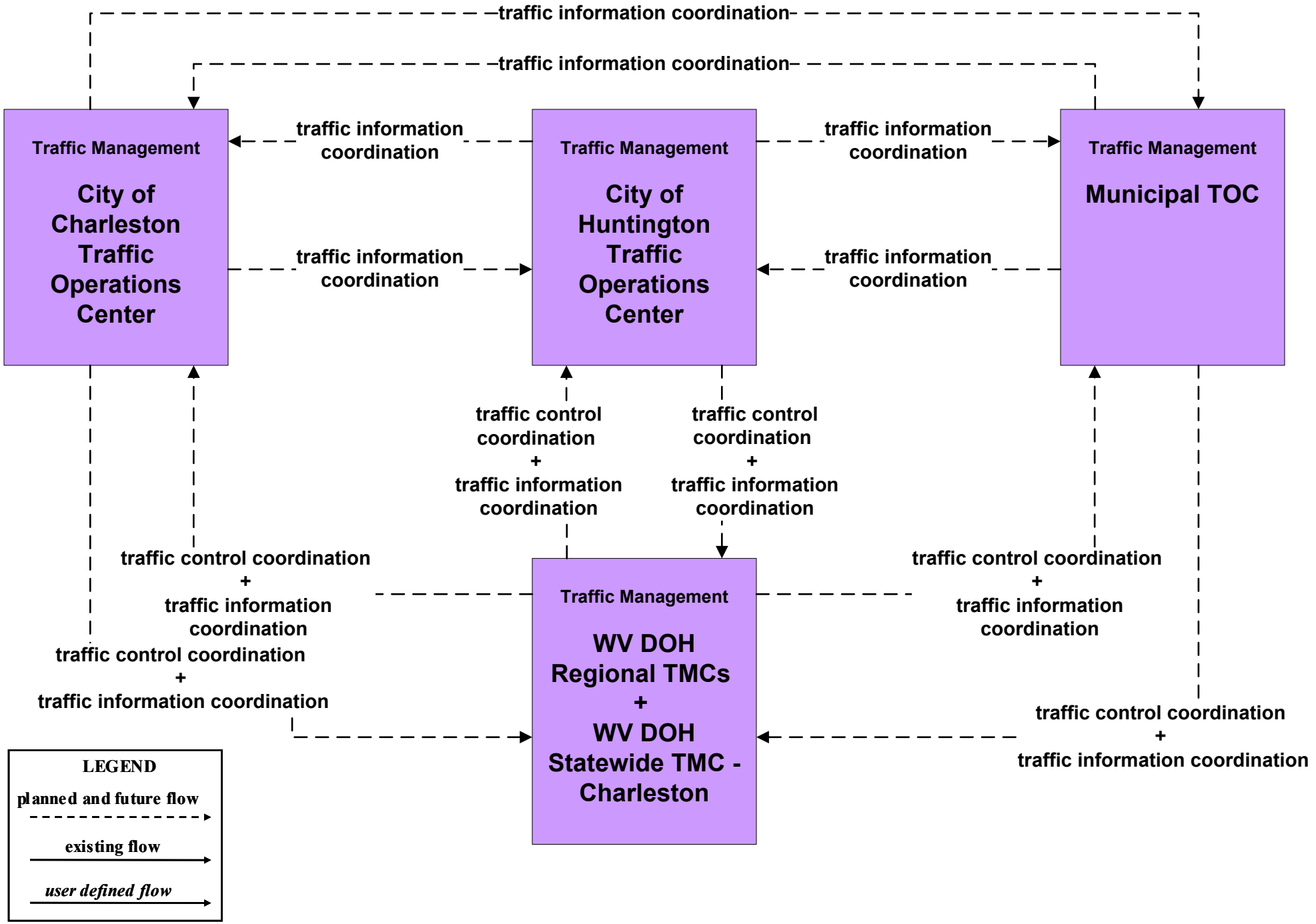


ATMS06 - Traffic Information Dissemination
WV Parkway Authority TOC (TM to EM / ISP) (2 of 2)

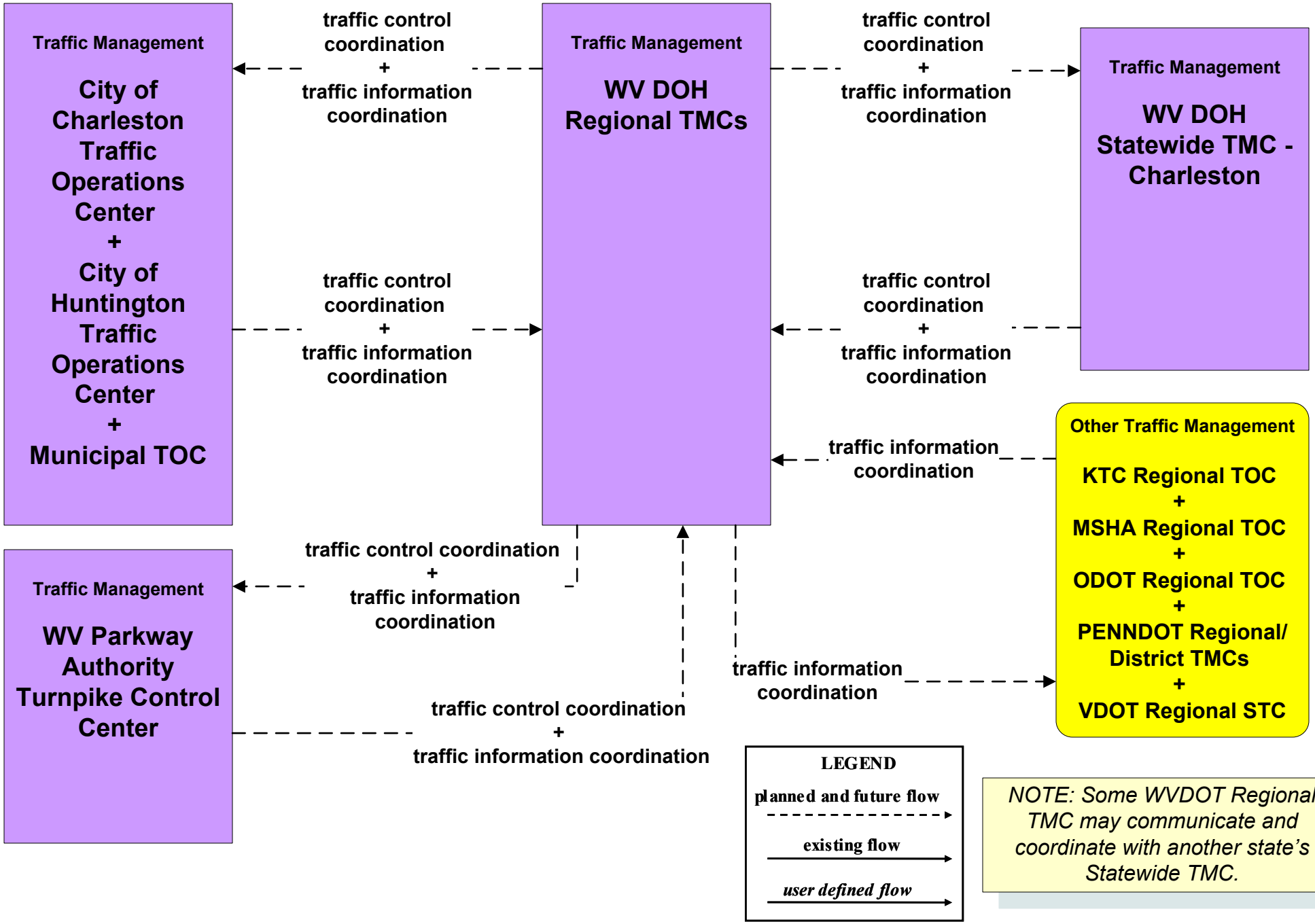




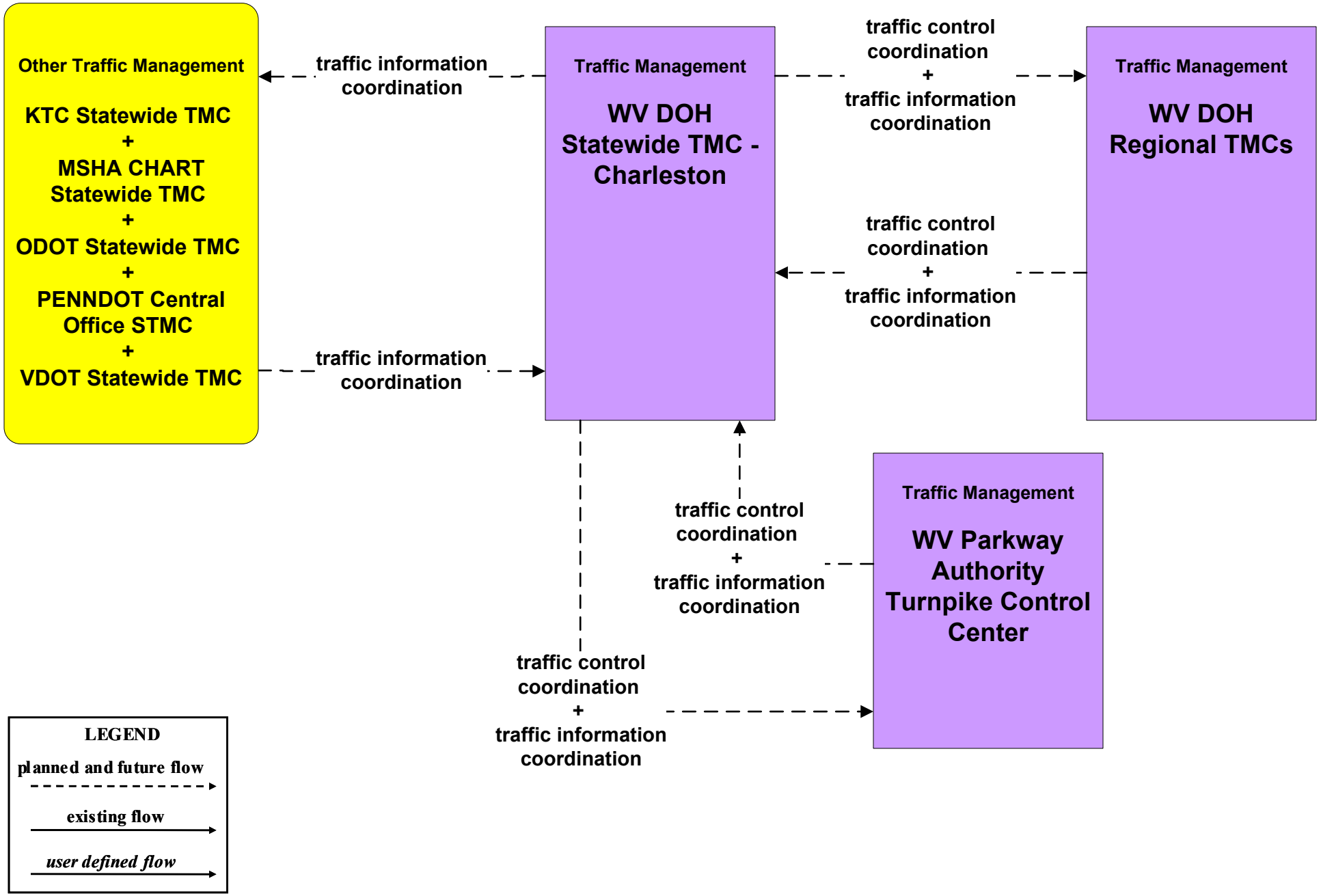
ATMS07 - Regional Traffic Control
Municipal TOCs



ATMS07 - Regional Traffic Control
WV DOH Regional TMCs



ATMS07 - Regional Traffic Control
WV DOH Statewide TMC



Incident Management Overview

ATMS08 Covered

Emergency Management ←→ Traffic Management

Emergency Management ←→ Maintenance and Construction

Traffic Management ←→ Maintenance and Construction

Maintenance and Construction ←→ Maintenance and Construction

Event Plans and Weather ←→ Traffic Management & Emergency Management (see MCs for M&C)

ATMS06, 03, 04, etc. Covered

Traffic Management ←→ Roadway

ATMS07 Covered

Traffic Management ←→ Traffic Management

EM1 Covered

Emergency Management ←→ Emergency Management

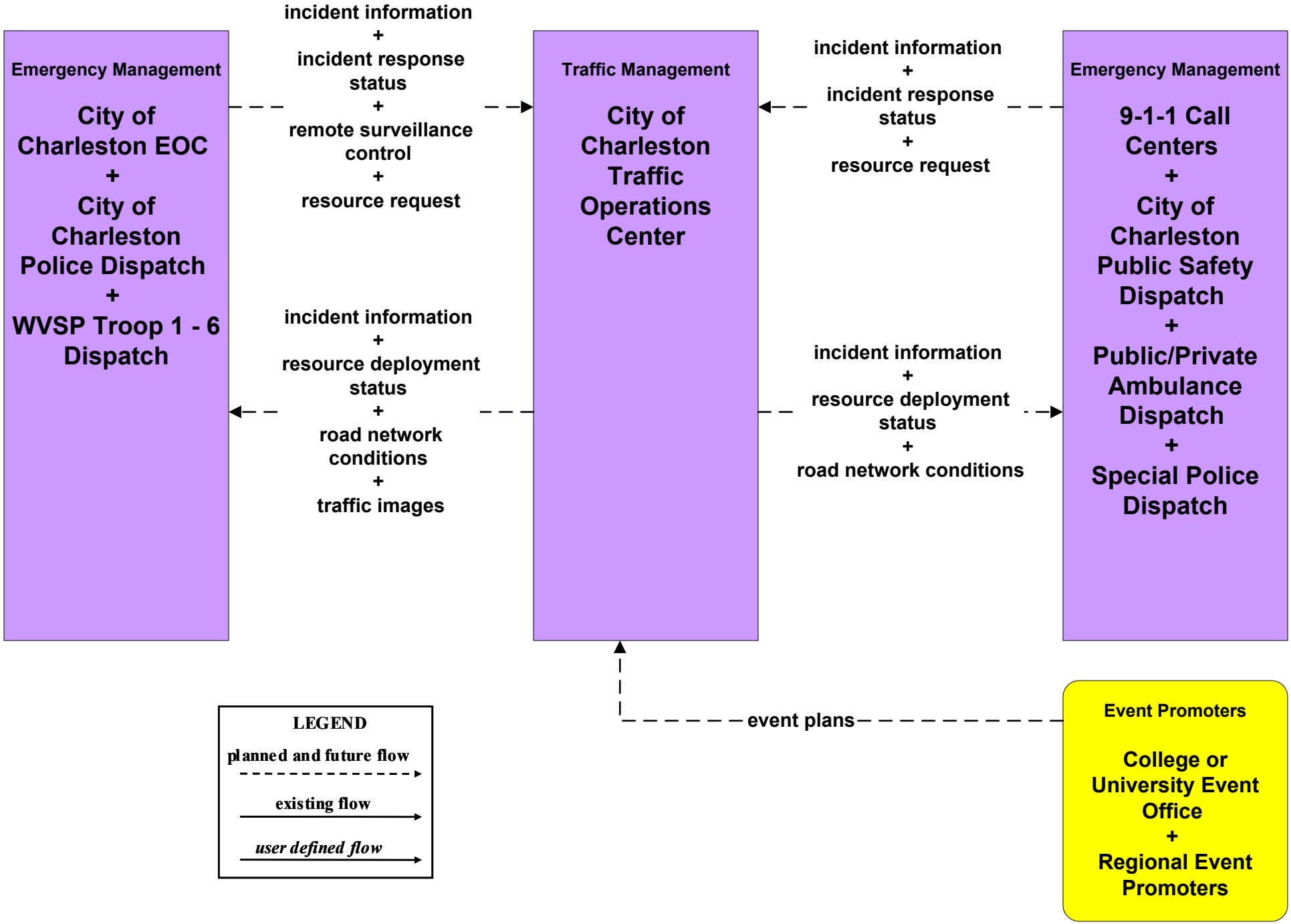
EM2 Covered

Emergency Vehicle Preemption

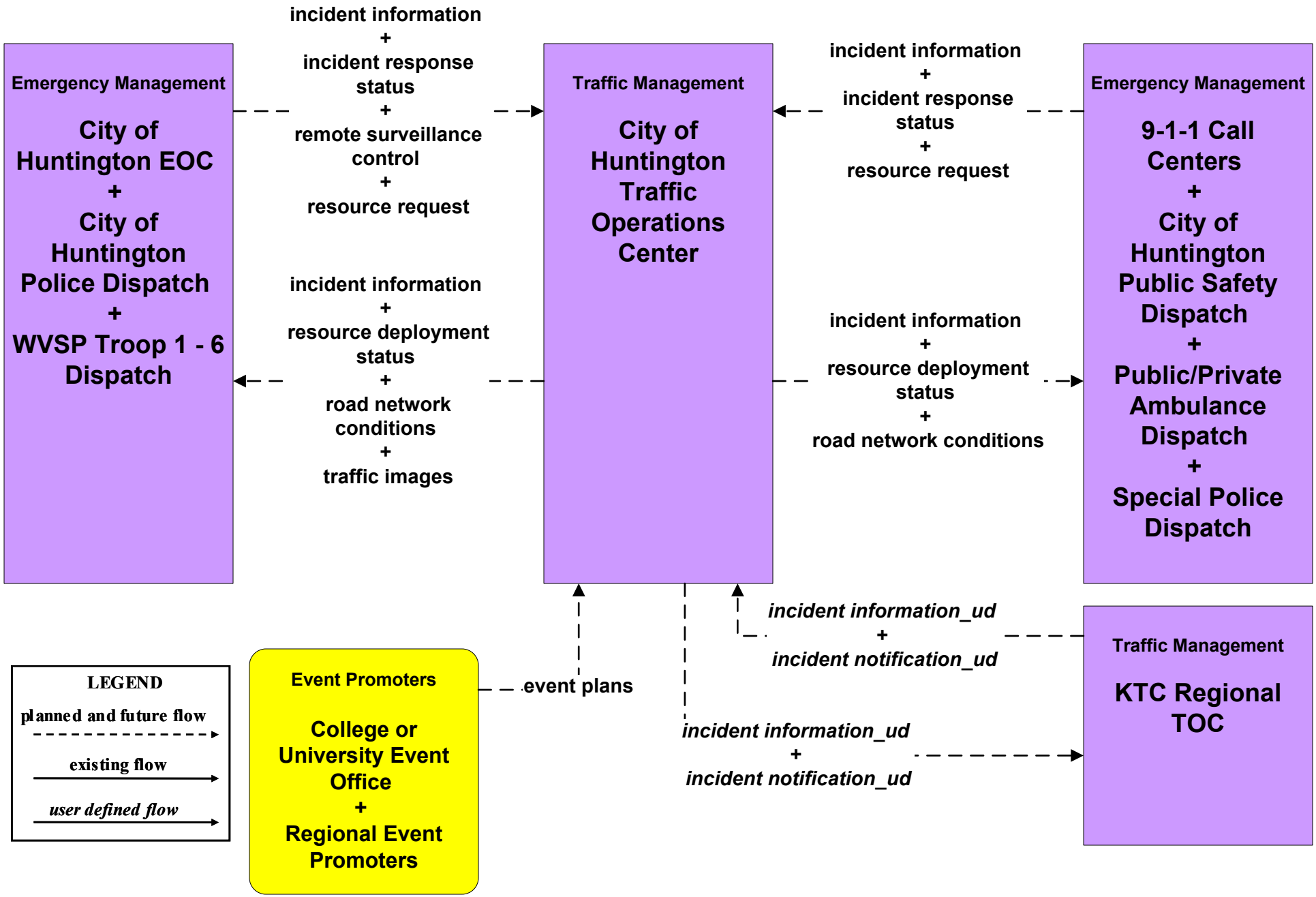
ATMS08 - Incident Management

Traffic Management ←→ Emergency Management

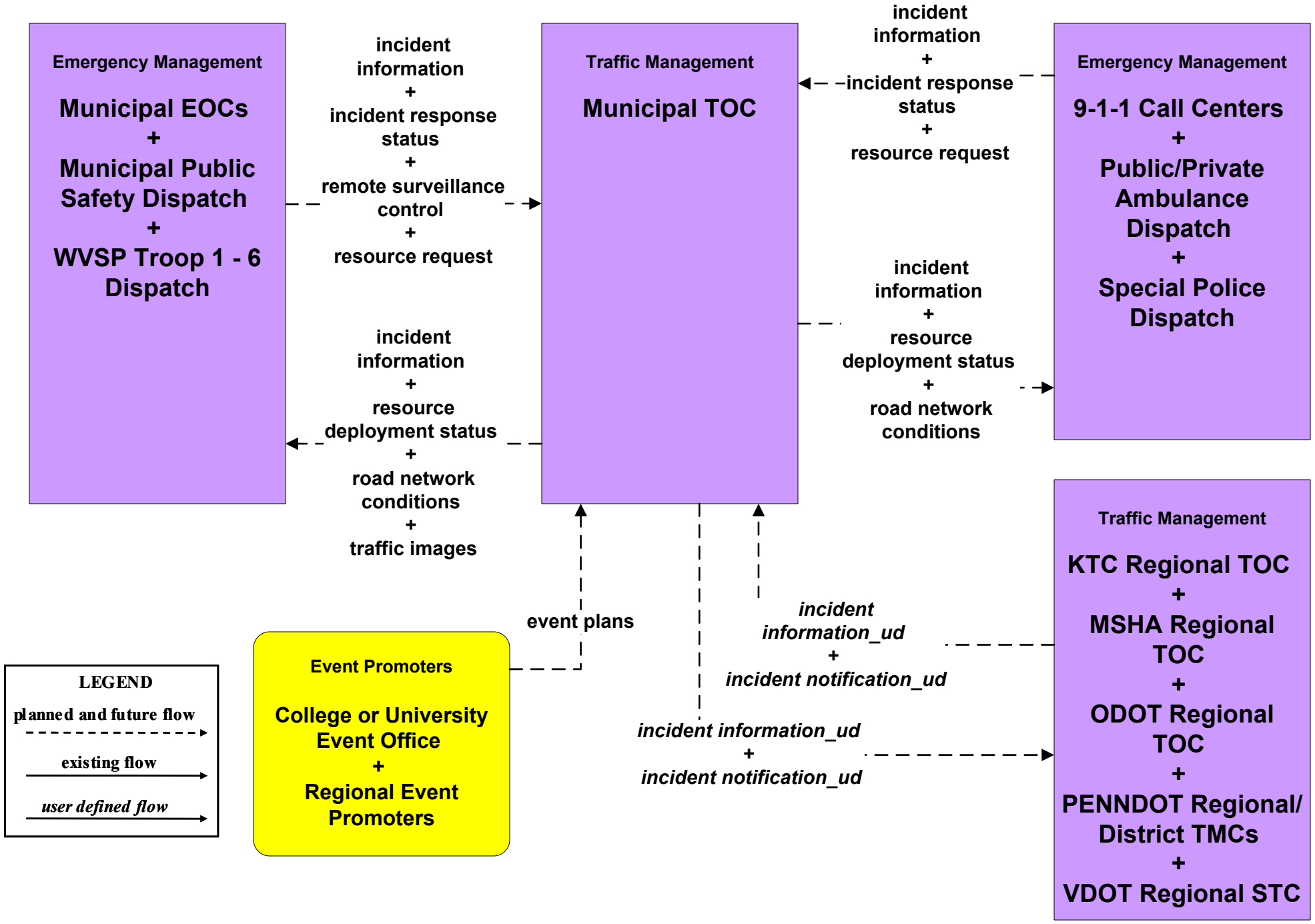
ATMS08 - Incident Management
City of Charleston TOC (TM to EM)



