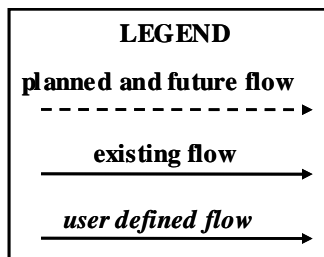
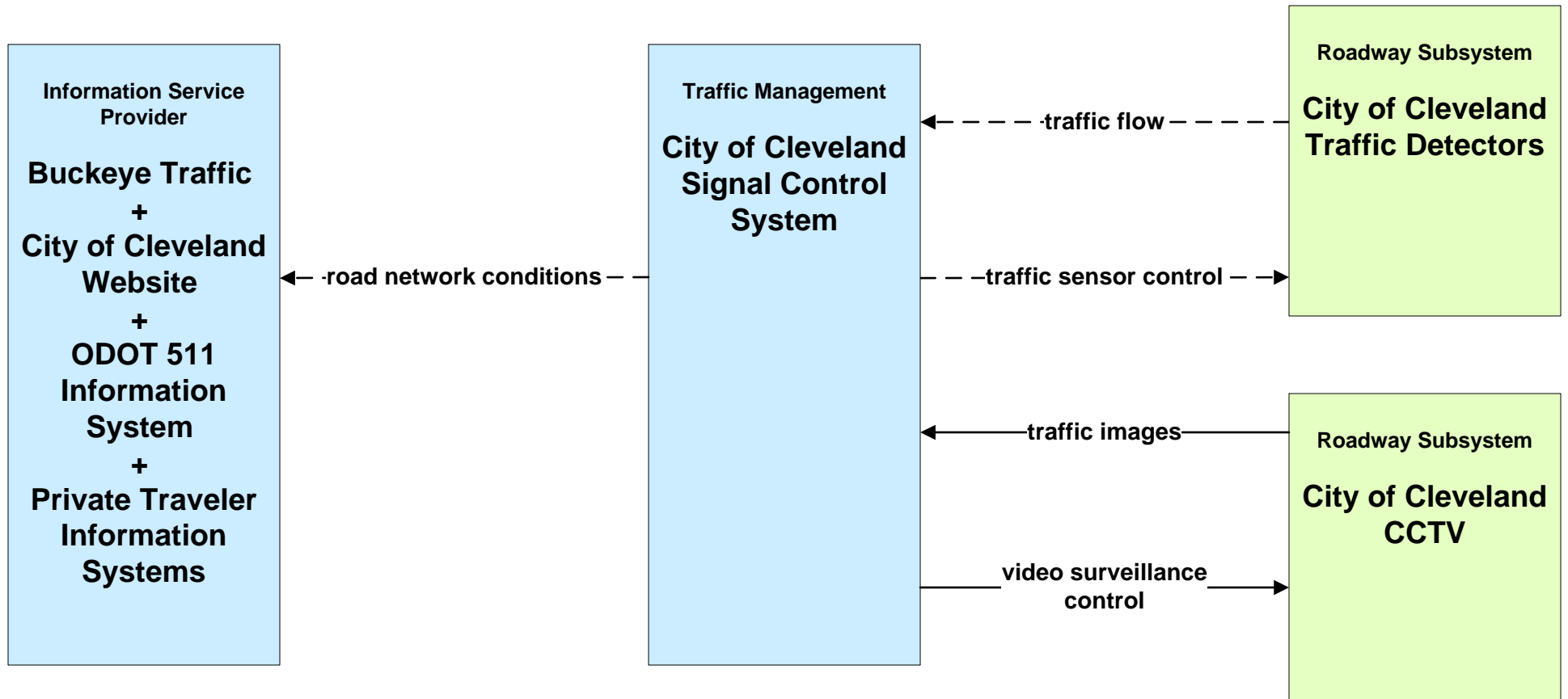


NOACA Regional ITS Architecture

Customized Market Package Diagrams

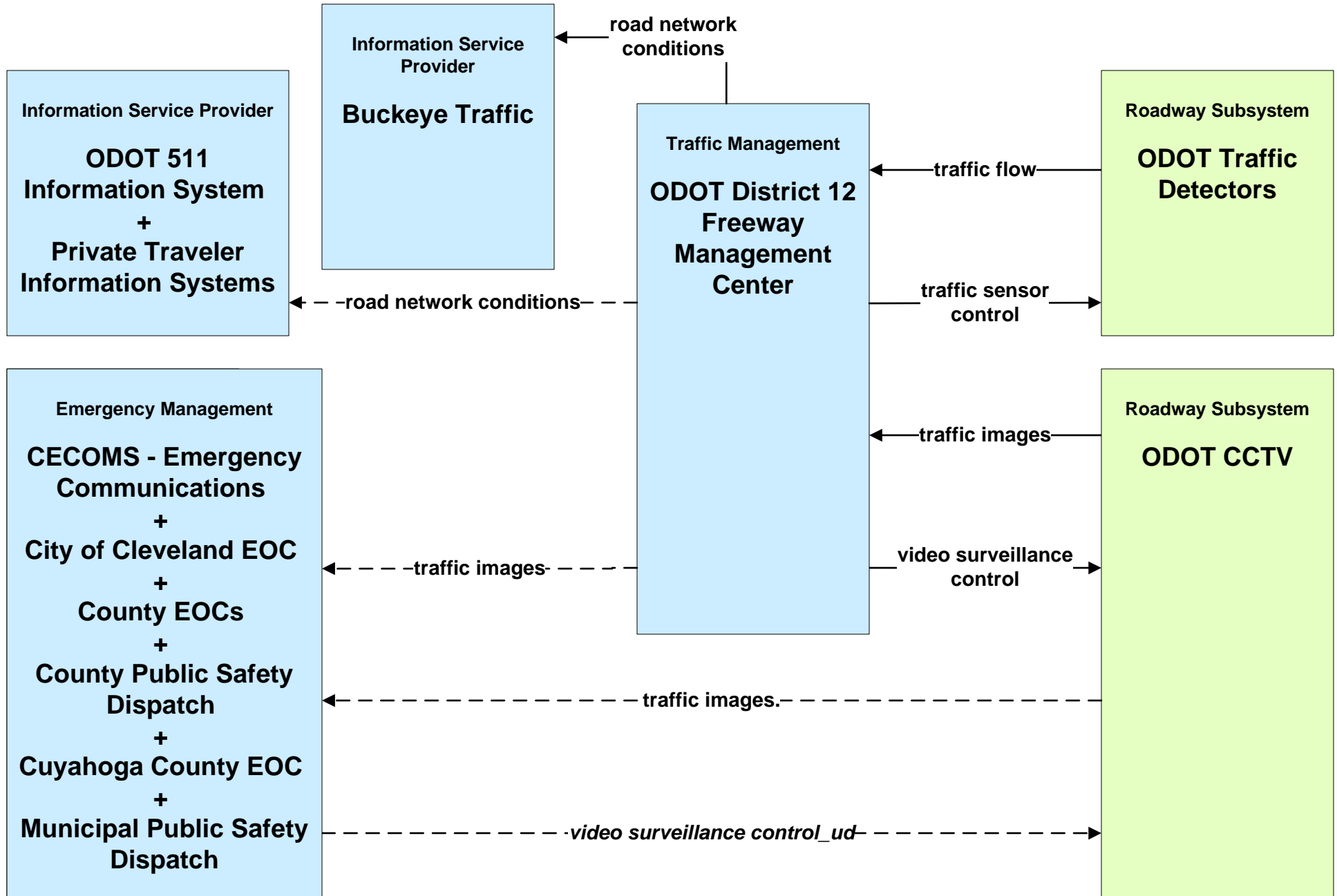
**Advanced Traffic Management Systems
(ATMS)**

ATMS01 - Network Surveillance City of Cleveland



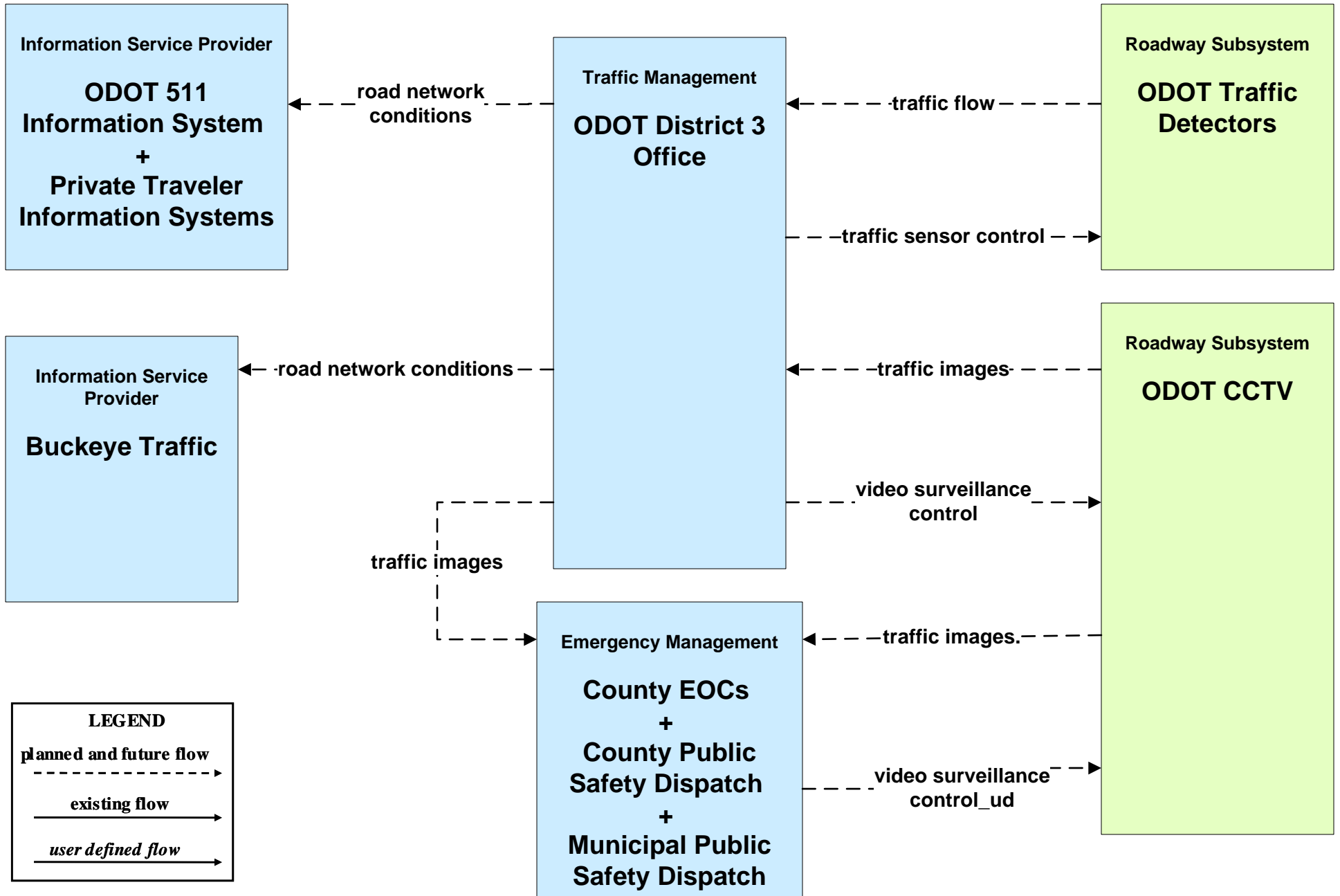
ATMS01 - Network Surveillance

ODOT District 12

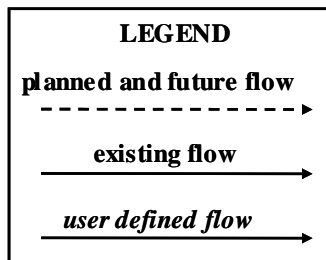
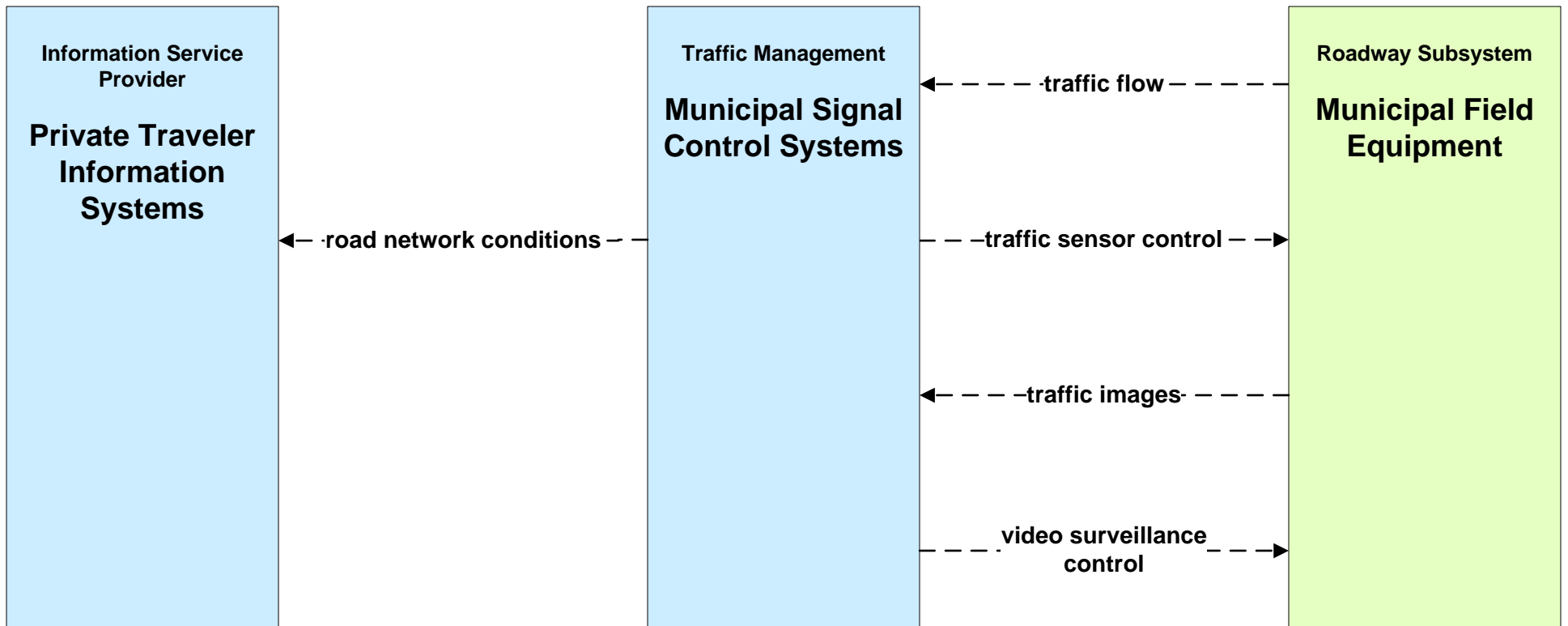


ATMS01 - Network Surveillance

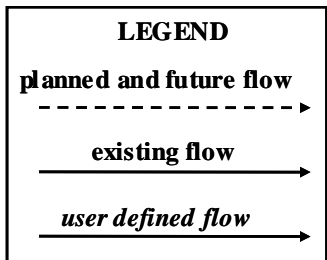
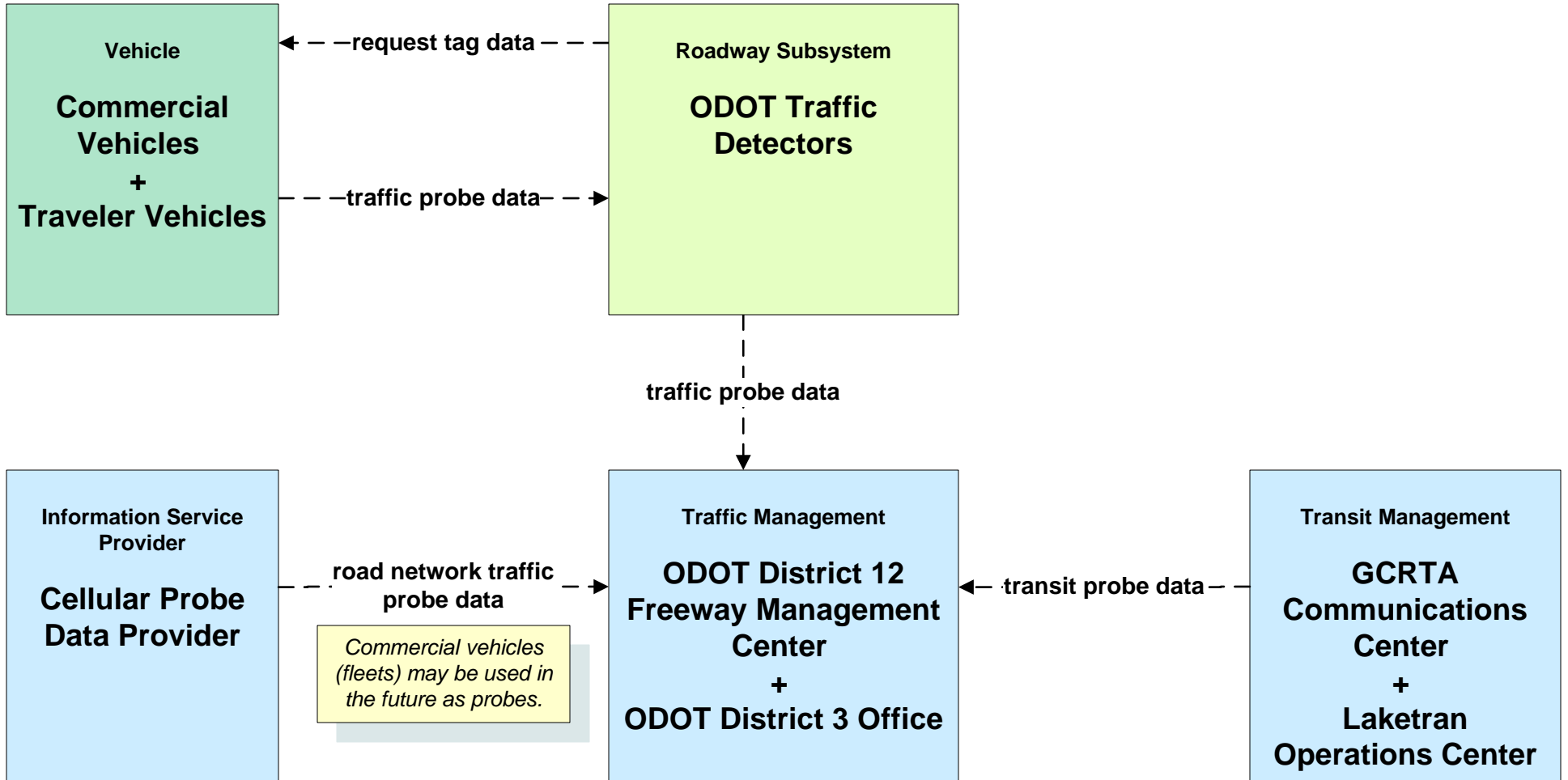
ODOT District 3



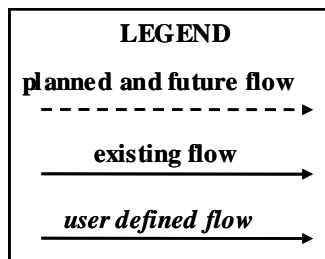
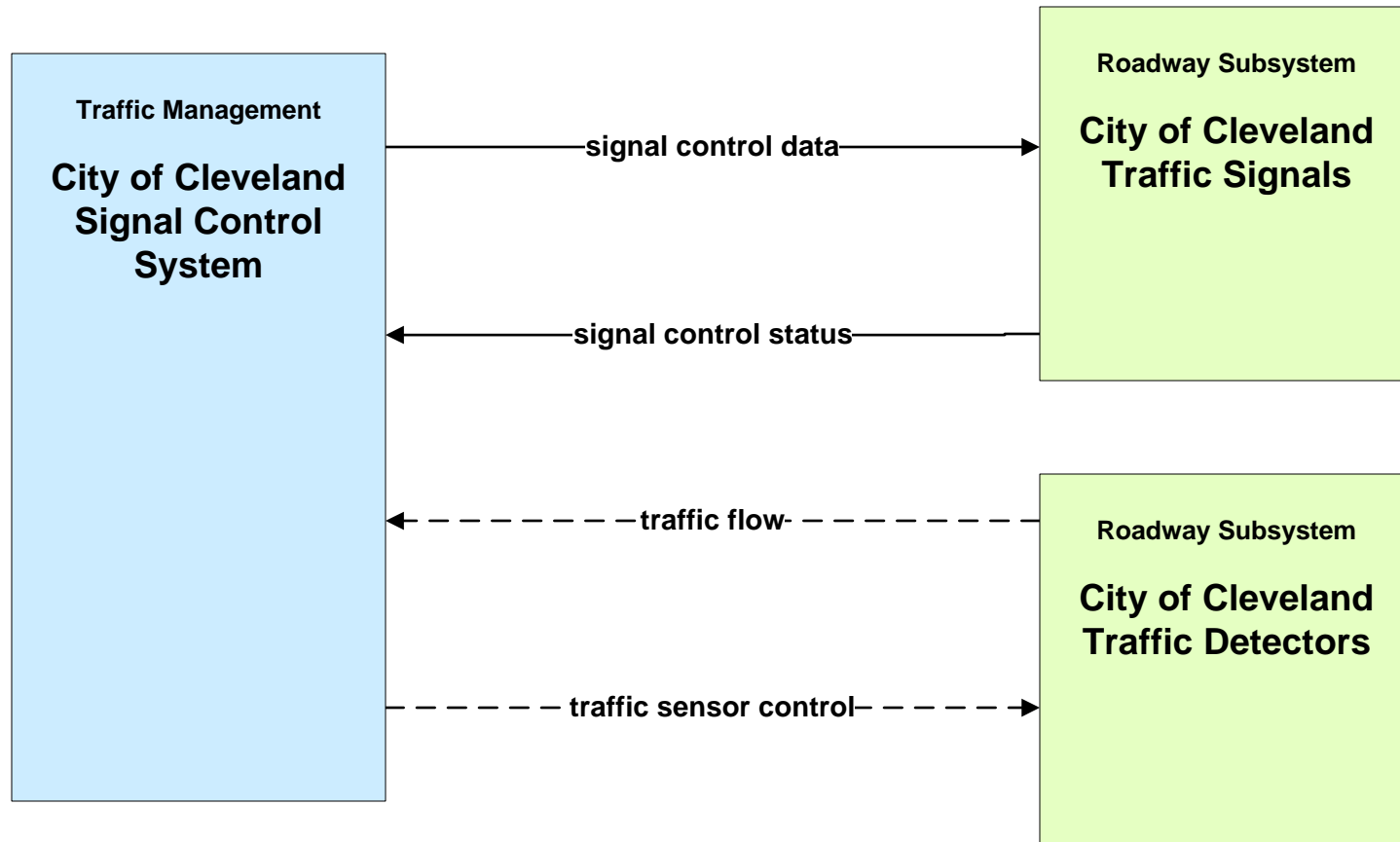
ATMS01 - Network Surveillance Municipal Signal Control Systems



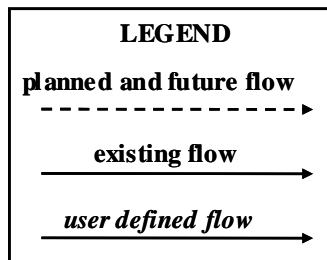
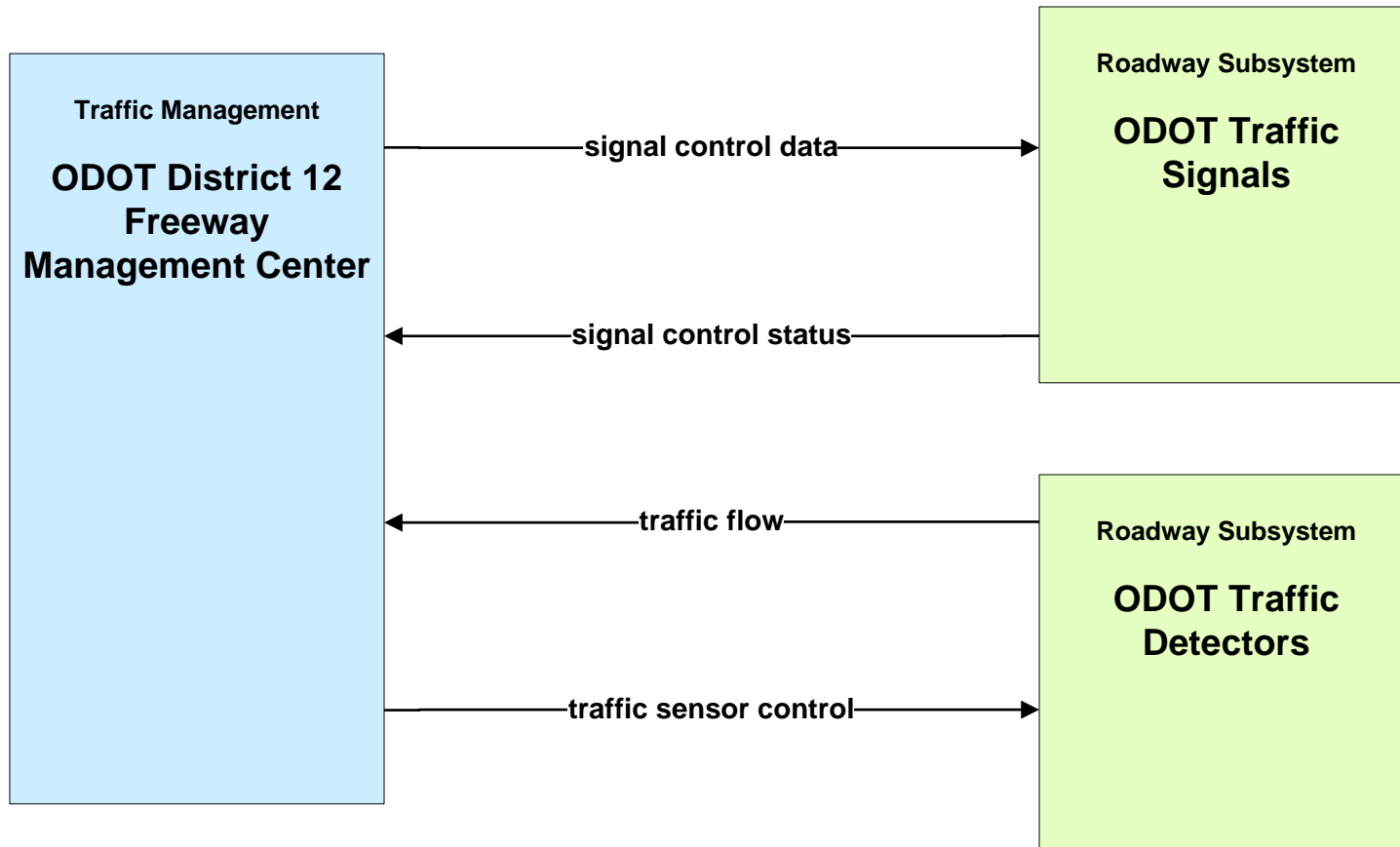
ATMS02 - Probe Surveillance ODOT Probe System



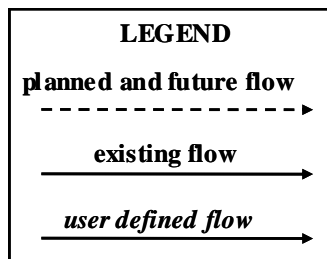
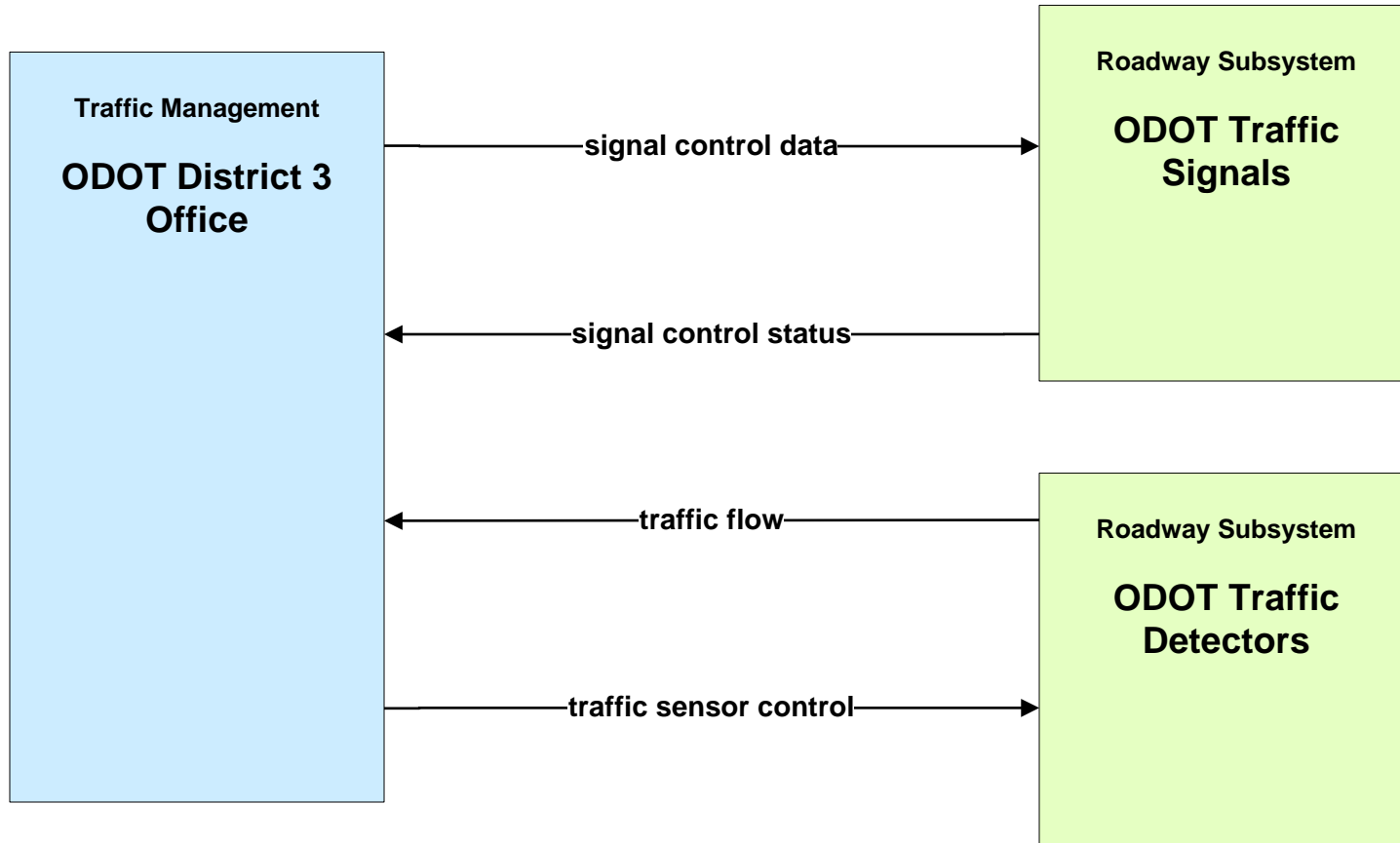
ATMS03 - Surface Street Control City of Cleveland



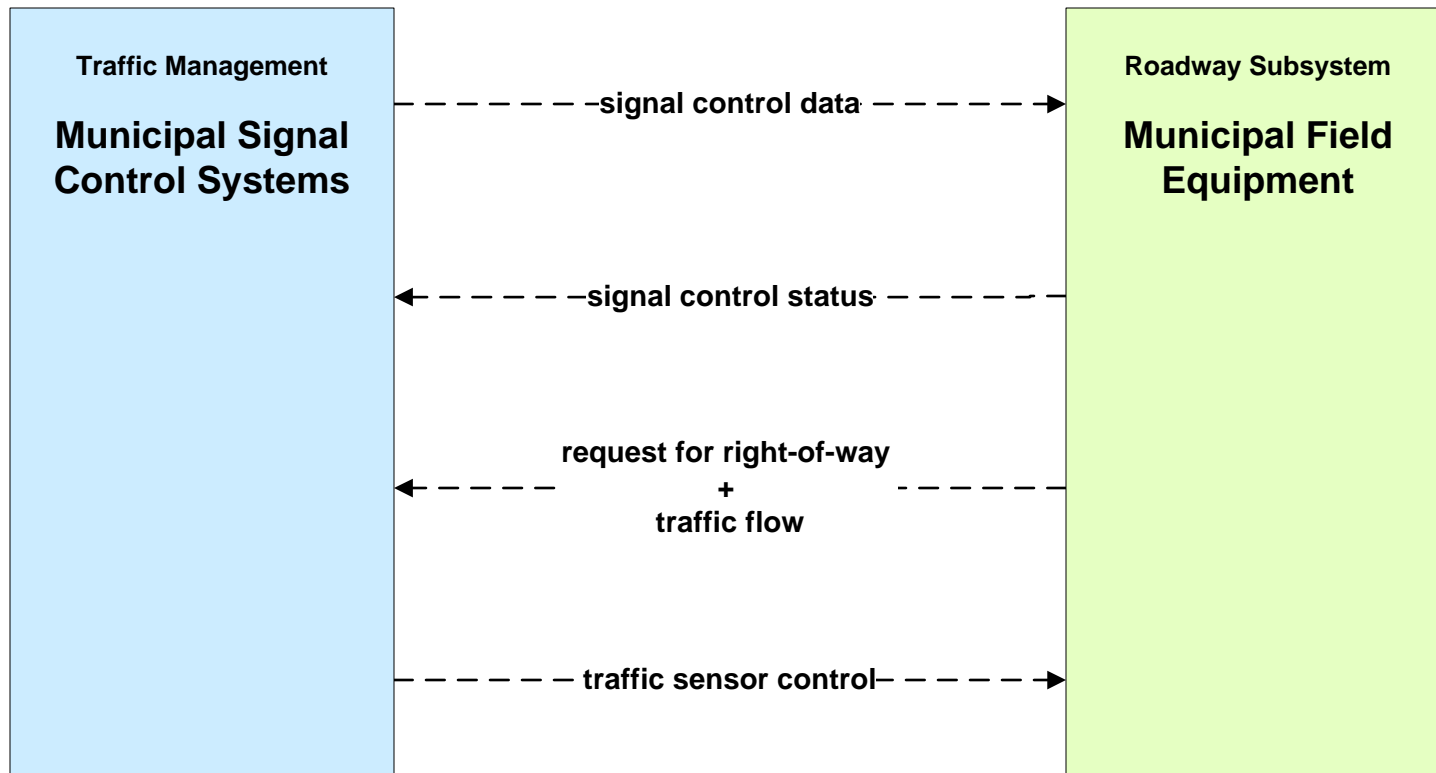
**ATMS03 - Surface Street Control
ODOT District 12**



ATMS03 - Surface Street Control ODOT District 3



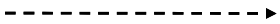
ATMS03 - Surface Street Control Municipal Signal Control Systems



Some are existing.