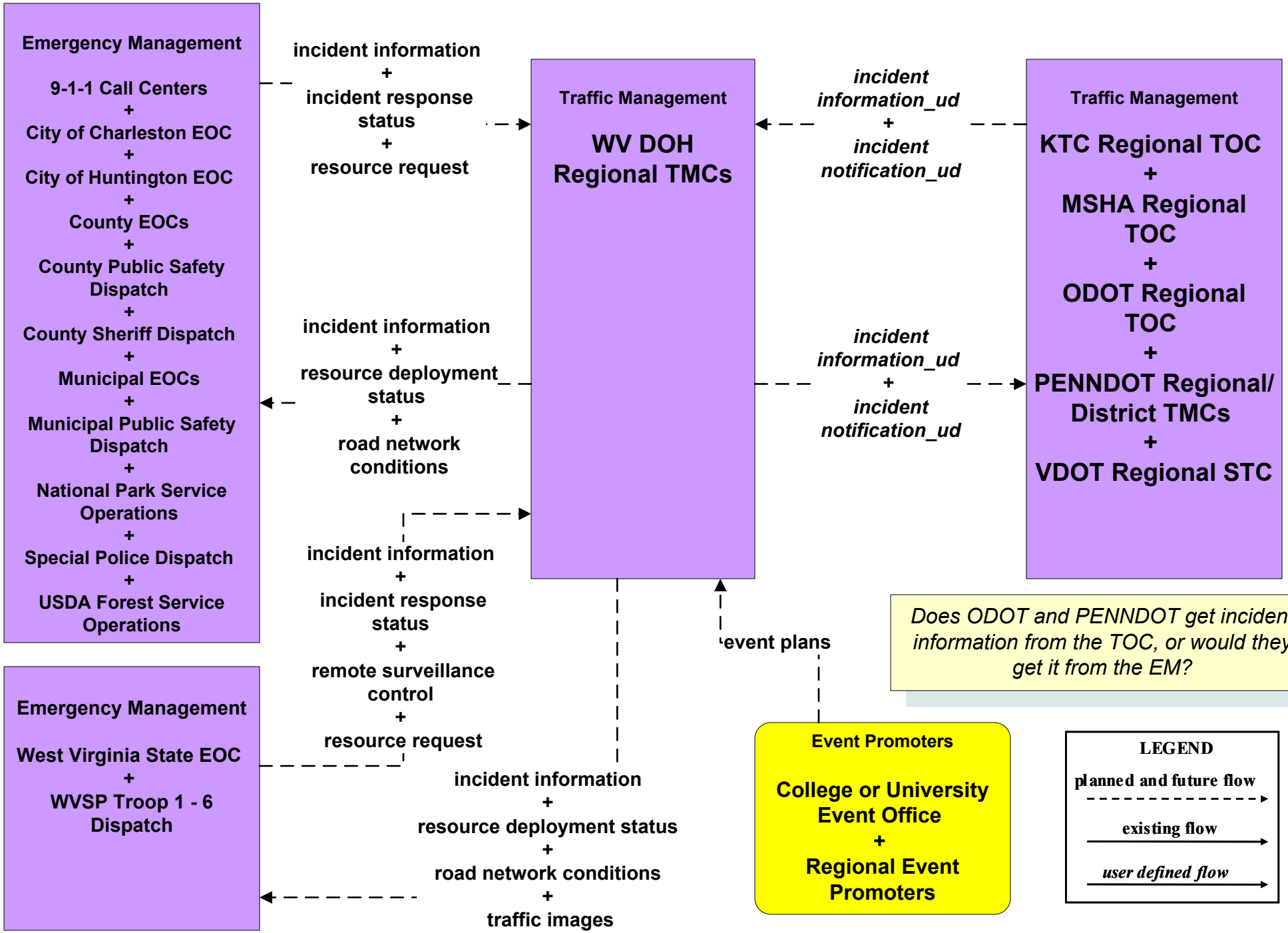
ATMS08 - Incident Management
City of Huntington TOC (TM to EM)



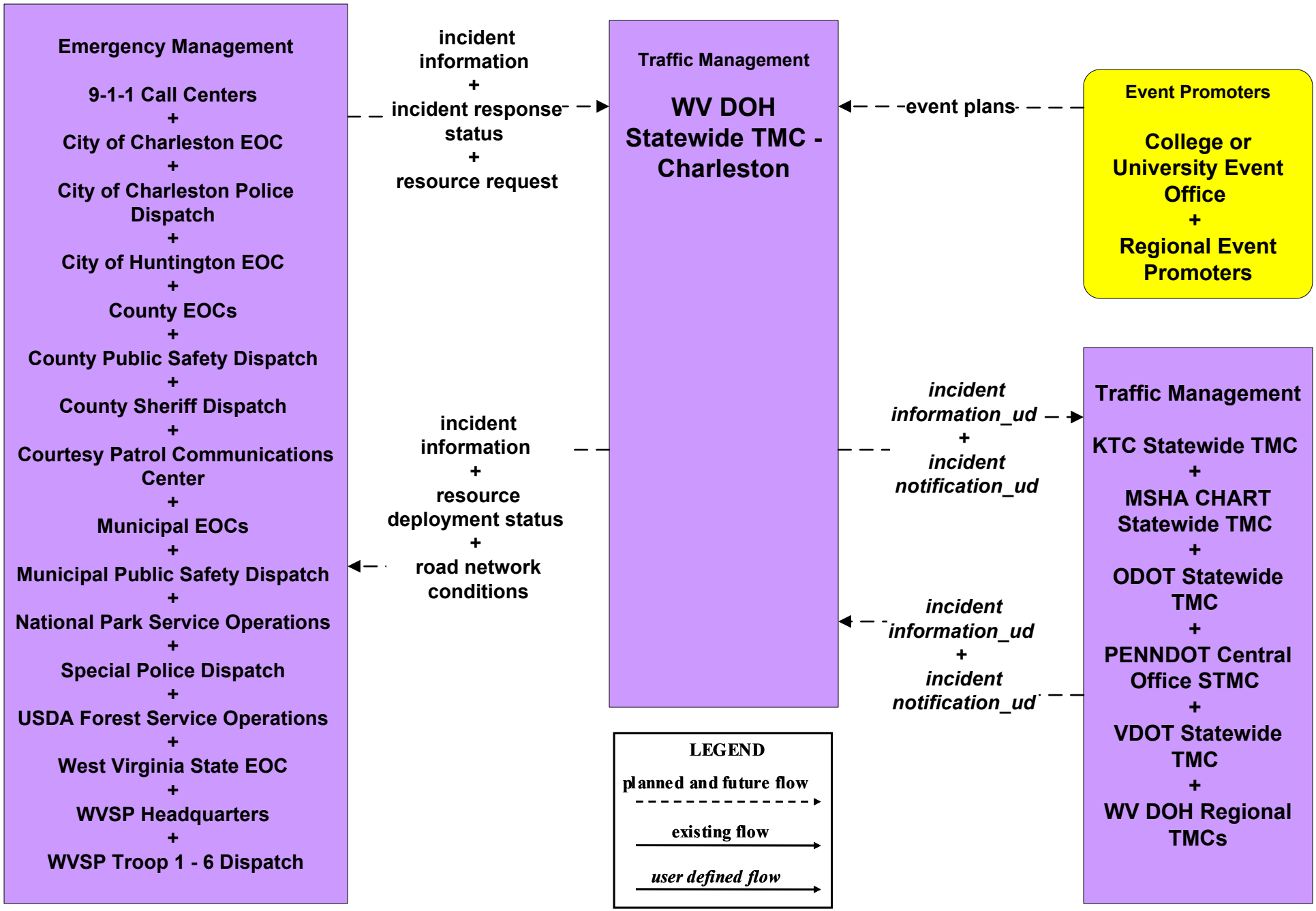
ATMS08 - Incident Management
Municipal TOC (TM to EM)



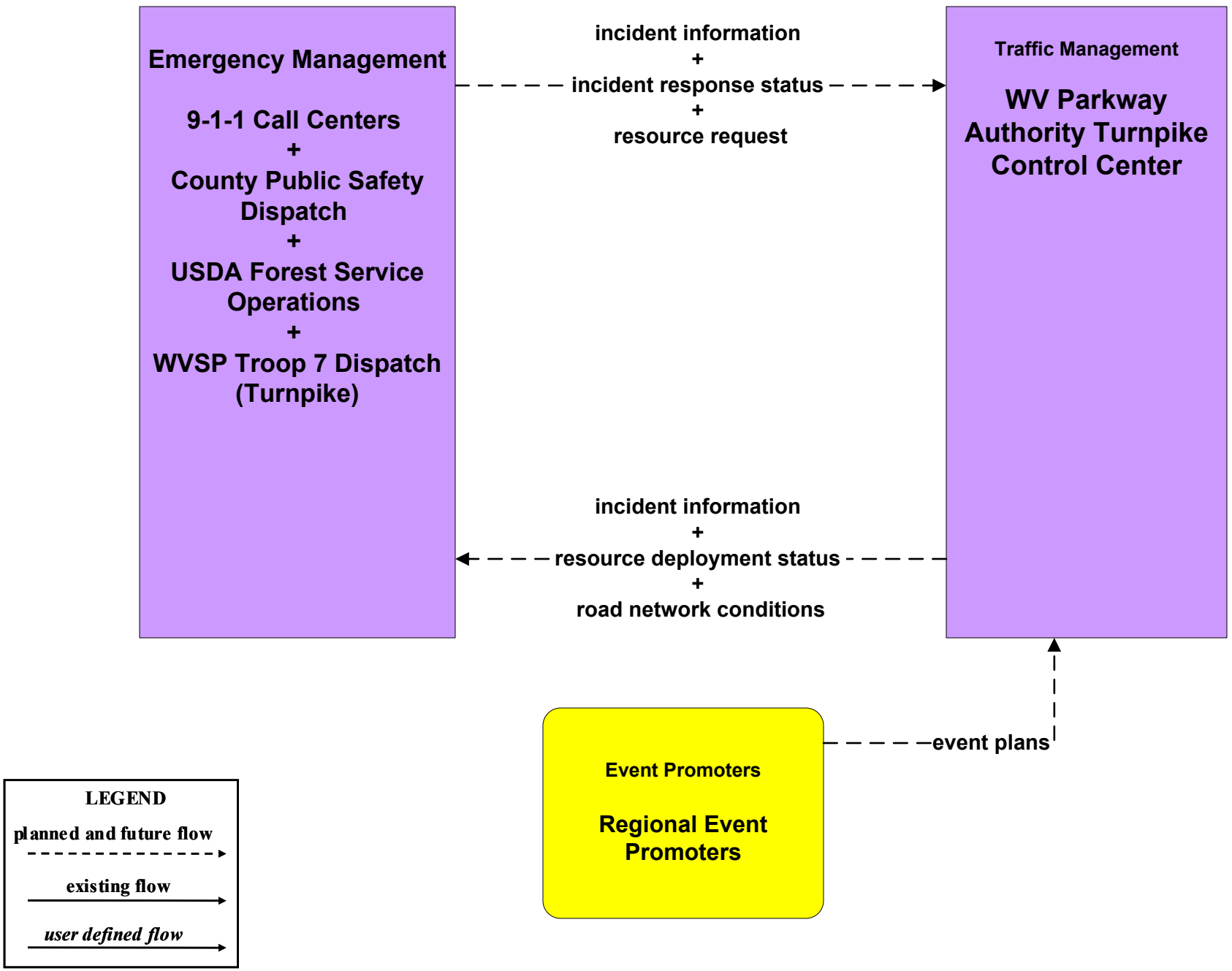
ATMS08 - Incident Management
WV DOH Regional TMCs (TM to EM)



ATMS08 - Incident Management
WV DOH Statewide TMC (TM to EM)



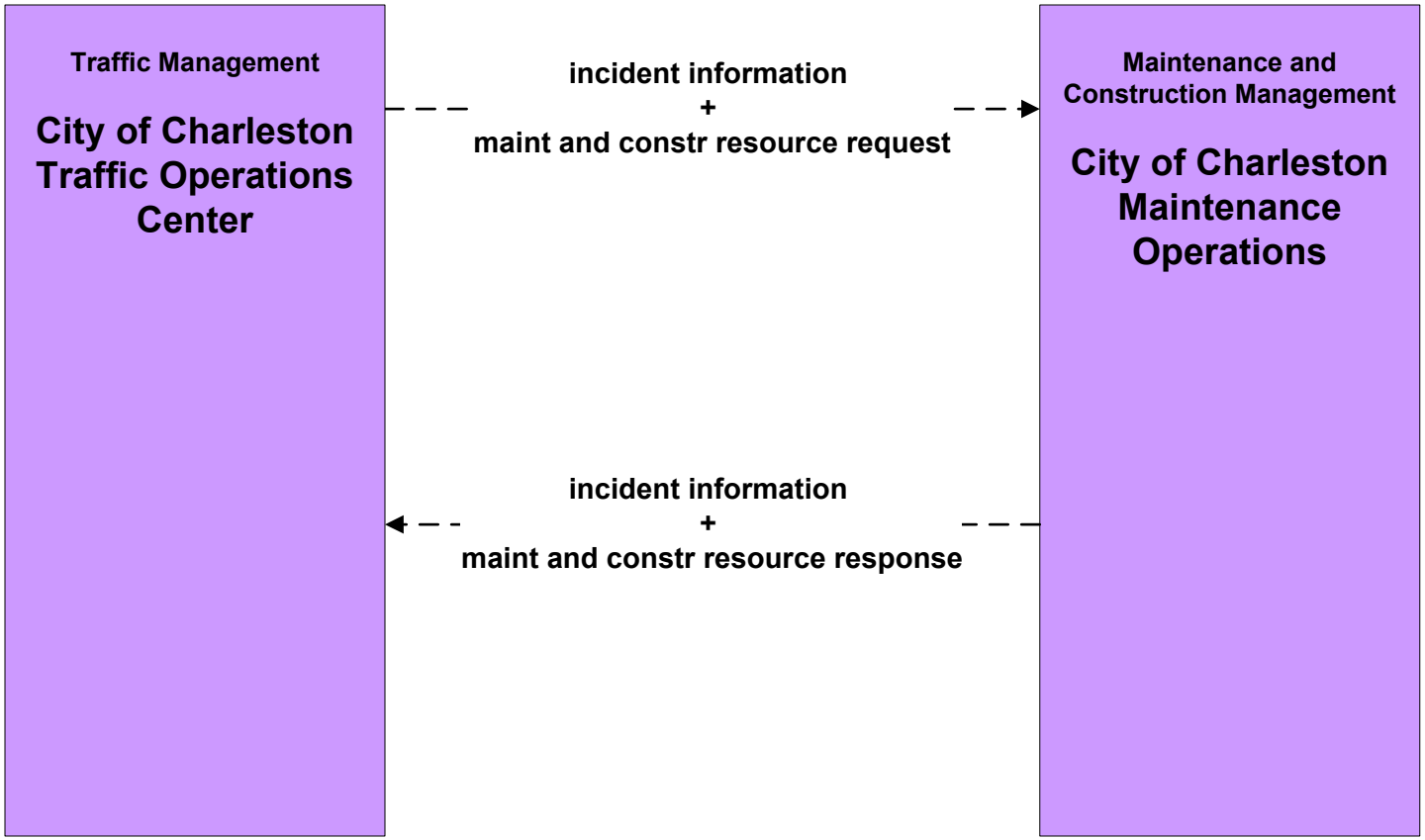
ATMS08 - Incident Management
WV Parkway Authority TOC (TM to EM)



ATMS08 - Incident Management

Traffic Management ←→ Maintenance and Construction Management

ATMS08 - Incident Management
City of Charleston TOC (TM to MCM)



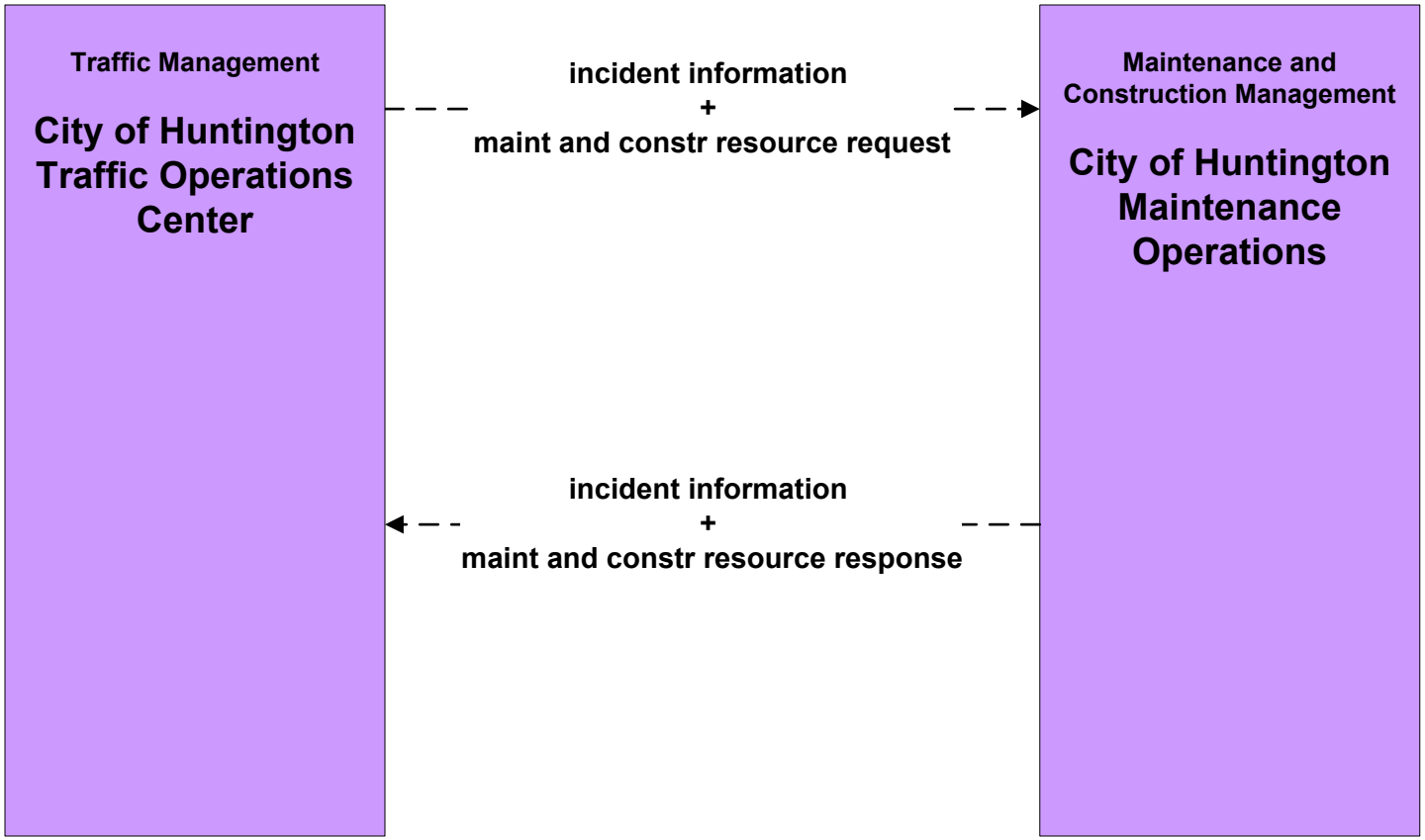
LEGEND

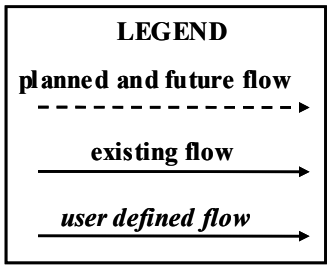
planned and future flow

existing flow

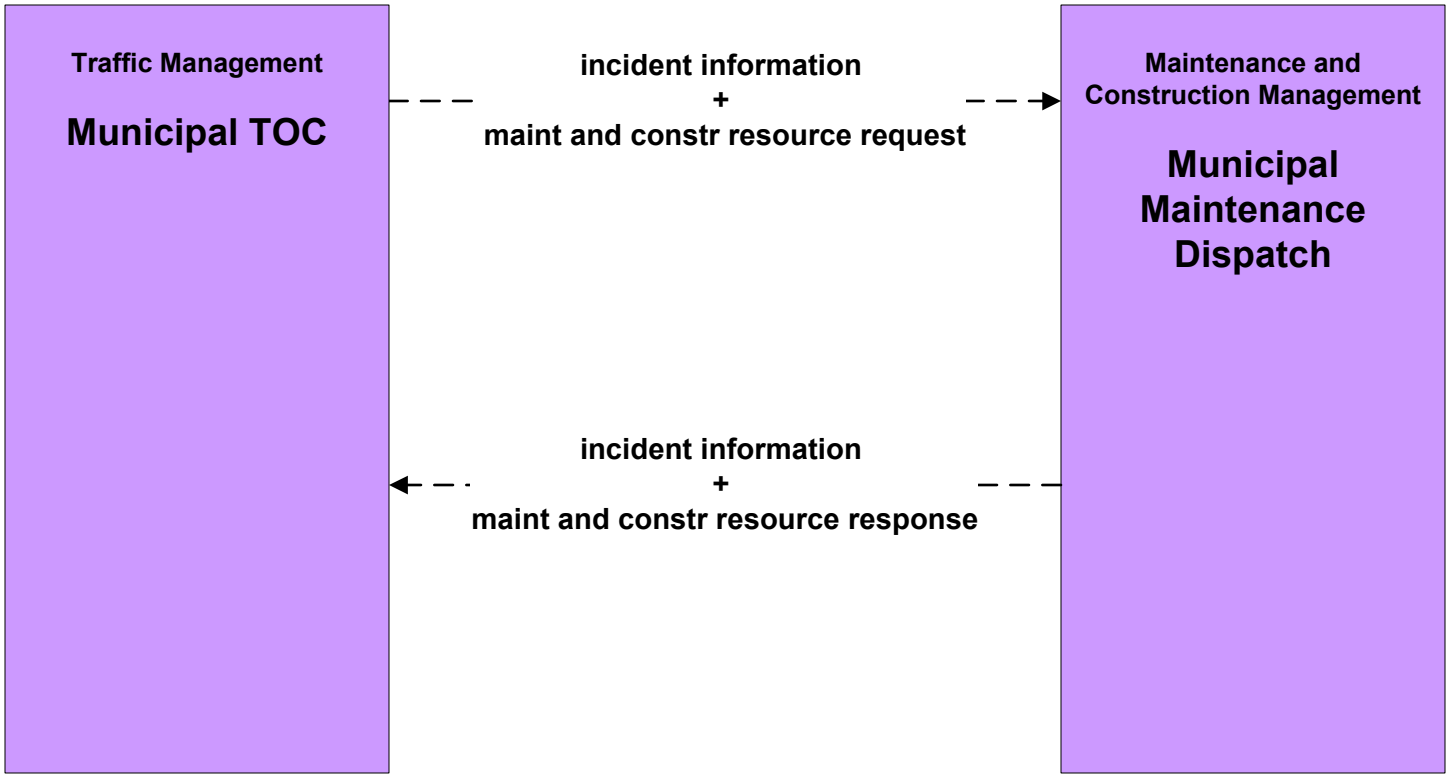
user defined flow

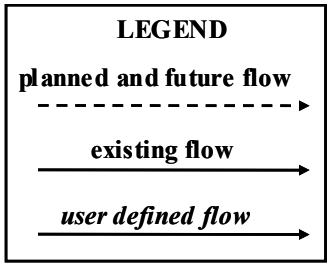
ATMS08 - Incident Management
City of Huntington TOC (TM to MCM)