LEGEND

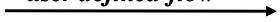
planned and future flow



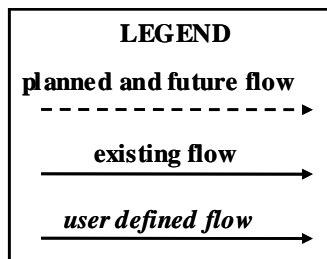
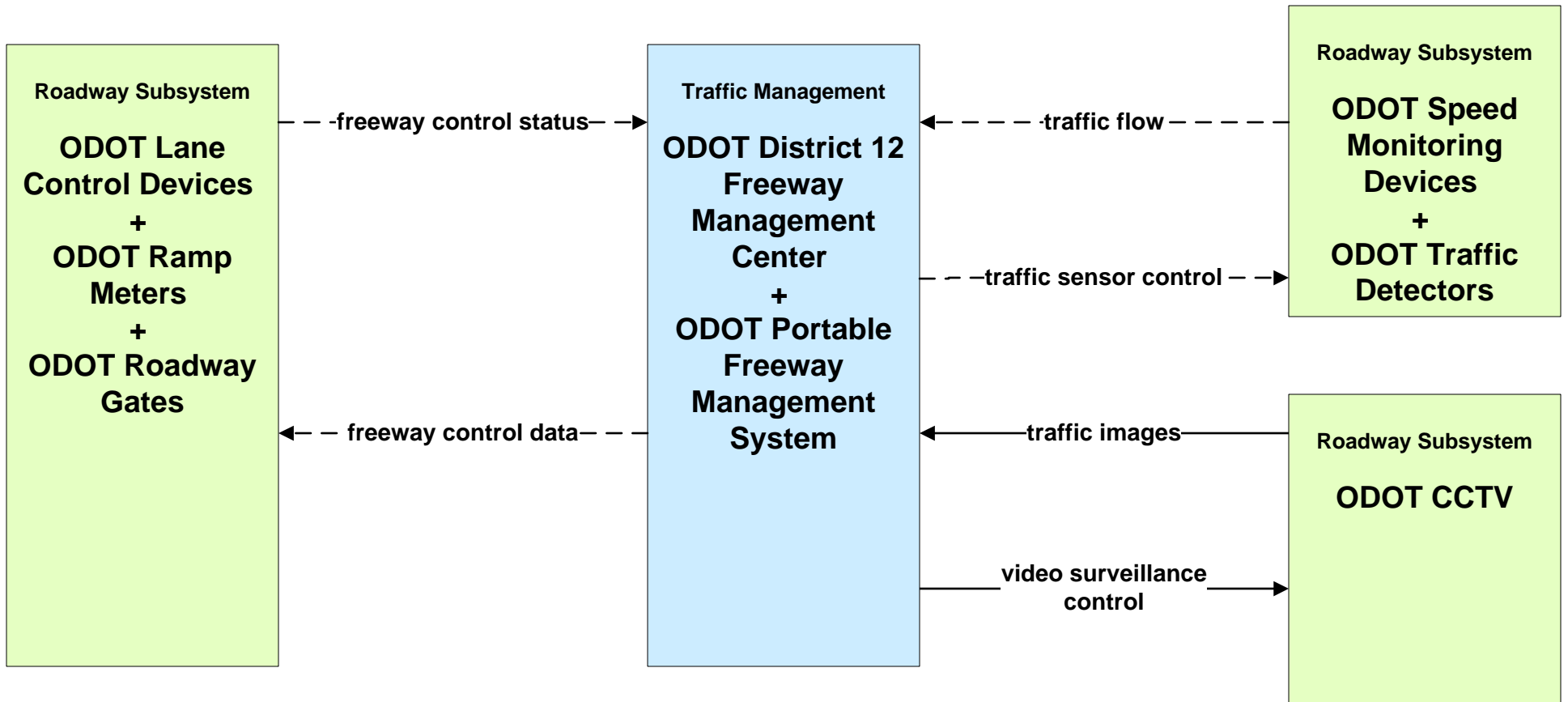
existing flow



user defined flow

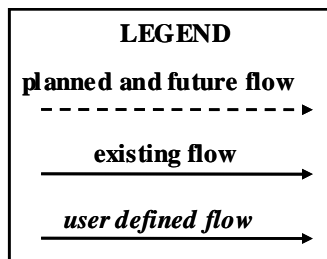
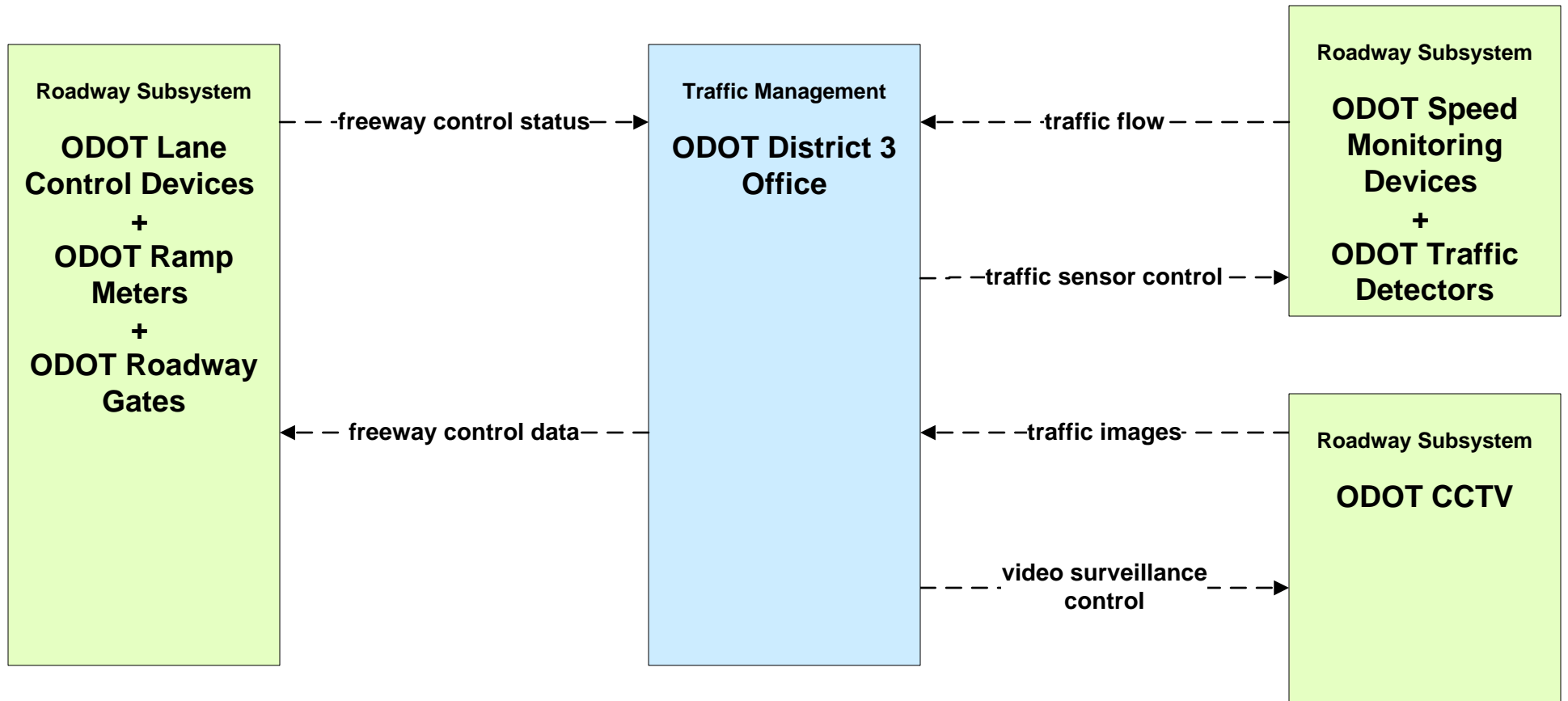


**ATMS04 - Freeway Control
ODOT District 12**

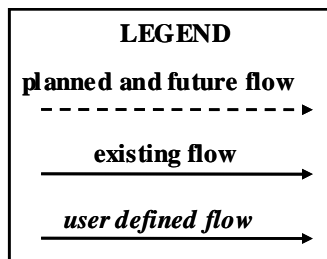
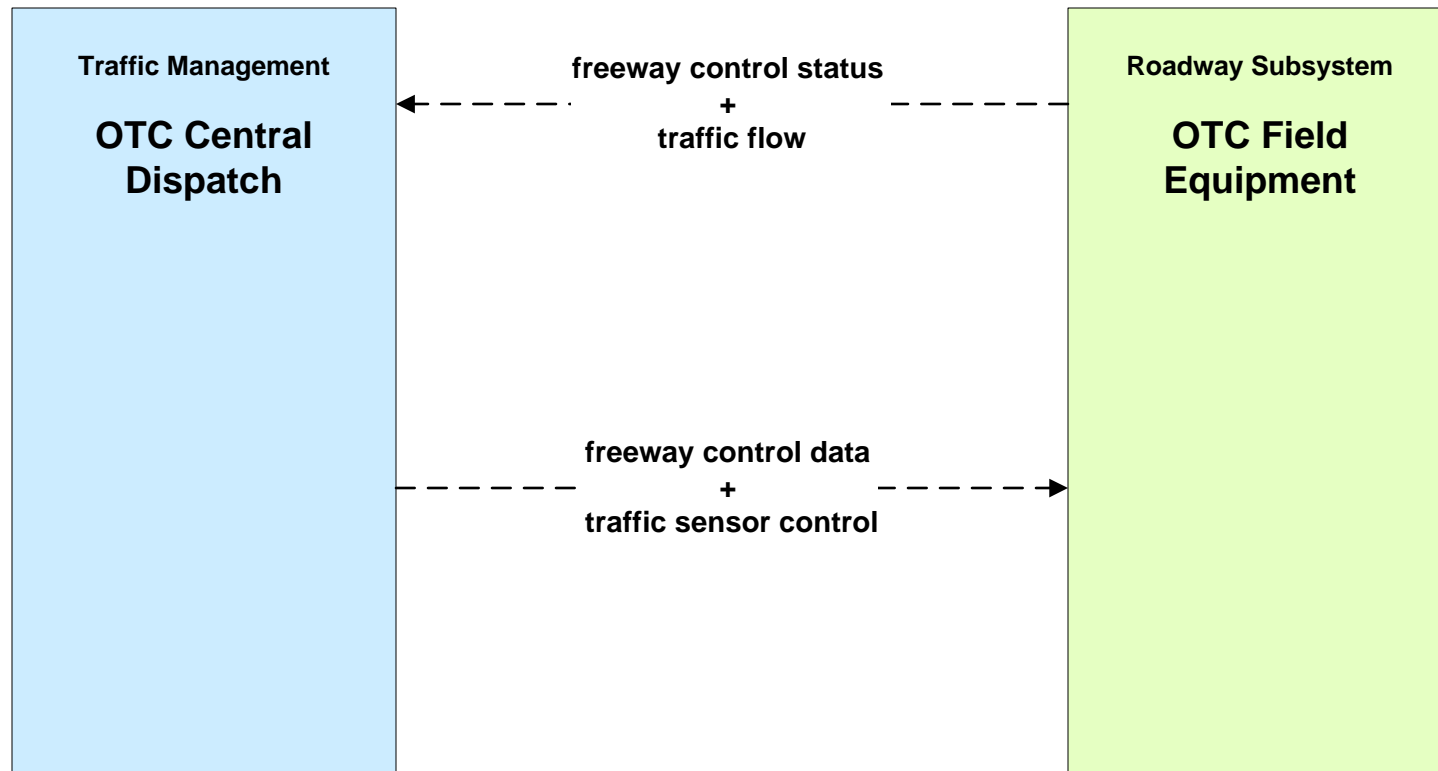


ATMS04 - Freeway Control

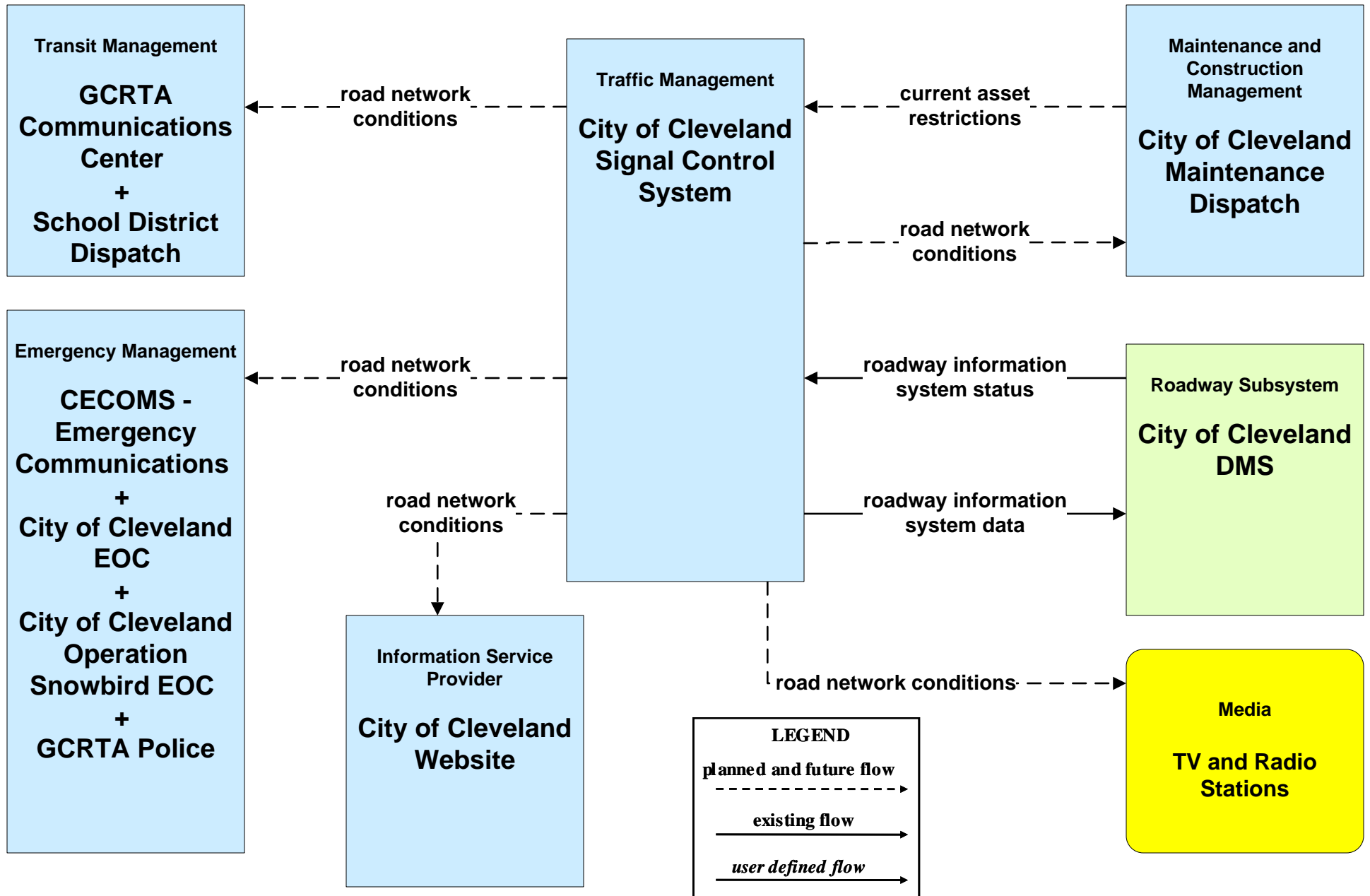
ODOT District 3



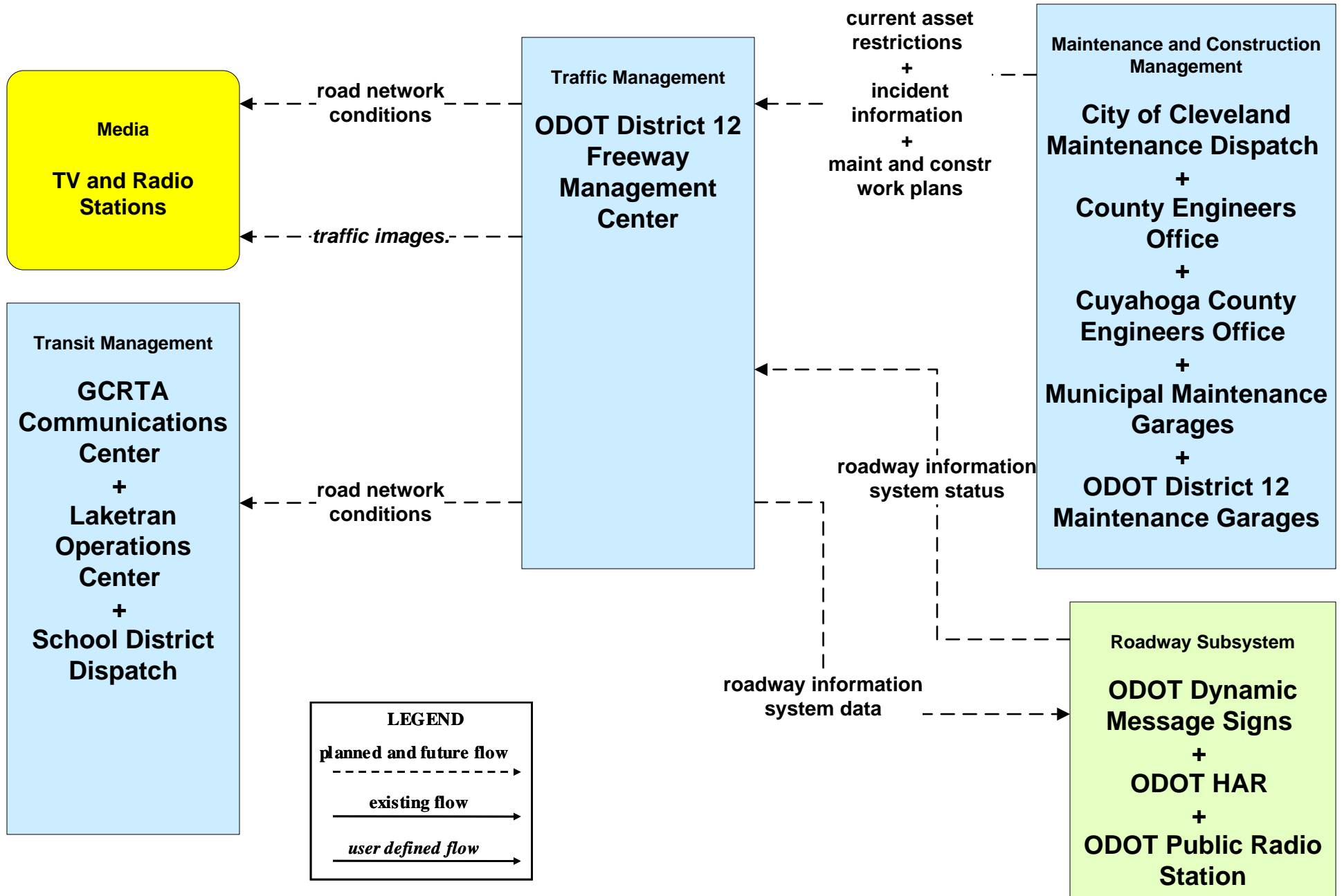
ATMS04 - Freeway Control Ohio Turnpike Commission



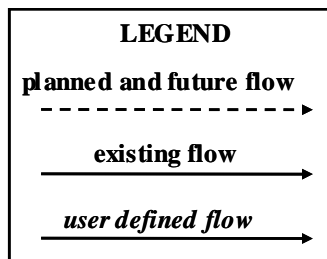
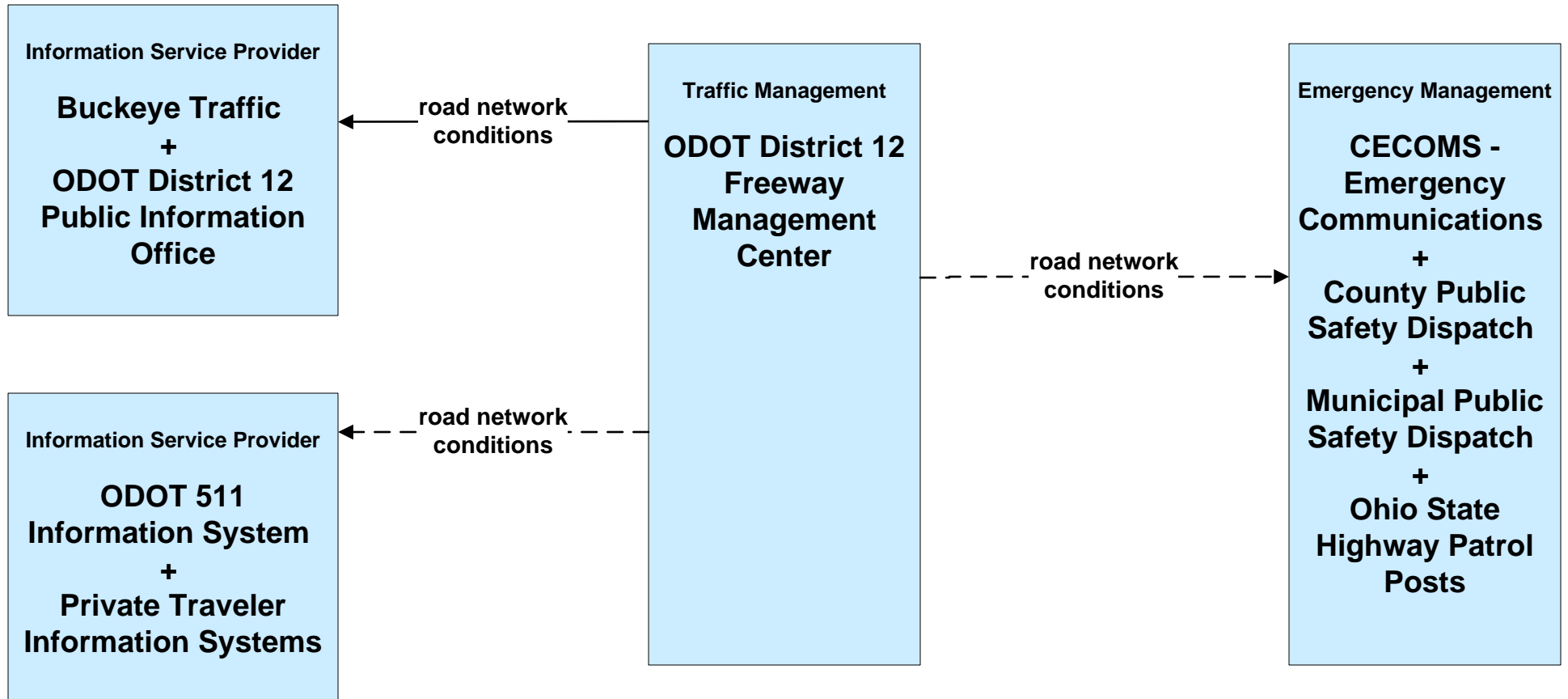
ATMS06 - Traffic Information Dissemination City of Cleveland



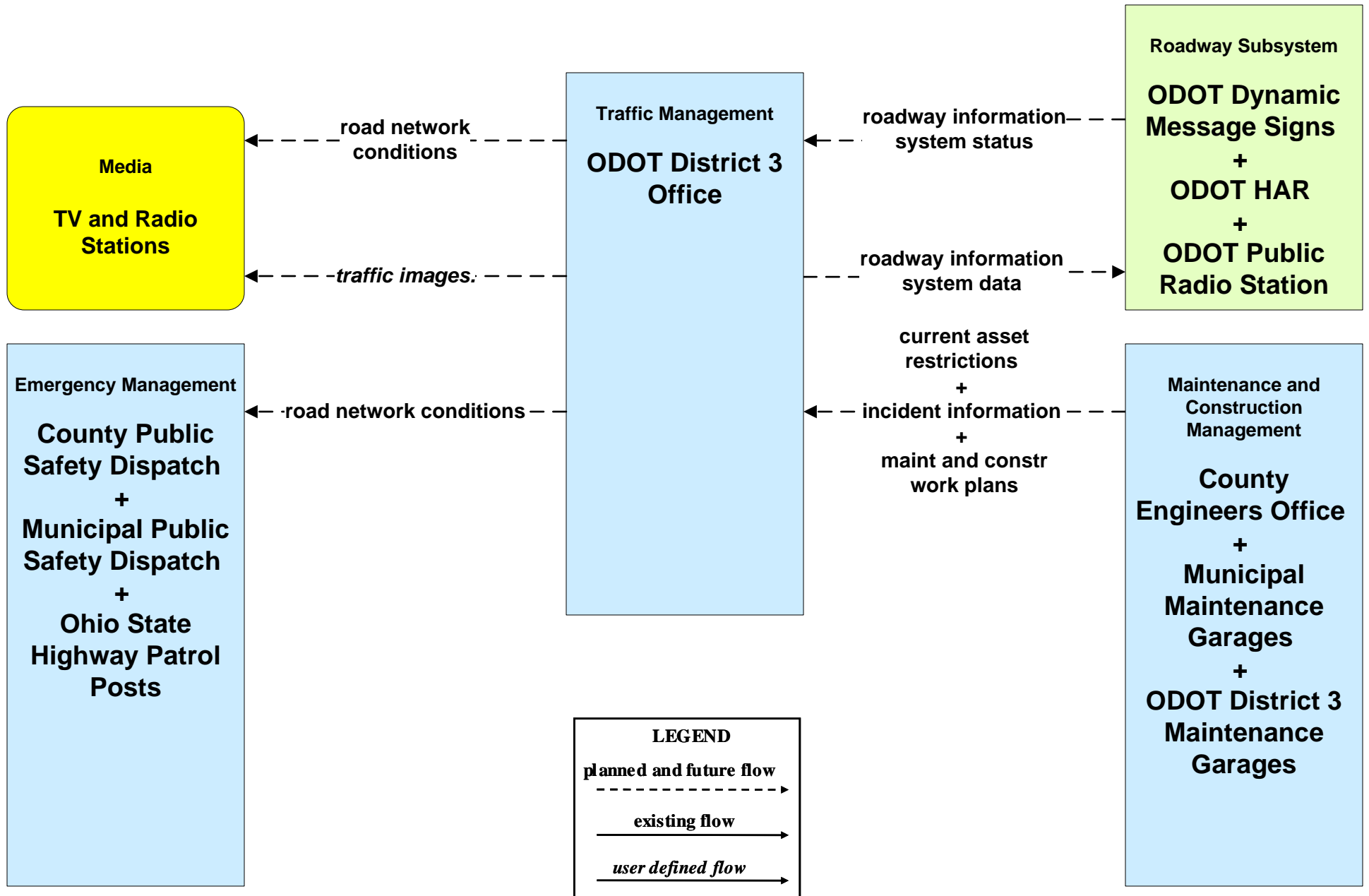
ATMS06 - Traffic Information Dissemination
ODOT District 12 (1 of 2)



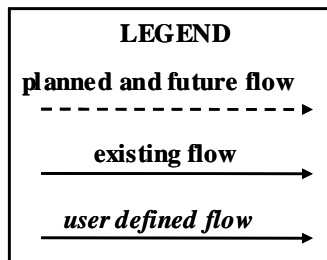
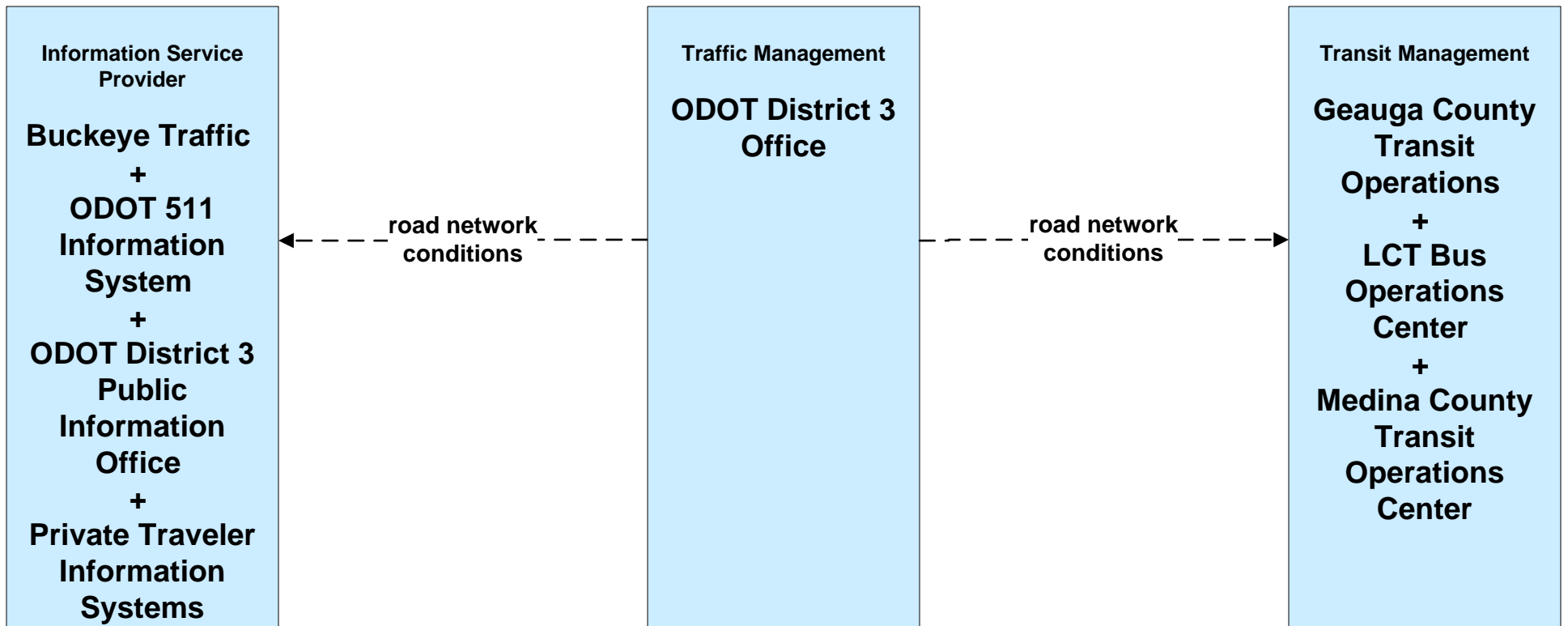
**ATMS06 - Traffic Information Dissemination
ODOT District 12 (2 of 2)**



**ATMS06 - Traffic Information Dissemination
ODOT District 3 (1 of 2)**

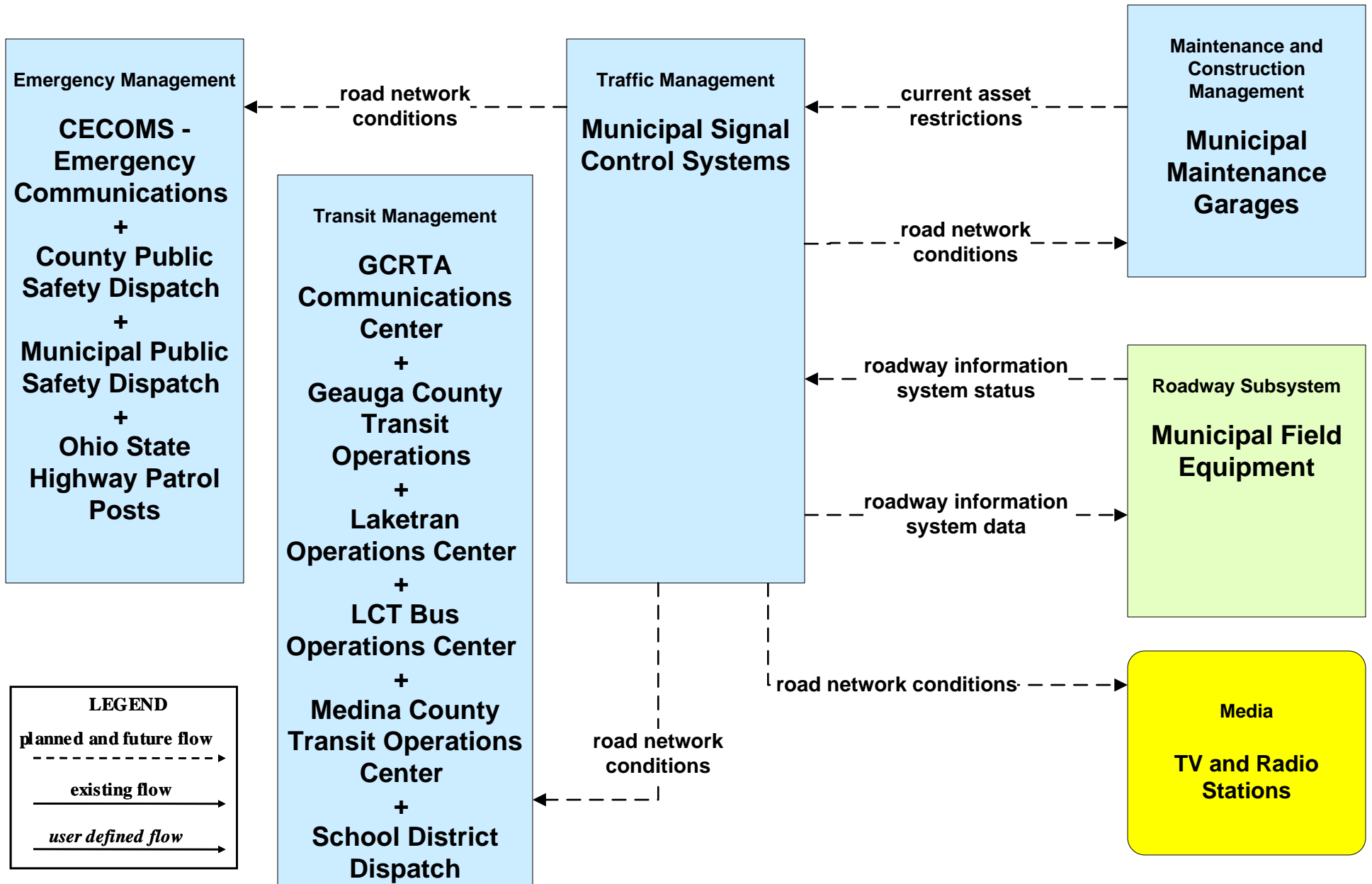


**ATMS06 - Traffic Information Dissemination
ODOT District 3 (2 of 2)**

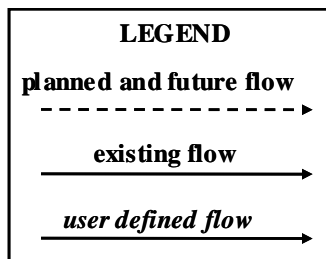
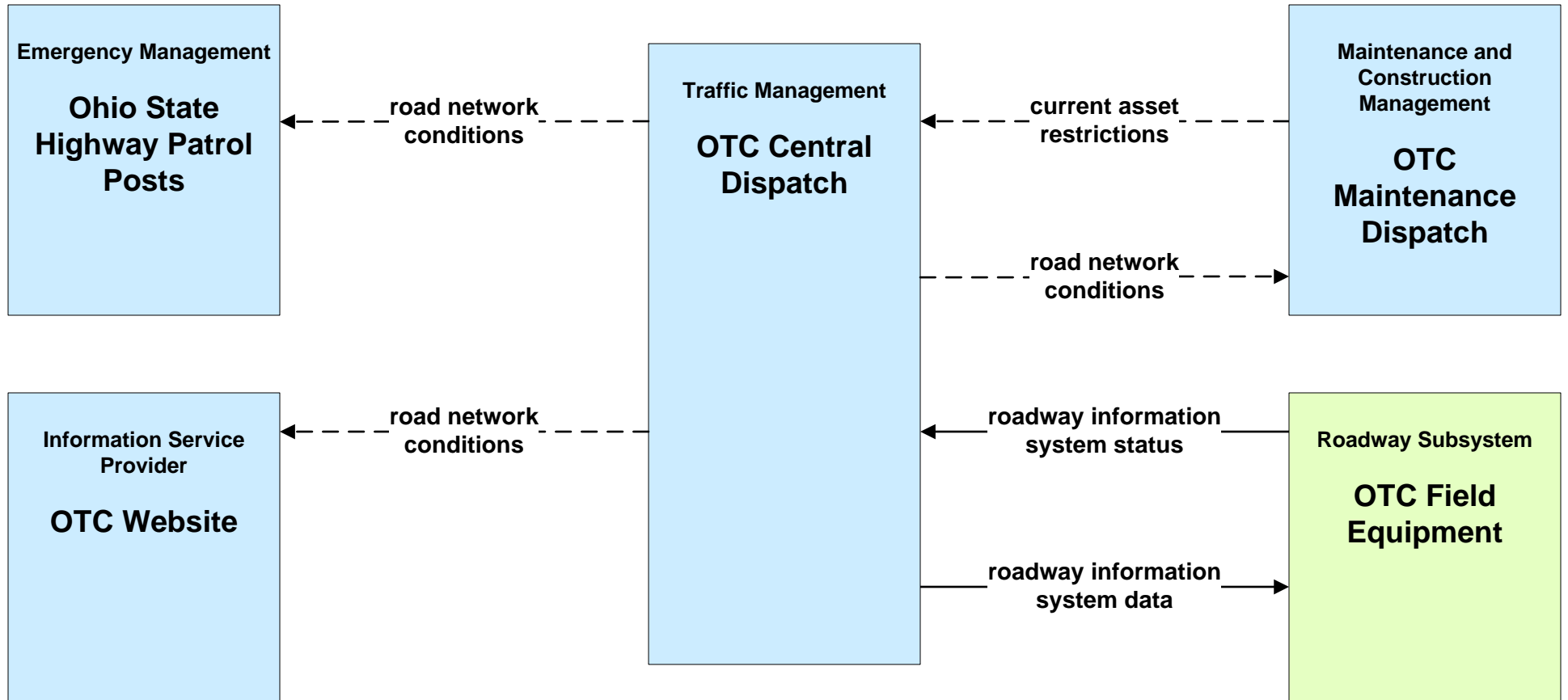


ATMS06 - Traffic Information Dissemination

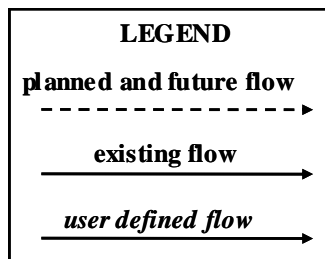
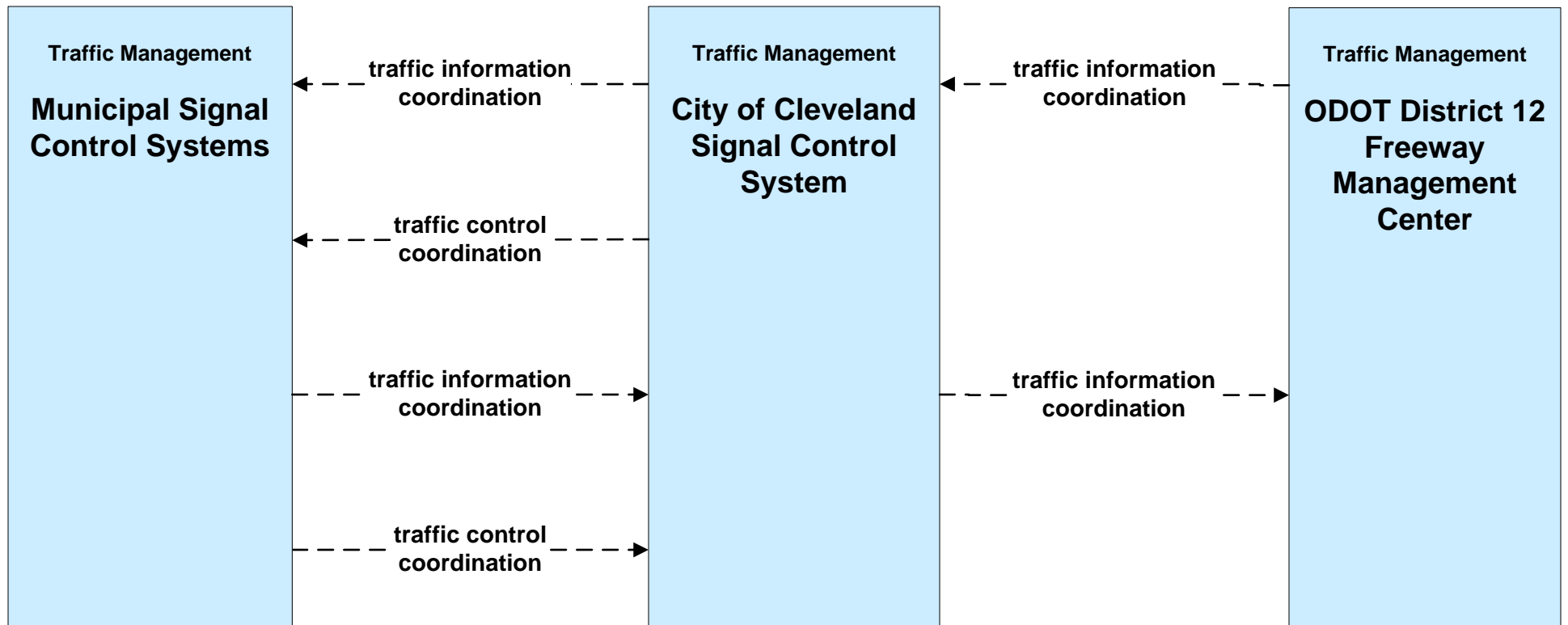
Municipal Signal Control Systems



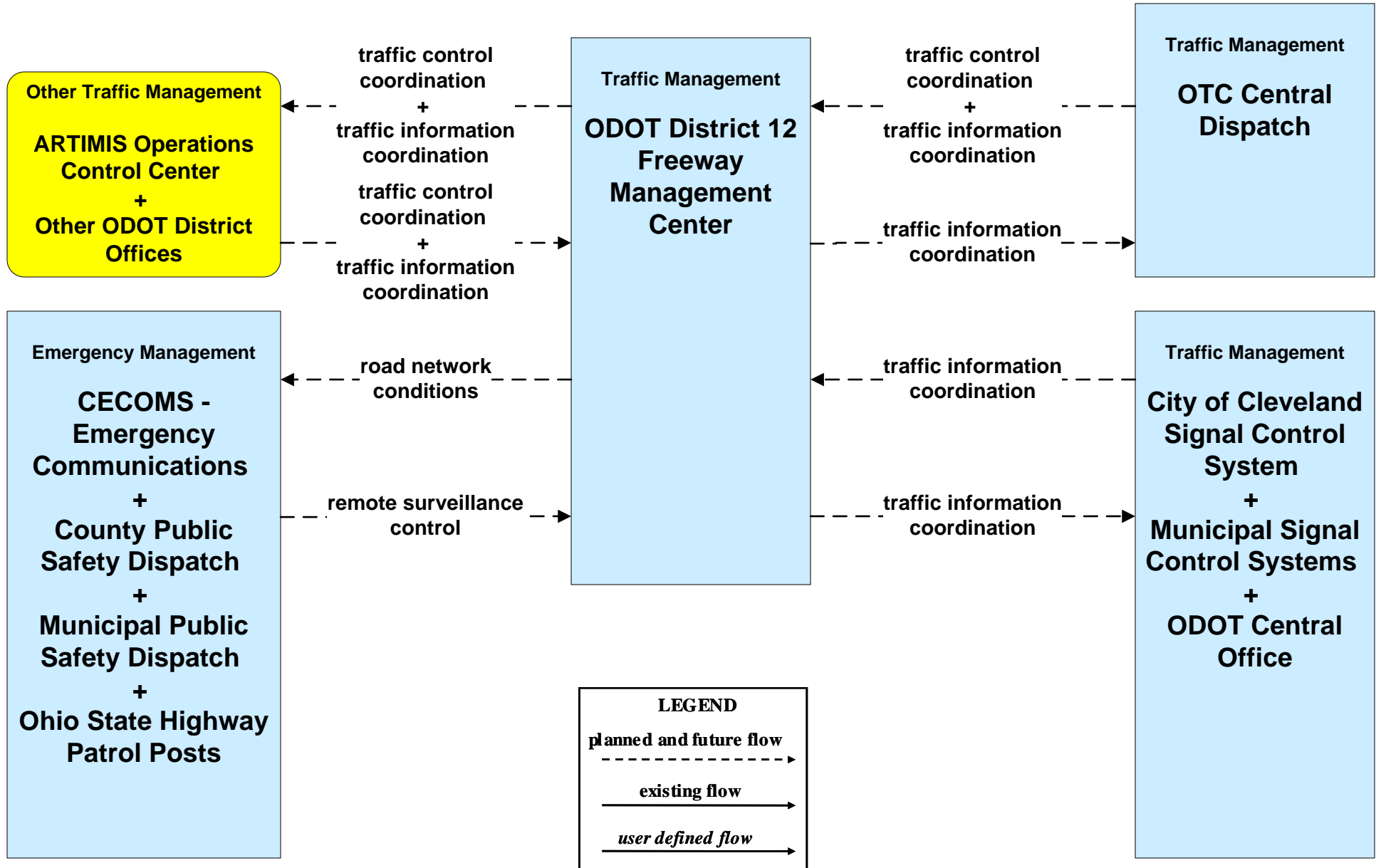
ATMS06 - Traffic Information Dissemination Ohio Turnpike Commission



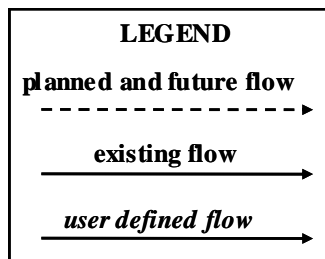
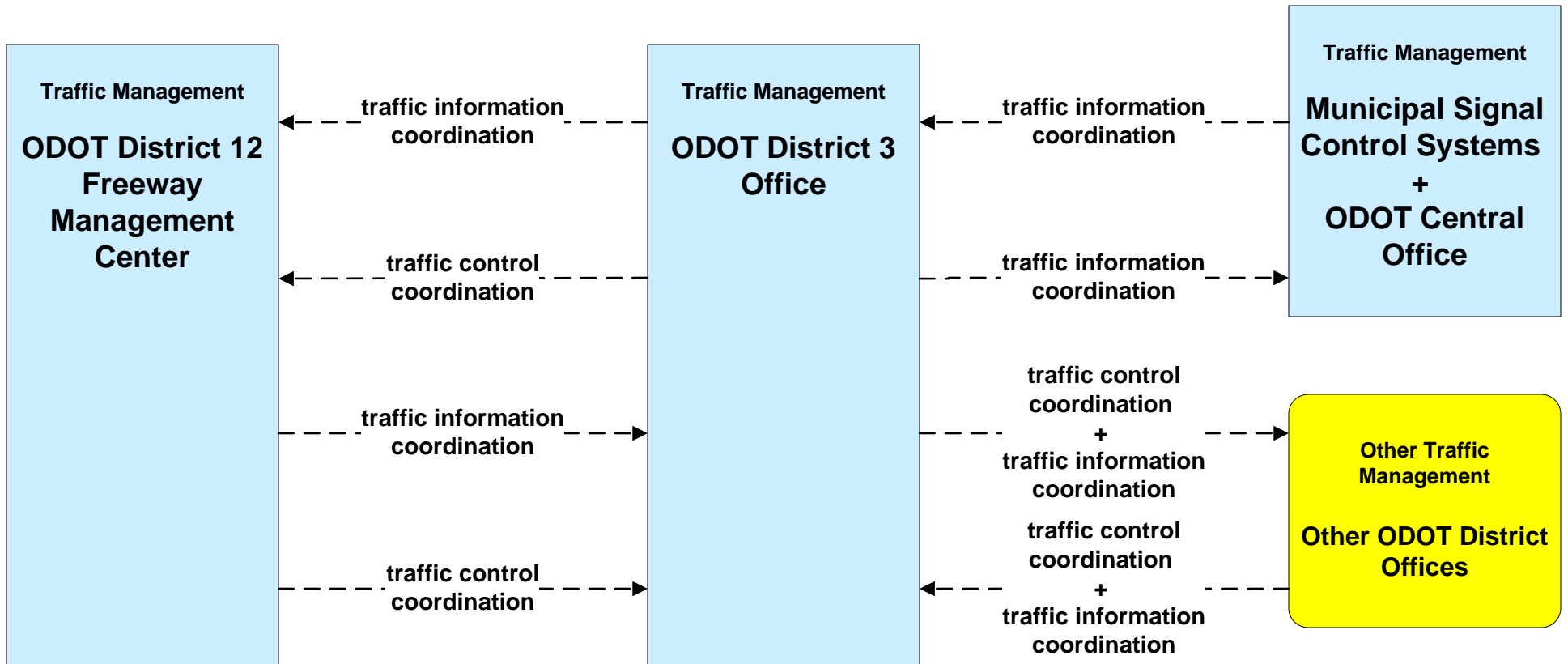
ATMS07 - Regional Traffic Control City of Cleveland



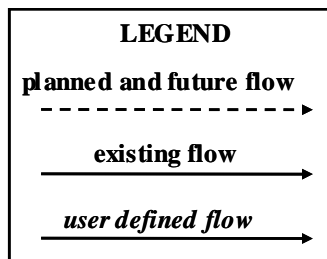
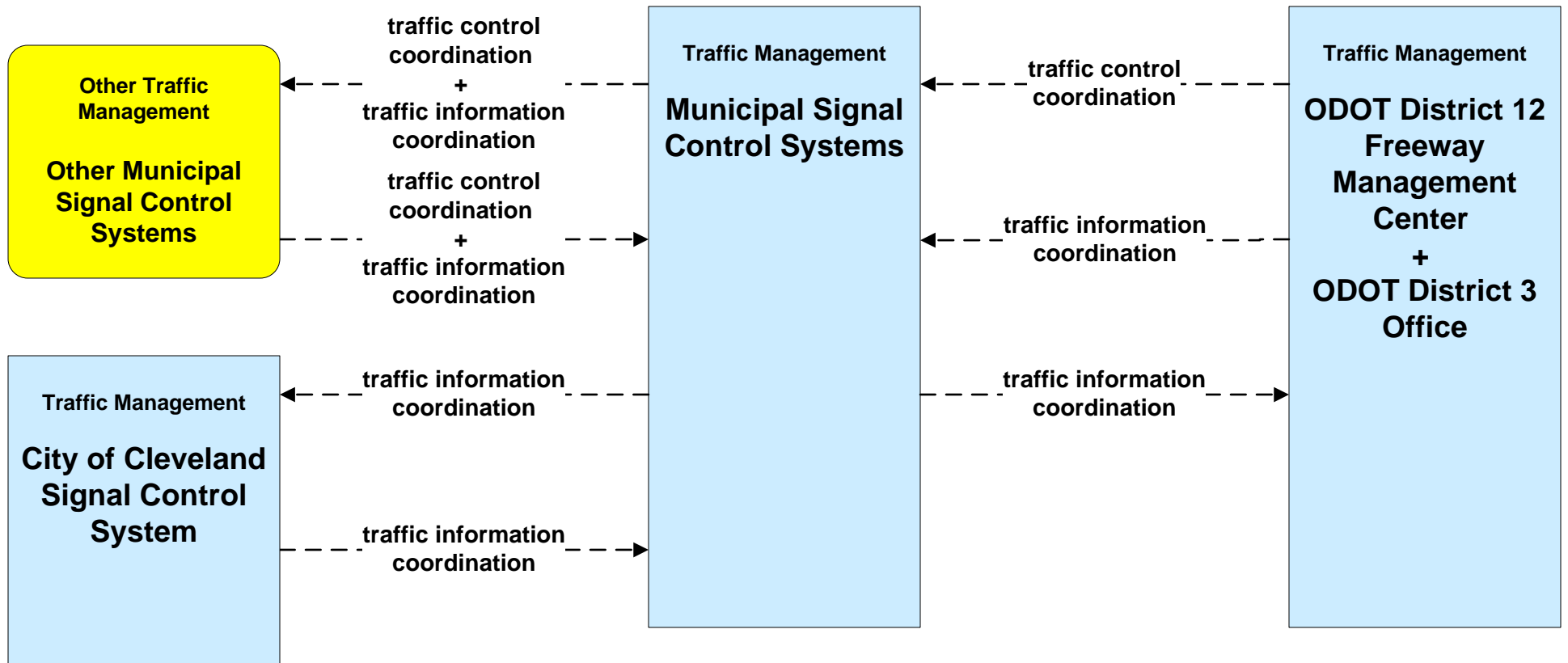
**ATMS07 - Regional Traffic Control
ODOT District 12**



**ATMS07 - Regional Traffic Control
ODOT District 3**



ATMS07 - Regional Traffic Control Municipal Signal Control Systems



Incident Management Overview

ATMS08 Covered

<i>Emergency Management</i>	<i>Traffic Management</i>
<i>Emergency Management</i>	<i>Maintenance and Construction</i>
<i>Traffic Management</i>	<i>Maintenance and Construction</i>
<i>Maintenance and Construction</i>	<i>Maintenance and Construction</i>
<i>Event Plans and Weather</i>	<i>Traffic Management & Emergency Management (see MCs for M&C)</i>

ATMS06, 03, 04, etc. Covered

<i>Traffic Management</i>	<i>Roadway</i>
---------------------------	----------------

ATMS07 Covered

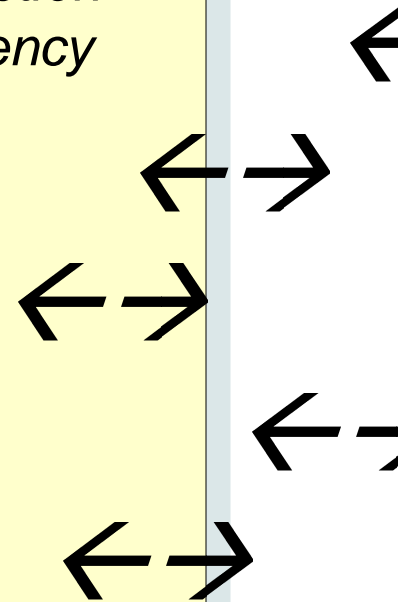
<i>Traffic Management</i>	<i>Traffic Management</i>
---------------------------	---------------------------

EM1 Covered

<i>Emergency Management</i>	<i>Emergency Management</i>
-----------------------------	-----------------------------

EM2 Covered

Emergency Vehicle Preemption



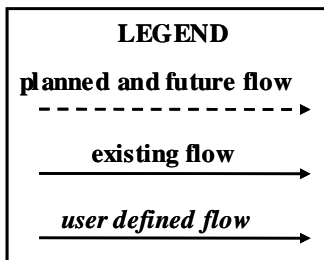
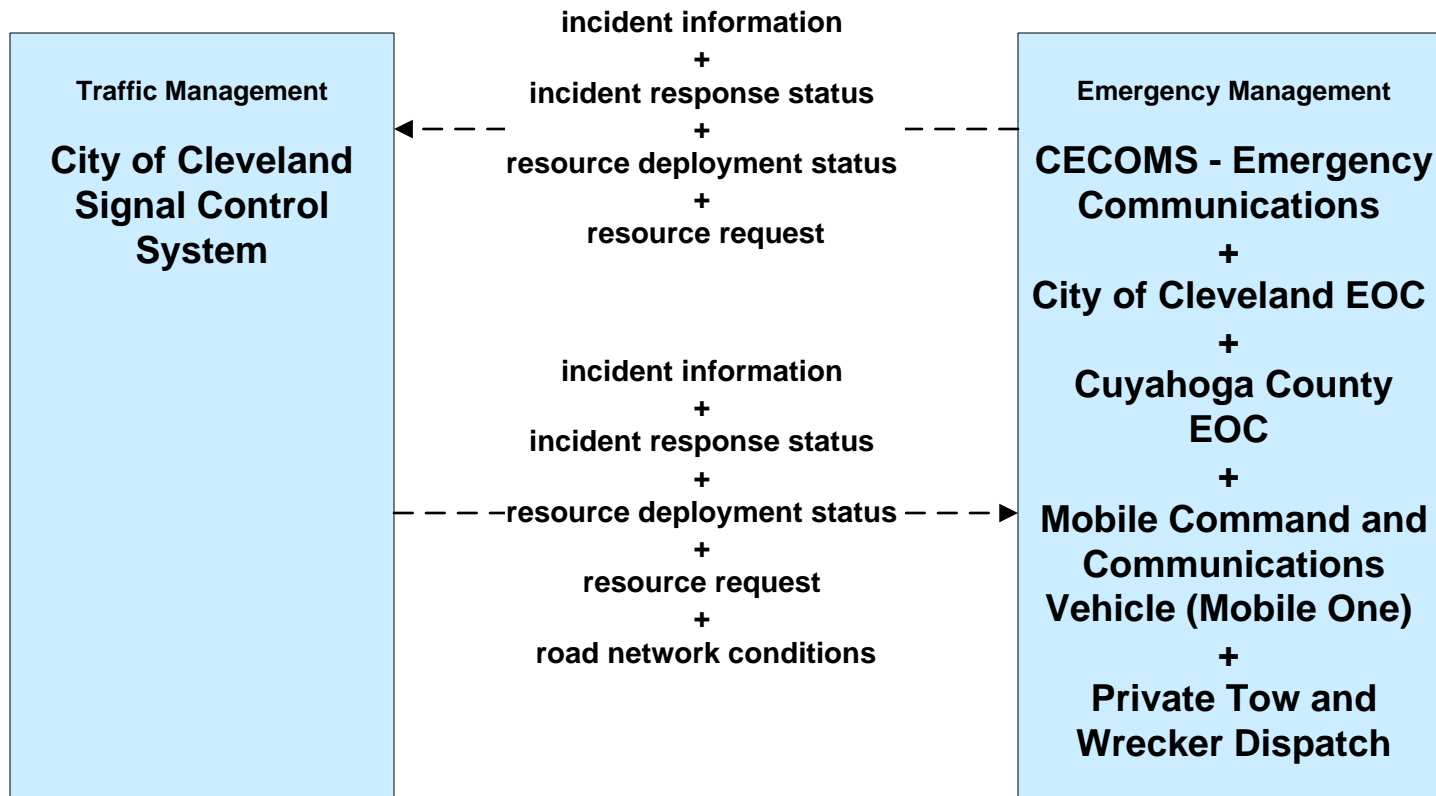
ATMS08 - Incident Management