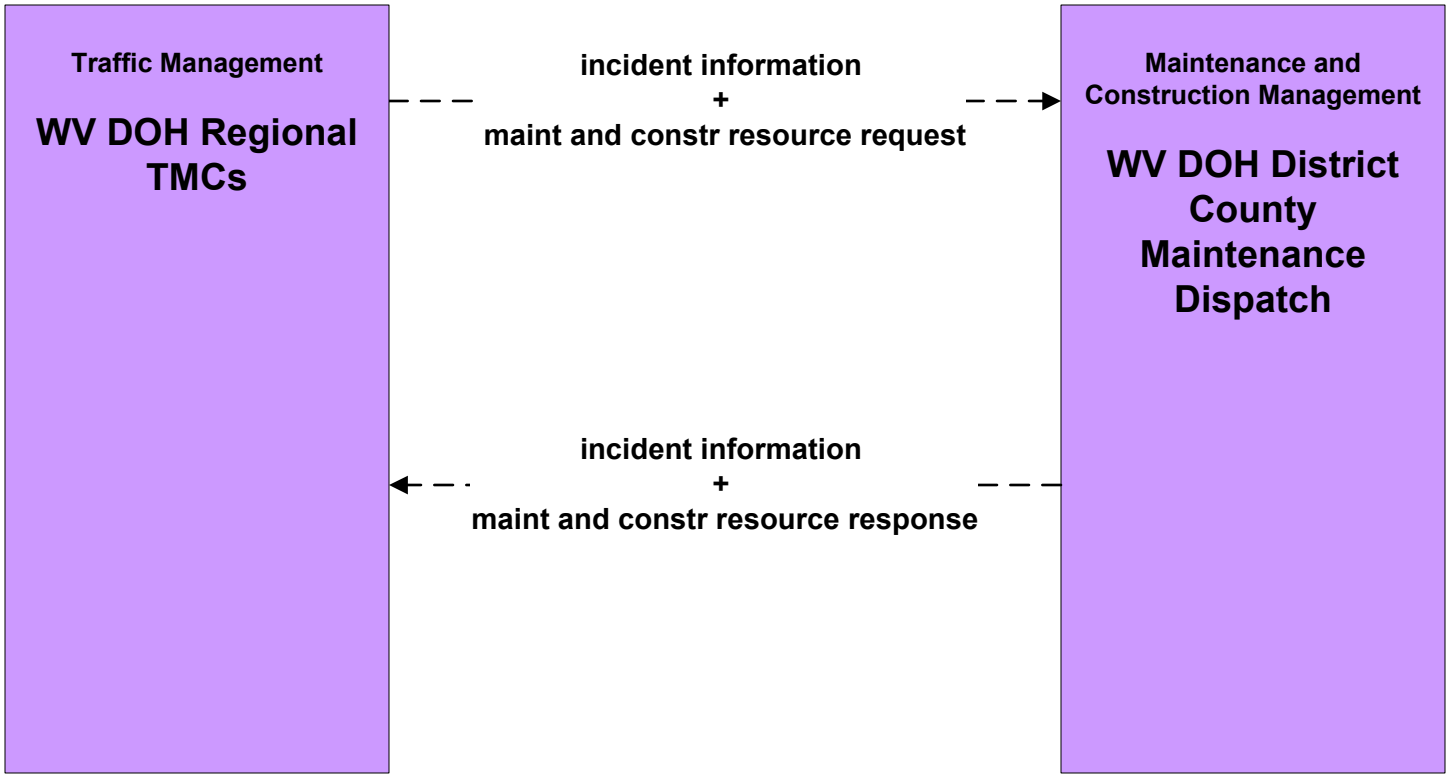


ATMS08 - Incident Management
Municipal TOC (TM to MCM)





ATMS08 - Incident Management
WV DOH Regional TMCs (TM to MCM)



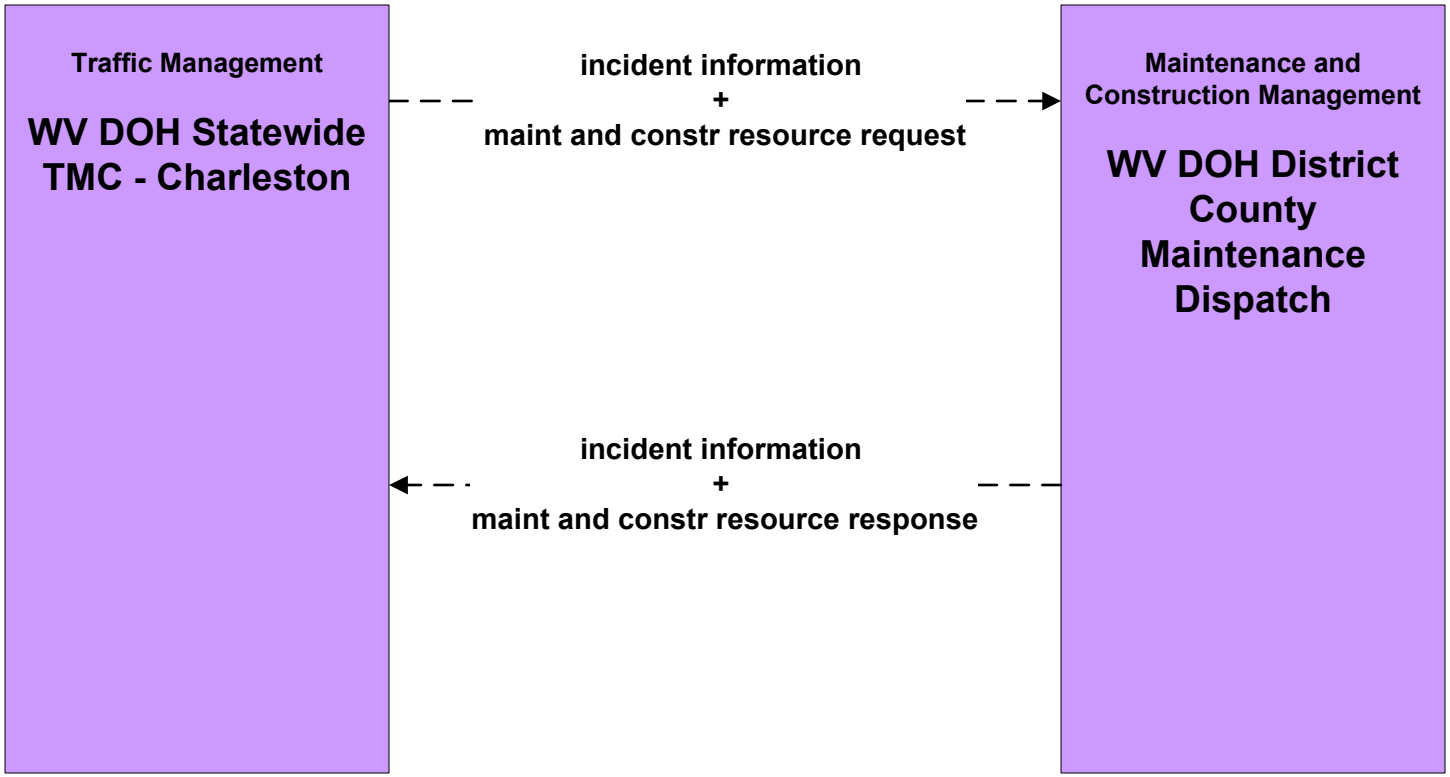
LEGEND

planned and future flow

existing flow

user defined flow

ATMS08 - Incident Management
WV DOH Statewide TMC (TM to MCM)



LEGEND

planned and future flow

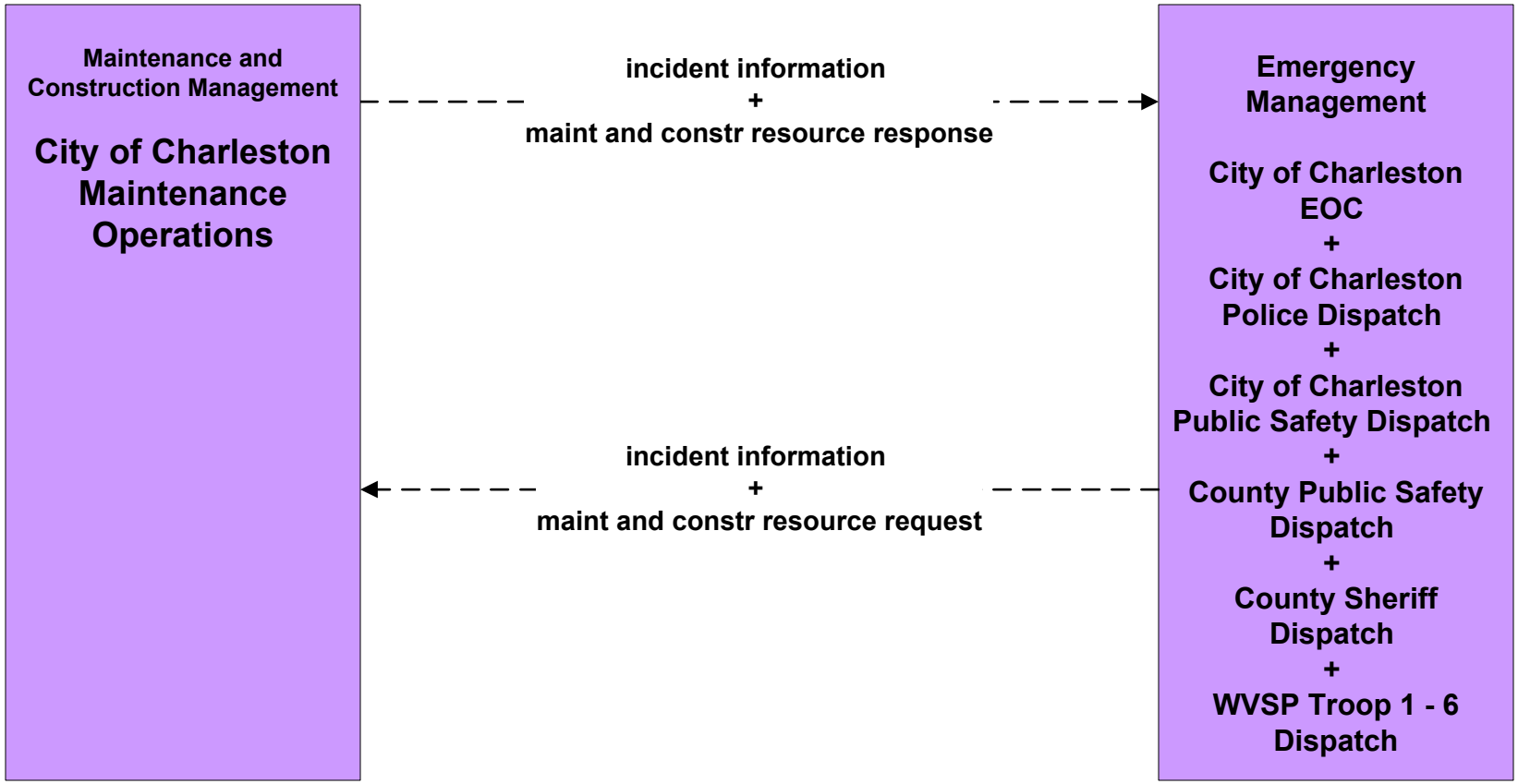
existing flow

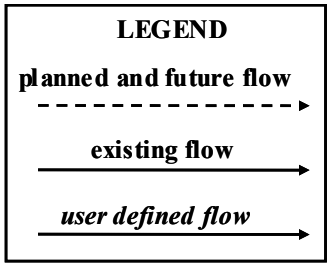
user defined flow

ATMS08 - Incident Management

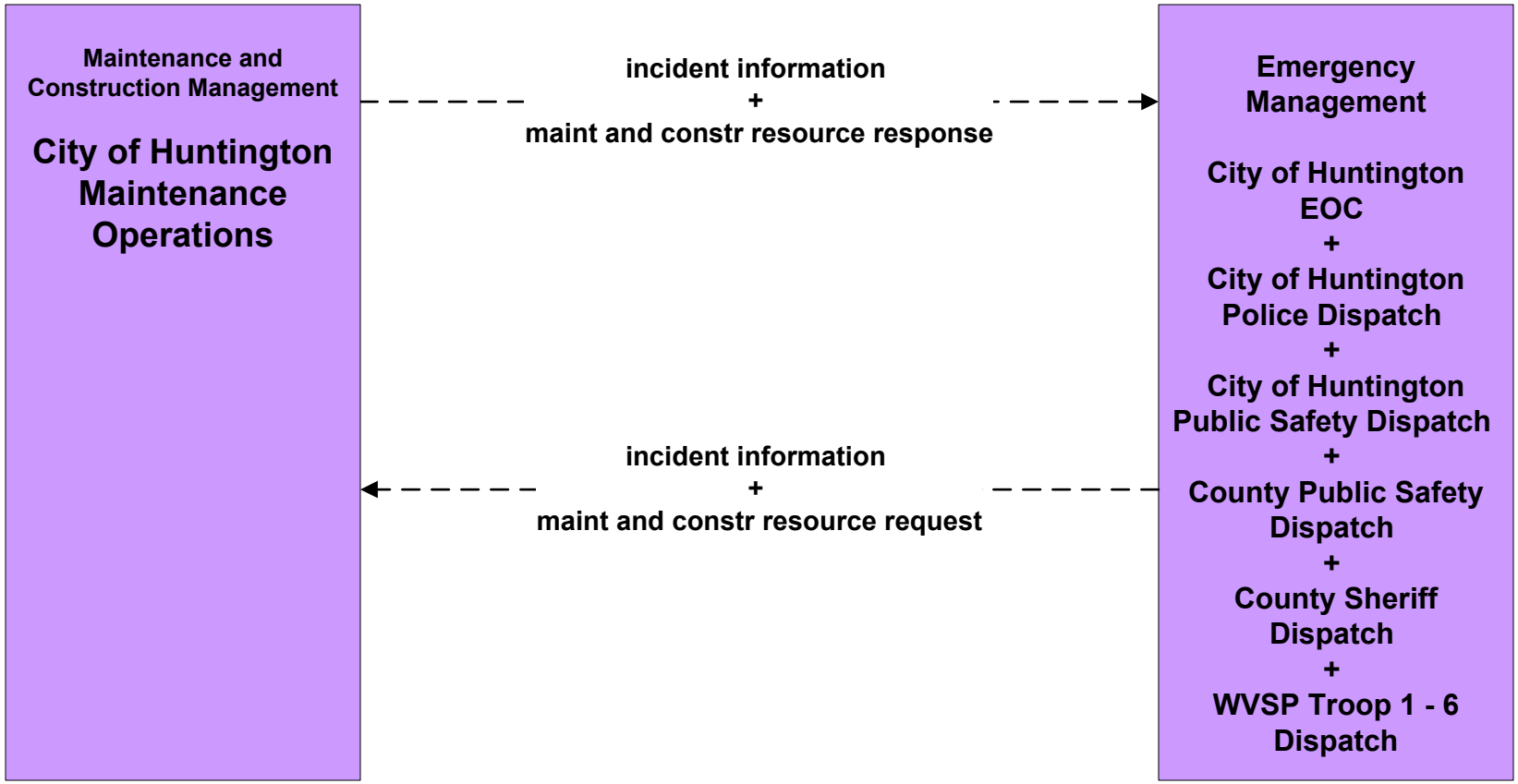
Emergency Management ←→ Maintenance and Construction Management

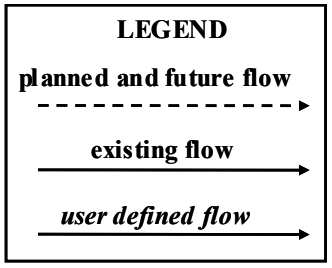
ATMS08 - Incident Management
City of Charleston Maintenance Operations (MCM to EM)



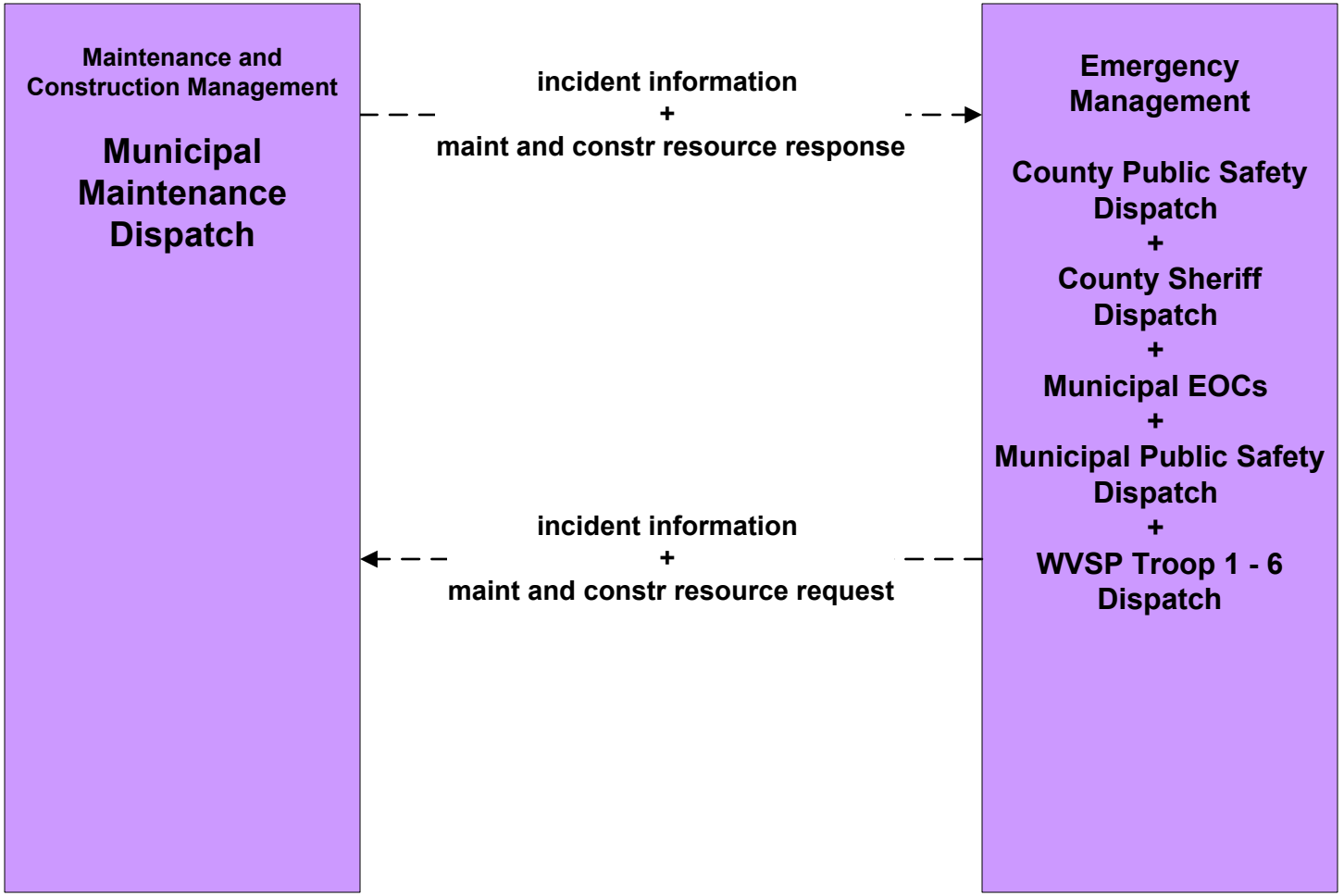


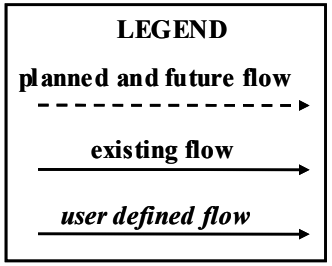
ATMS08 - Incident Management
City of Huntington Maintenance Operations (MCM to EM)



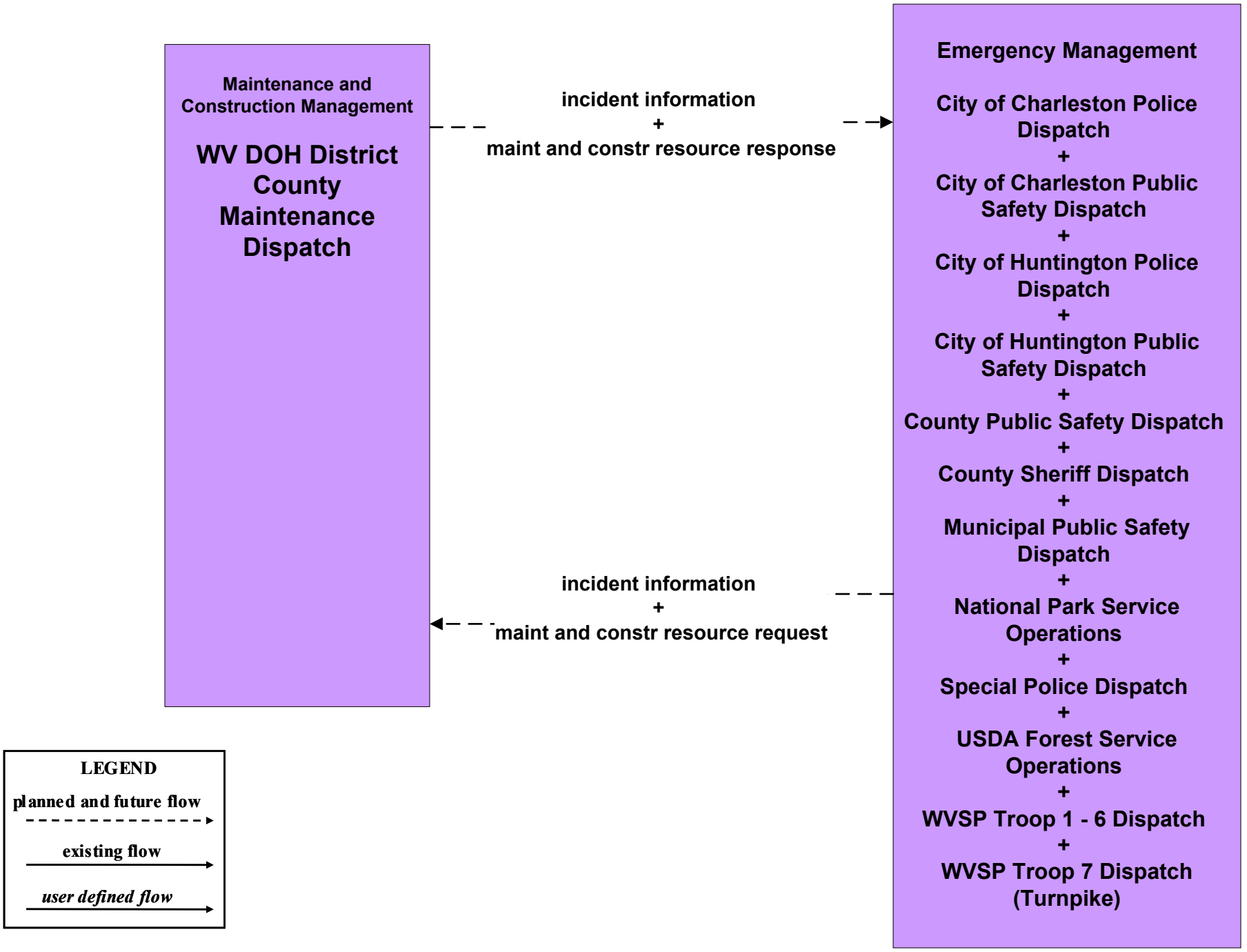


ATMS08 - Incident Management
Municipal Maintenance (MCM to EM)