Emergency Management

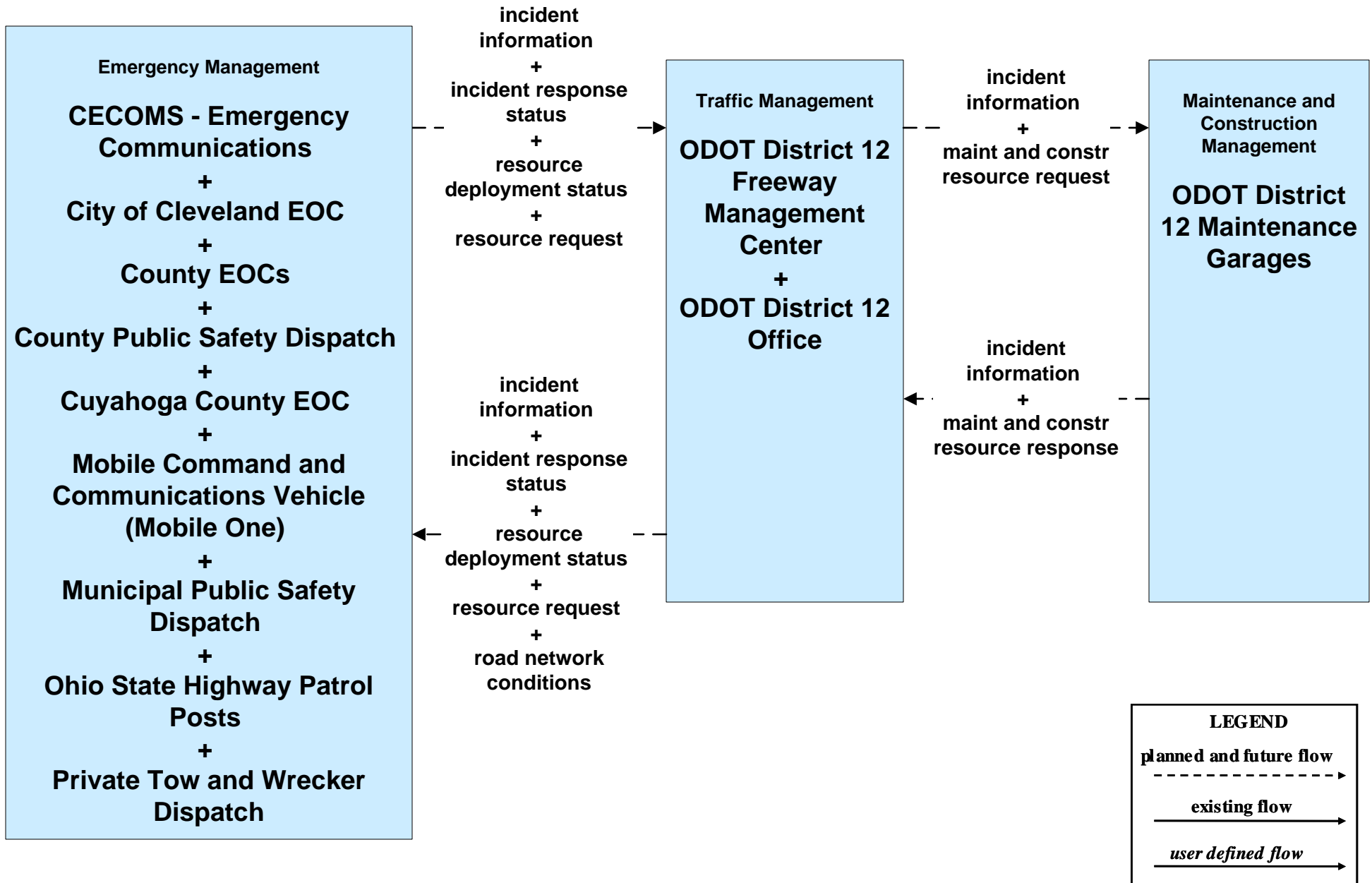
Traffic Management



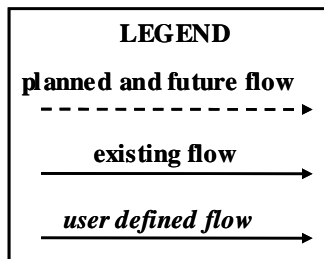
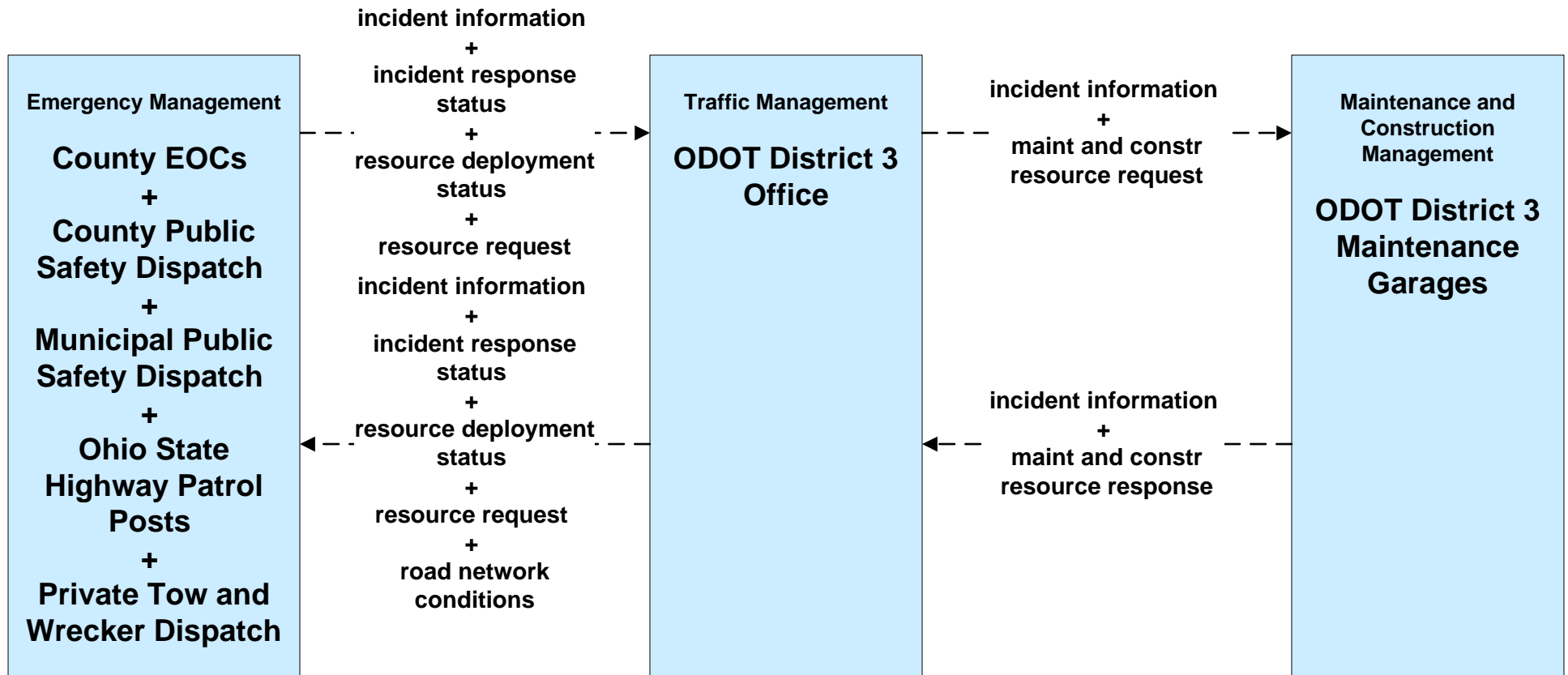
ATMS08 - Incident Management City of Cleveland (EM to TM)



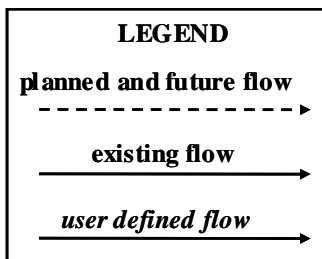
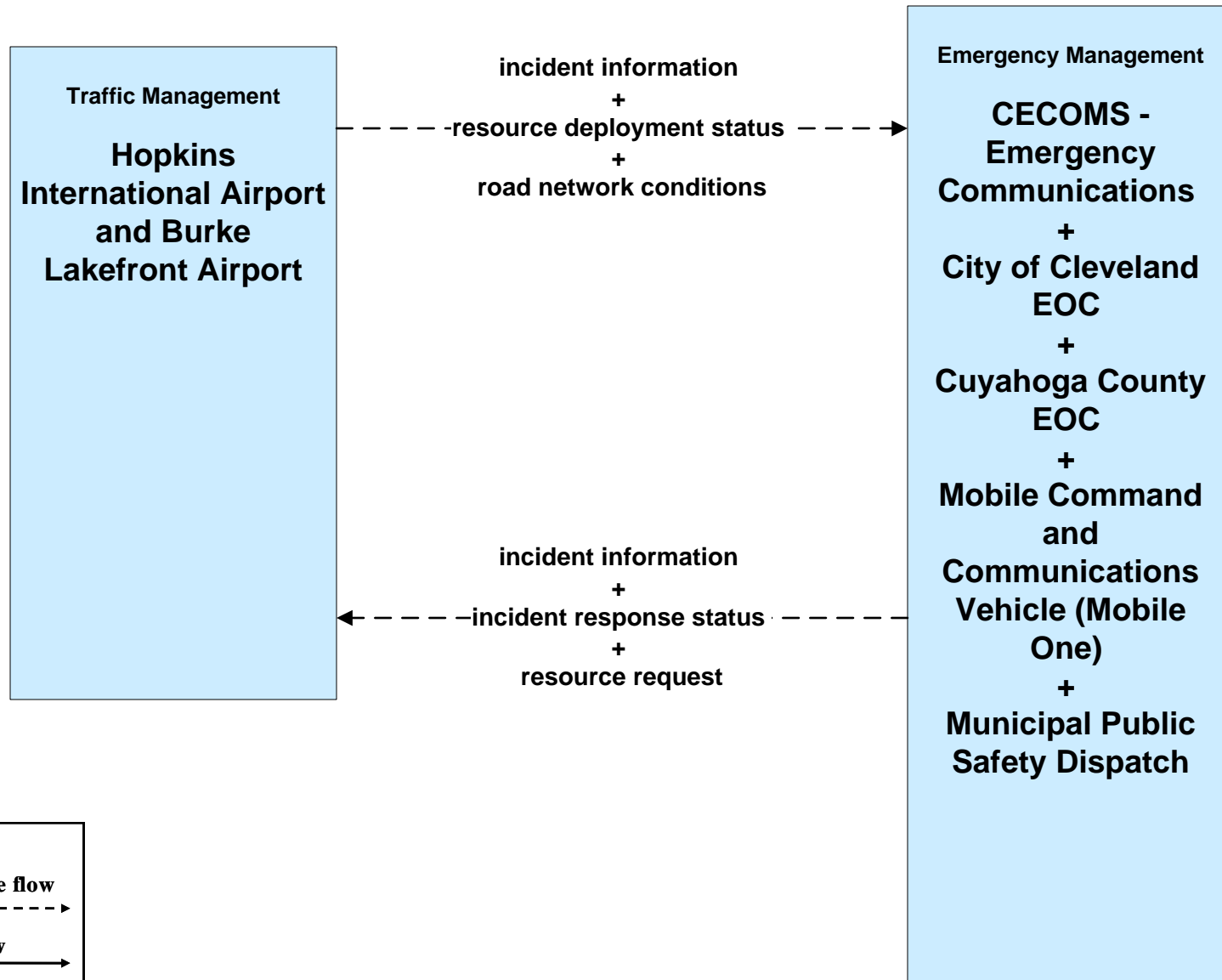
**ATMS08 - Incident Management
ODOT District 12 (EM to TM)**



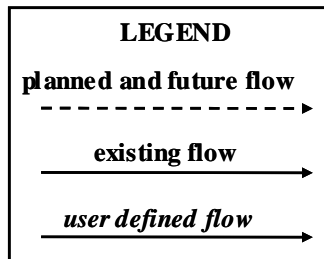
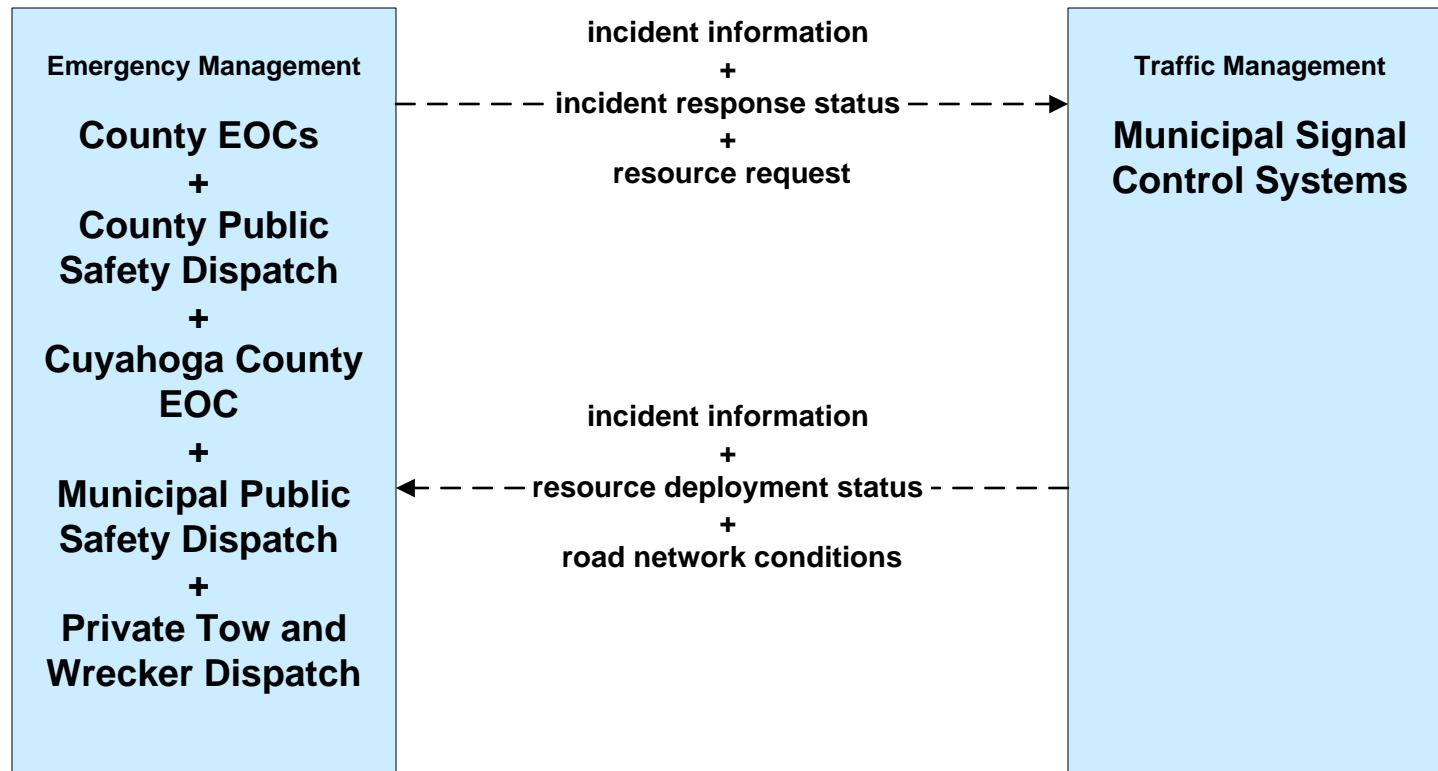
ATMS08 - Incident Management ODOT District 3 (EM to TM)



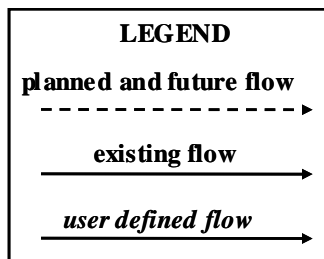
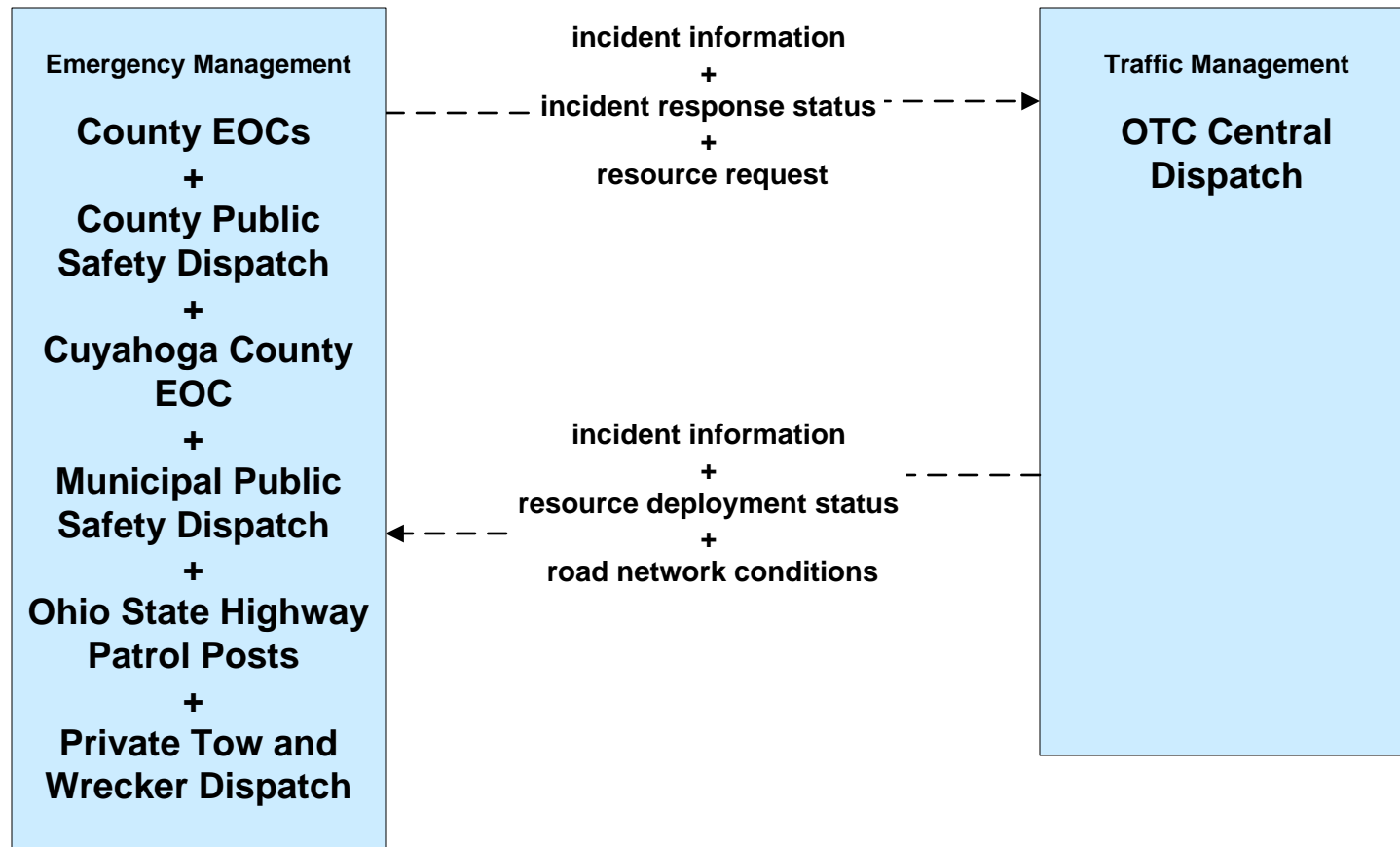
ATMS08 - Incident Management
Hopkins International and Burke Lakefront Airport (EM to TM)



ATMS08 - Incident Management Municipal Signal Systems (EM to TM)



ATMS08 - Incident Management
Ohio Turnpike Commission (EM to TM)



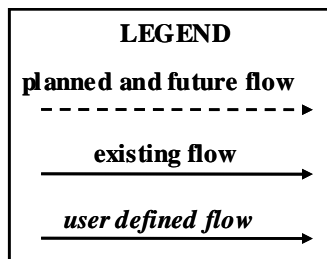
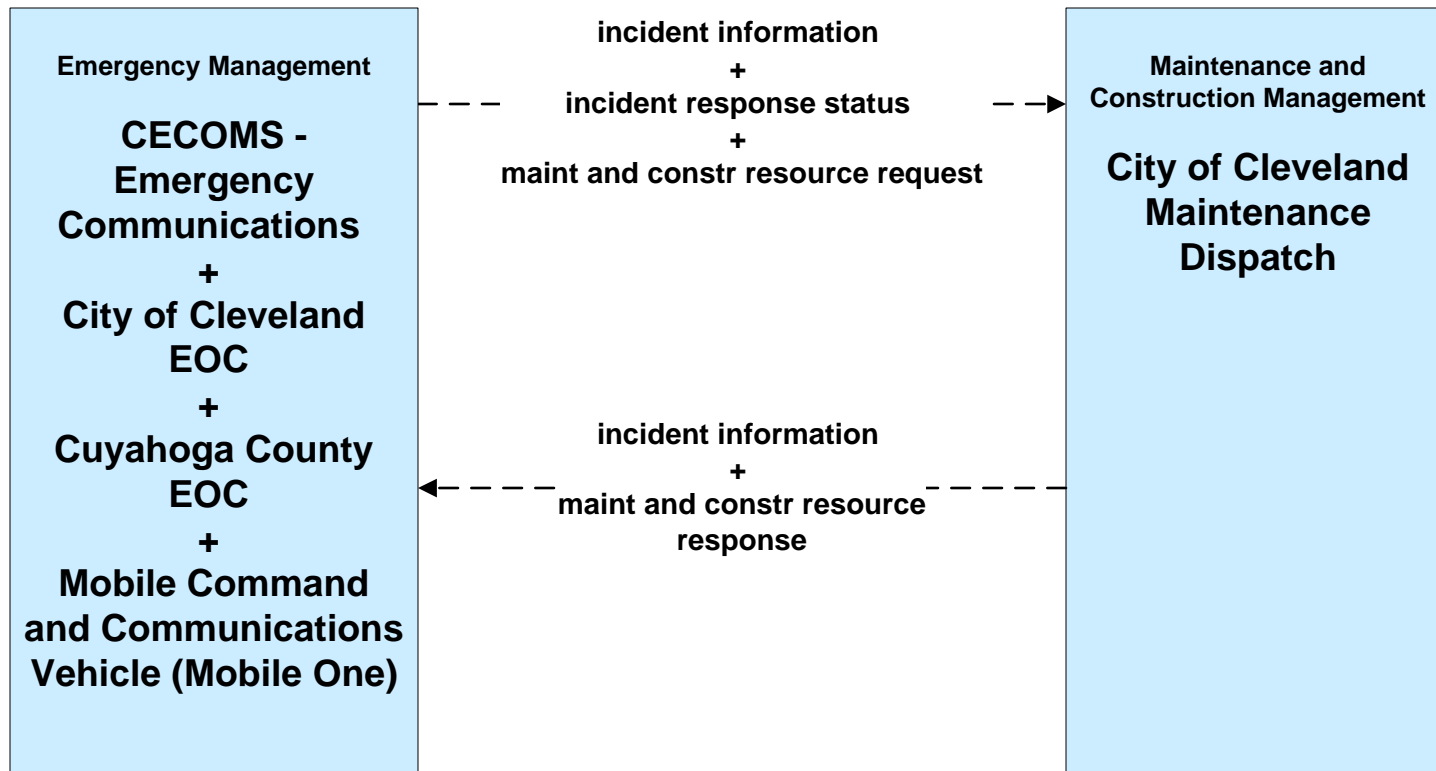
ATMS08 - Incident Management

Emergency Management

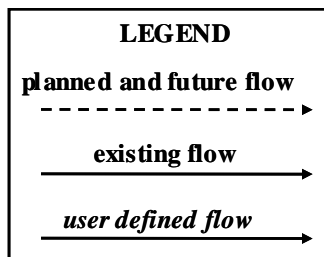
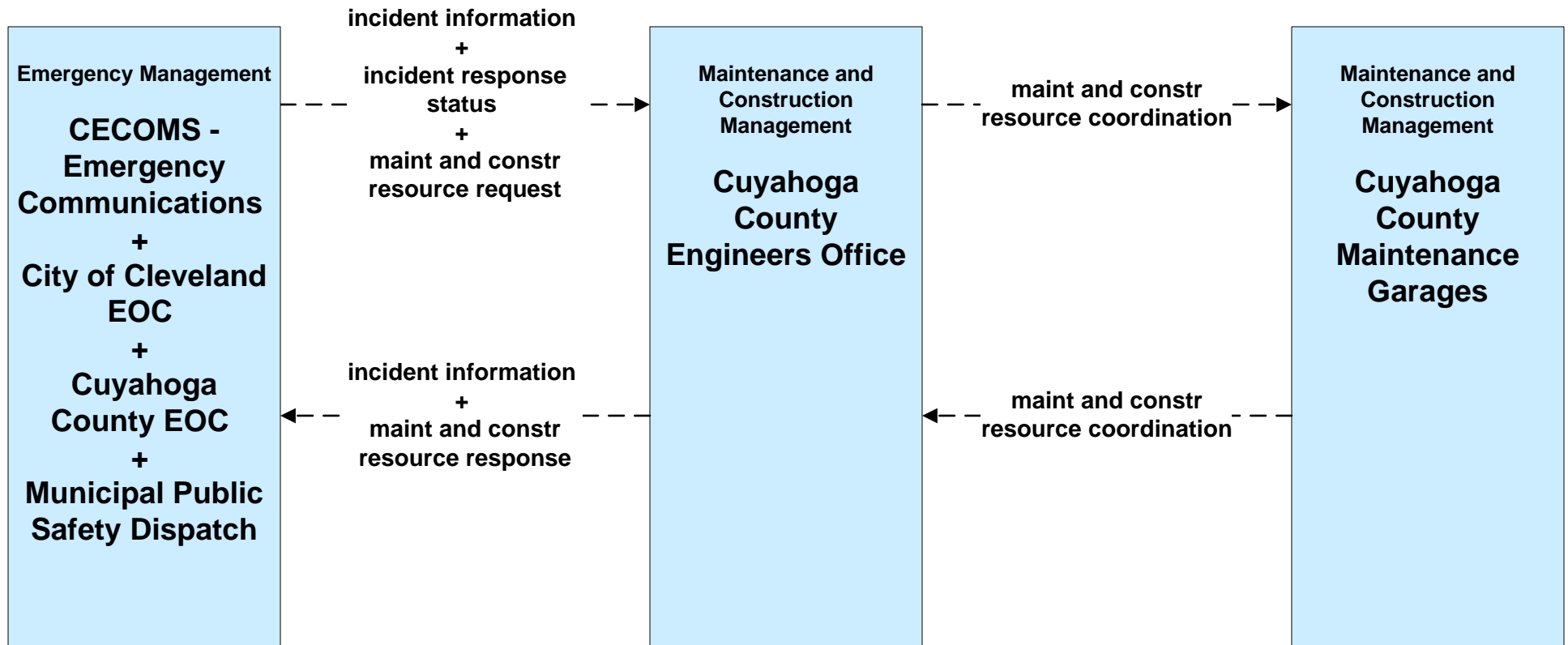
*Maintenance and Construction
Management*



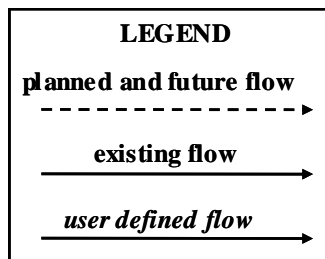
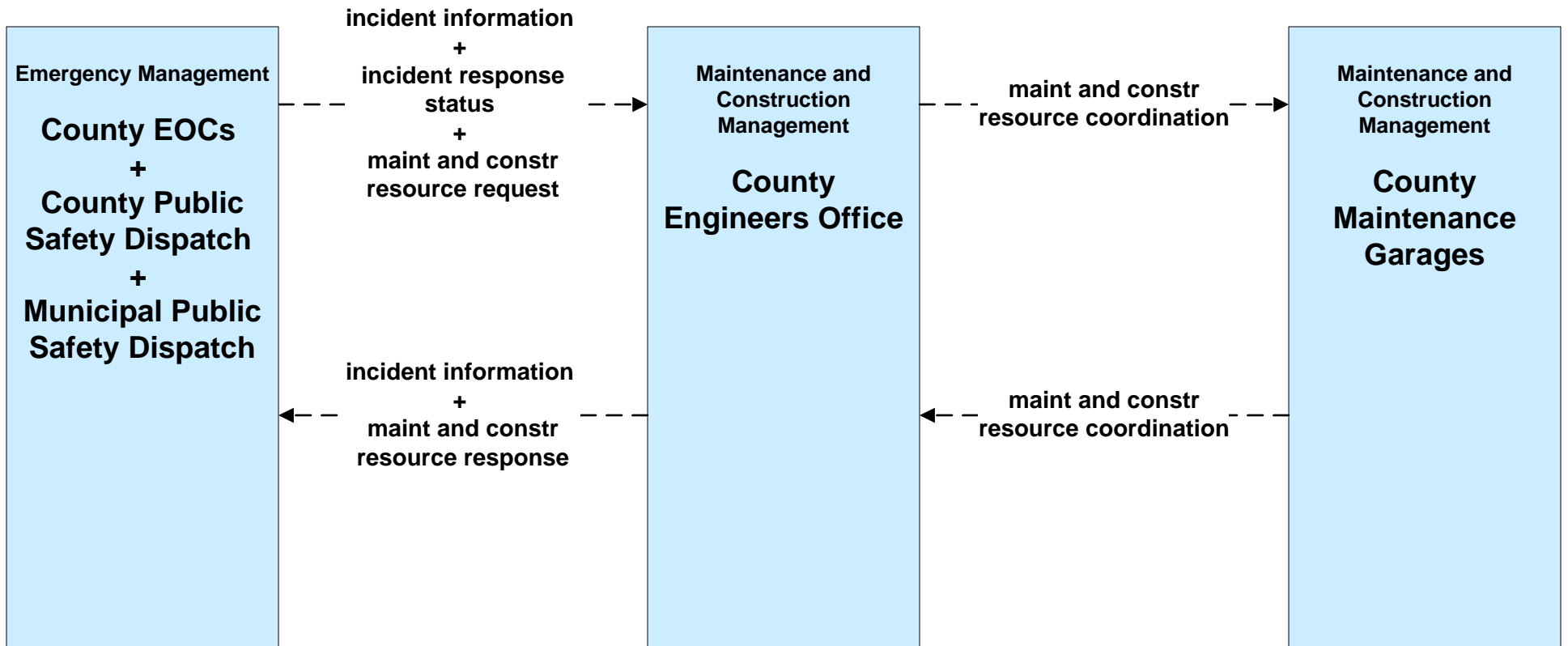
ATMS08 - Incident Management
City of Cleveland Maintenance Dispatch (EM to MCM)



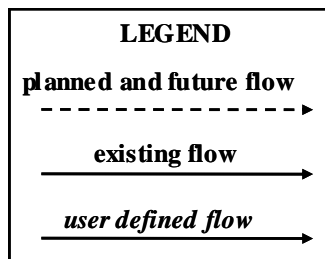
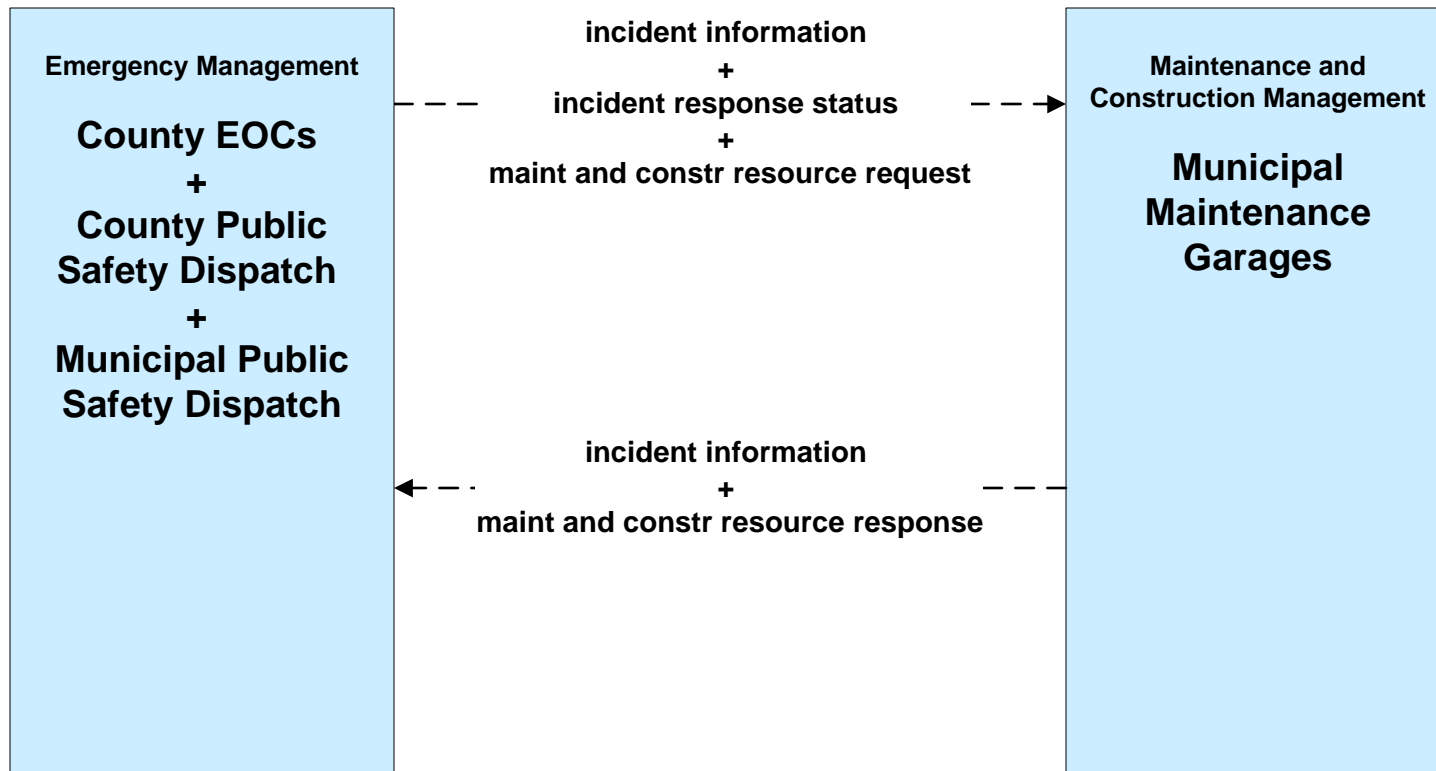
ATMS08 - Incident Management
Cuyahoga County Maintenance Garages (EM to MCM)



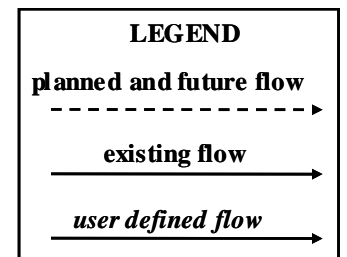
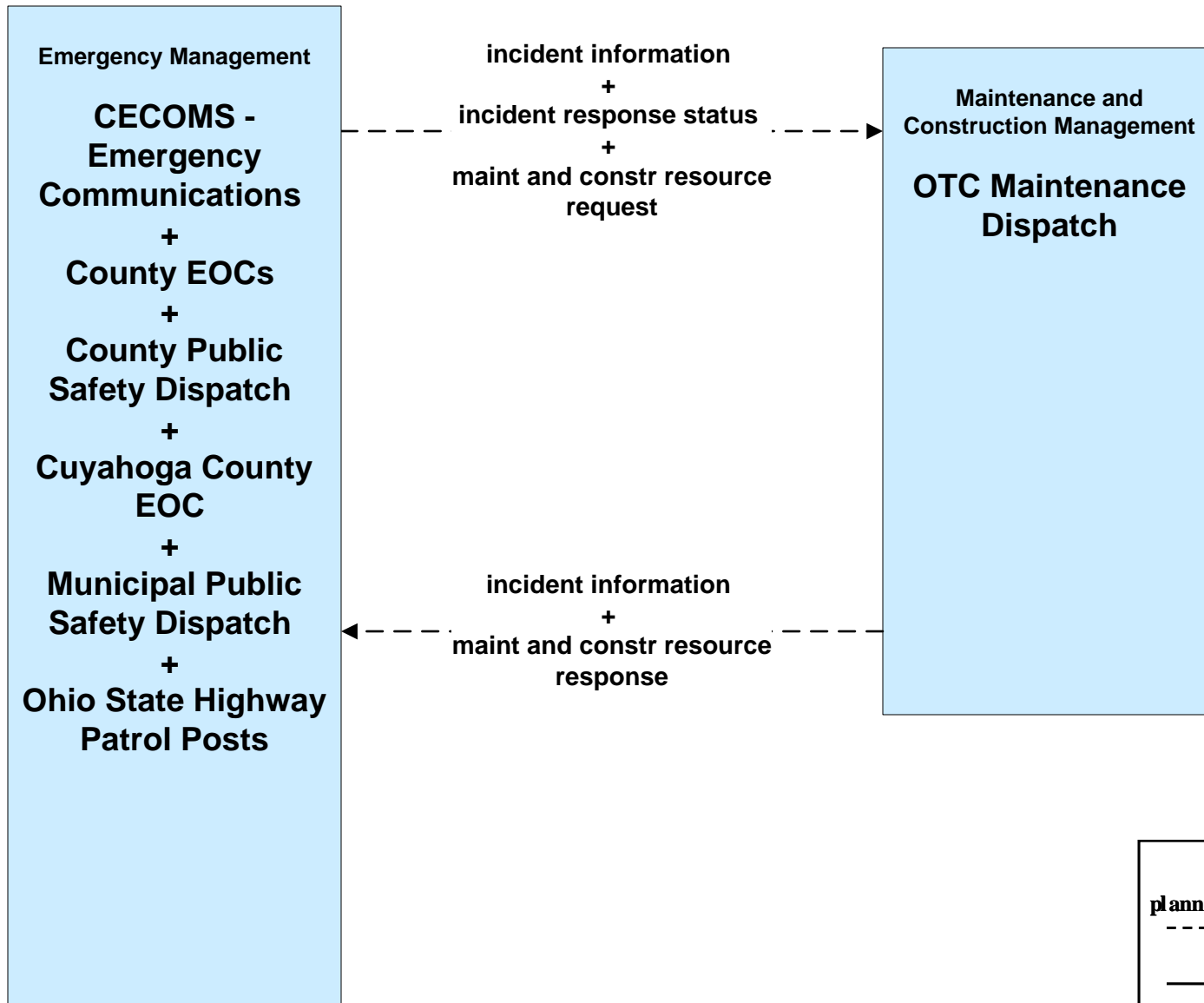
ATMS08 - Incident Management County Engineers (EM to MCM)



**ATMS08 - Incident Management
Municipal Maintenance Garages (EM to MCM)**



ATMS08 - Incident Management
Ohio Turnpike Commission (EM to MCM)



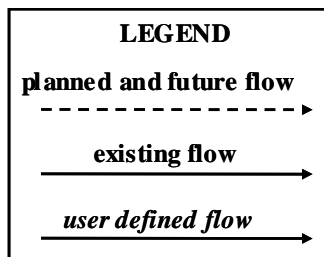
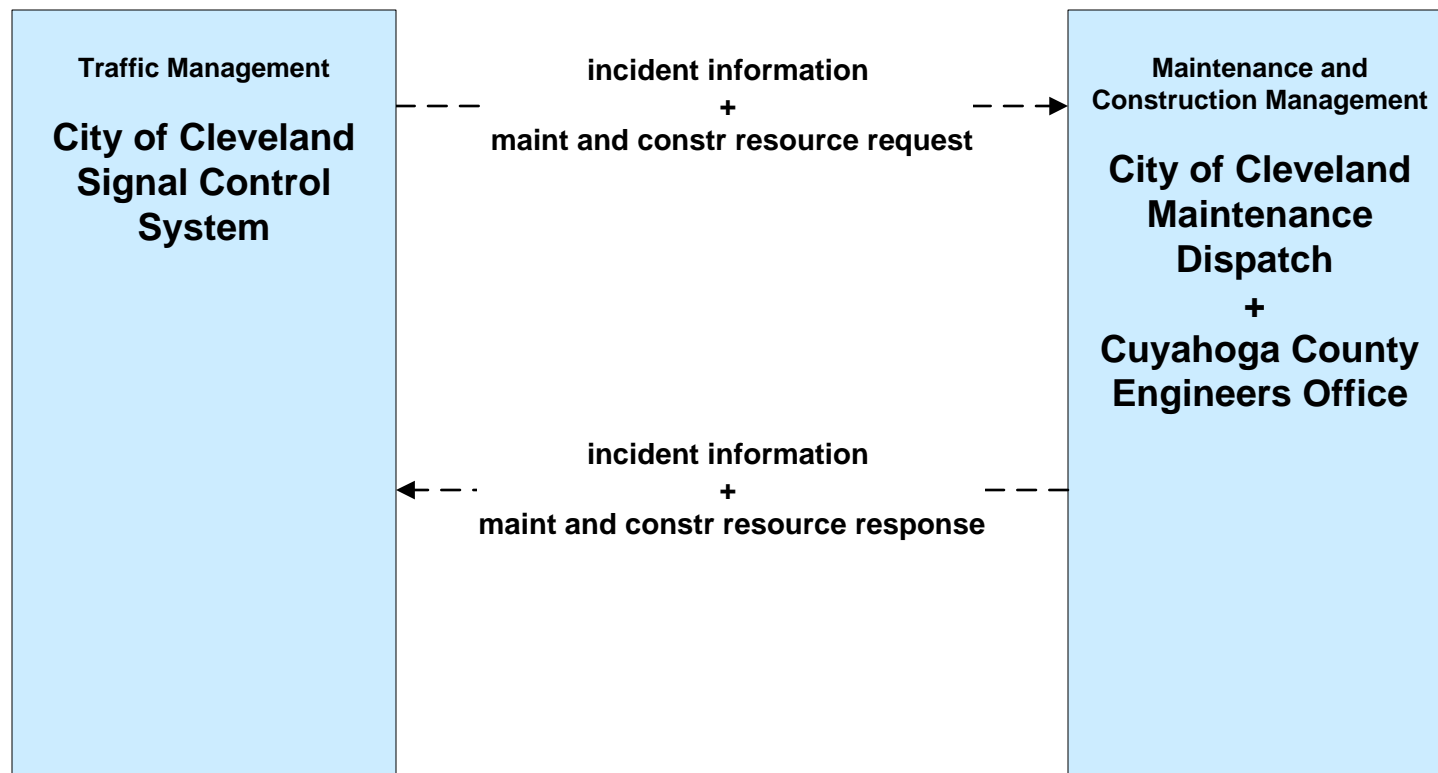
ATMS08 - Incident Management

Traffic Management

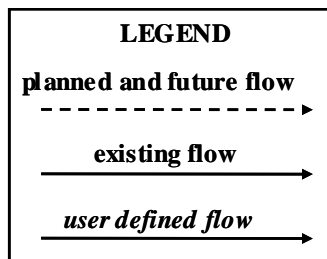
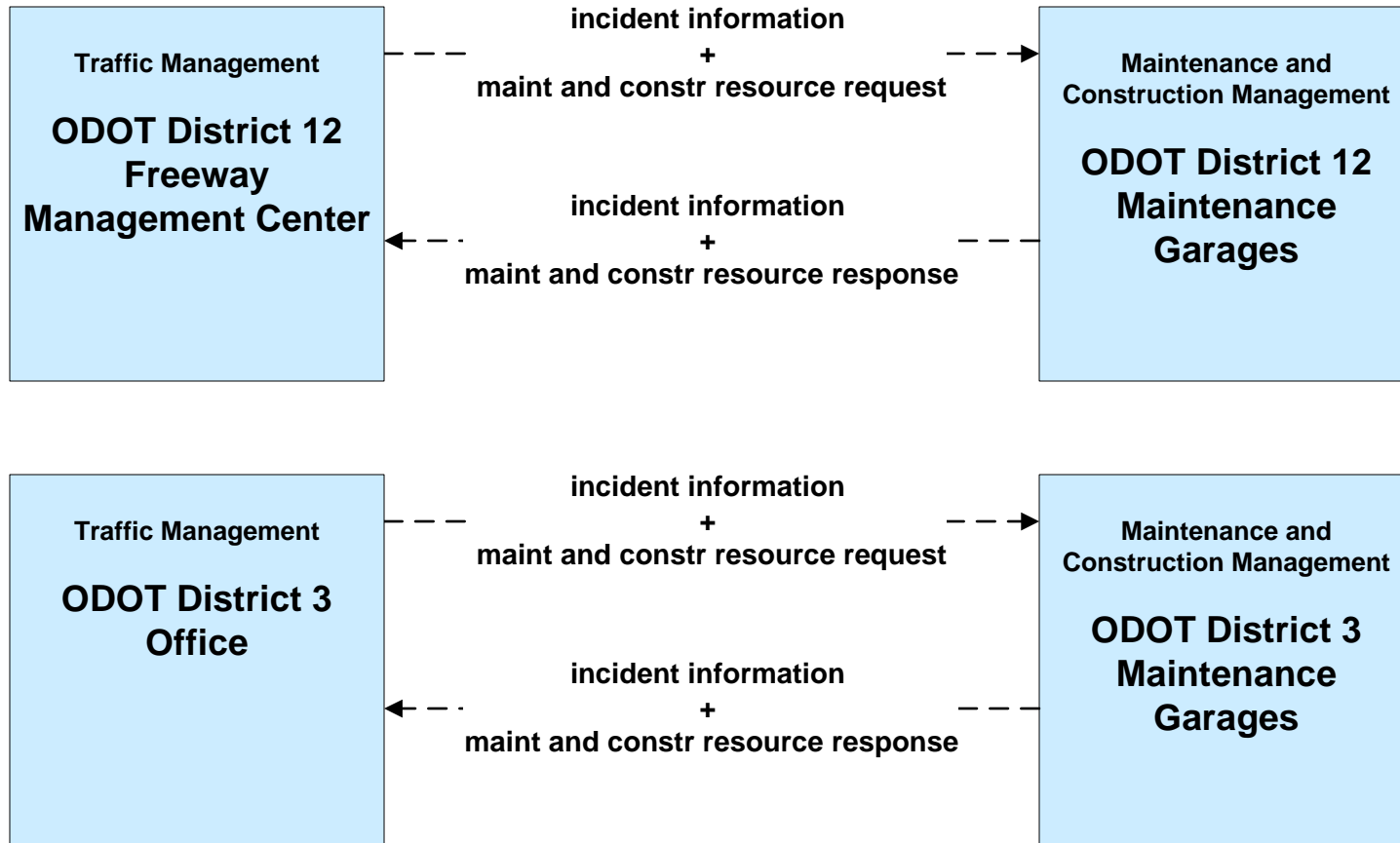
Maintenance and Construction Management



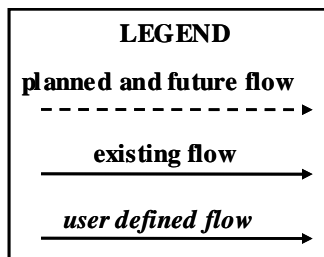
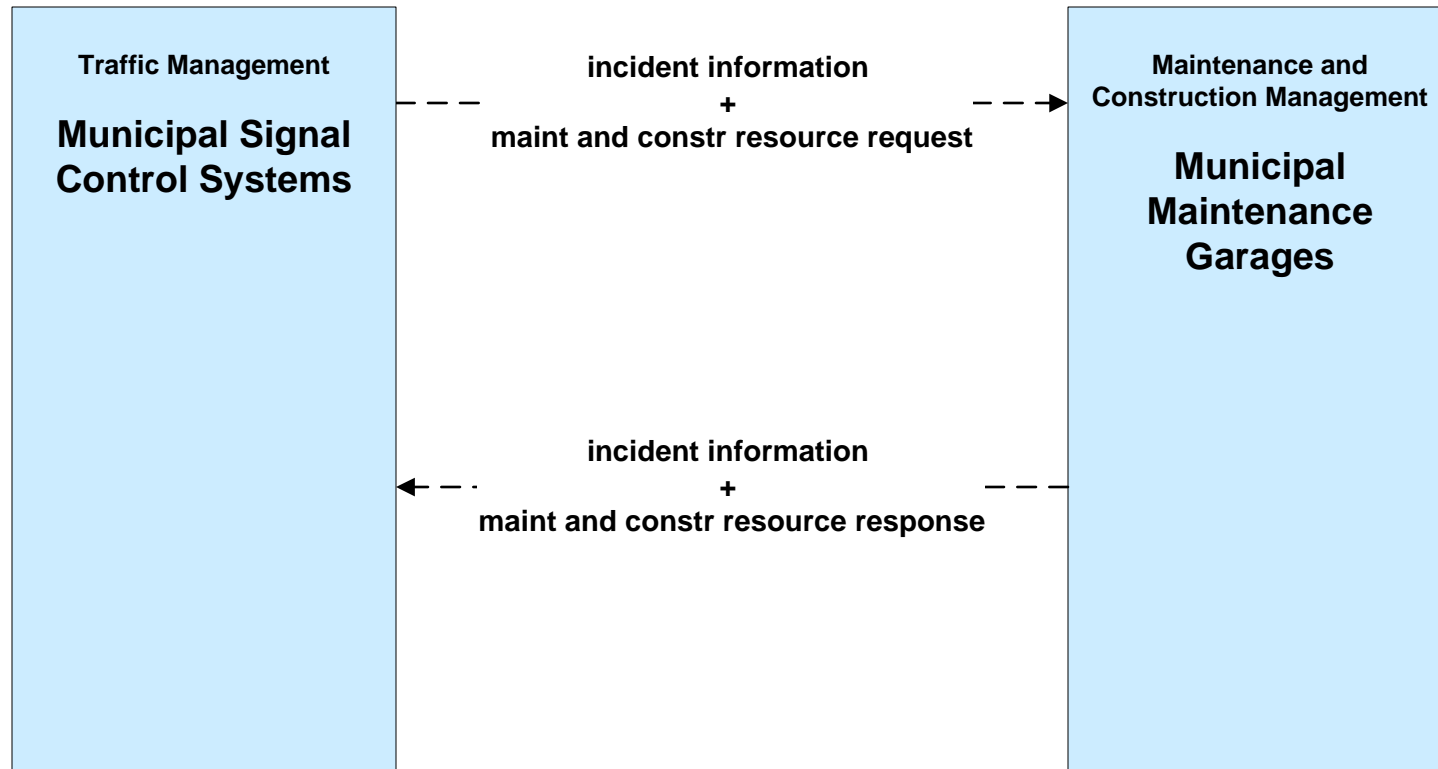
**ATMS08 - Incident Management
City of Cleveland (TM to MCM)**



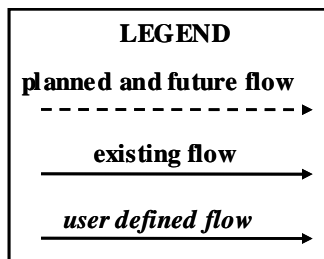
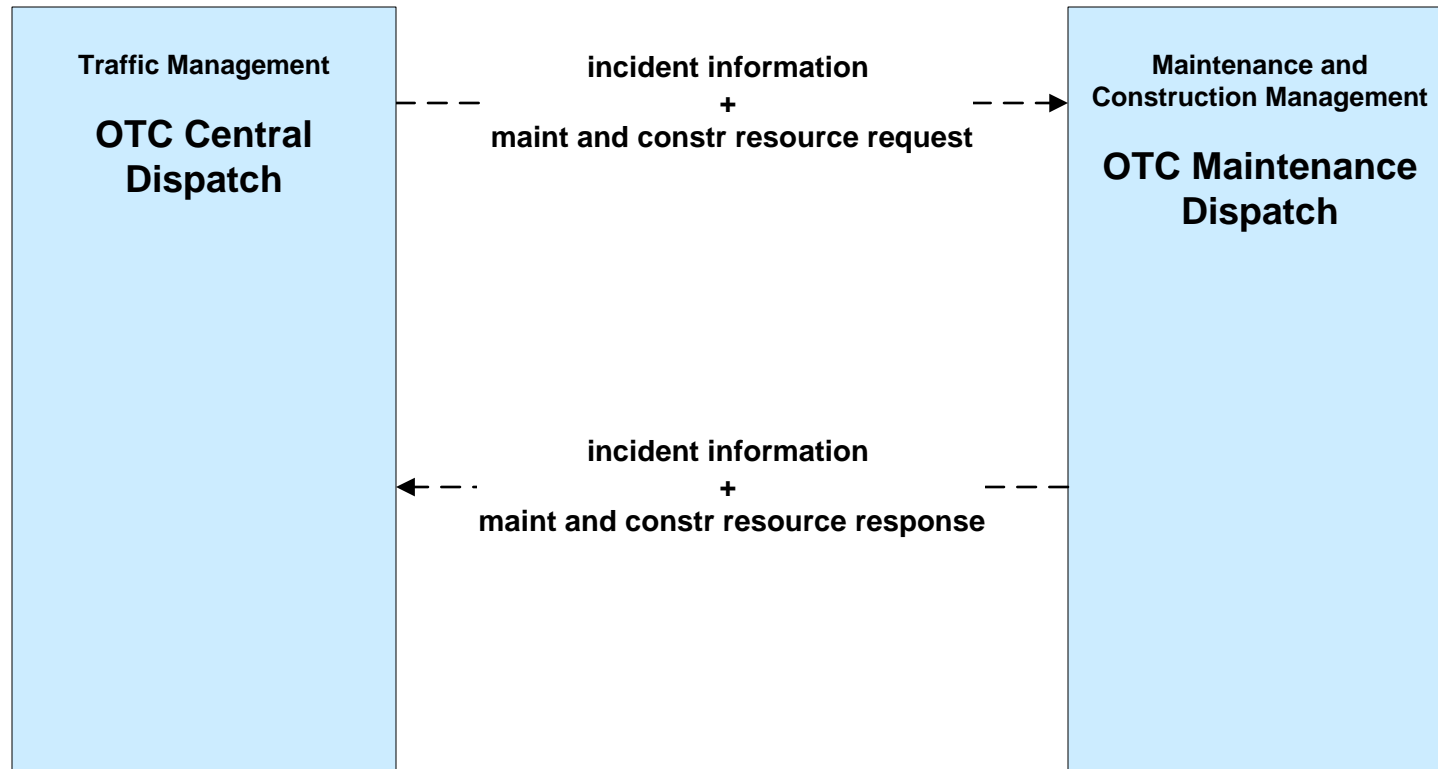
**ATMS08 - Incident Management
ODOT Districts 3 and 12 (TM to MCM)**



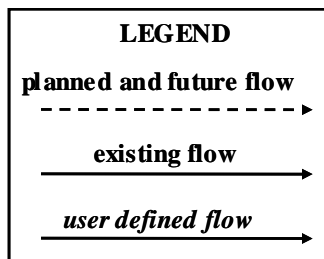
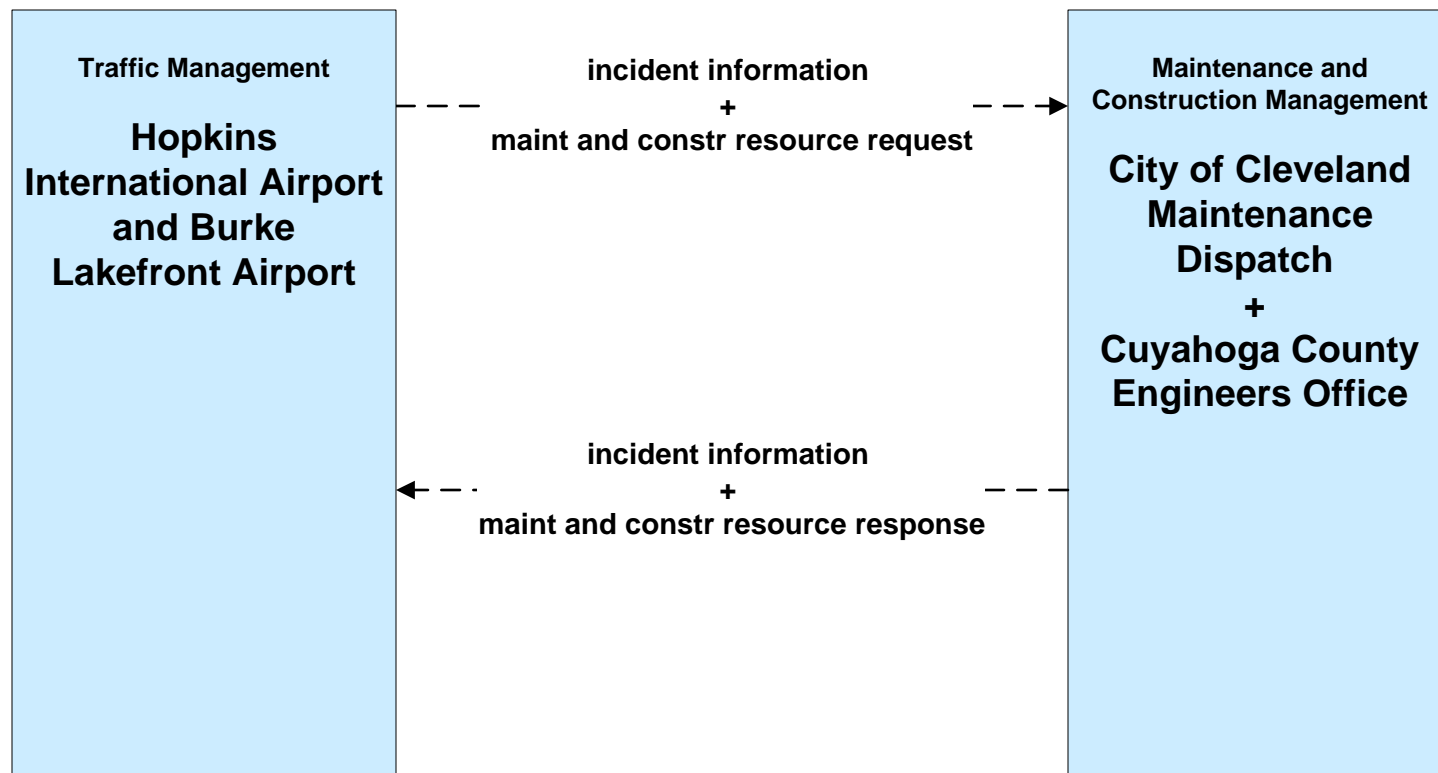
ATMS08 - Incident Management
Municipal Signal Control Systems (TM to MCM)



ATMS08 - Incident Management
Ohio Turnpike Commission (TM to MCM)



ATMS08 - Incident Management
Hopkins International Airport and Burke Lakefront Airport (TM to MCM)