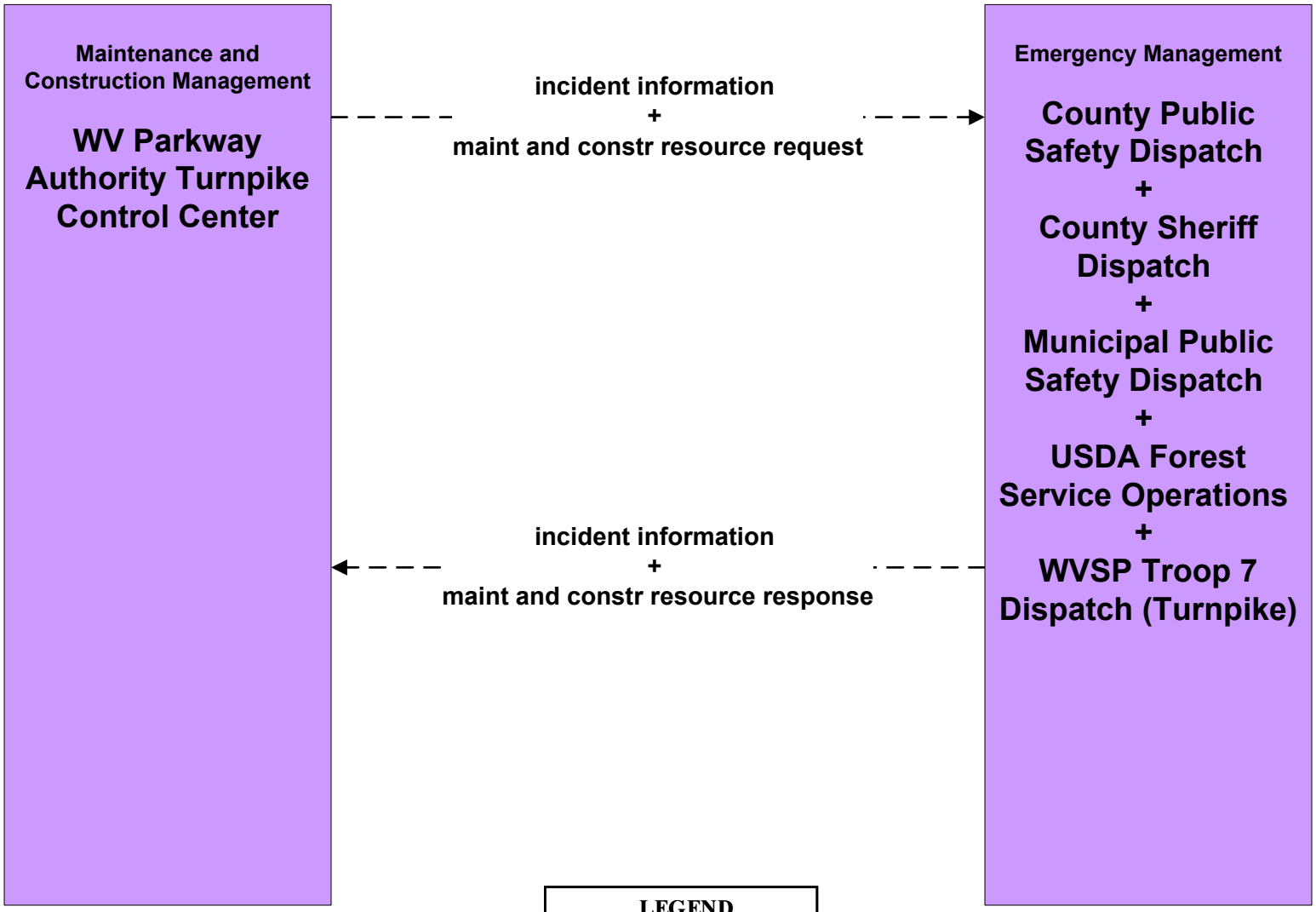




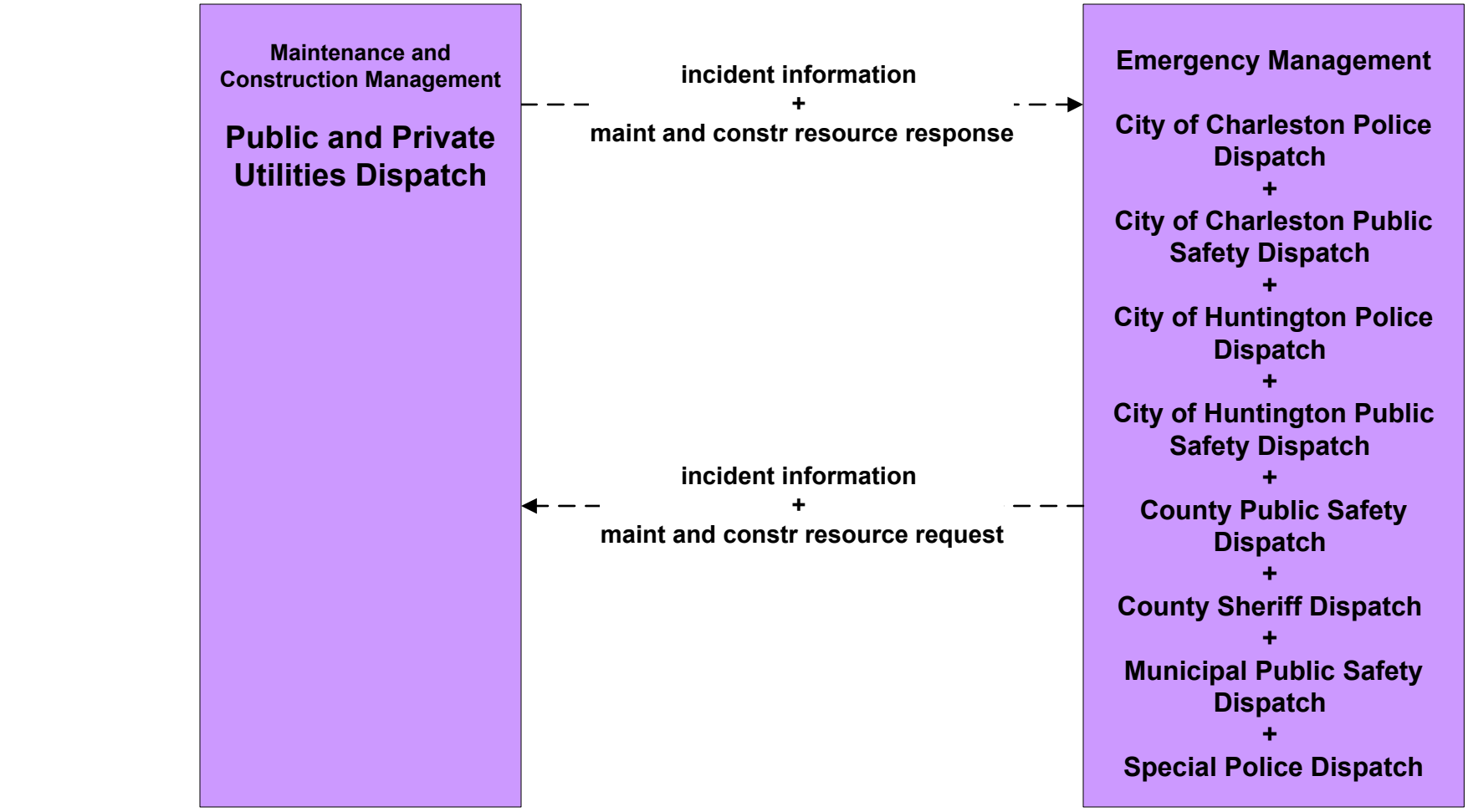
ATMS08 - Incident Management
DOH Maintenance (MCM to EM)



ATMS08 - Incident Management
WV Parkway Authority Maintenance (MCM to EM)



ATMS08 - Incident Management
Public and Private Utilities (MCM to EM)



LEGEND

planned and future flow

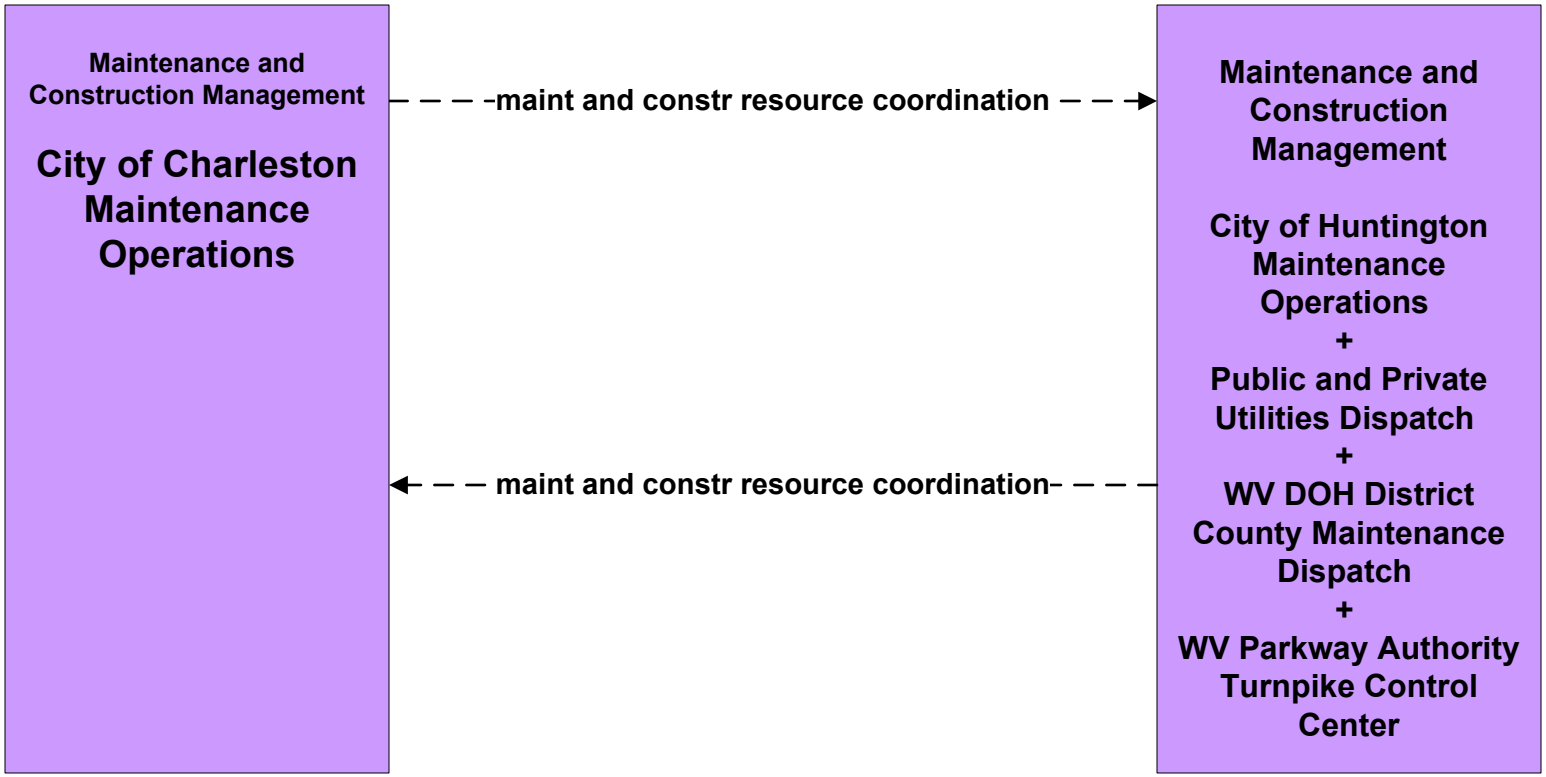
existing flow

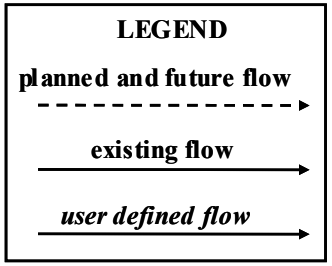
user defined flow

ATMS08 - Incident Management

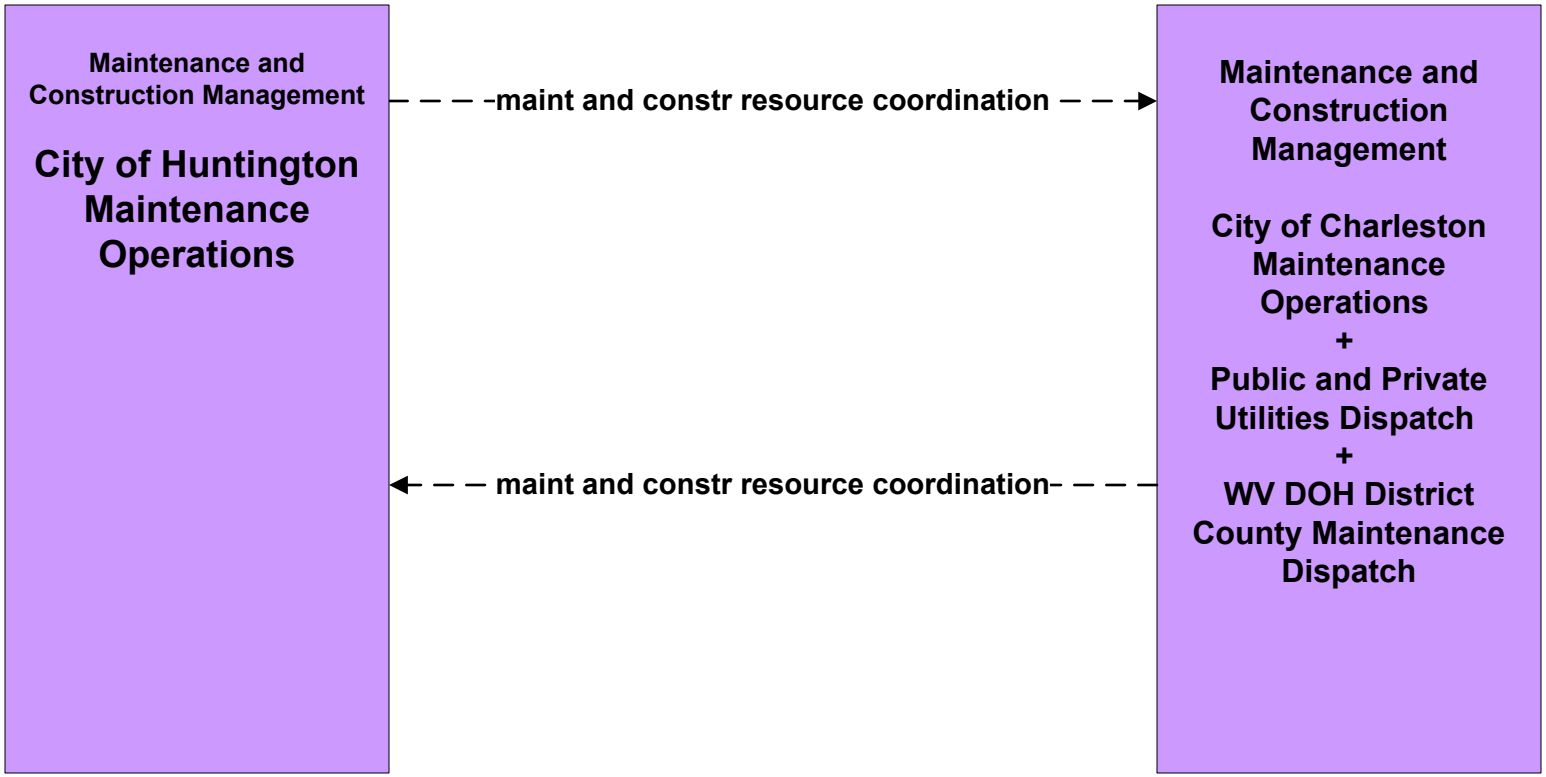
Maintenance and Construction Management ←→ Maintenance and Construction Management

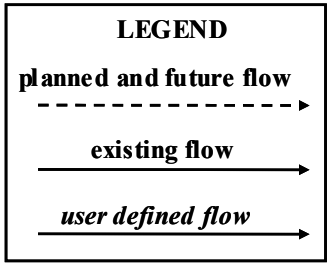
ATMS08 - Incident Management
City of Charleston Maintenance Operations (MCM to MCM)



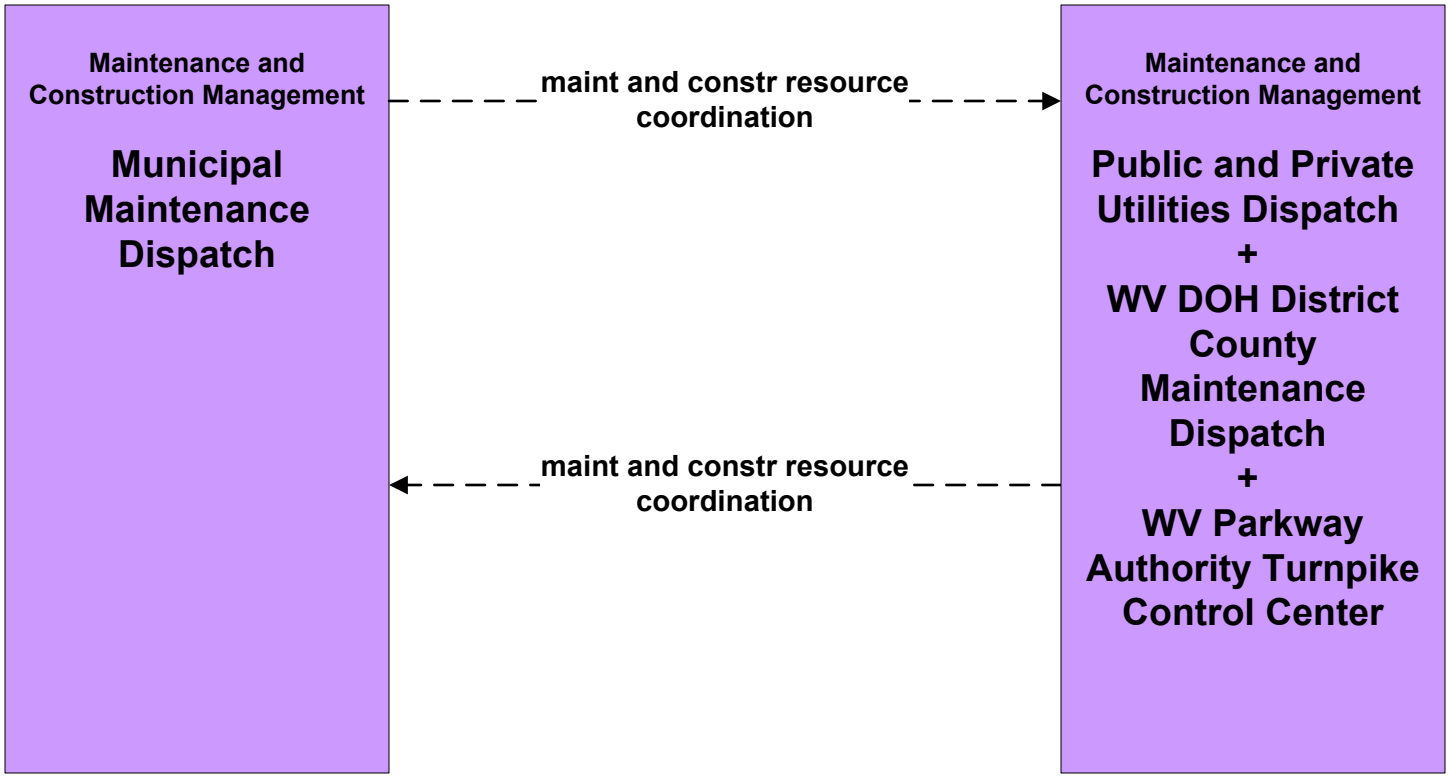


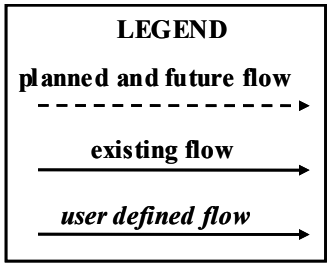
ATMS08 - Incident Management
City of Huntington Maintenance Operations (MCM to MCM)



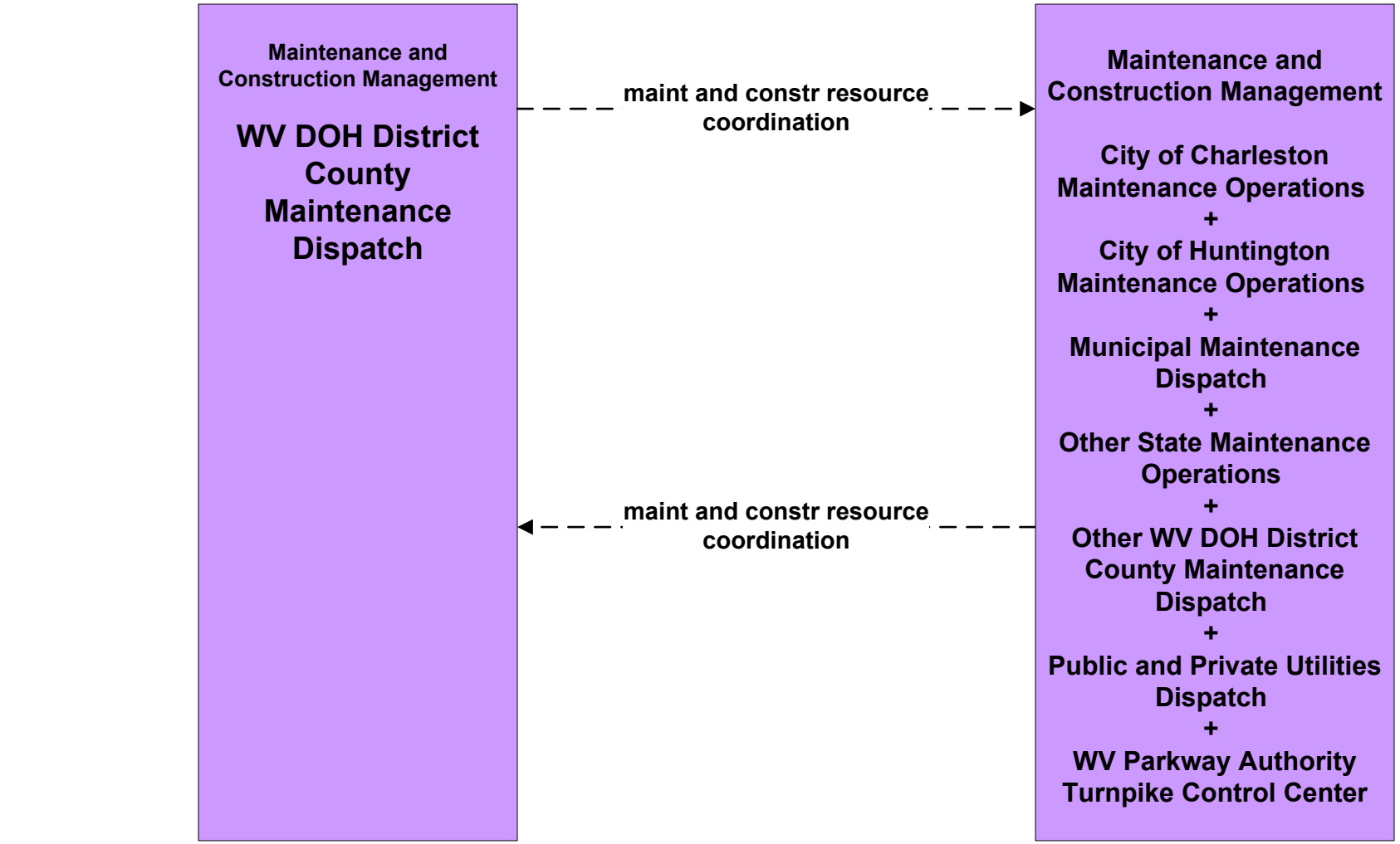


ATMS08 - Incident Management
Municipal Maintenance Dispatch (MCM to Other MCM)





ATMS08 - Incident Management
WV DOH Maintenance (MCM to Other MCM)