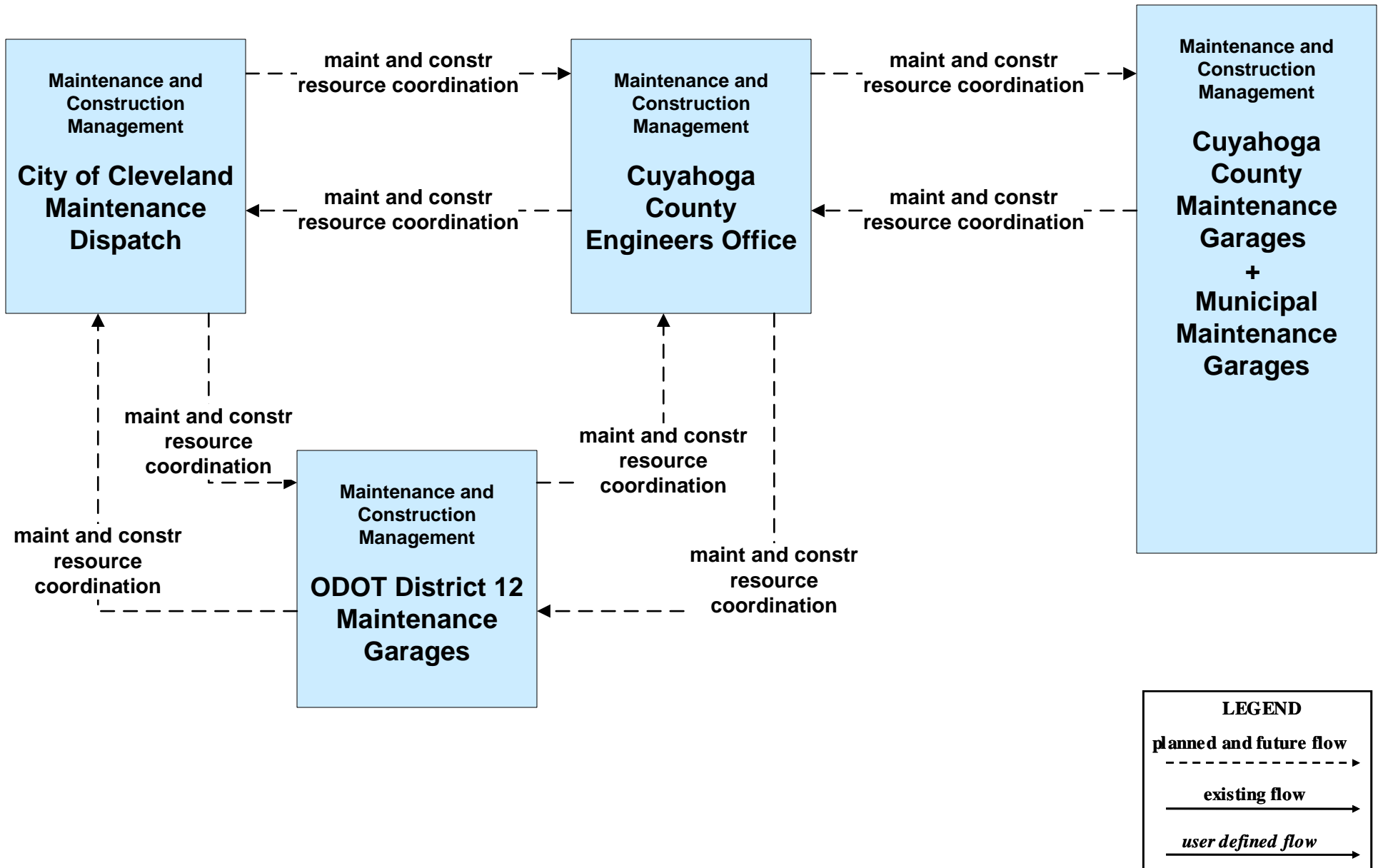


ATMS08 - Incident Management

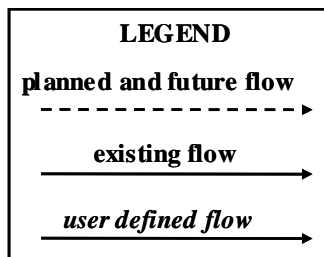
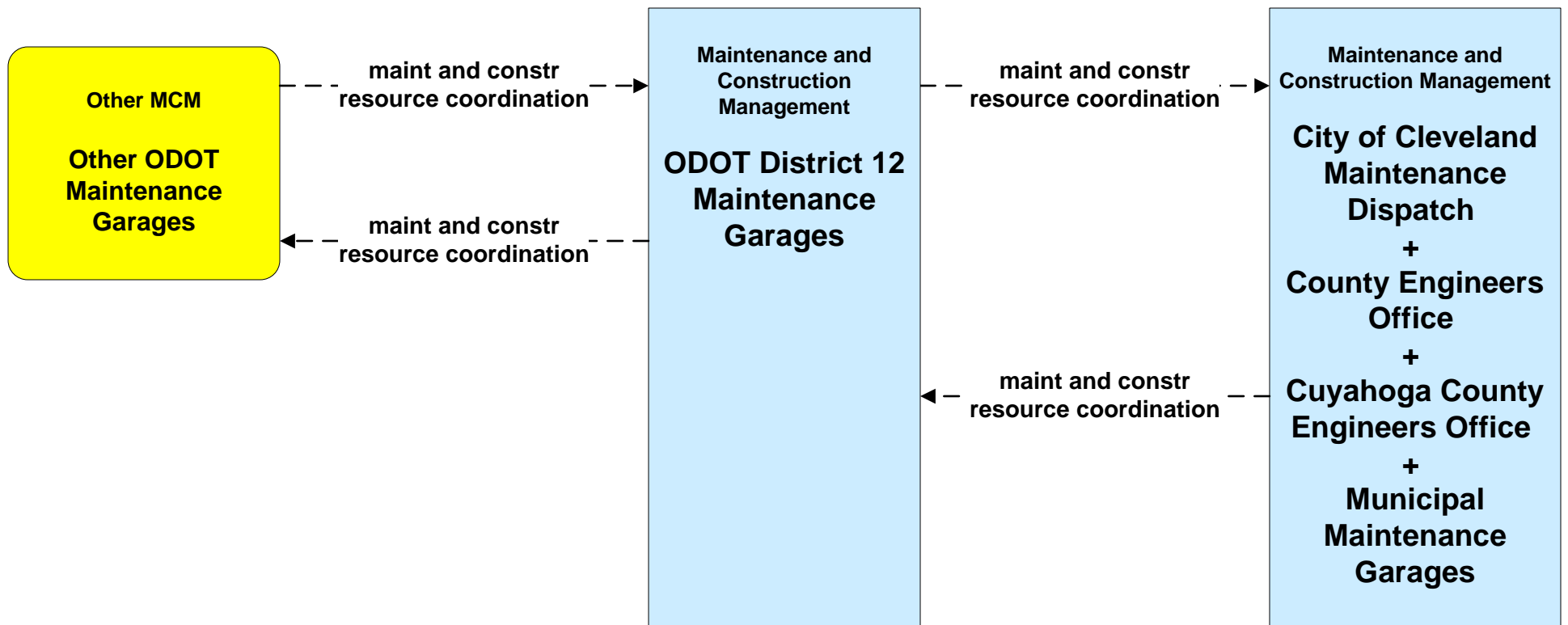
Maintenance and Construction Management
Construction Management

Maintenance and

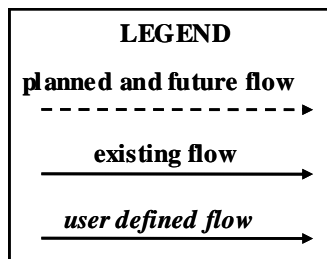
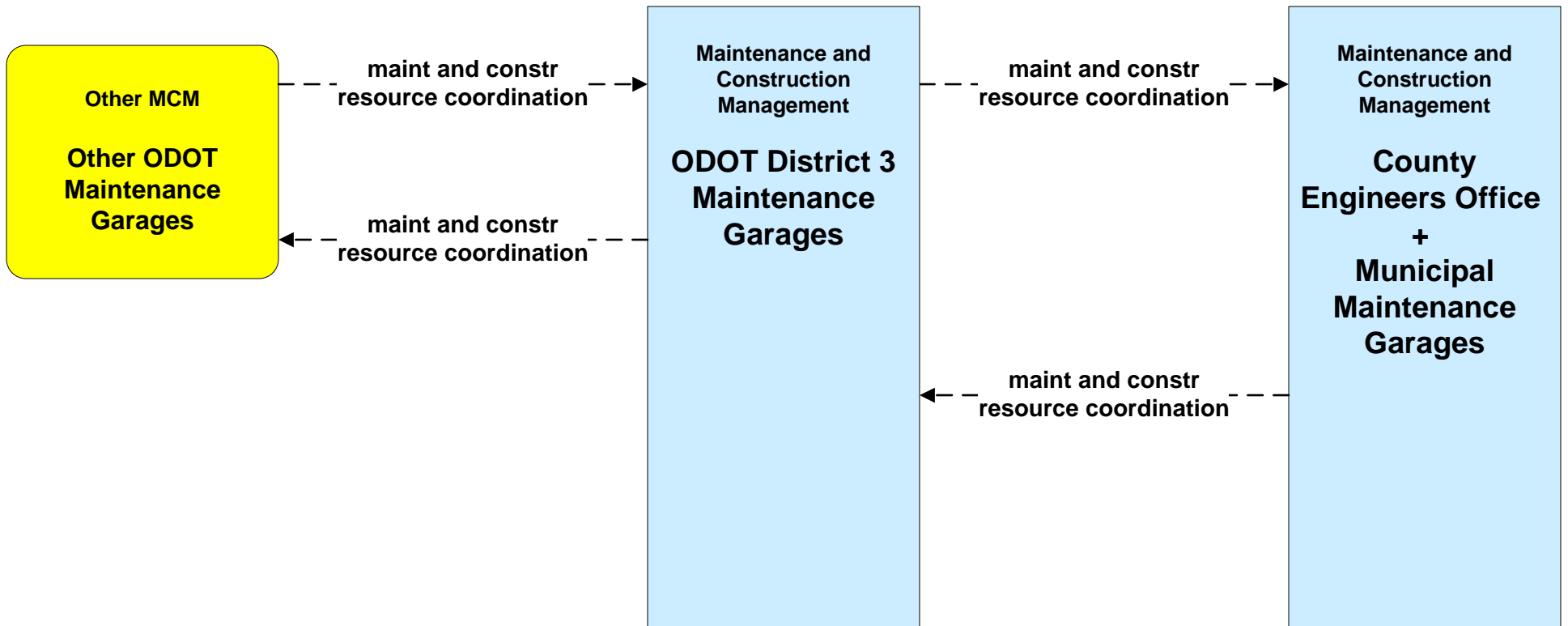
ATMS08 - Incident Management
City of Cleveland and Cuyahoga County (MCM to MCM)



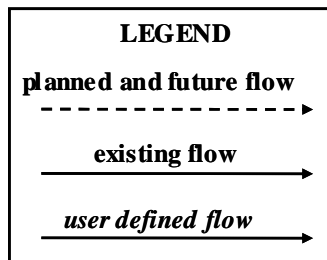
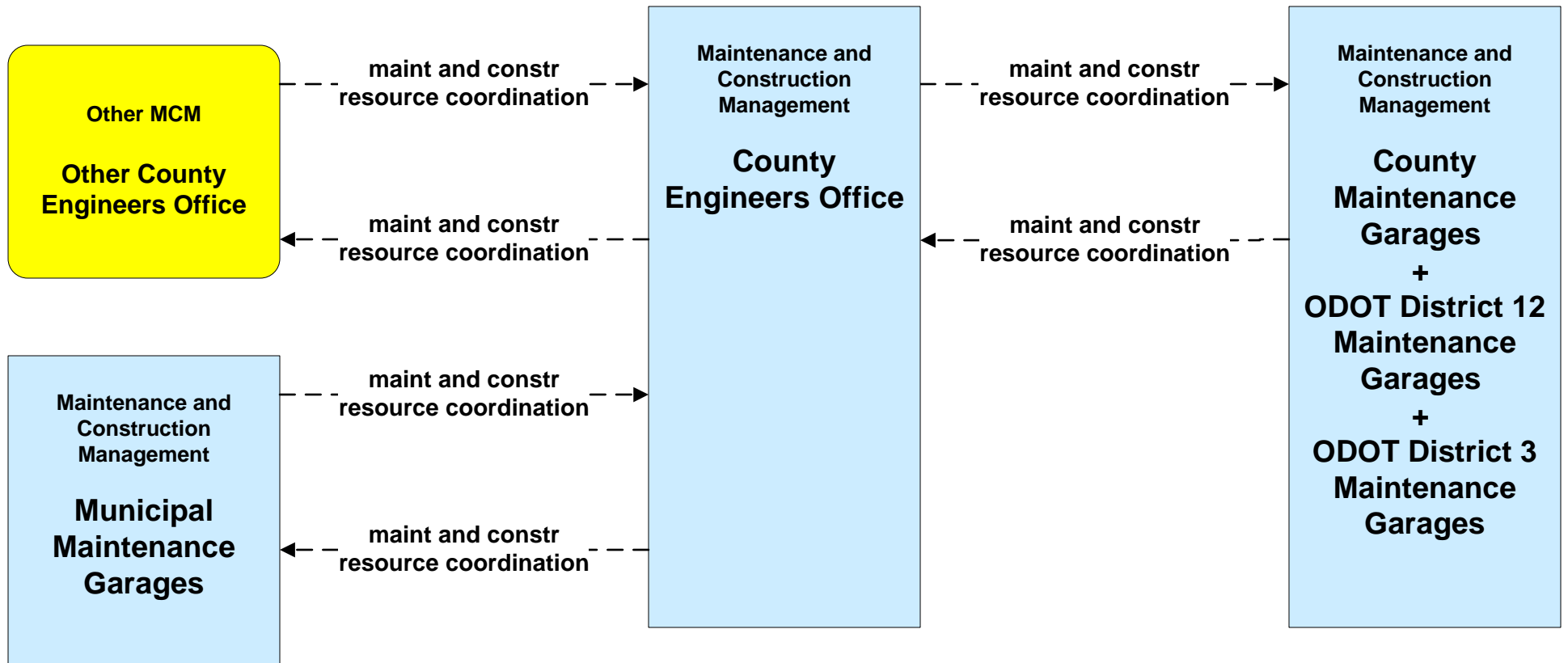
ATMS08 - Incident Management
ODOT District 12 Maintenance Garages (MCM to MCM)



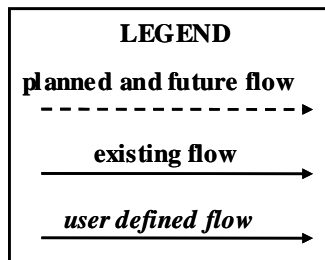
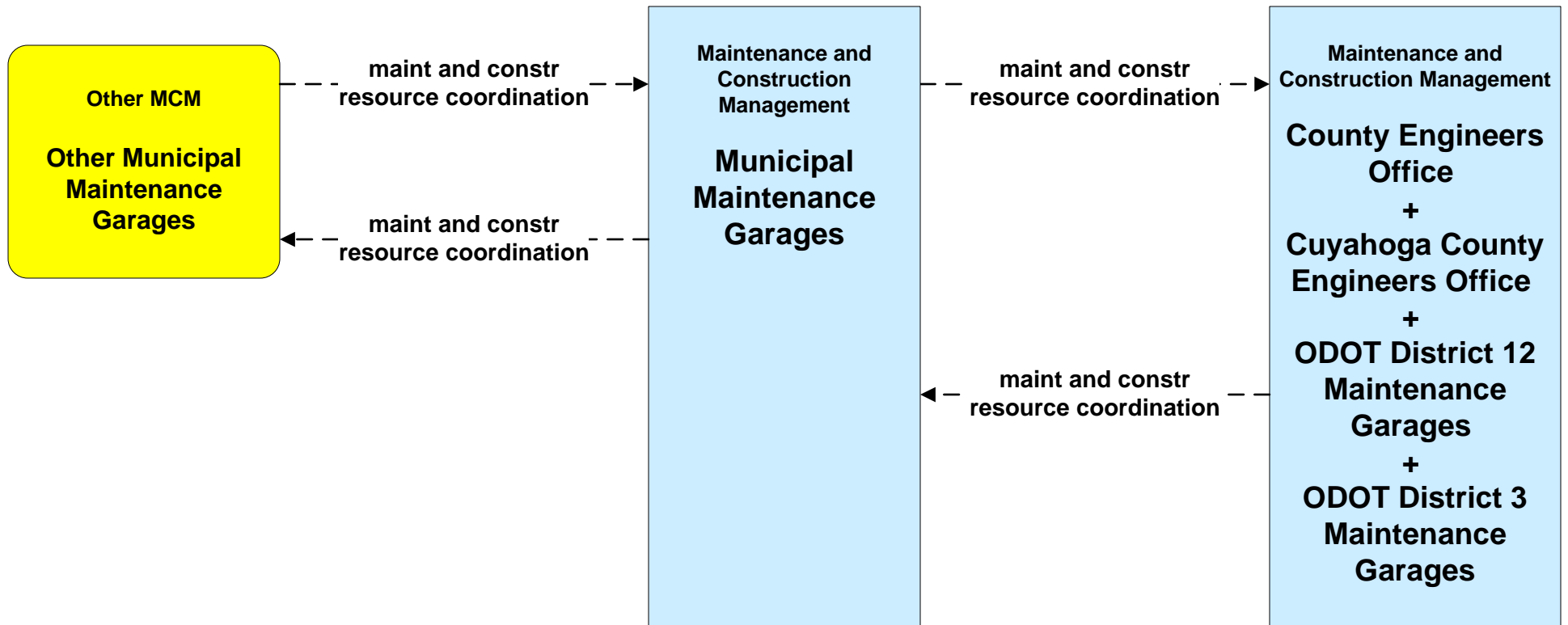
ATMS08 - Incident Management
ODOT District 3 Maintenance Garages (MCM to MCM)



**ATMS08 - Incident Management
County Engineers Office (MCM to MCM)**



**ATMS08 - Incident Management
Municipal Maintenance Garages (MCM to MCM)**



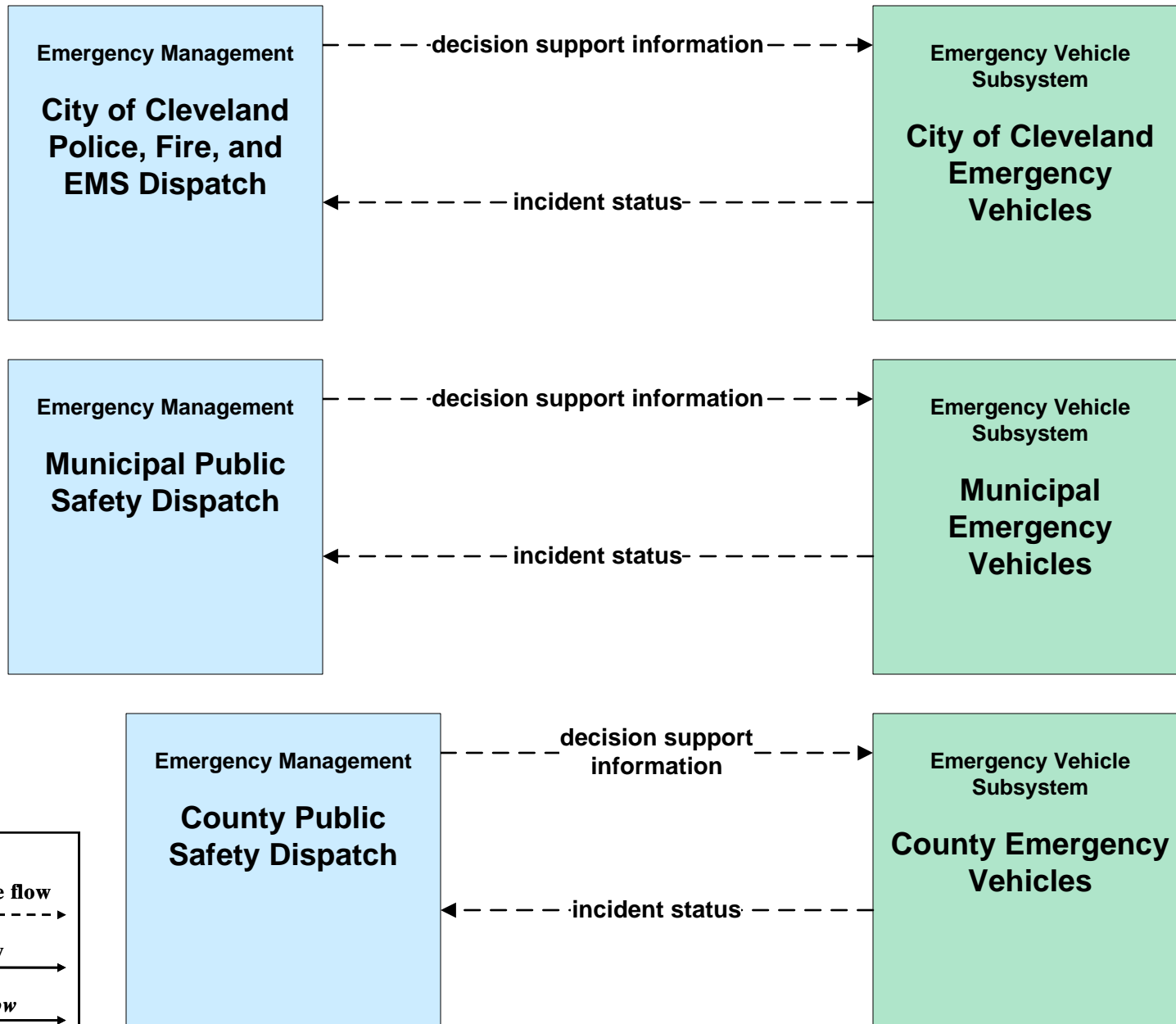
ATMS08 - Incident Management

Emergency Management

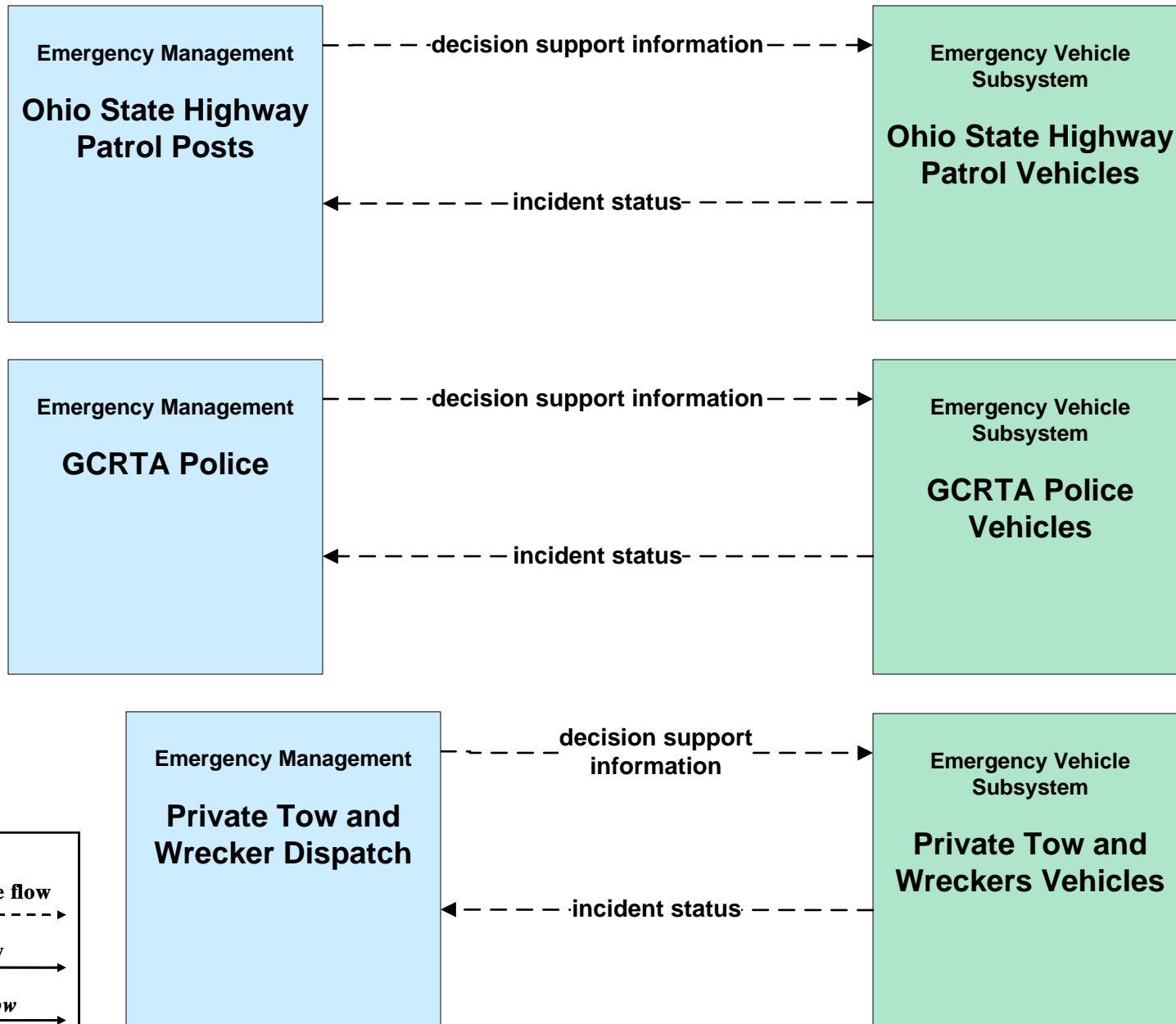
Emergency Vehicles



**ATMS08 - Incident Management
EM to EVS (1 of 2)**



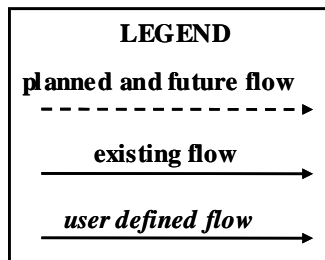
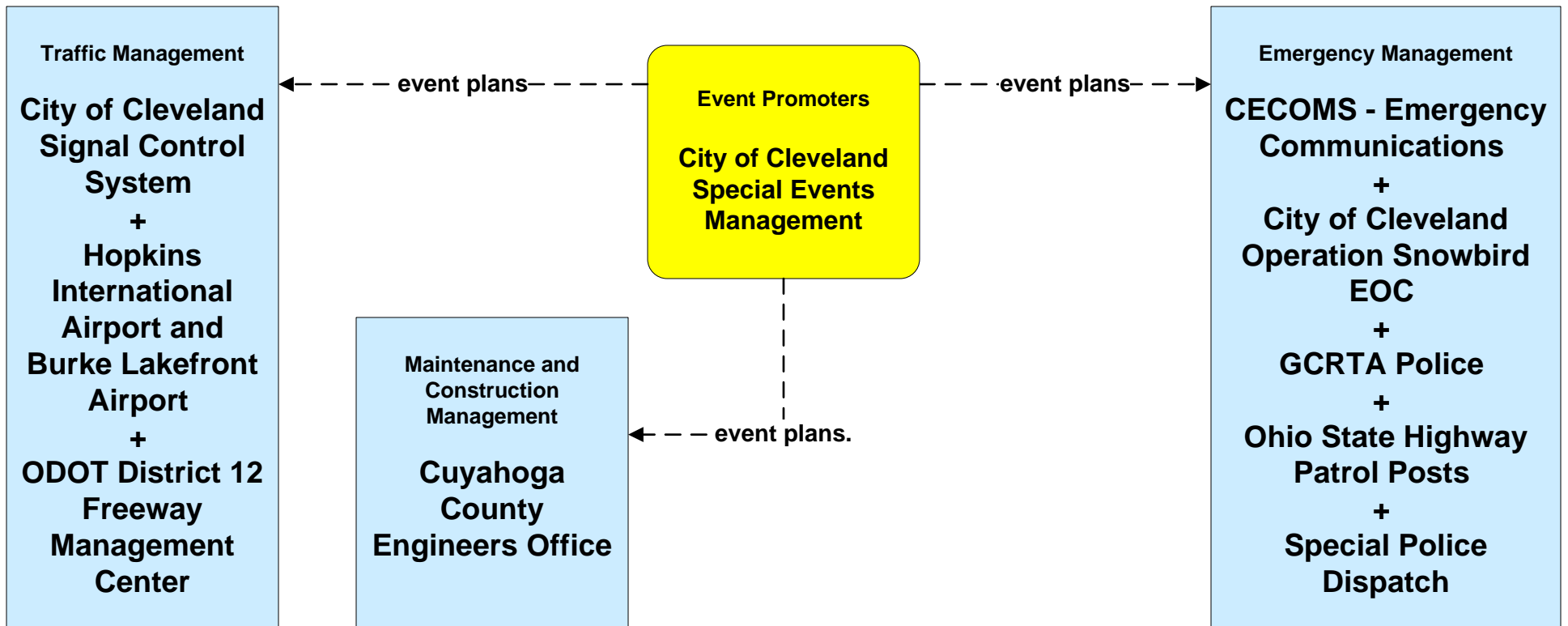
**ATMS08 - Incident Management
EM to EVS (2 of 2)**



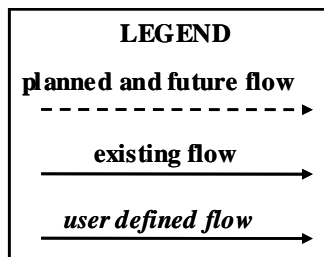
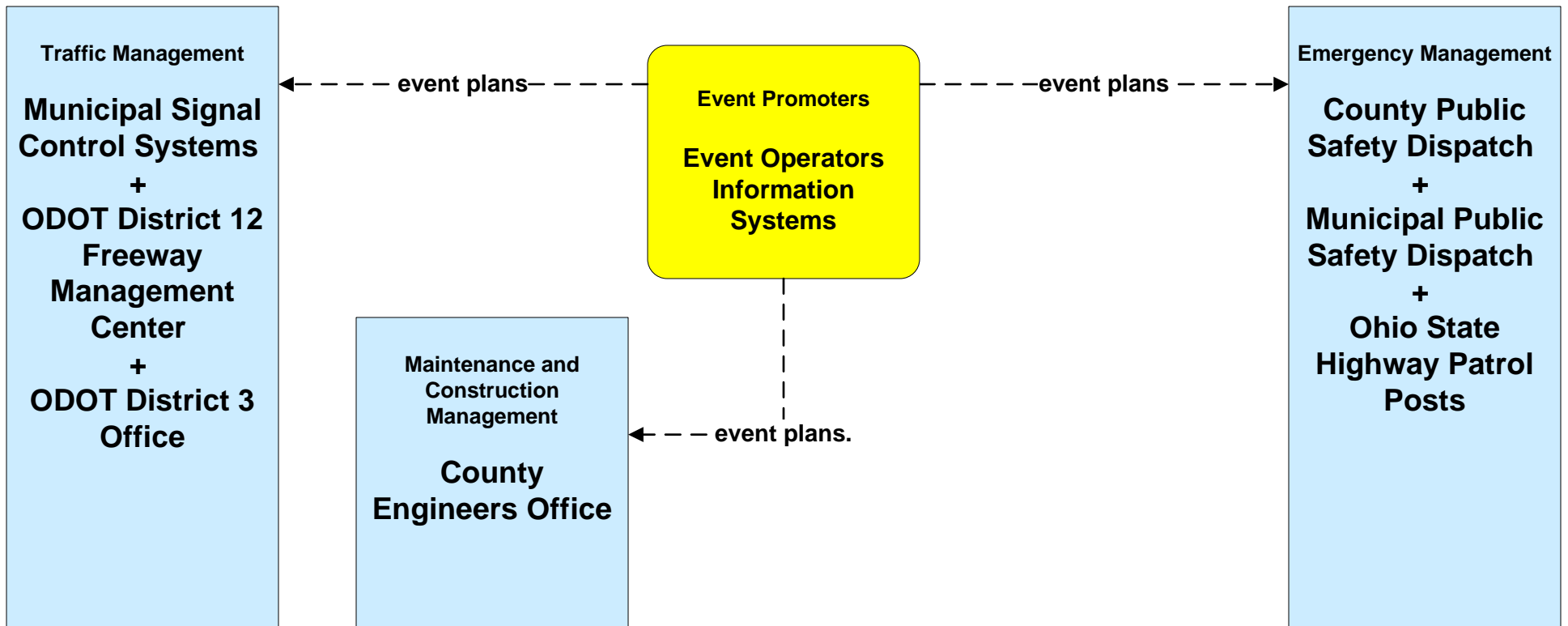
ATMS08 - Incident Management

Event Promoter Interfaces

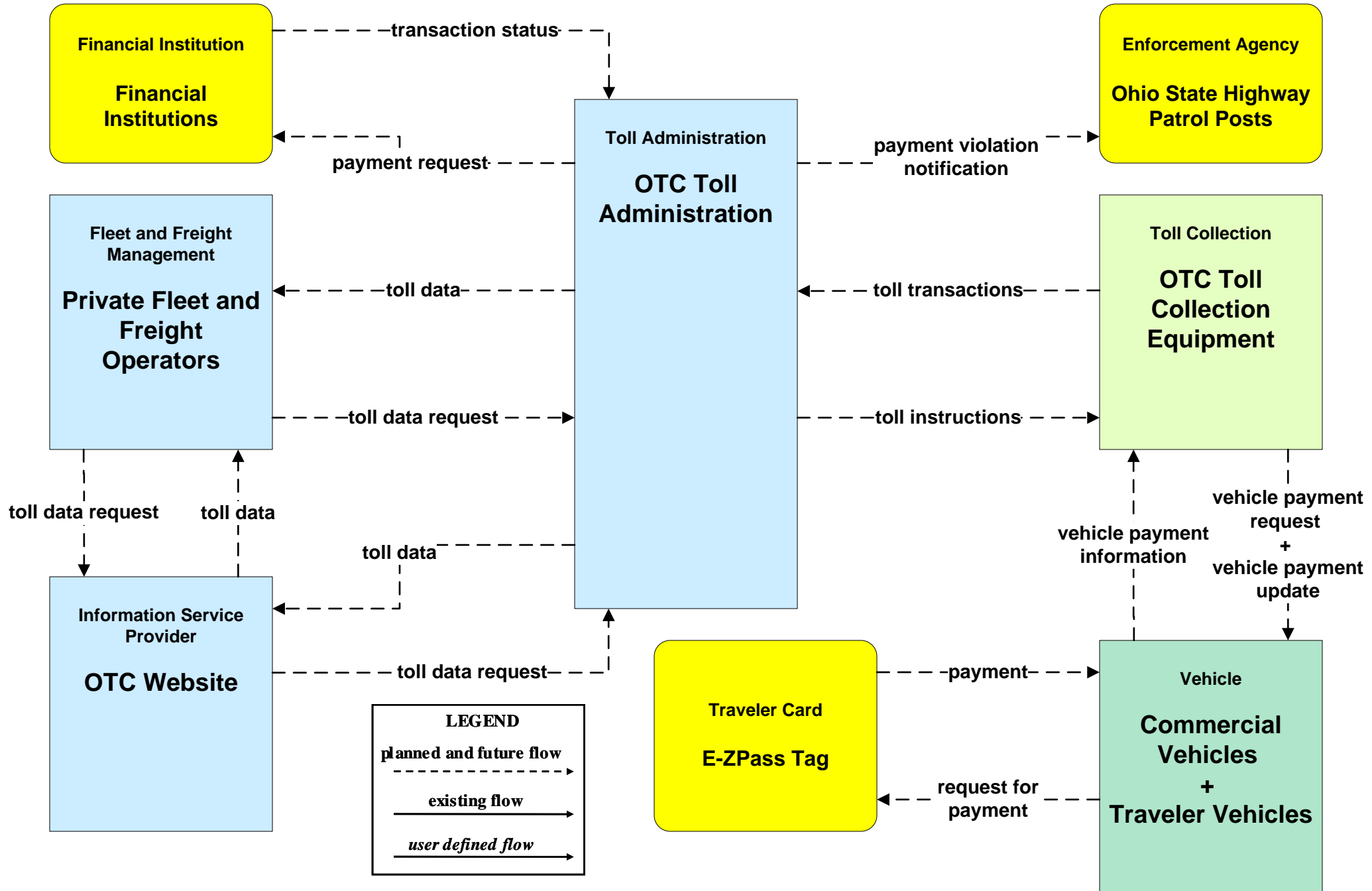
**ATMS08 - Incident Management
Event Promoter Interfaces – City of Cleveland**



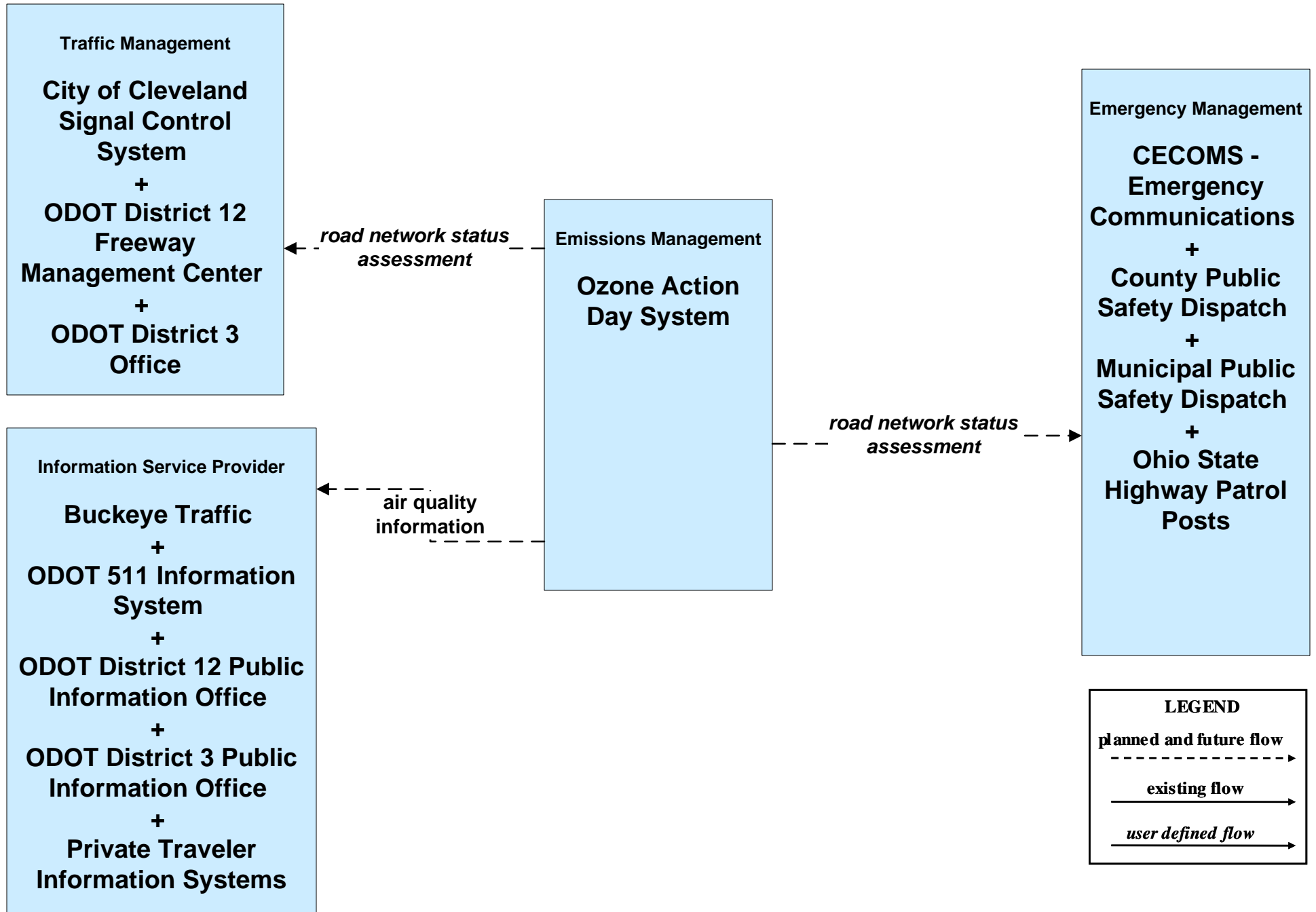
ATMS08 - Incident Management
Event Promoter Interfaces – Municipalities and Counties



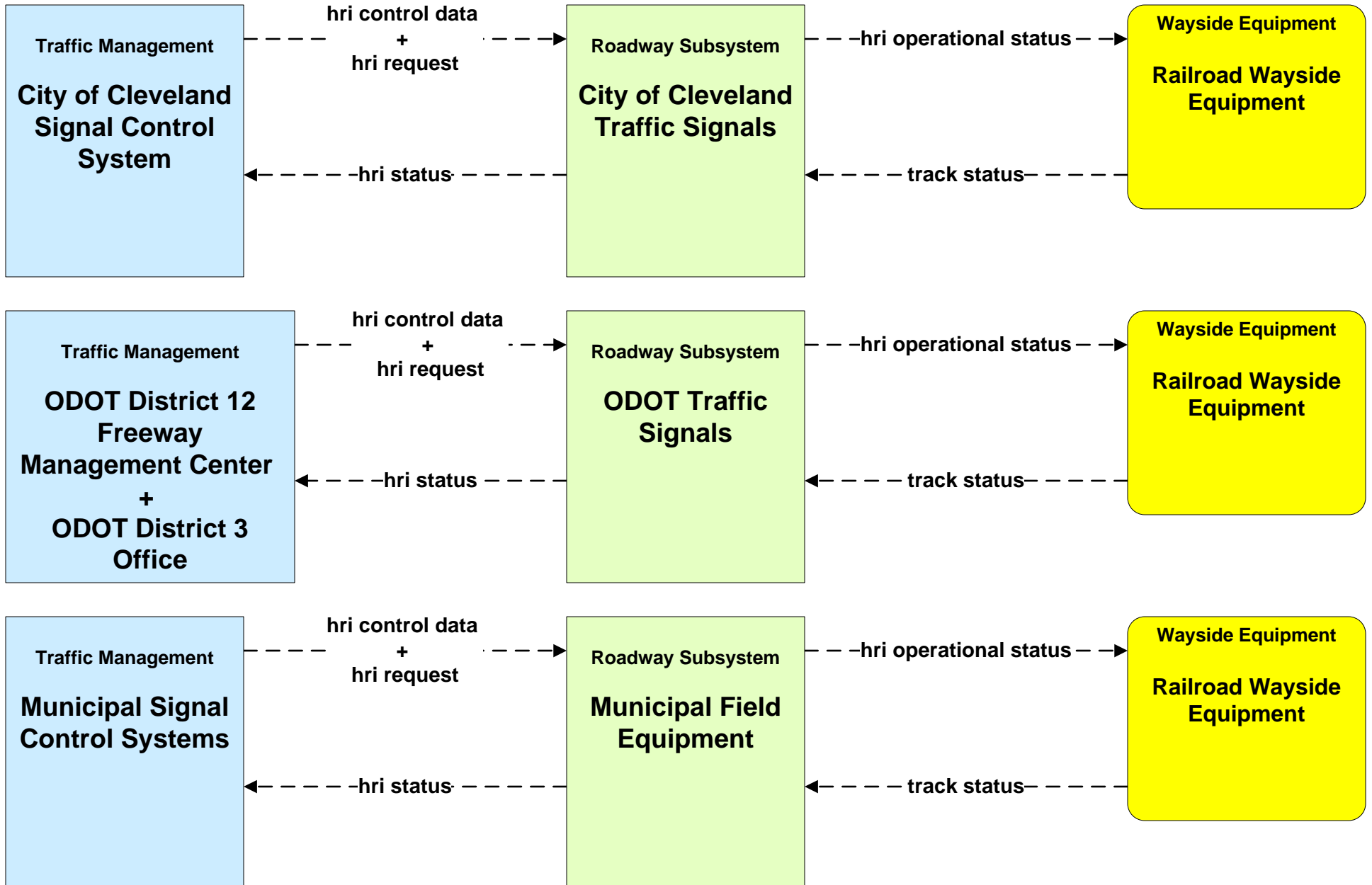
ATMS10 - Electronic Toll Collection Ohio Turnpike Commission



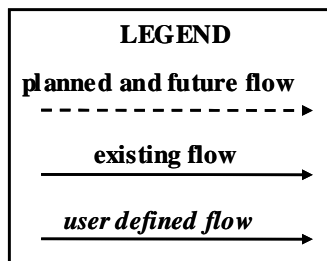
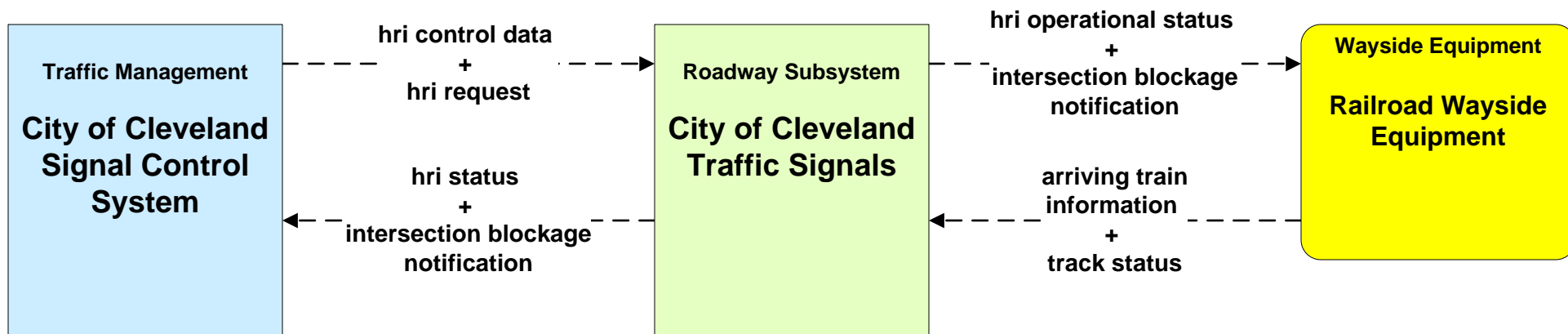
ATMS11 - Emissions Monitoring and Management Ozone Action Day System



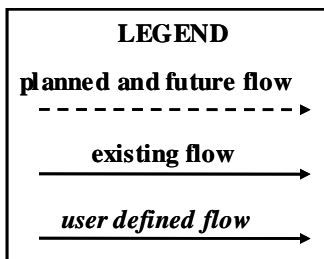
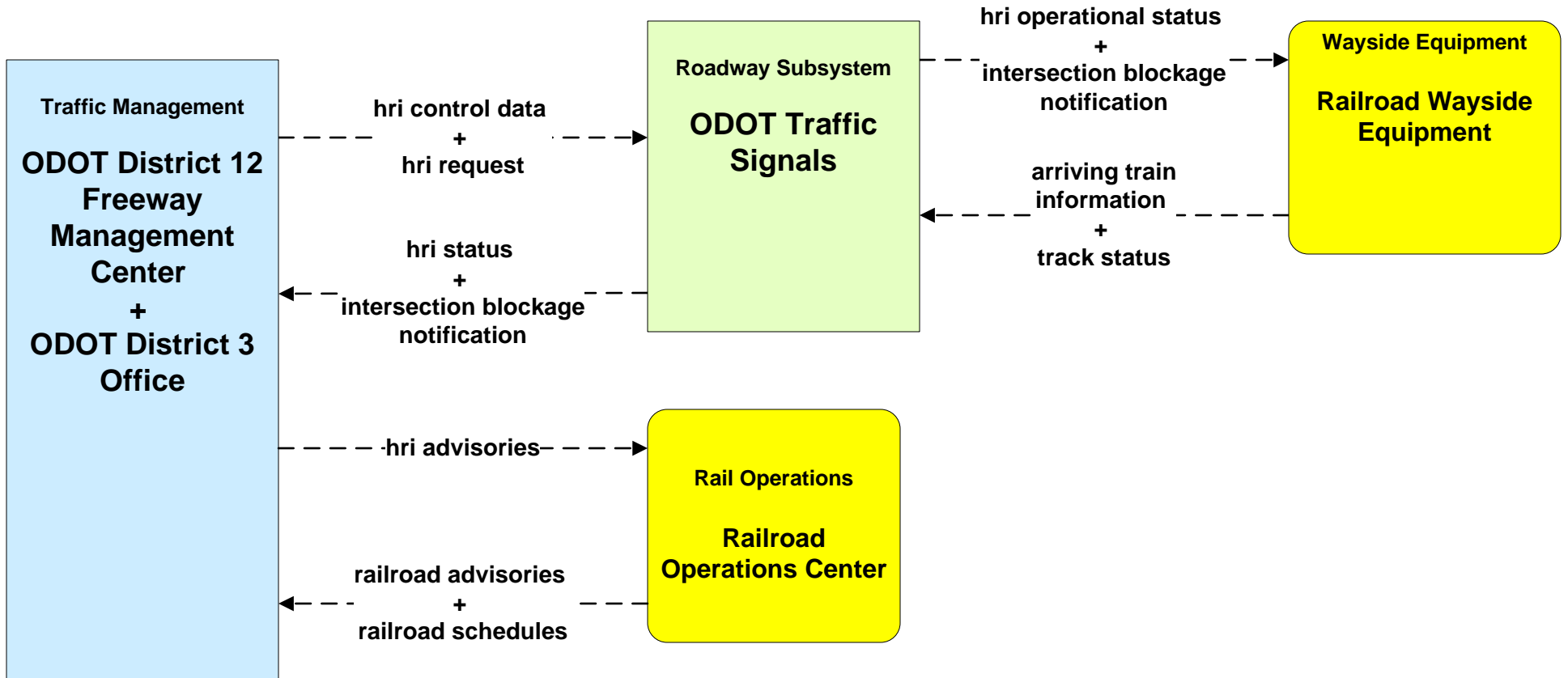
ATMS13 - Standard Railroad Crossing
City of Cleveland / ODOT / Municipal



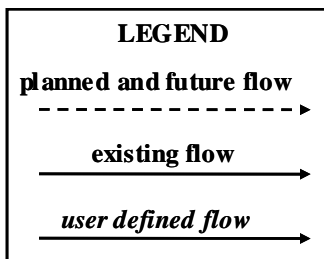
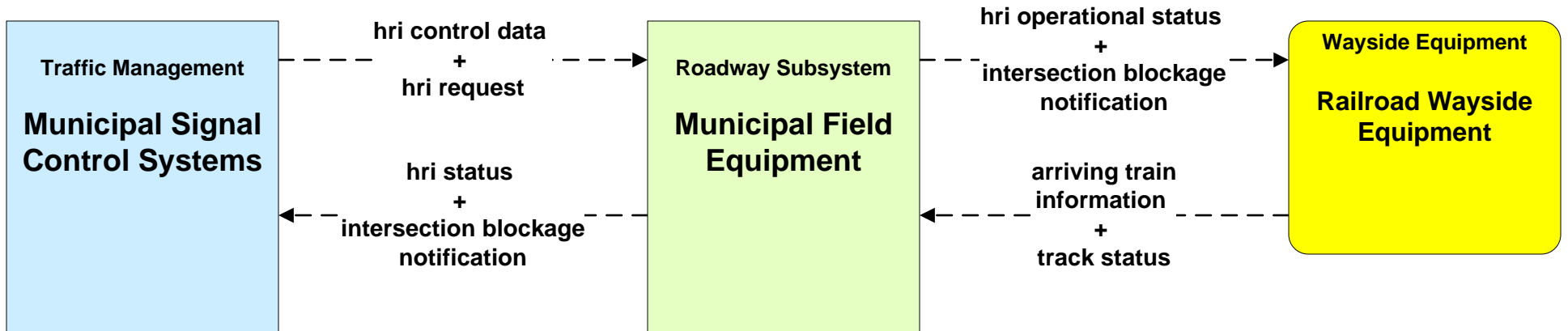
ATMS14 - Advanced Railroad Grade Crossing City of Cleveland



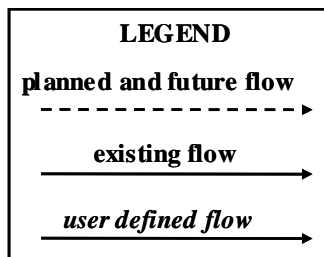
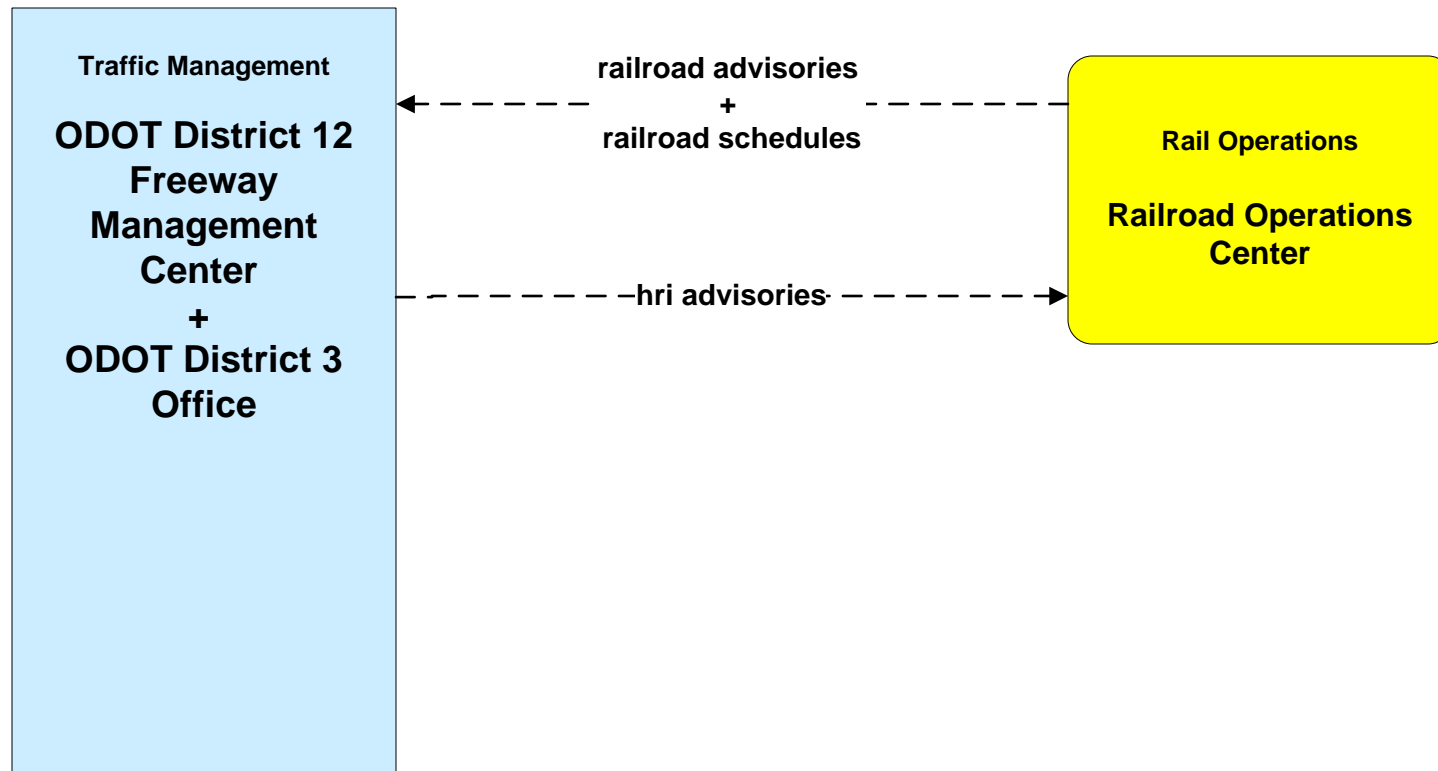
ATMS14 - Advanced Railroad Grade Crossing ODOT



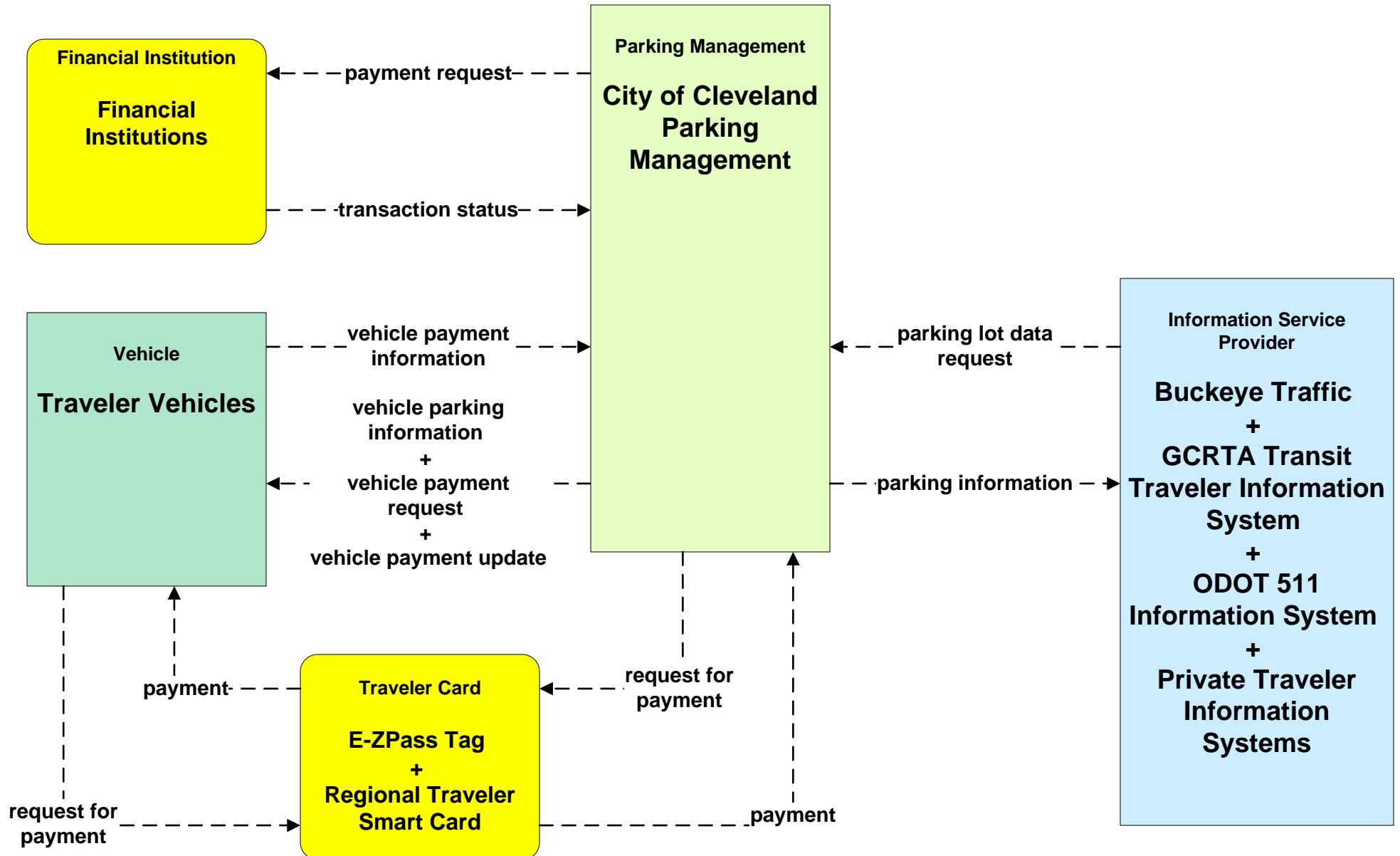
ATMS14 - Advanced Railroad Grade Crossing Municipal Signal Control Systems



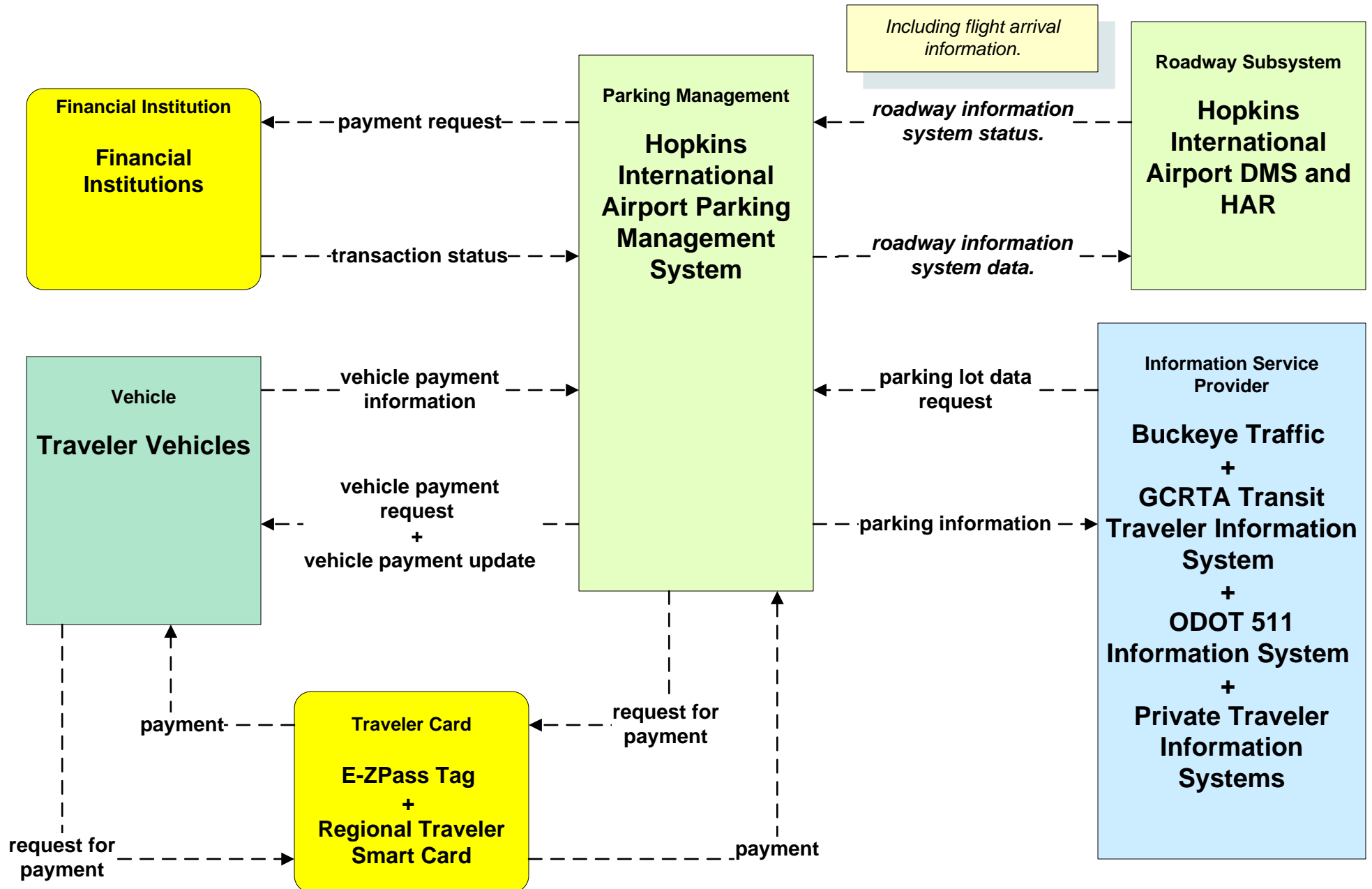
ATMS15 - Railroad Operations Coordination TMCs to Rail Operations Center