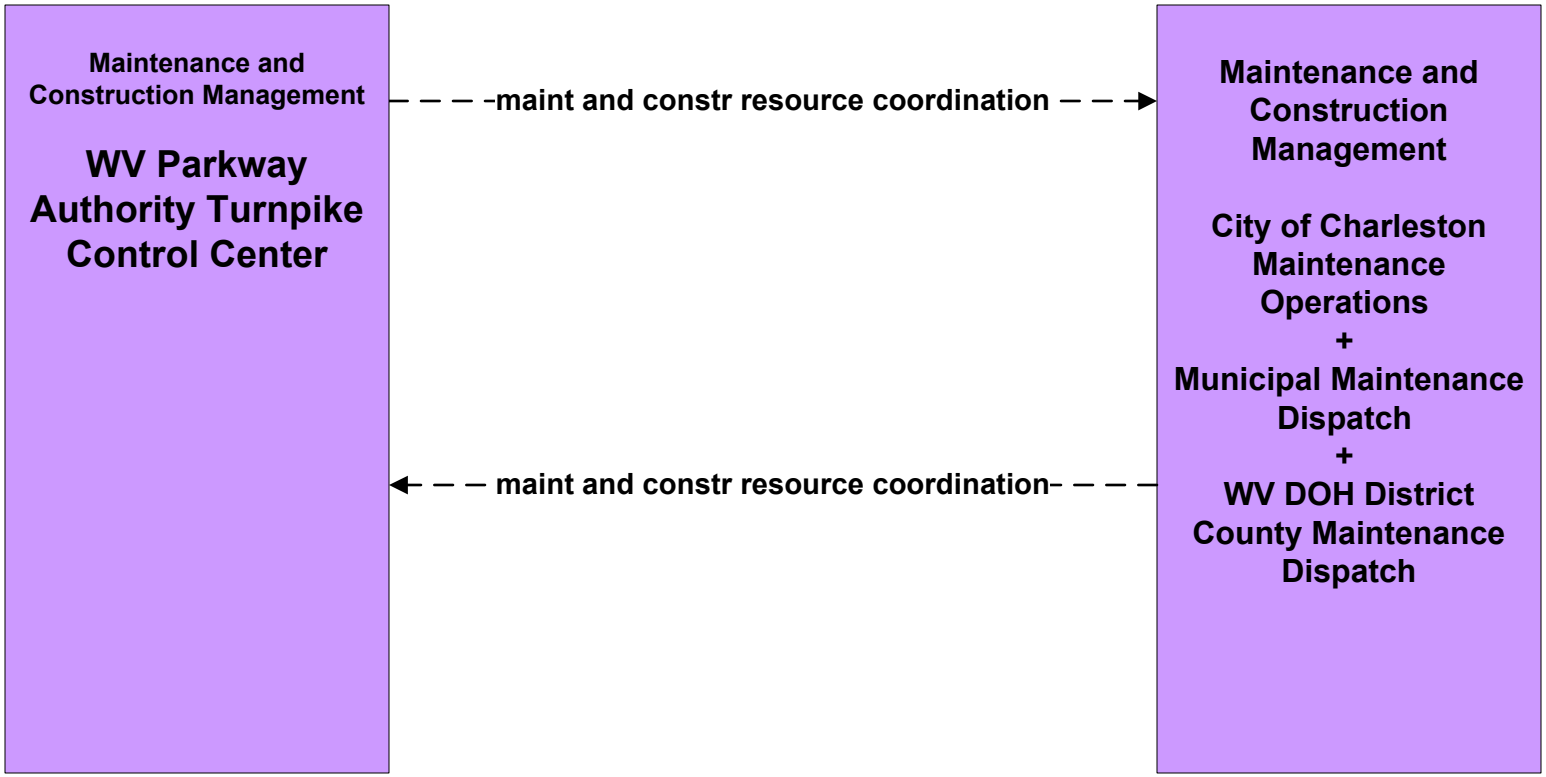
LEGEND

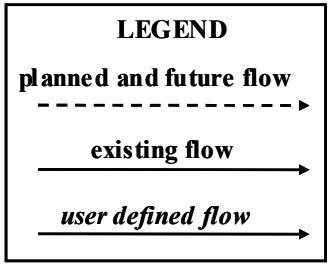
planned and future flow

existing flow

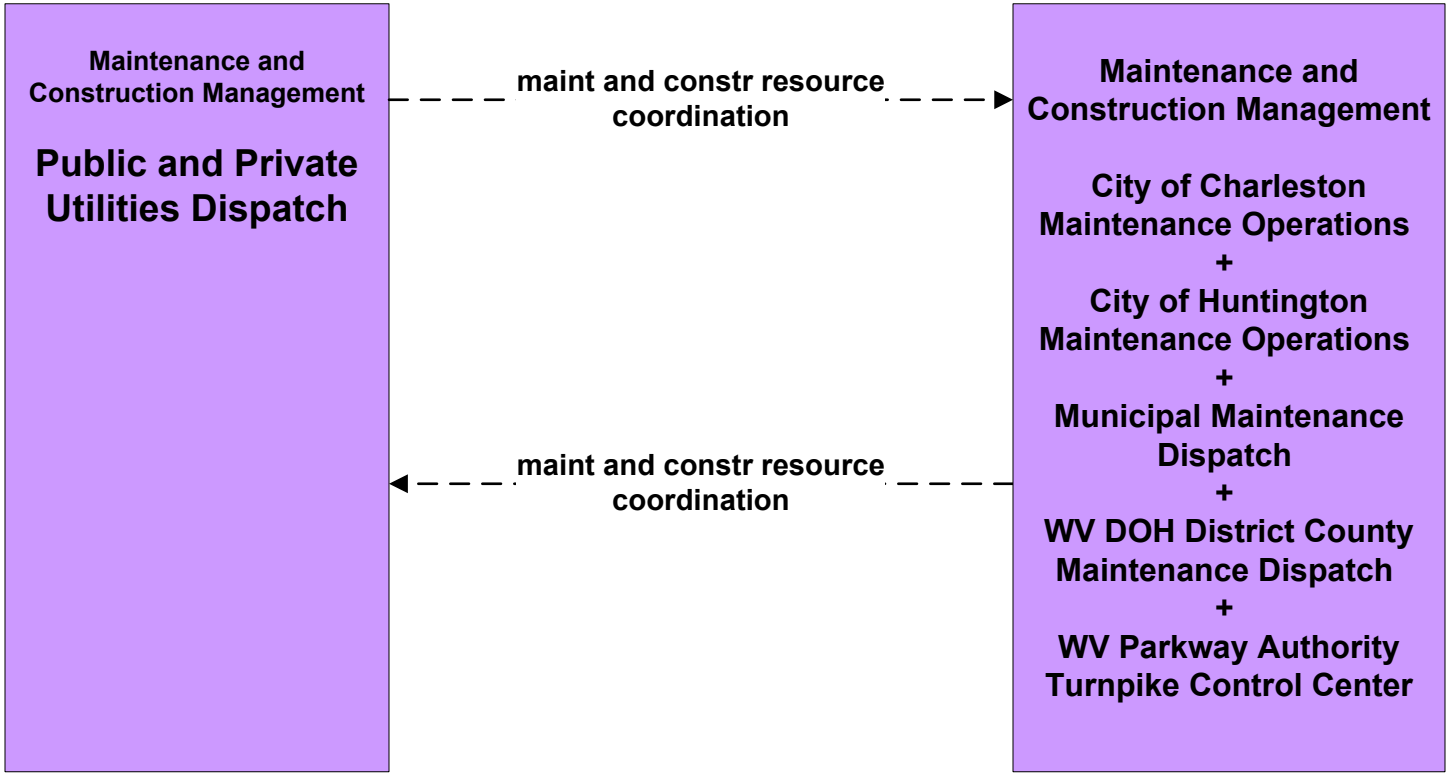
user defined flow

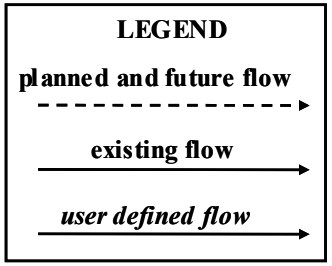
ATMS08 - Incident Management
WV Parkway Authority Maintenance (MCM to EM)





ATMS08 - Incident Management
Public and Private Utilities (MCM to Other MCM)

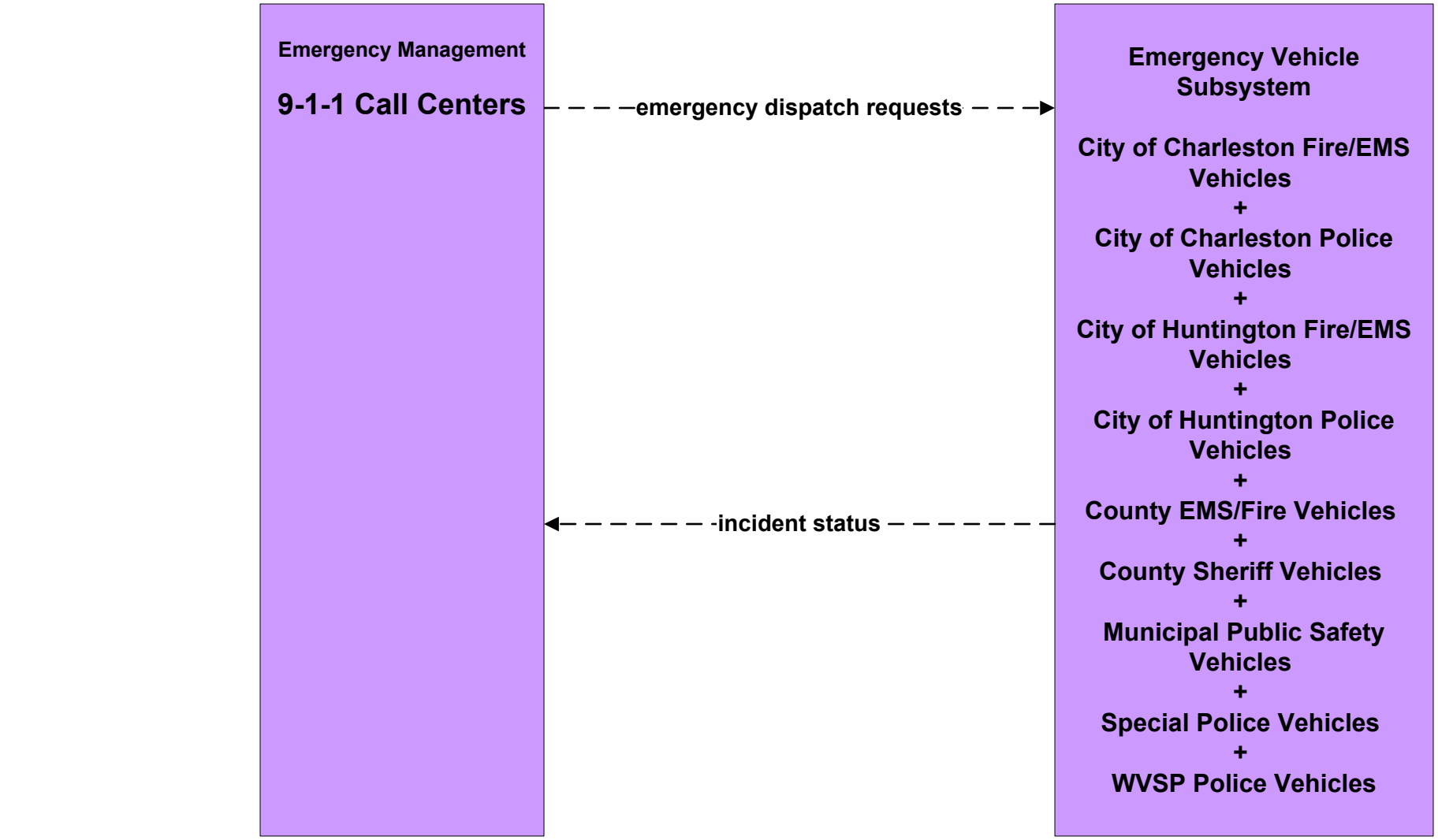




ATMS08 - Incident Management

Emergency Management ←→ Emergency Vehicles

ATMS08 - Incident Management
911 Call Centers (EM to EVS)



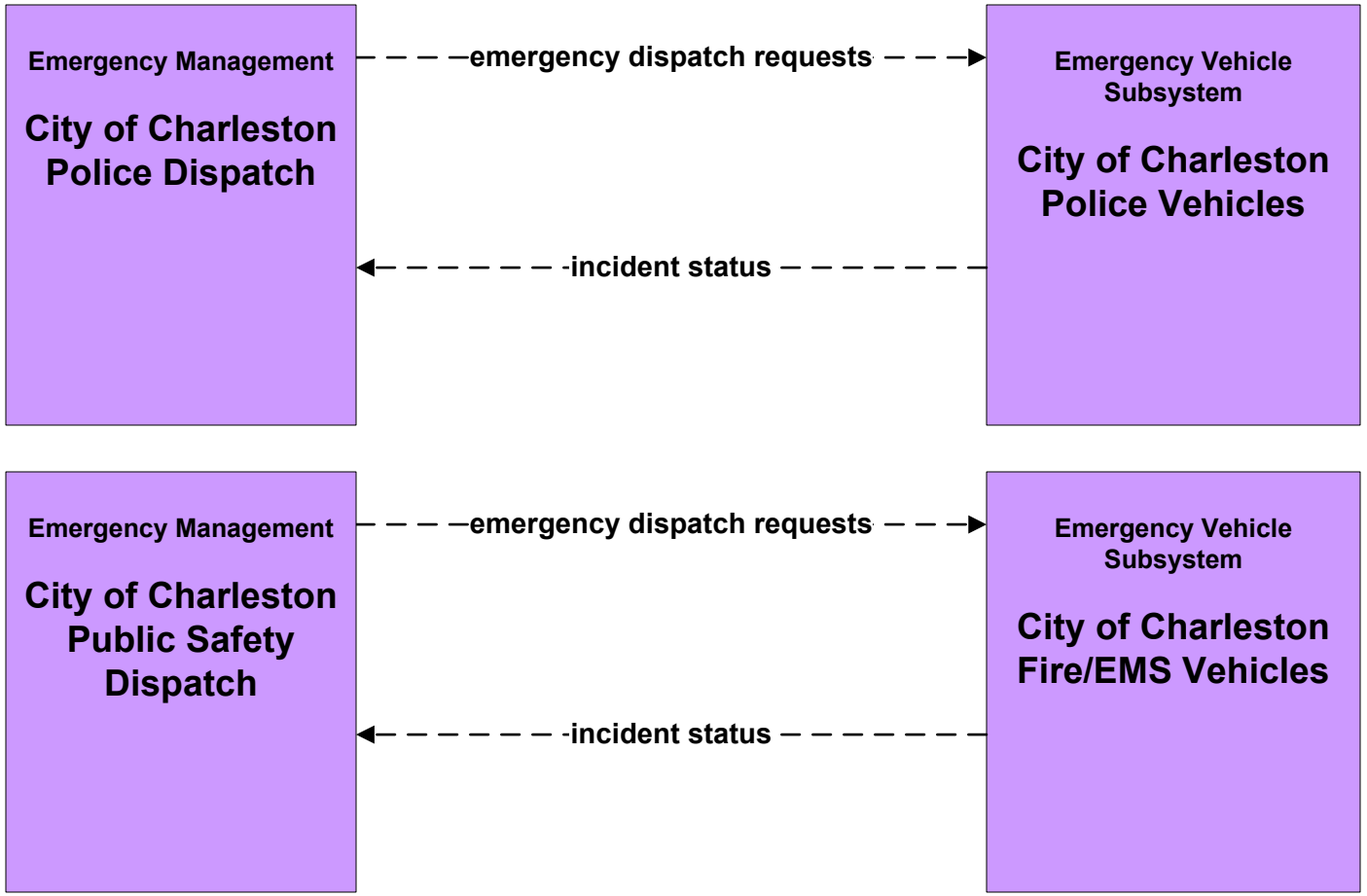
LEGEND

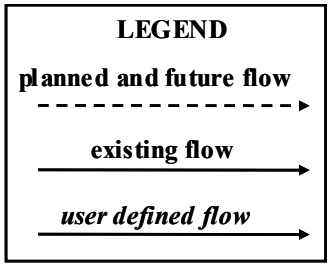
planned and future flow

existing flow

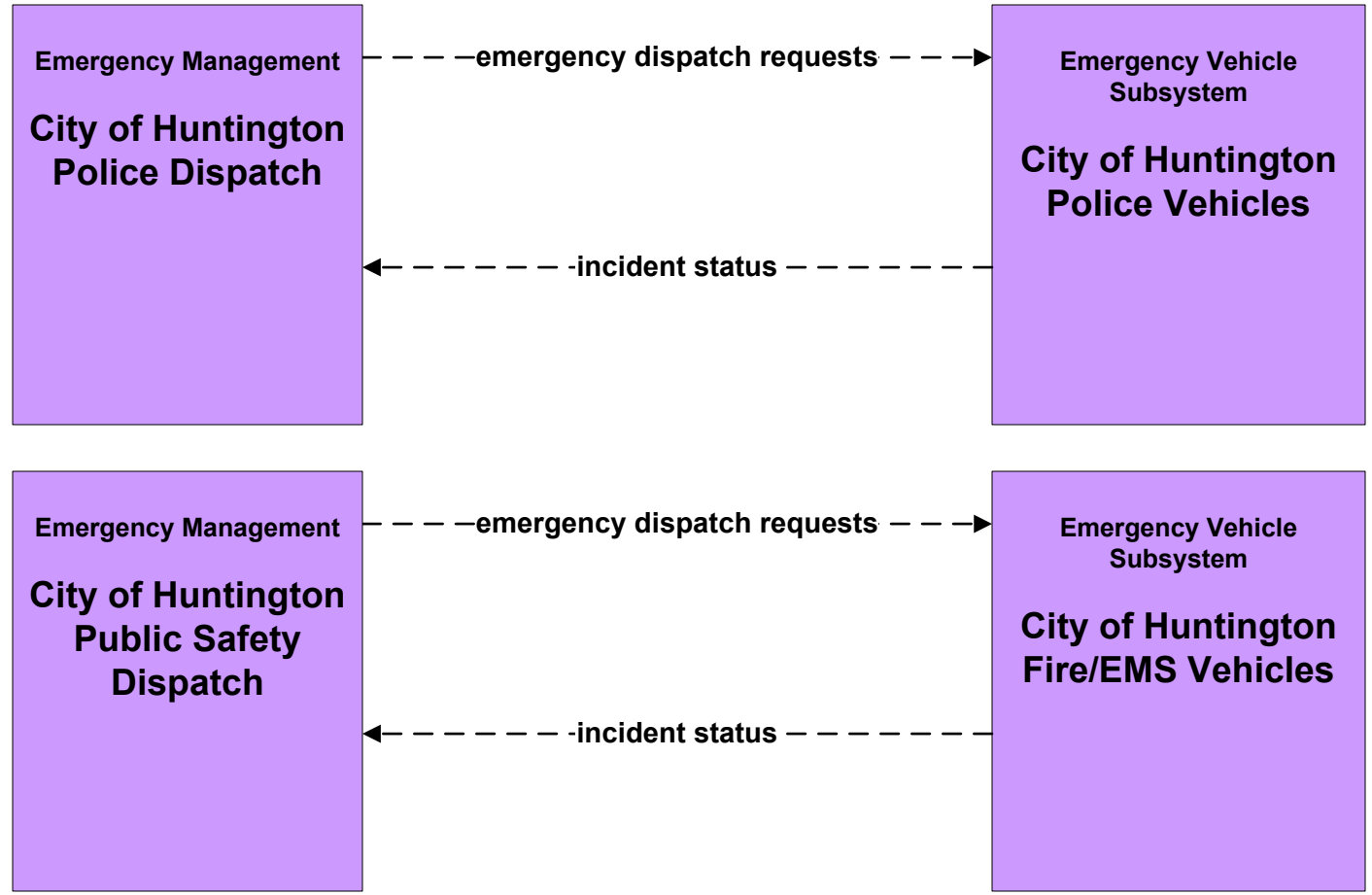
user defined flow

ATMS08 - Incident Management
City of Charleston (EM to EVS)





ATMS08 - Incident Management
City of Huntington (EM to EVS)



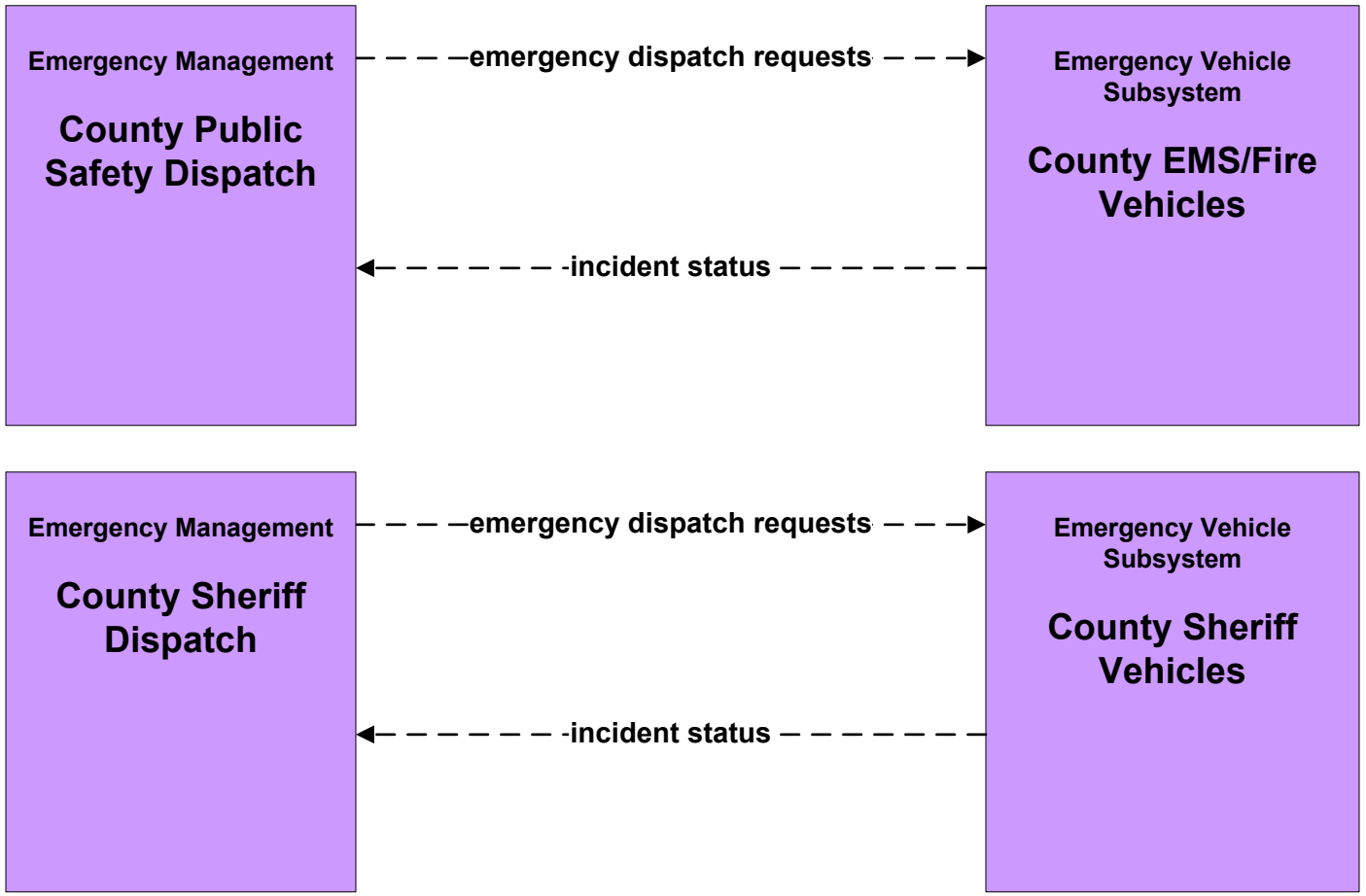
LEGEND

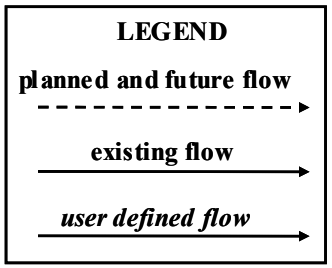
planned and future flow

existing flow

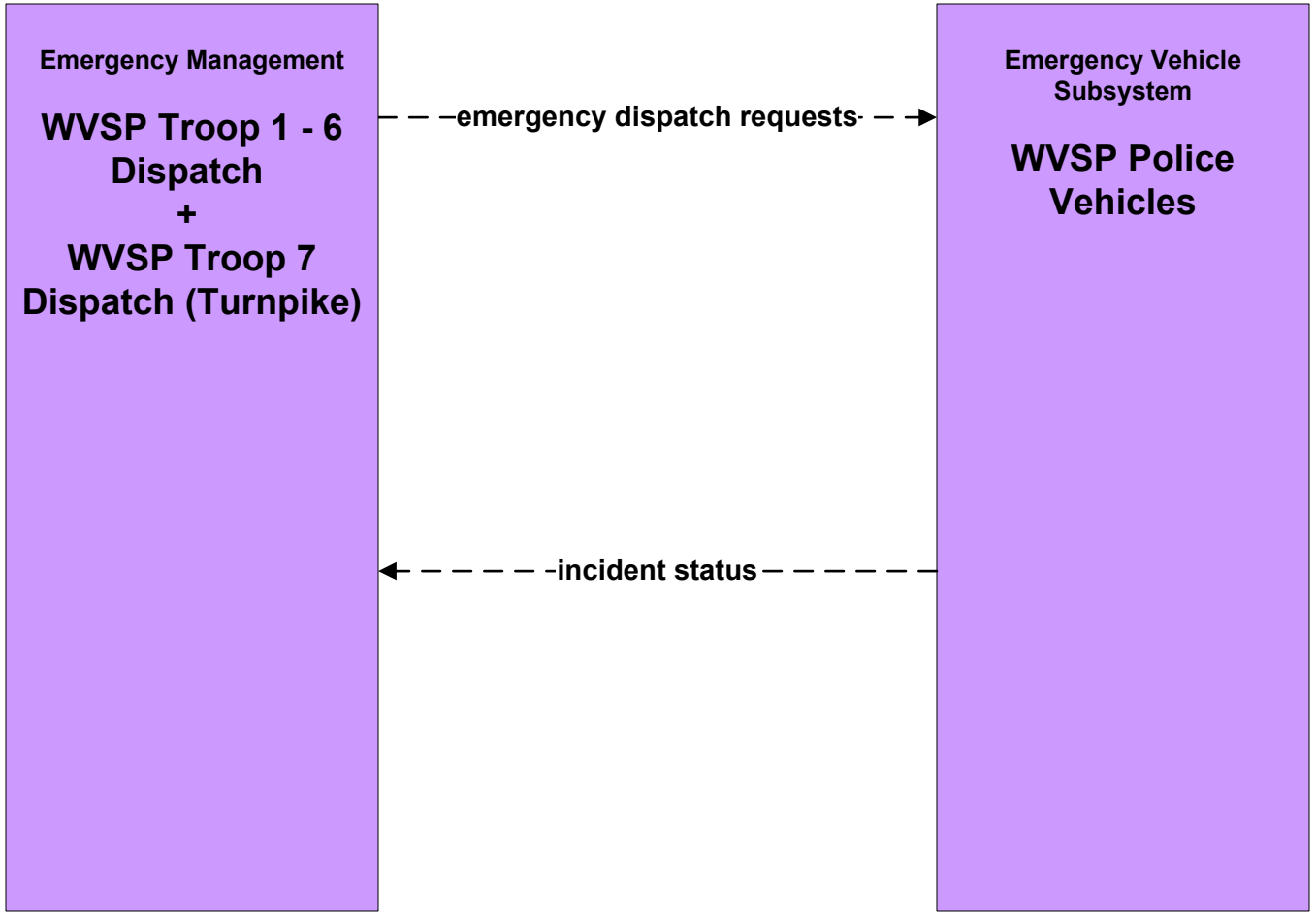
user defined flow

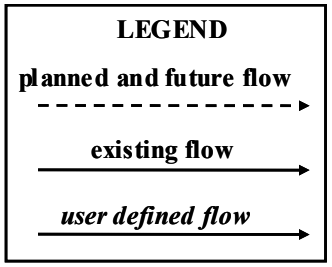
ATMS08 - Incident Management
County Public Safety / Sheriff (EM to EVS)