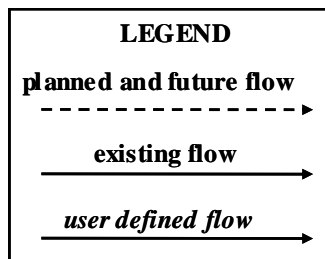
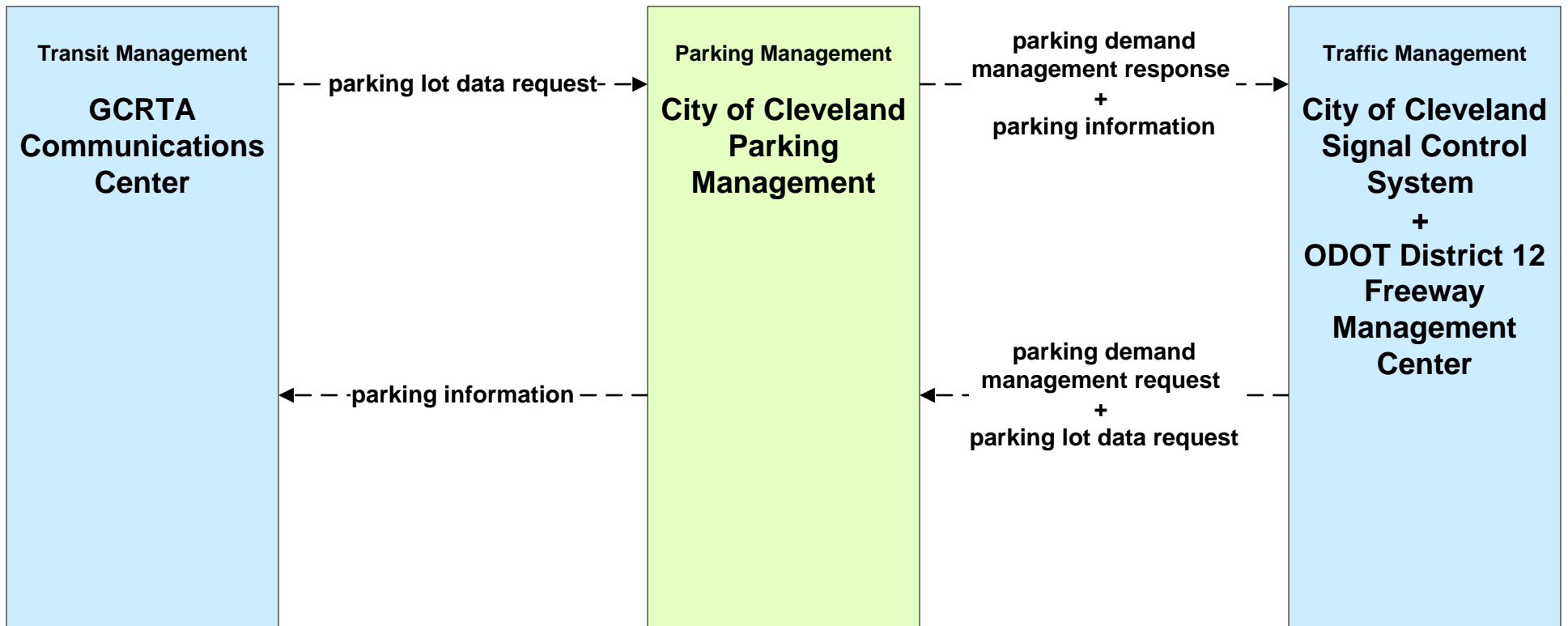
ATMS16 - Parking Facility Management City of Cleveland



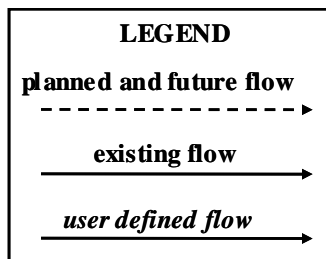
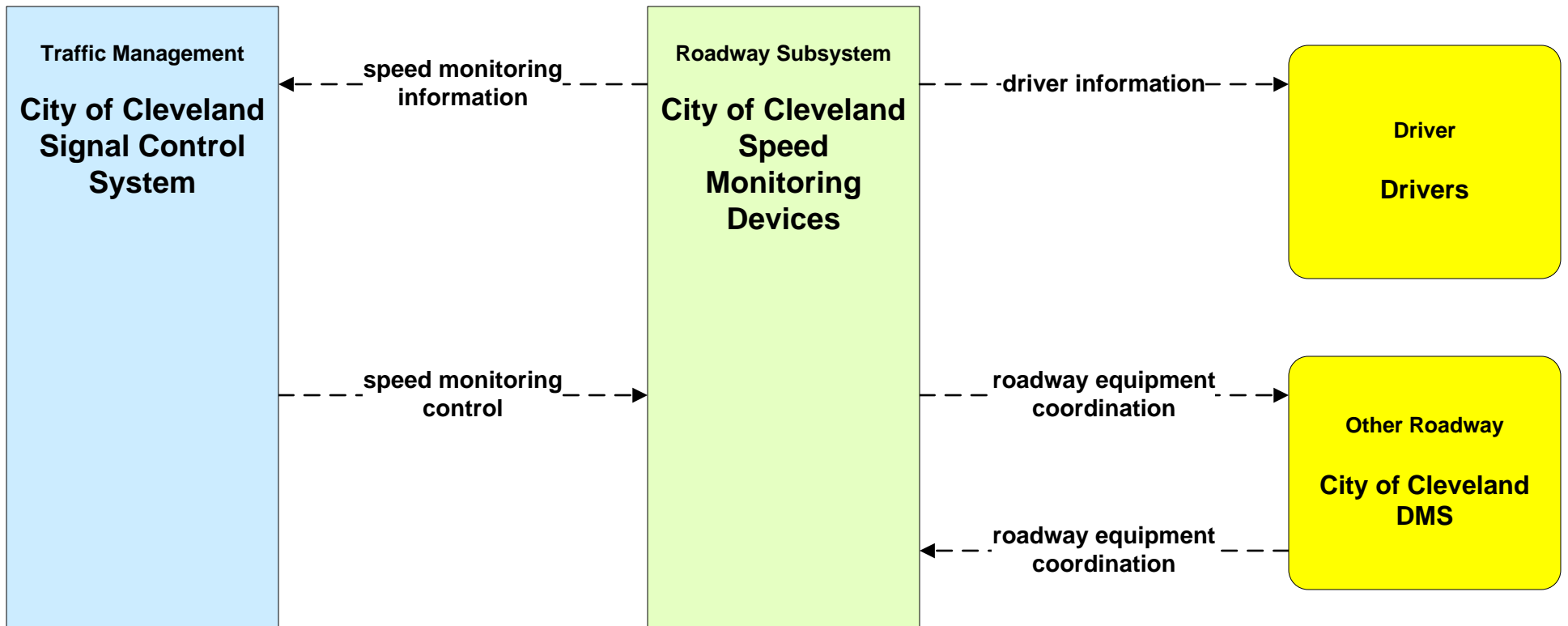
ATMS16 - Parking Facility Management Hopkins International Airport



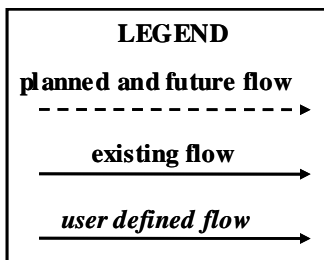
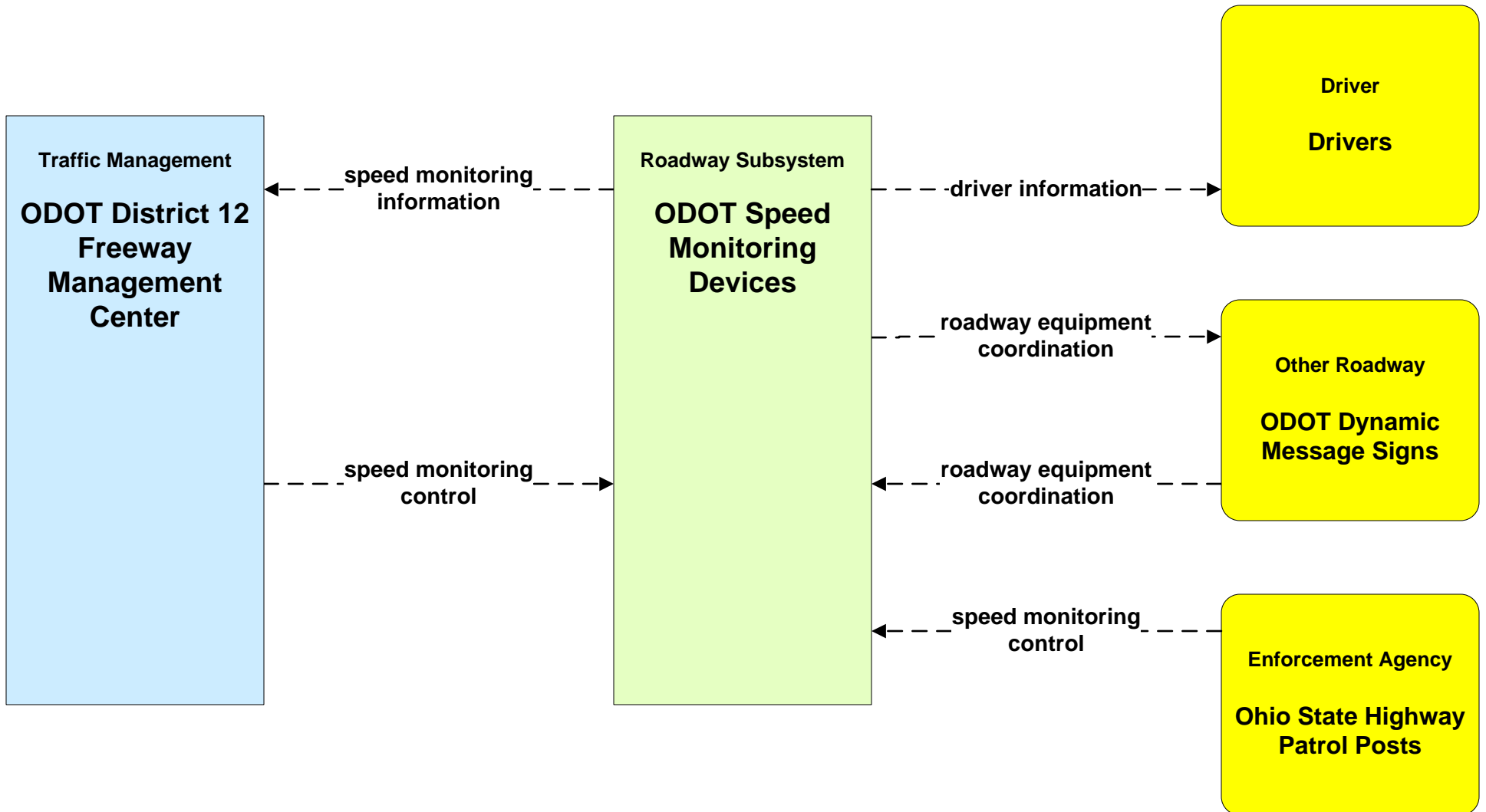
ATMS17 - Regional Parking Management City of Cleveland



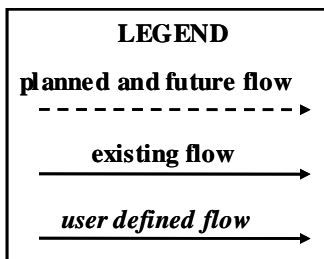
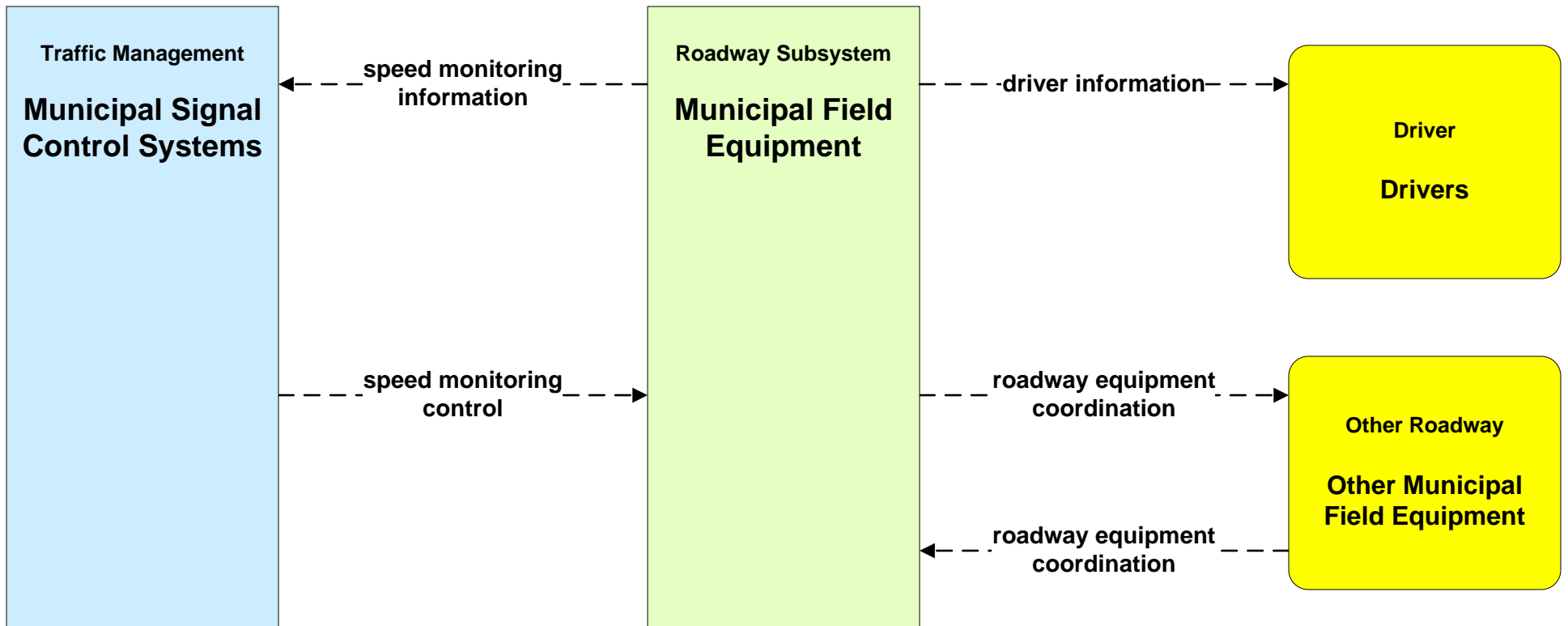
ATMS19 - Speed Monitoring City of Cleveland



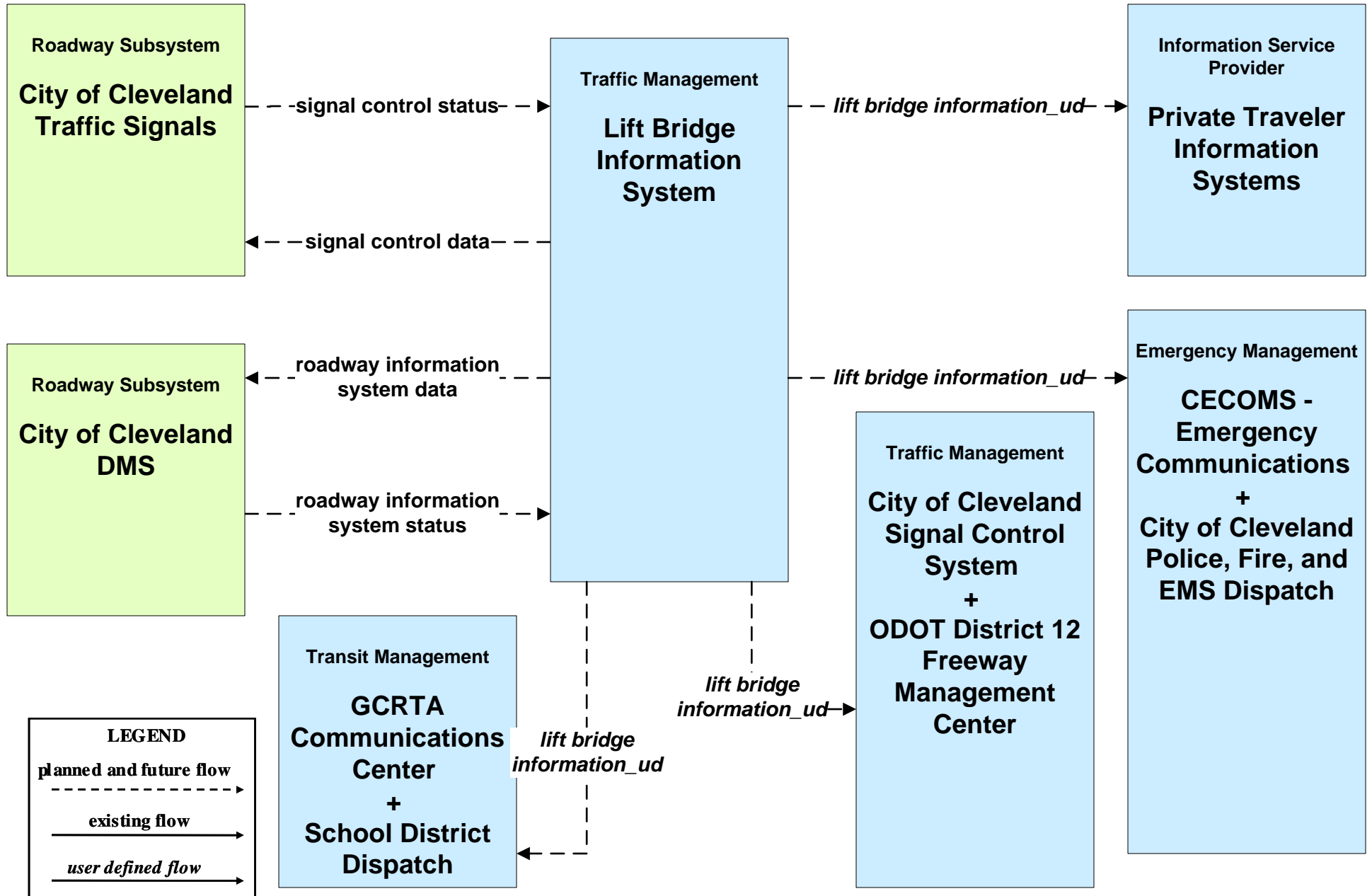
ATMS19 - Speed Monitoring ODOT



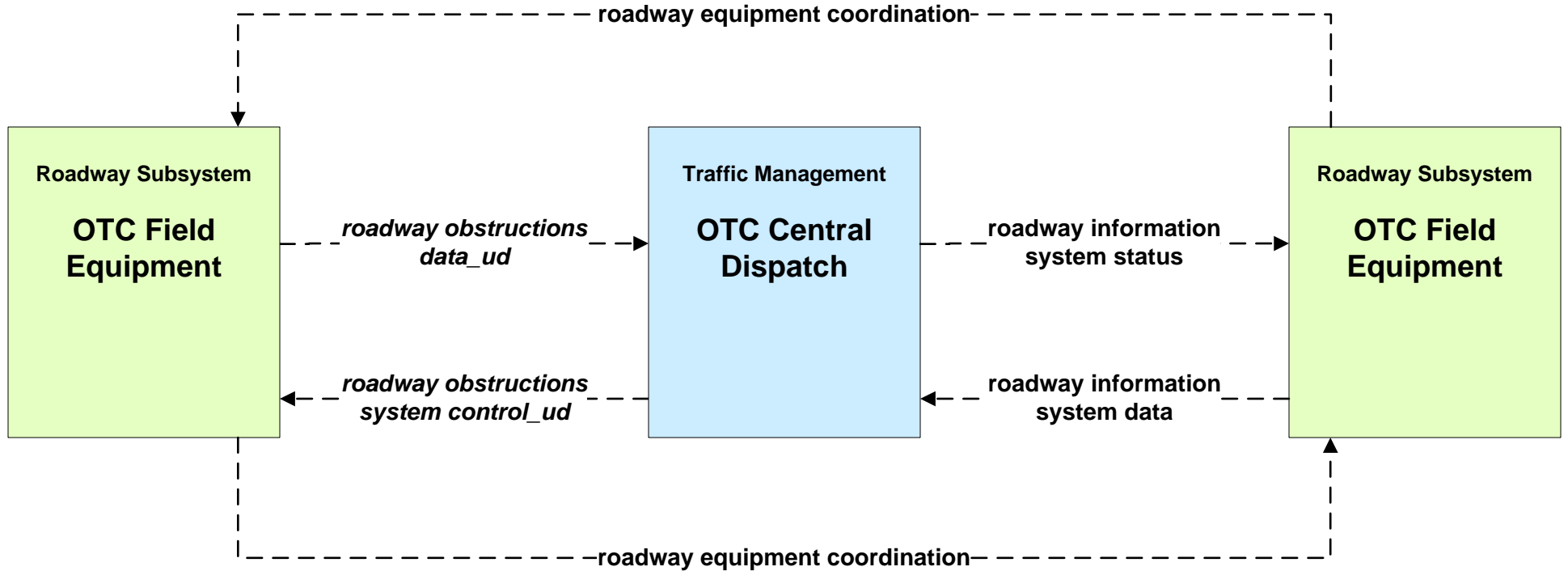
ATMS19 - Speed Monitoring Municipal Signal Control Systems



ATMS20 - Drawbridge Management Lift Bridge Information System



ATMS21 - Roadway Obstruction Ohio Turnpike Commission

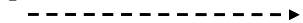


E.g., motion or intrusion sensor

E.g., dynamic message sign

LEGEND

planned and future flow



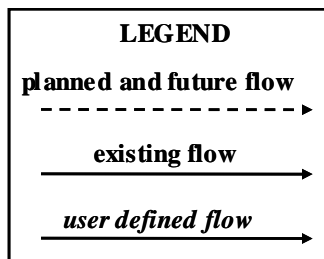
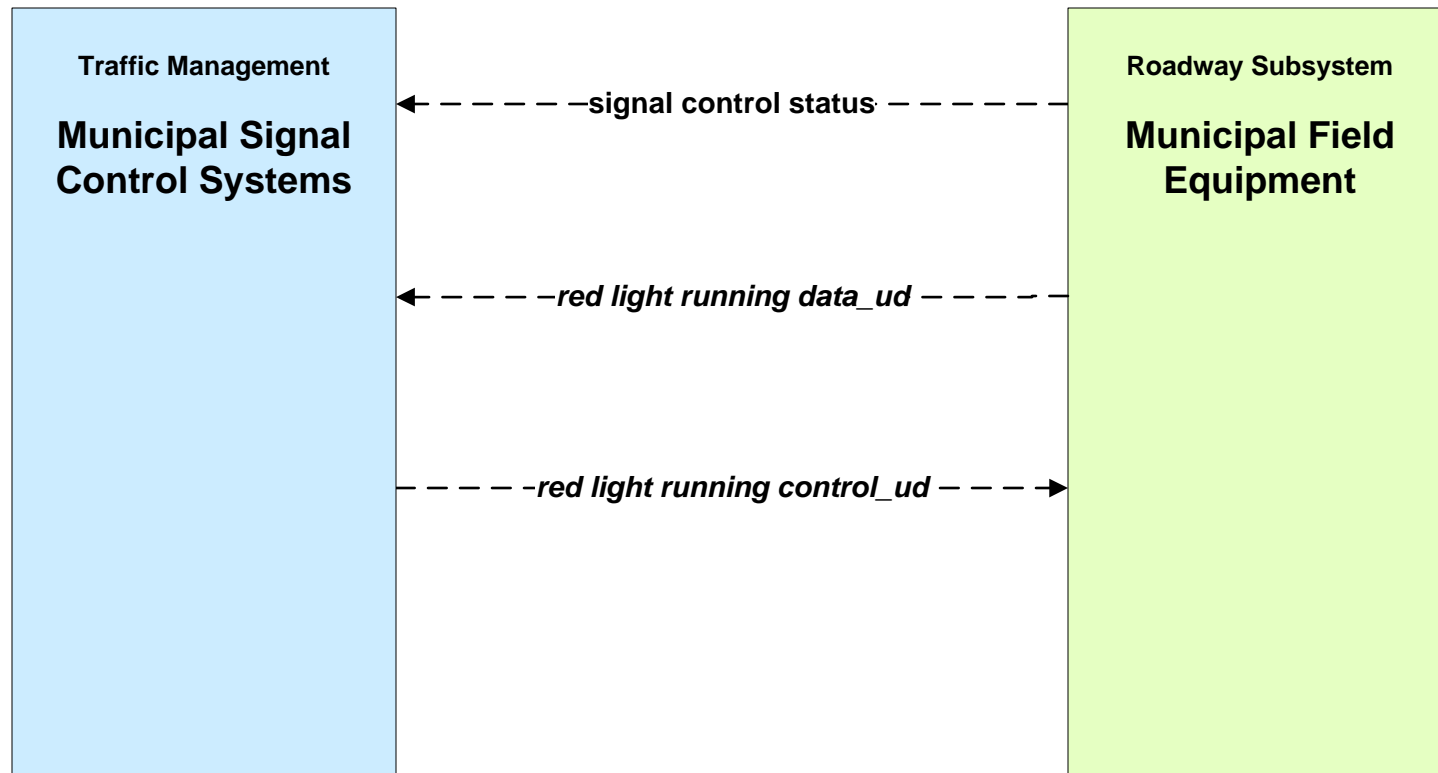
existing flow



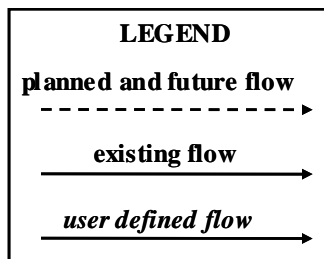
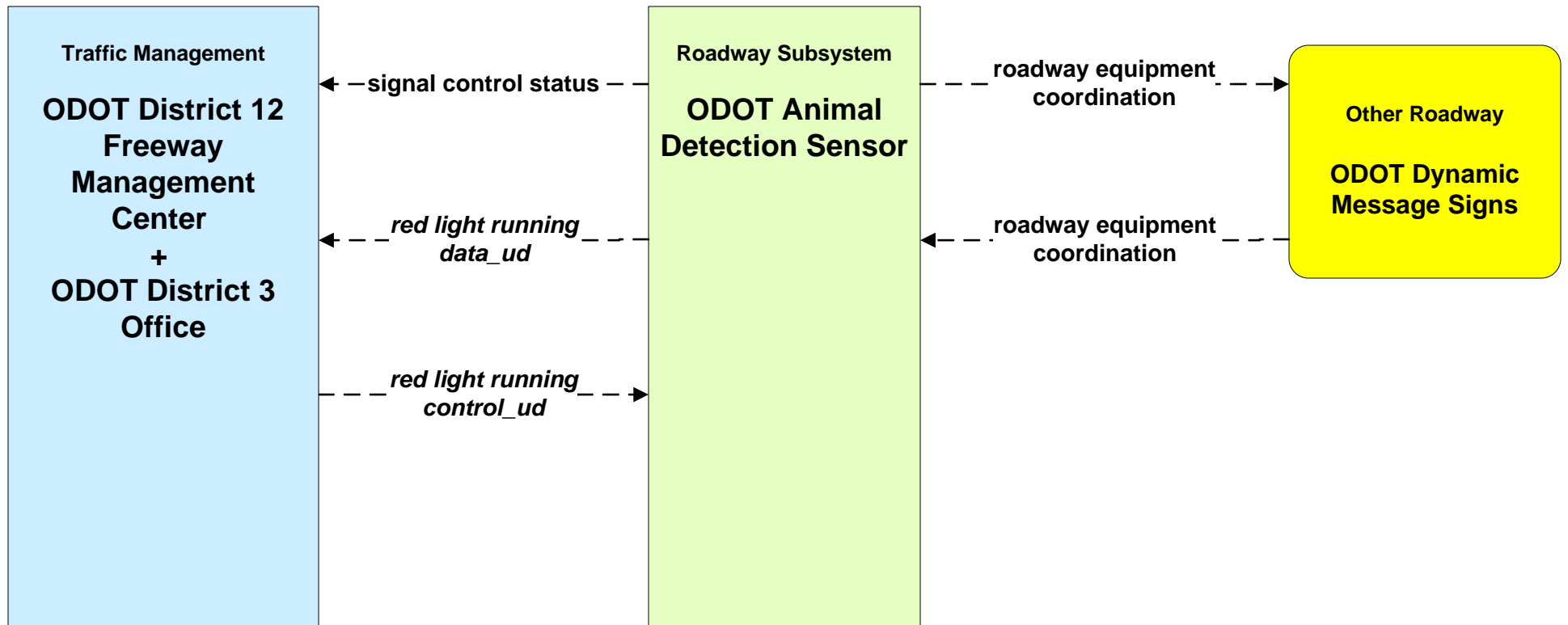
user defined flow



ATMS-EX1 – Red Light Running Municipal Signal Control Systems



ATMS-EX2 – Animal Detection System ODOT



ATMS-EX3 – Route Guidance Hopkins International Airport