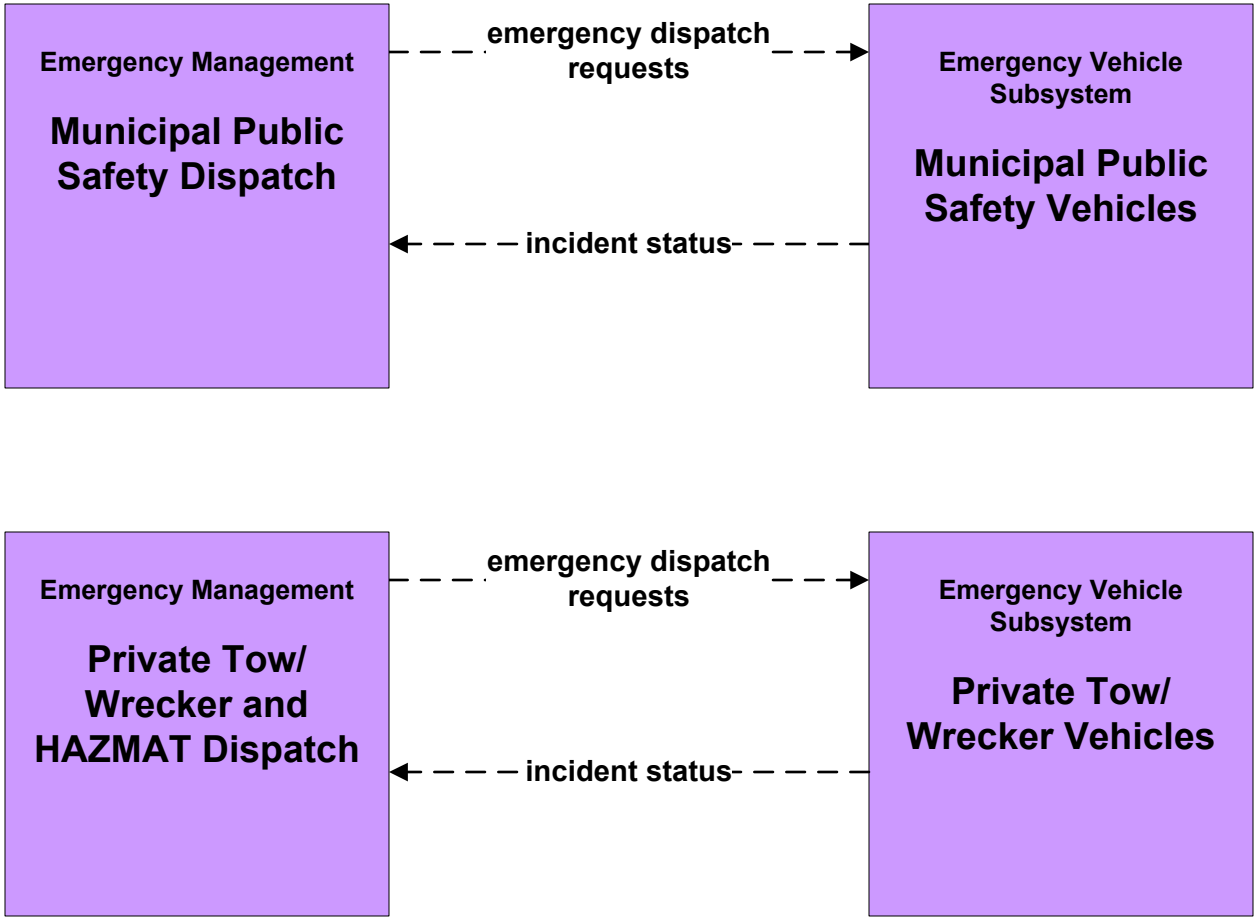


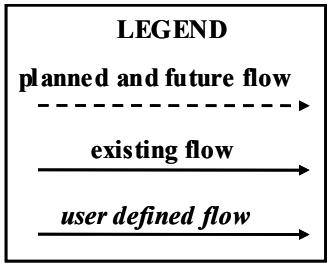
ATMS08 - Incident Management
WV State Police (EM to EVS)



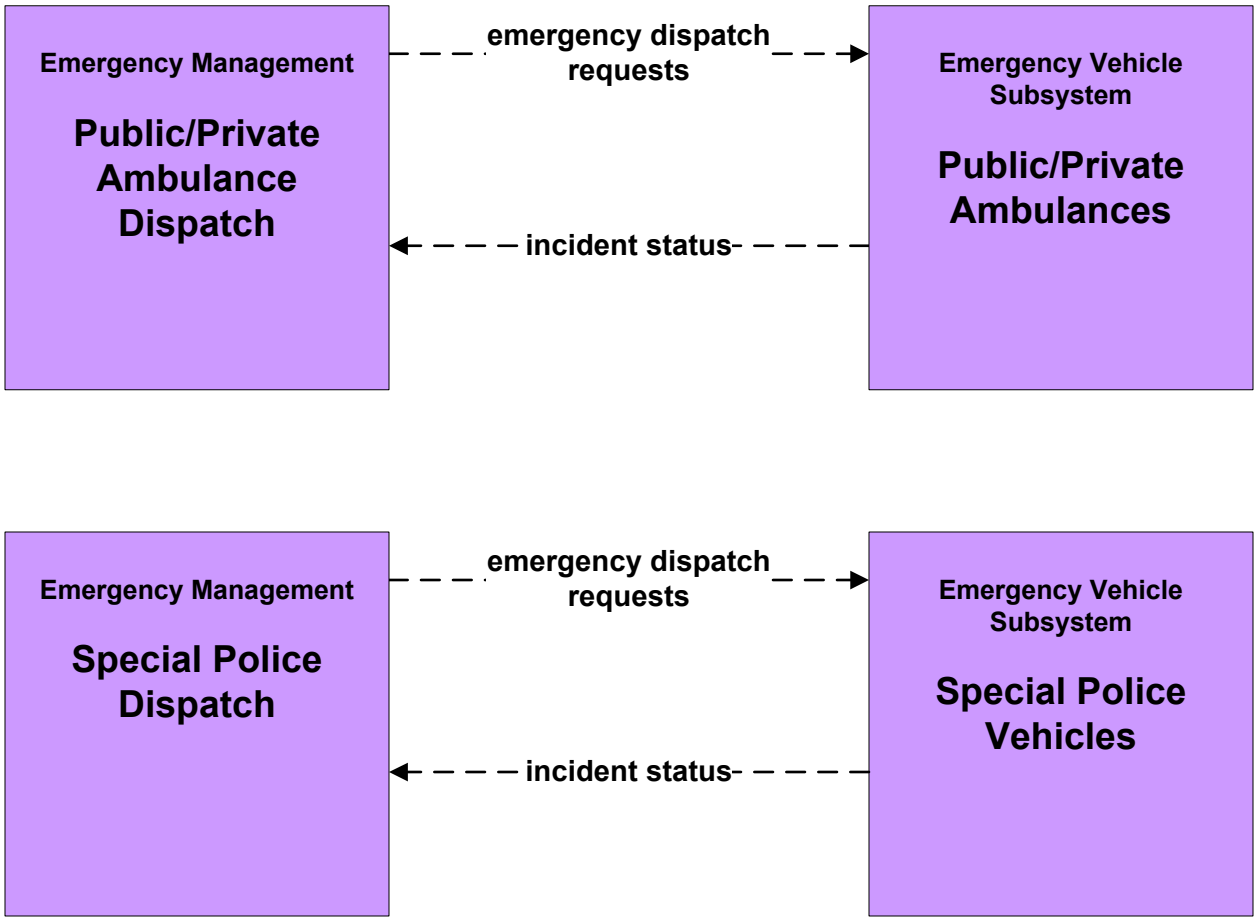


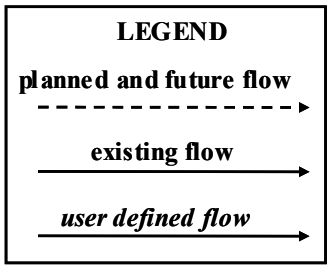
ATMS08 - Incident Management
EM to EVS (1 of 3)



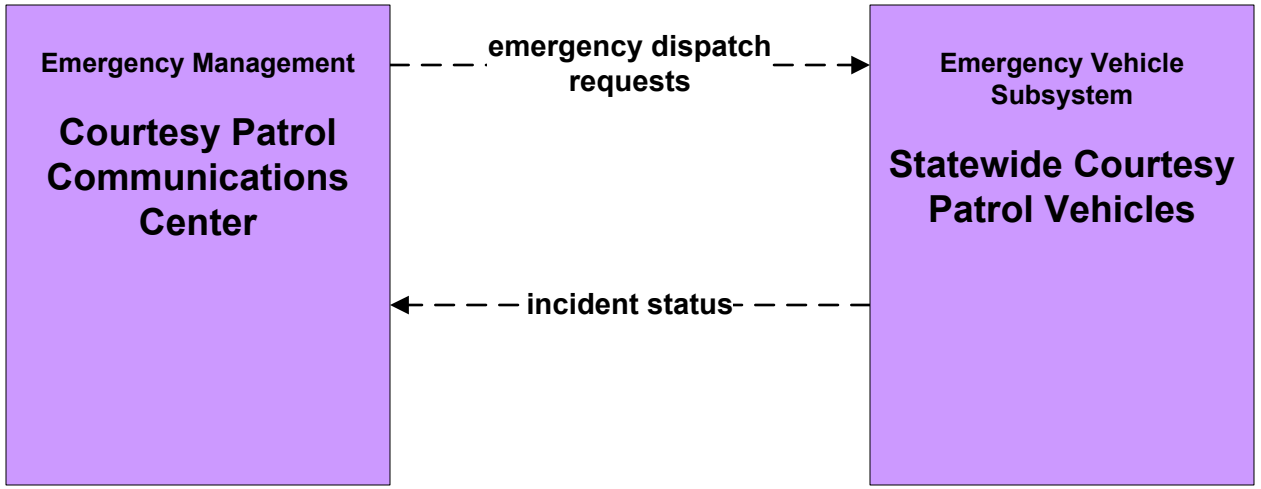


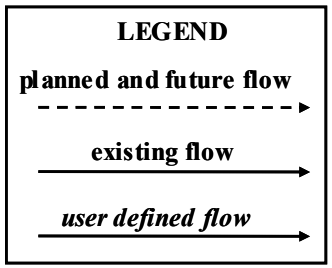
ATMS08 - Incident Management
EM to EVS (2 of 3)





ATMS08 - Incident Management
EM to EVS (3 of 3)

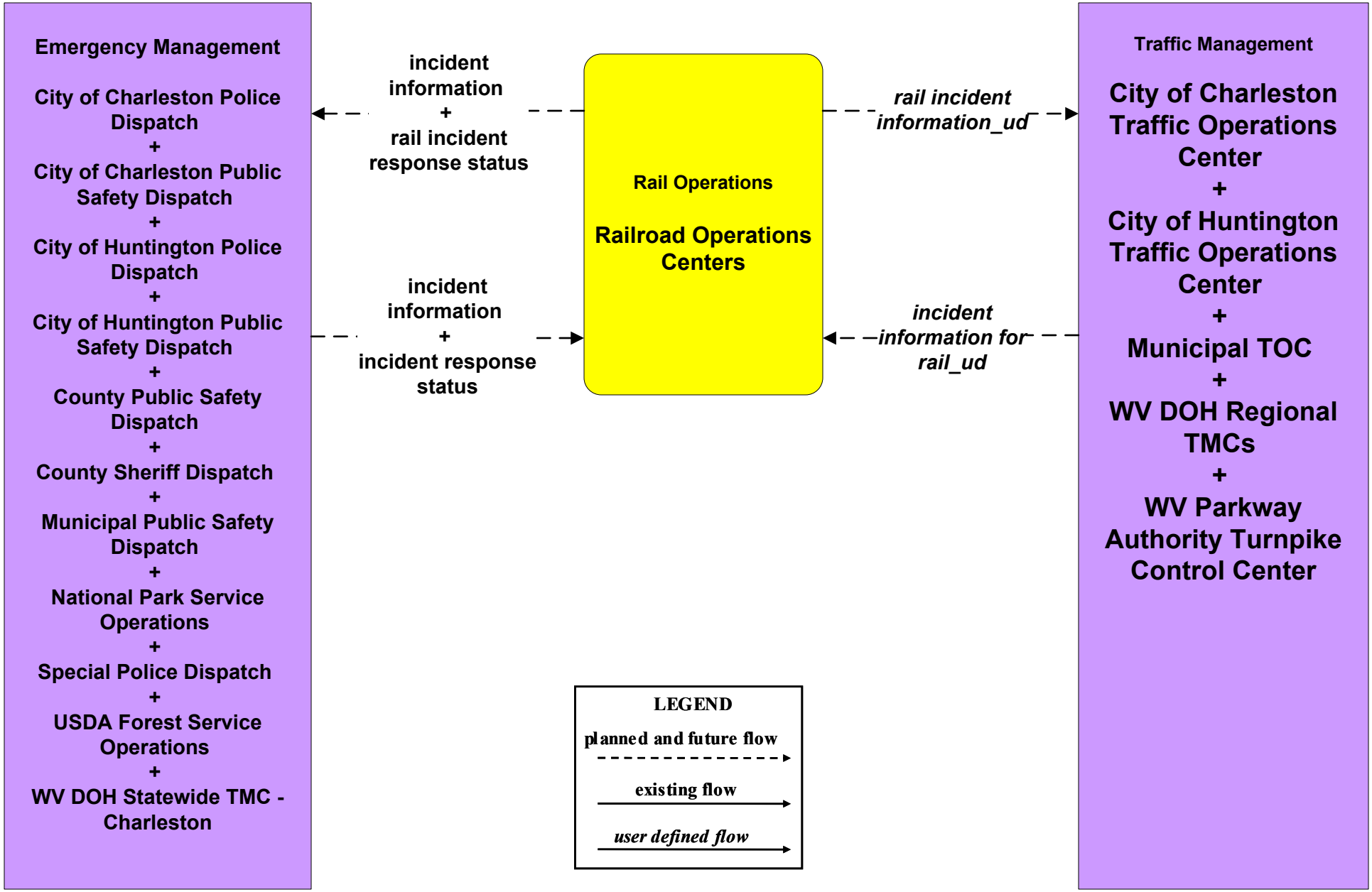




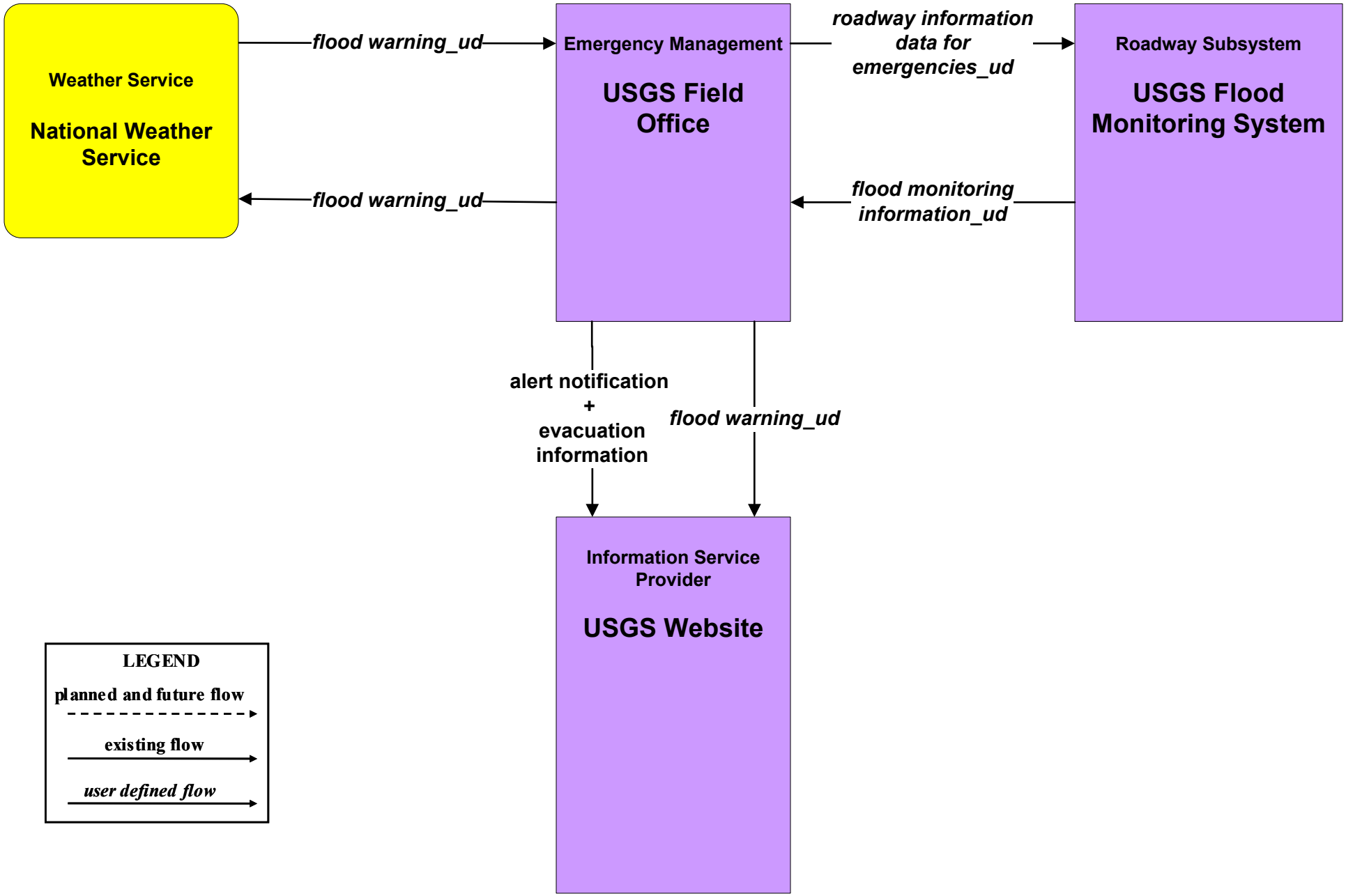
ATMS08 - Incident Management

Misc.

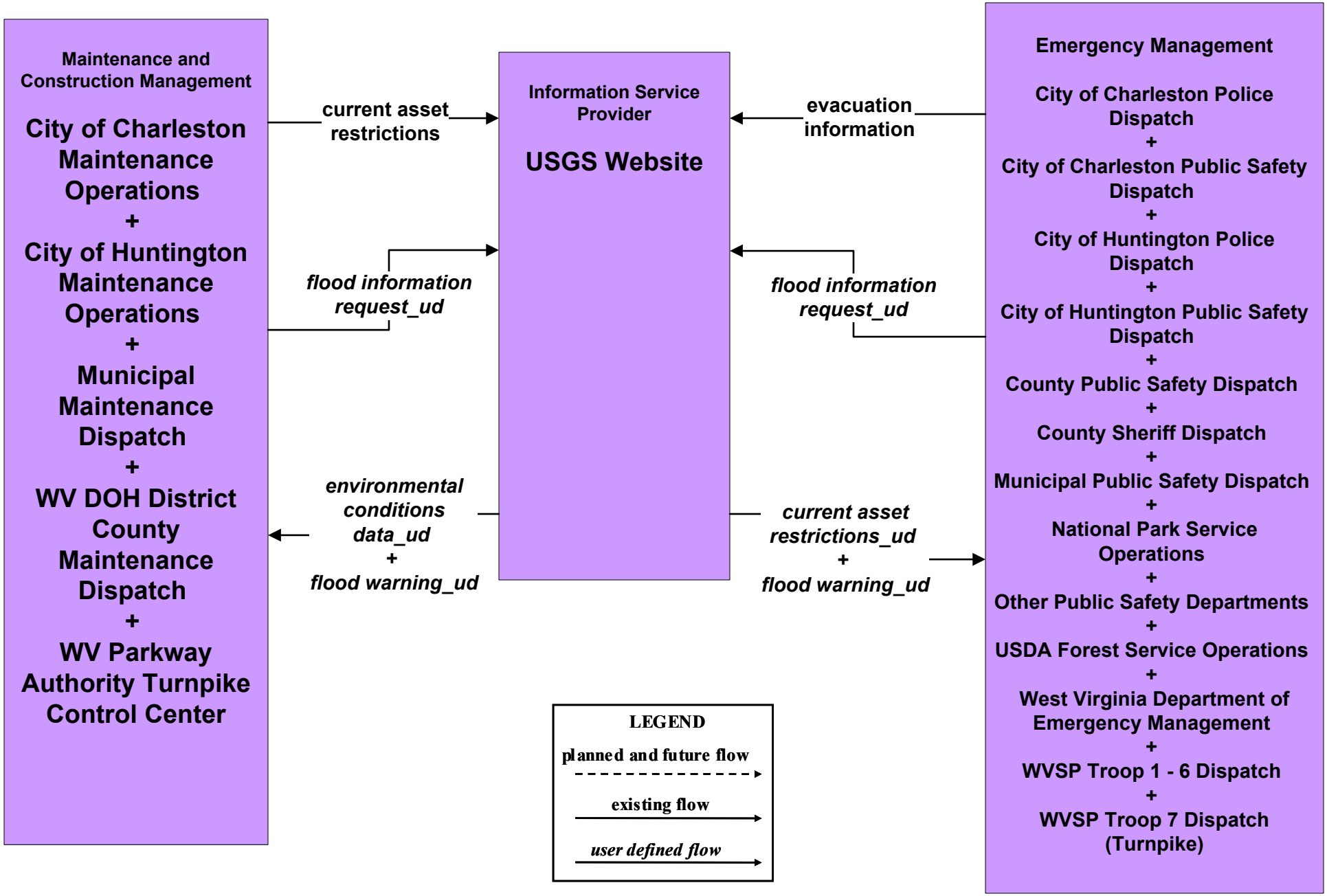
ATMS08 - Incident Management
Rail Operations Coordination



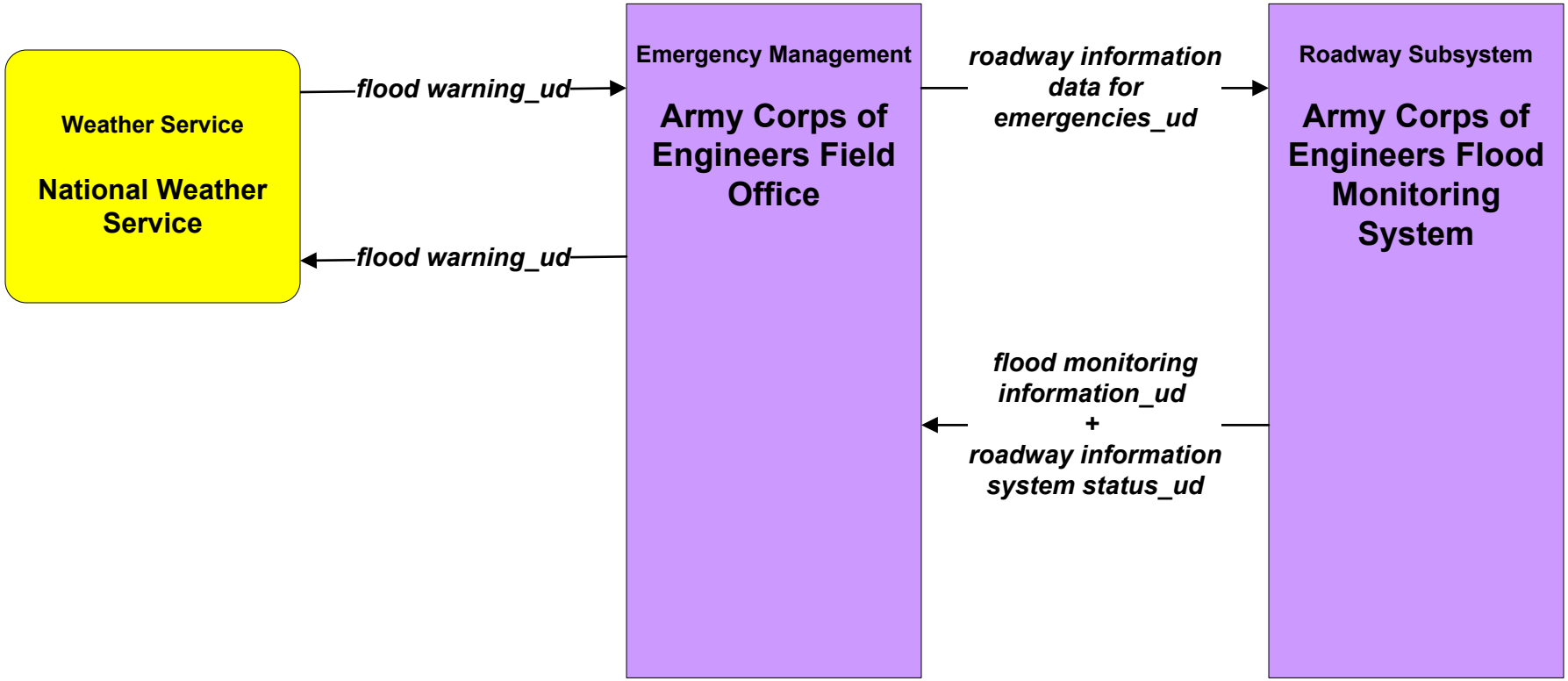
ATMS08 - Incident Management
Flood Monitoring – USGS (1 of 2)



ATMS08 - Incident Management
Flood Monitoring – USGS (2 of 2)



ATMS08 - Incident Management
Flood Monitoring – Army Corps of Engineers



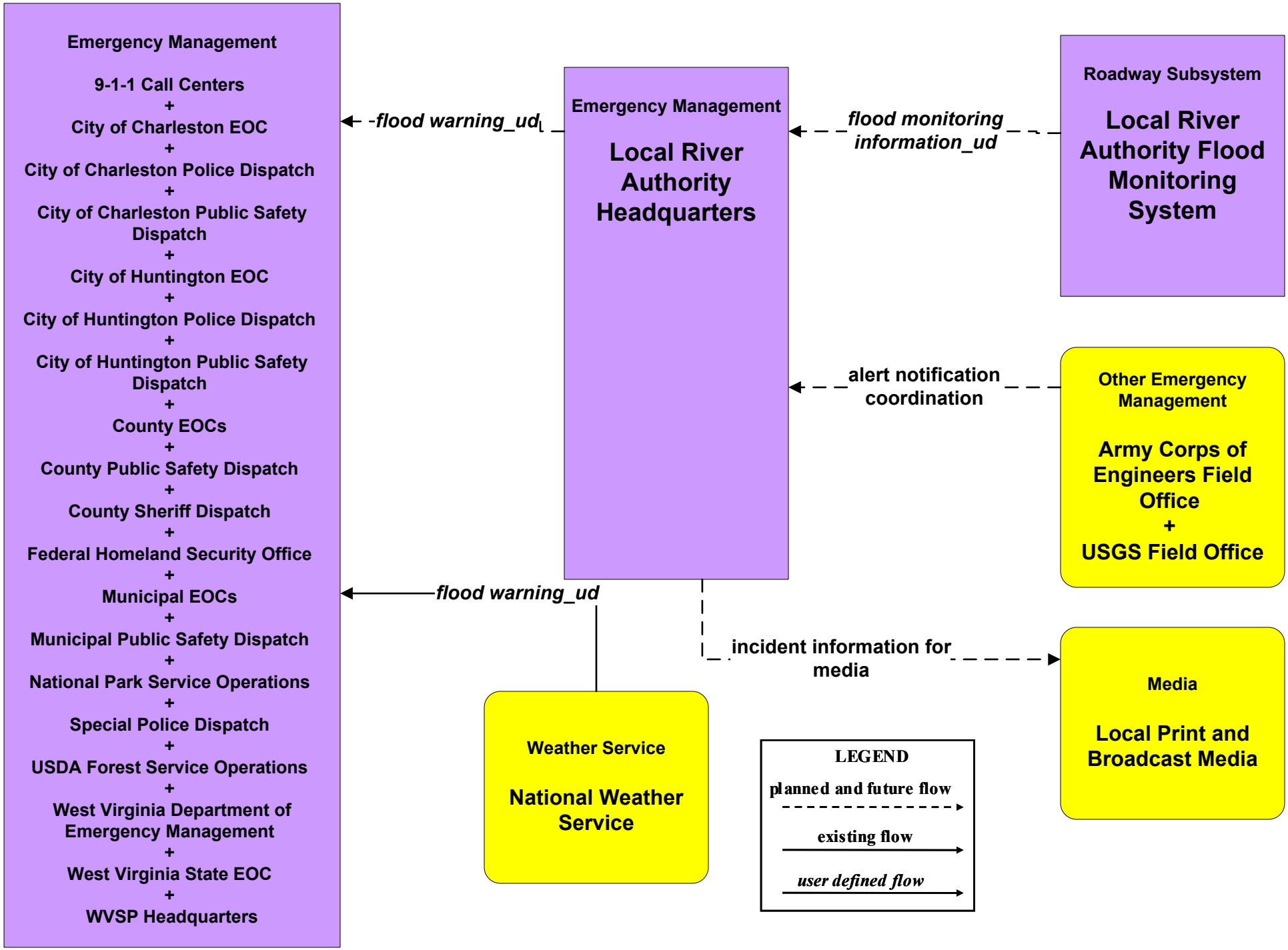
LEGEND

planned and future flow

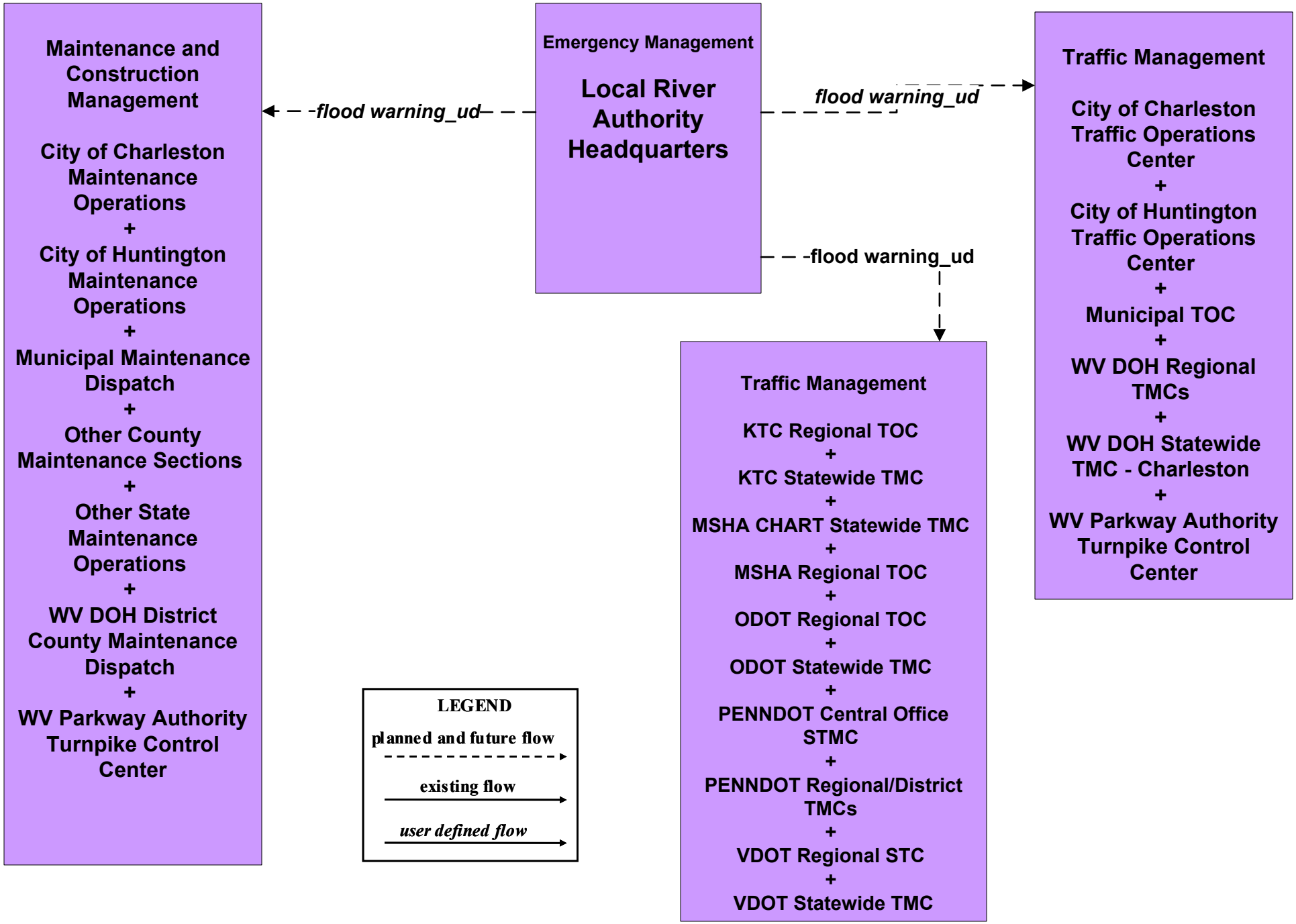
existing flow

user defined flow

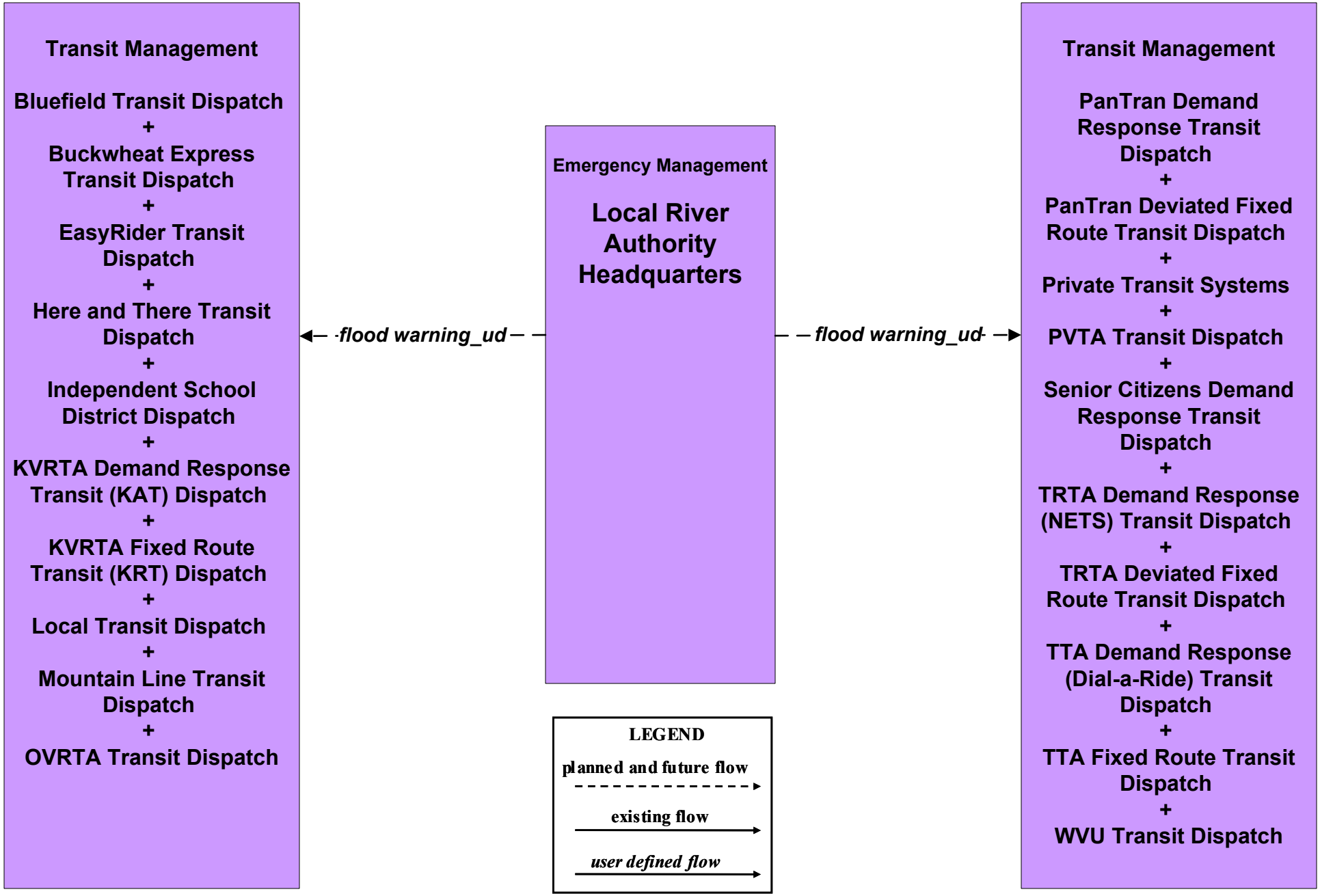
ATMS08 - Incident Management
Flood Monitoring – Local River Authority (1 of 3)



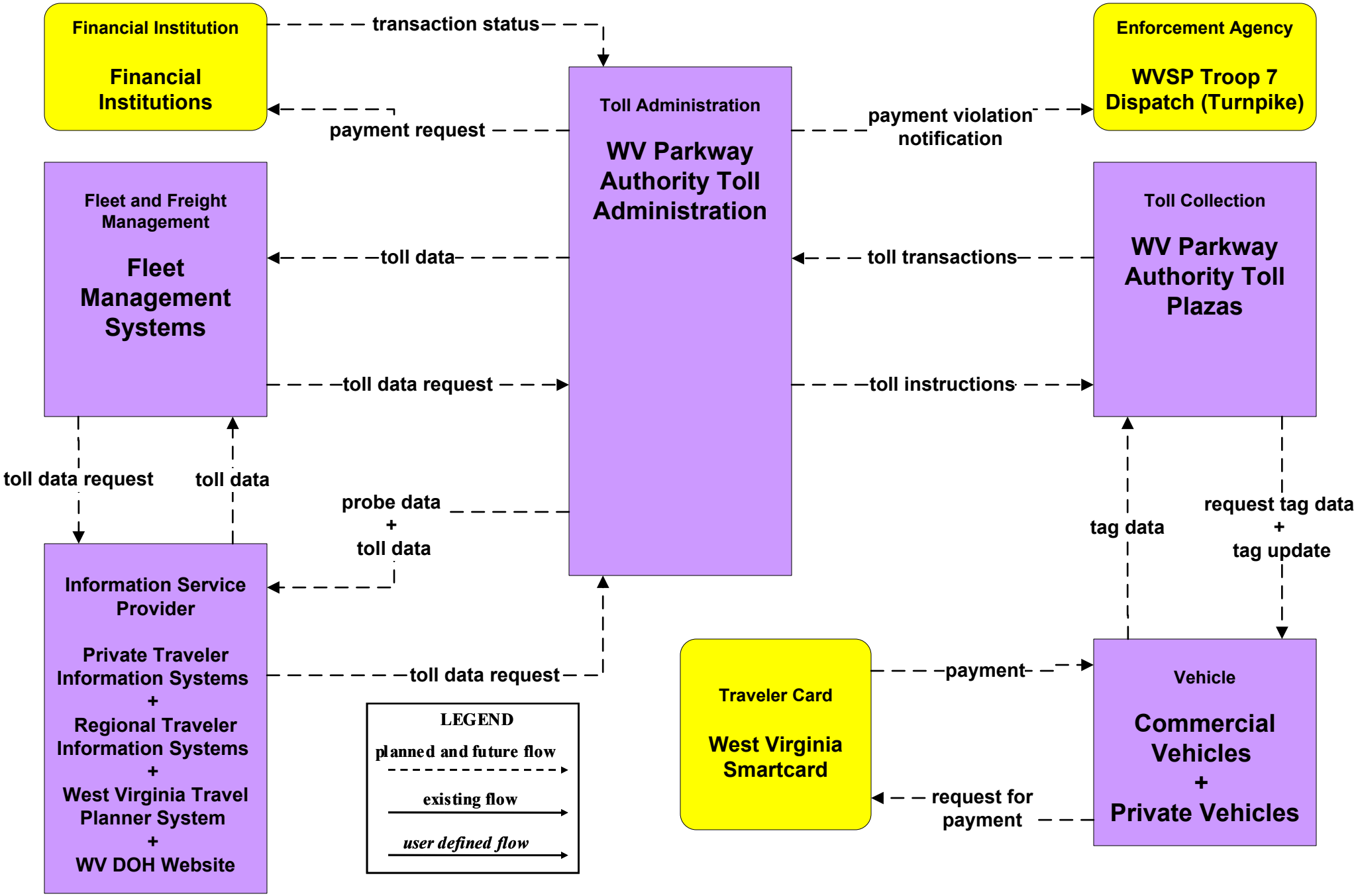
ATMS08 - Incident Management
Flood Monitoring – Local River Authority (2 of 3)



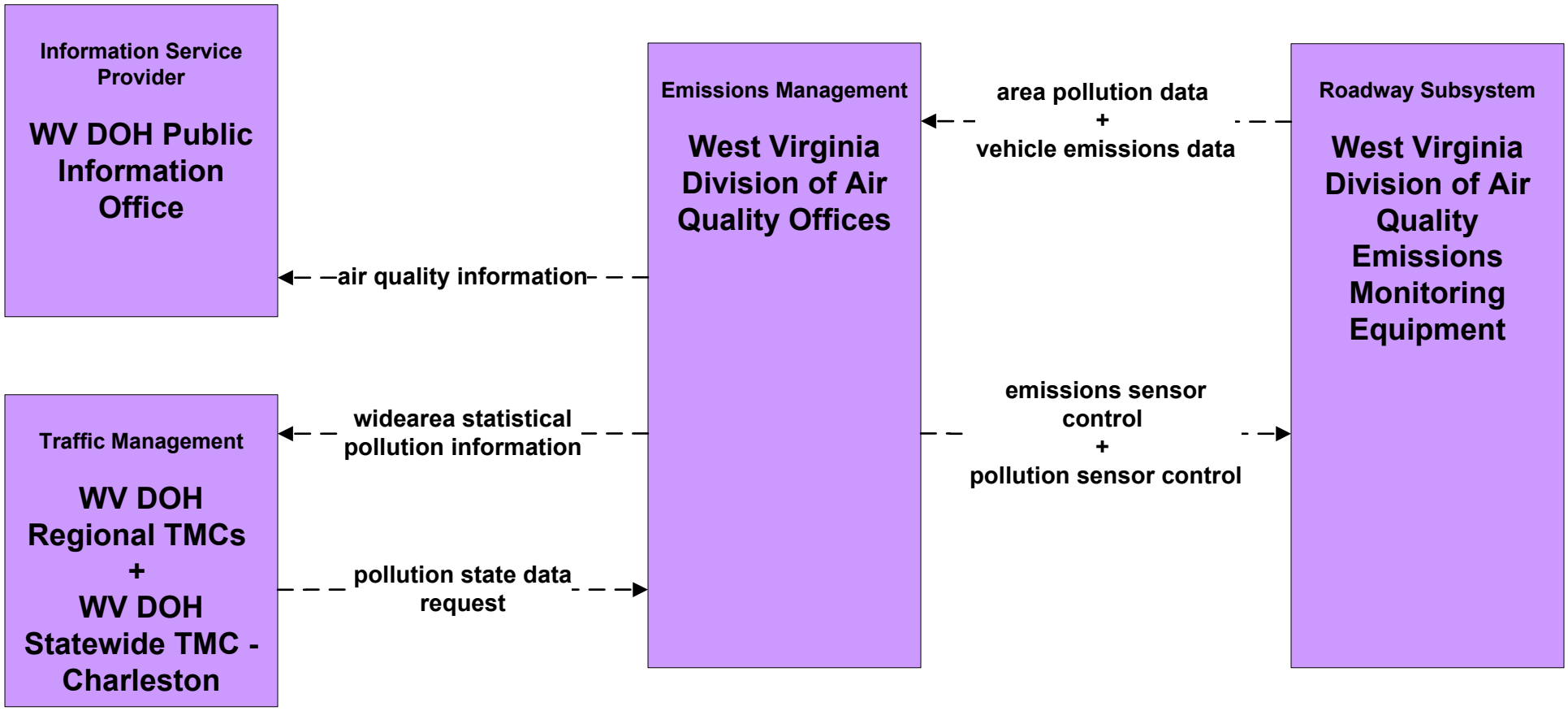
ATMS08 - Incident Management
Flood Monitoring – Local River Authority (3 of 3)

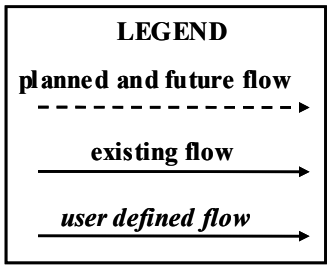


ATMS10 - Electronic Toll Collection
WV Parkway Authority

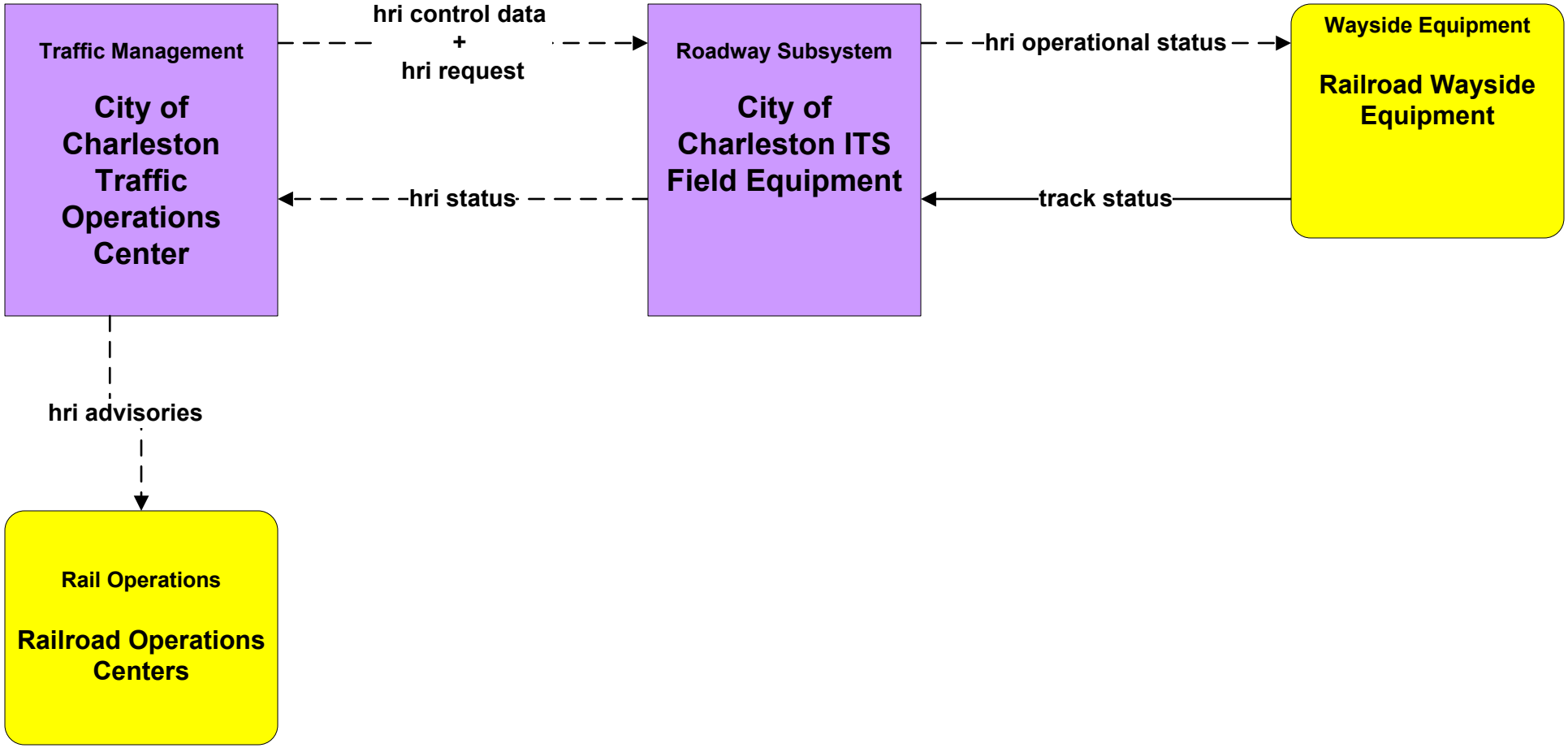


ATMS11 - Emissions Monitoring and Management
WV Division of Air Quality





ATMS13 - Standard Railroad Crossing
City of Charleston Traffic Operations Center



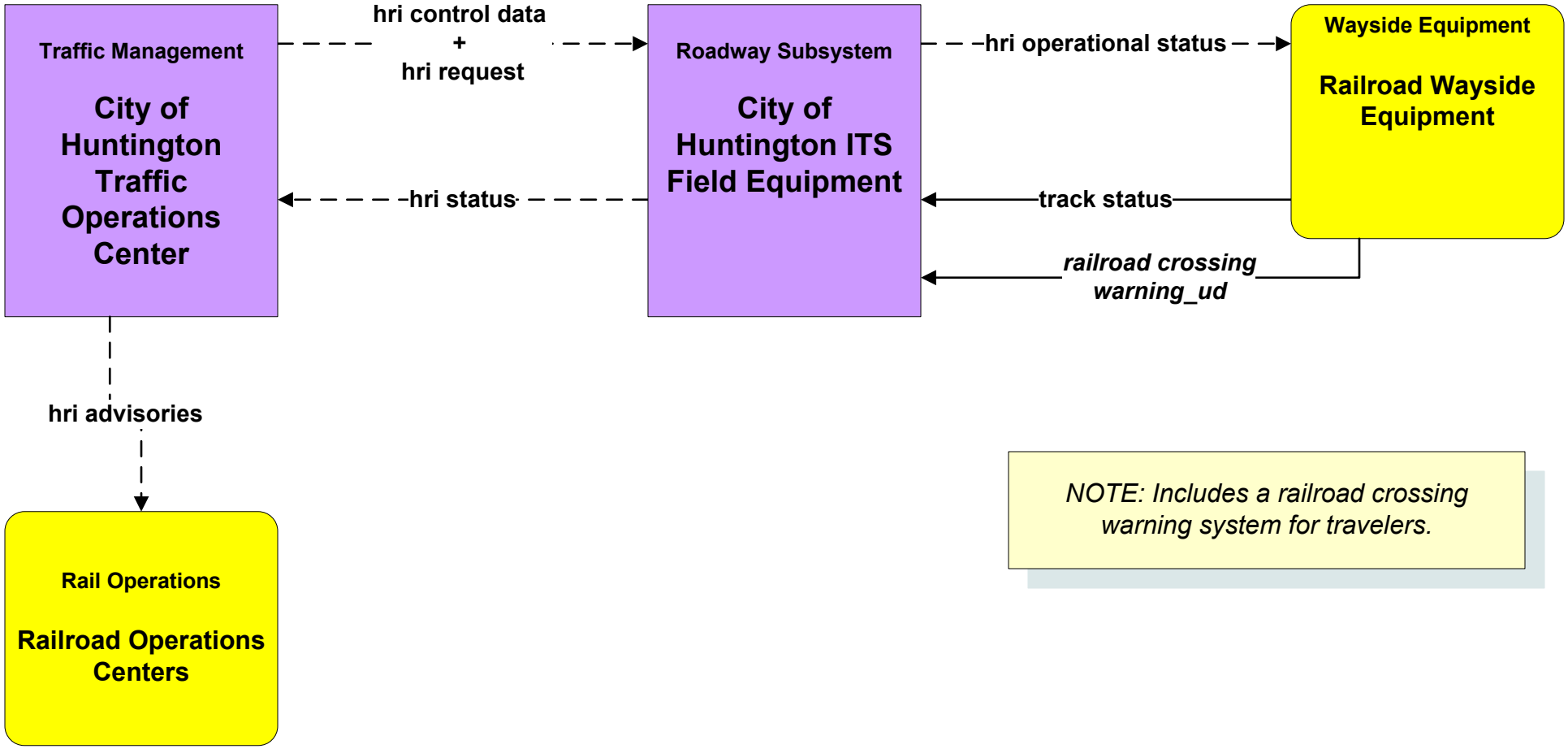
LEGEND

planned and future flow

existing flow

user defined flow

ATMS13 - Standard Railroad Crossing
City of Huntington Traffic Operations Center



NOTE: Includes a railroad crossing warning system for travelers.

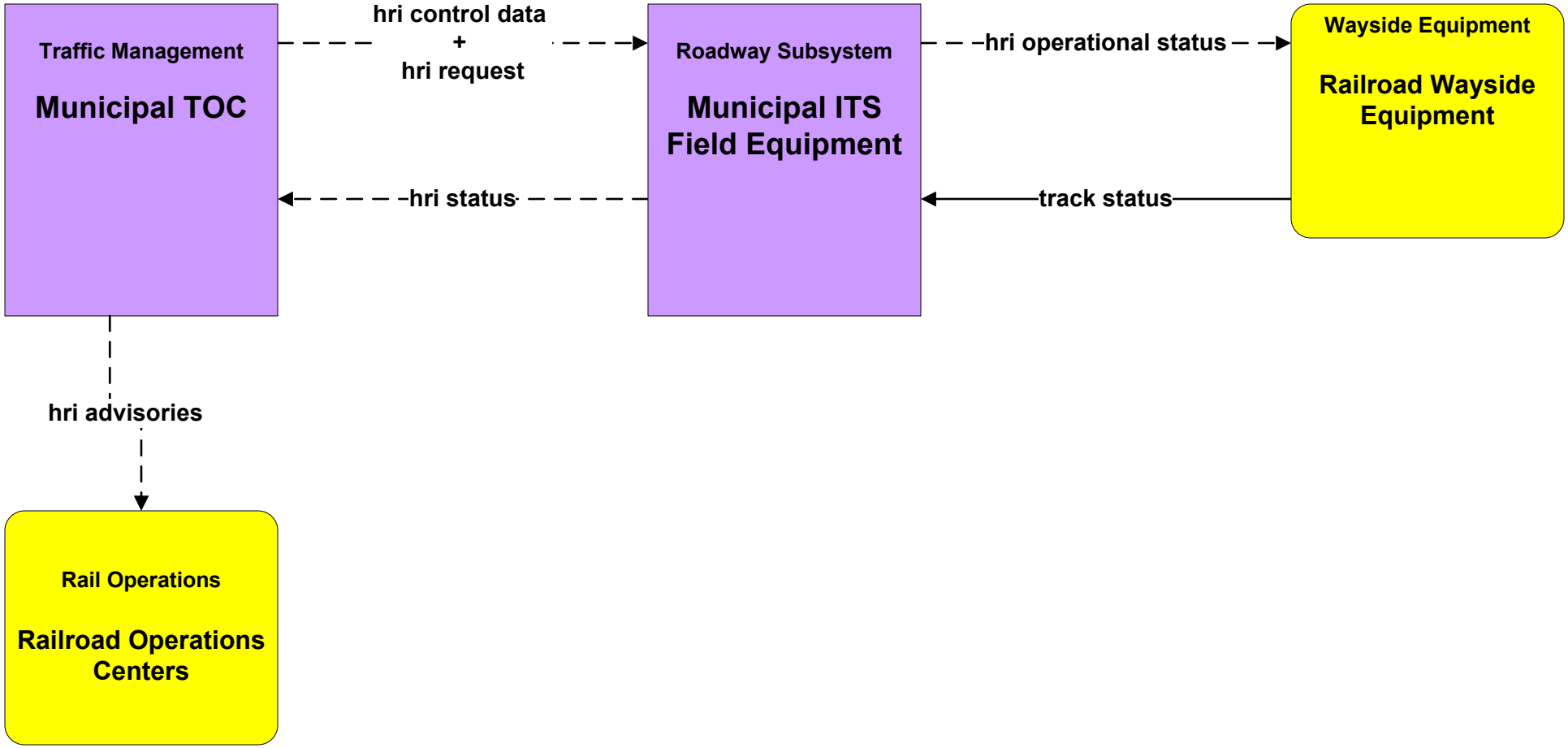
LEGEND

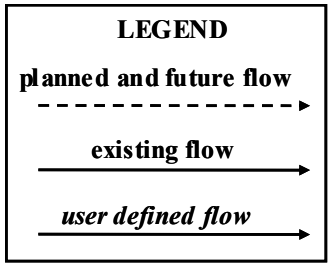
planned and future flow

existing flow

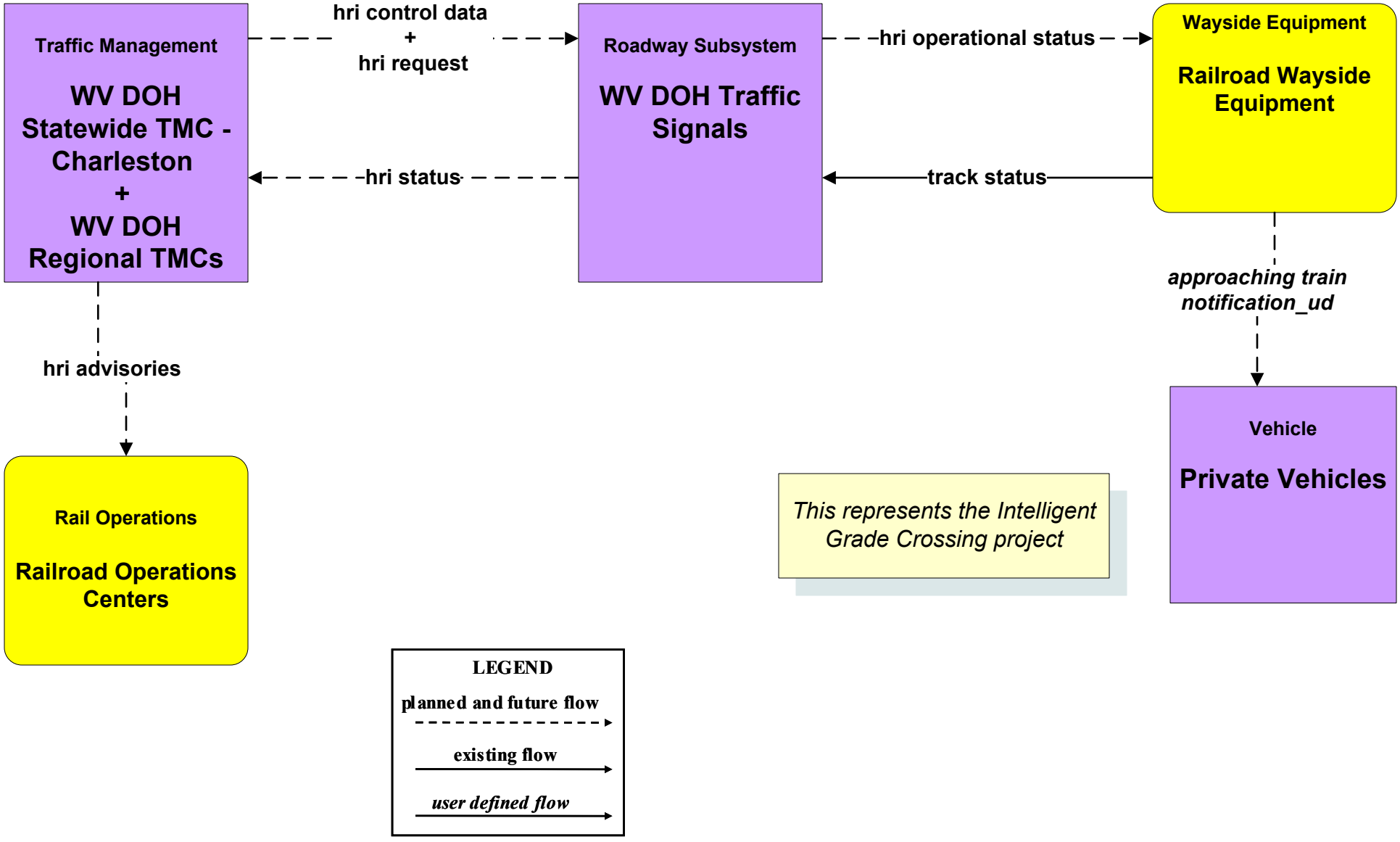
user defined flow

ATMS13 - Standard Railroad Crossing
Municipal TOC

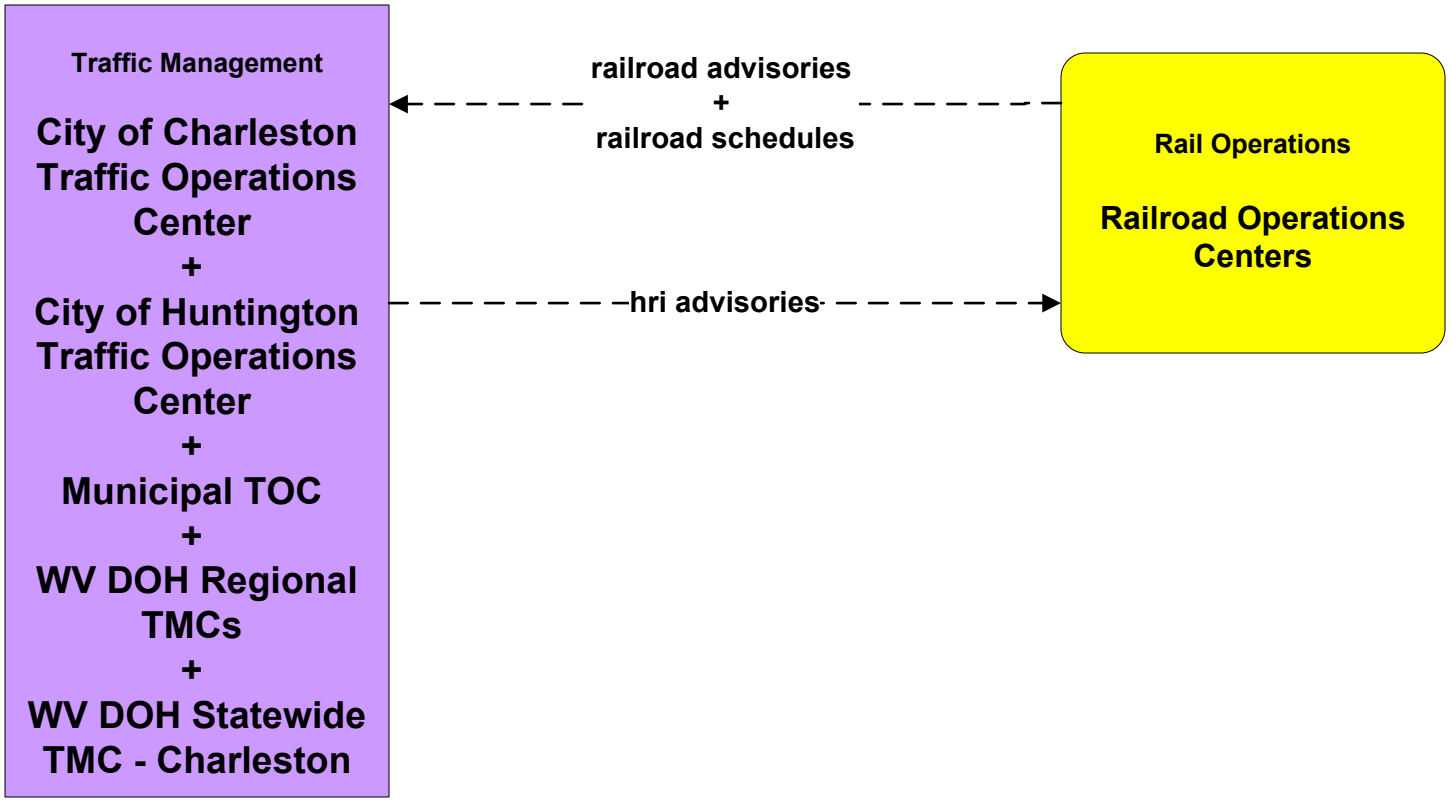


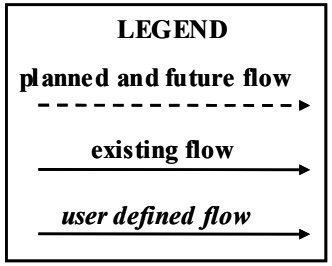


ATMS13 - Standard Railroad Crossing
WV DOH

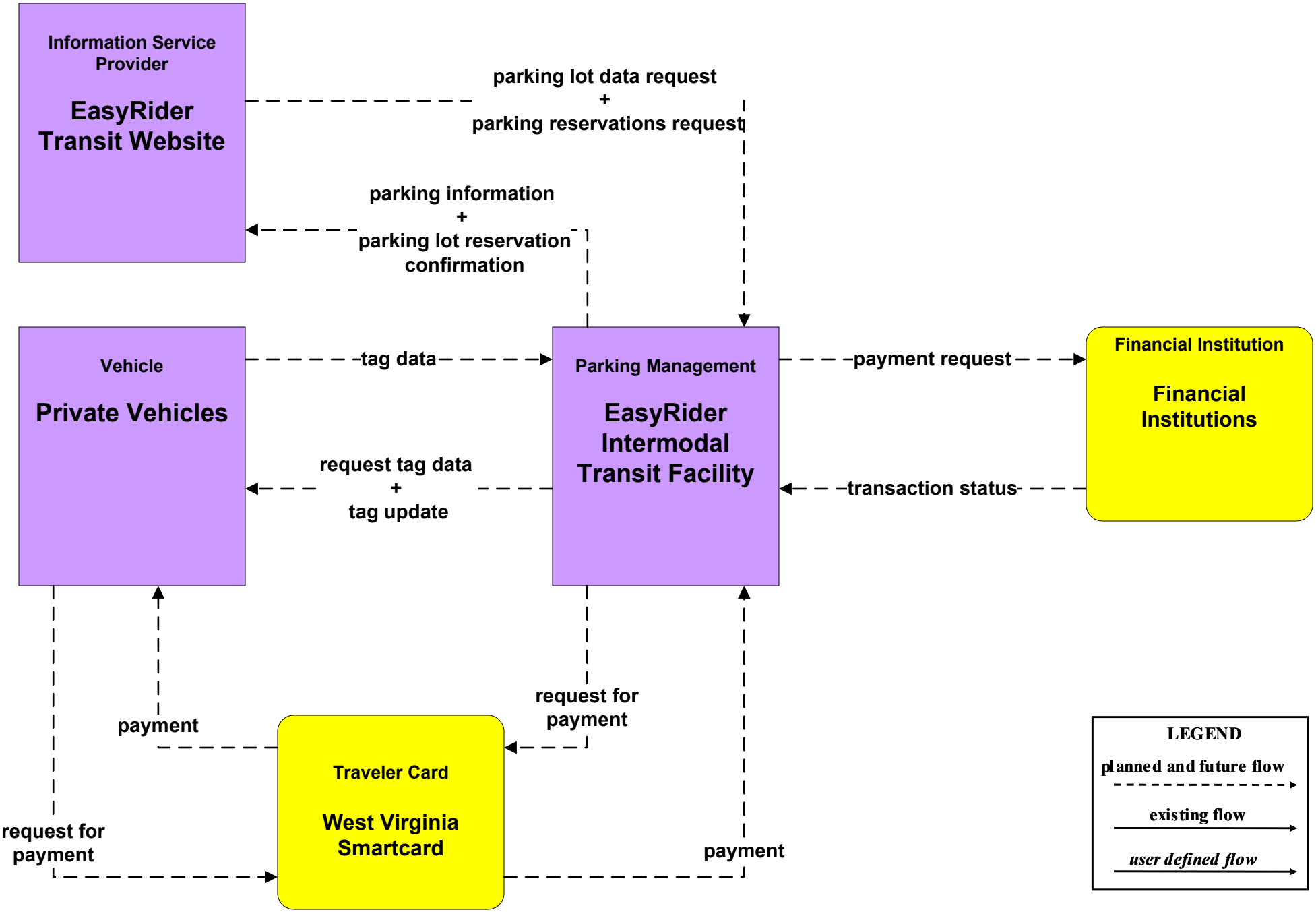
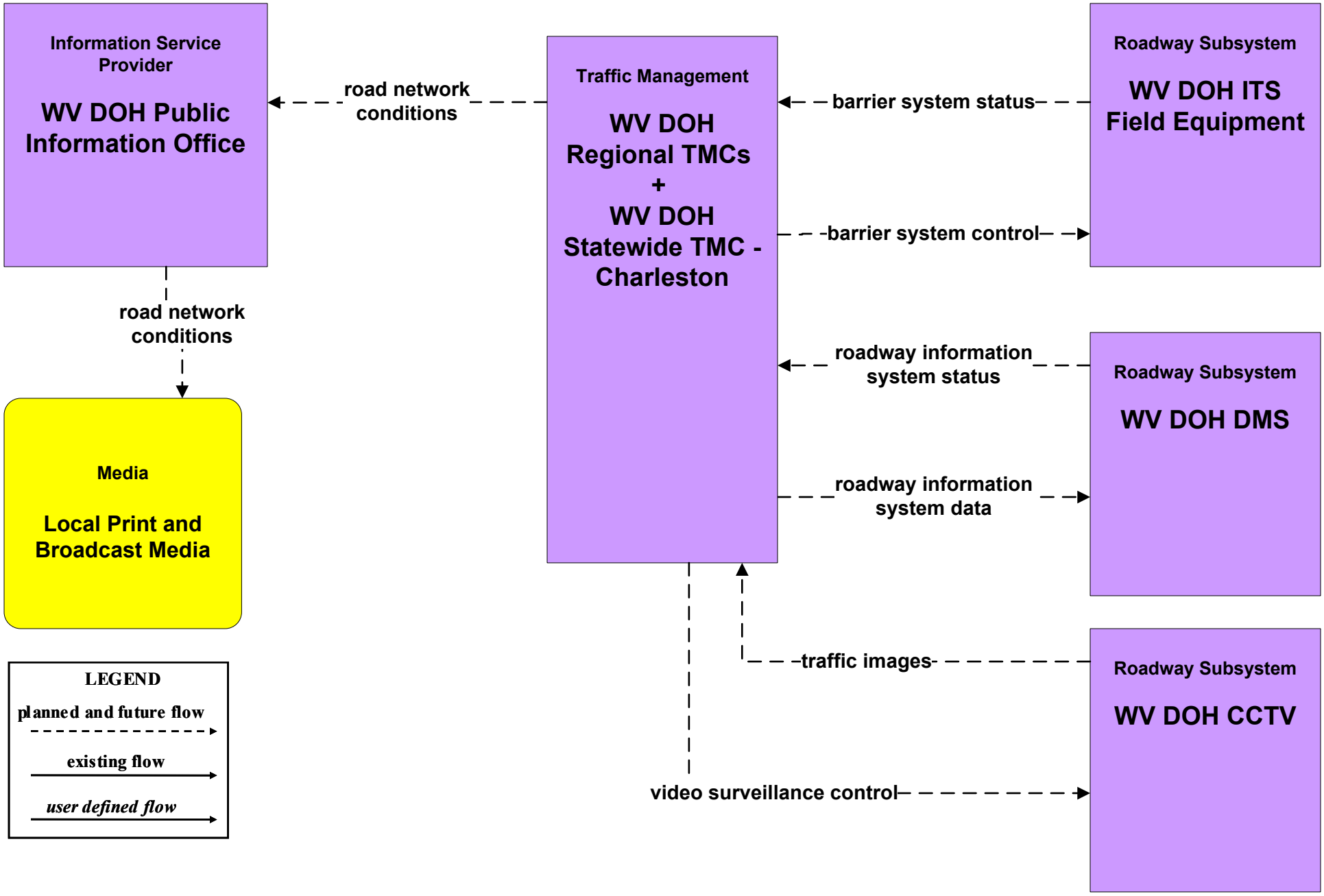


ATMS15 - Railroad Operations Coordination
Traffic Management Centers





ATMS16 - Parking Facility Management
EasyRider



ATMS21 - Roadway Closure Management
WV DOH TMCs