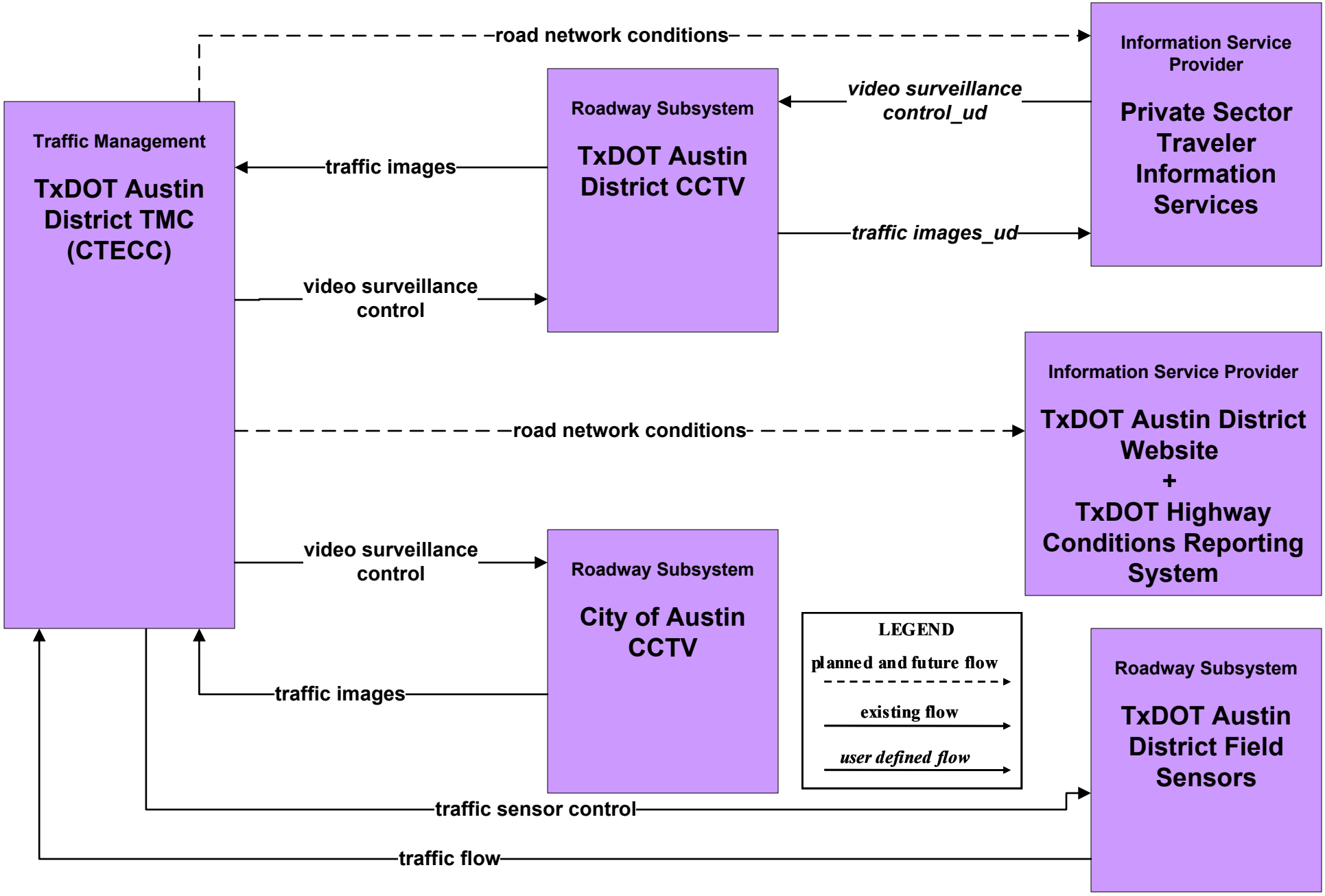
Austin Regional ITS Architecture

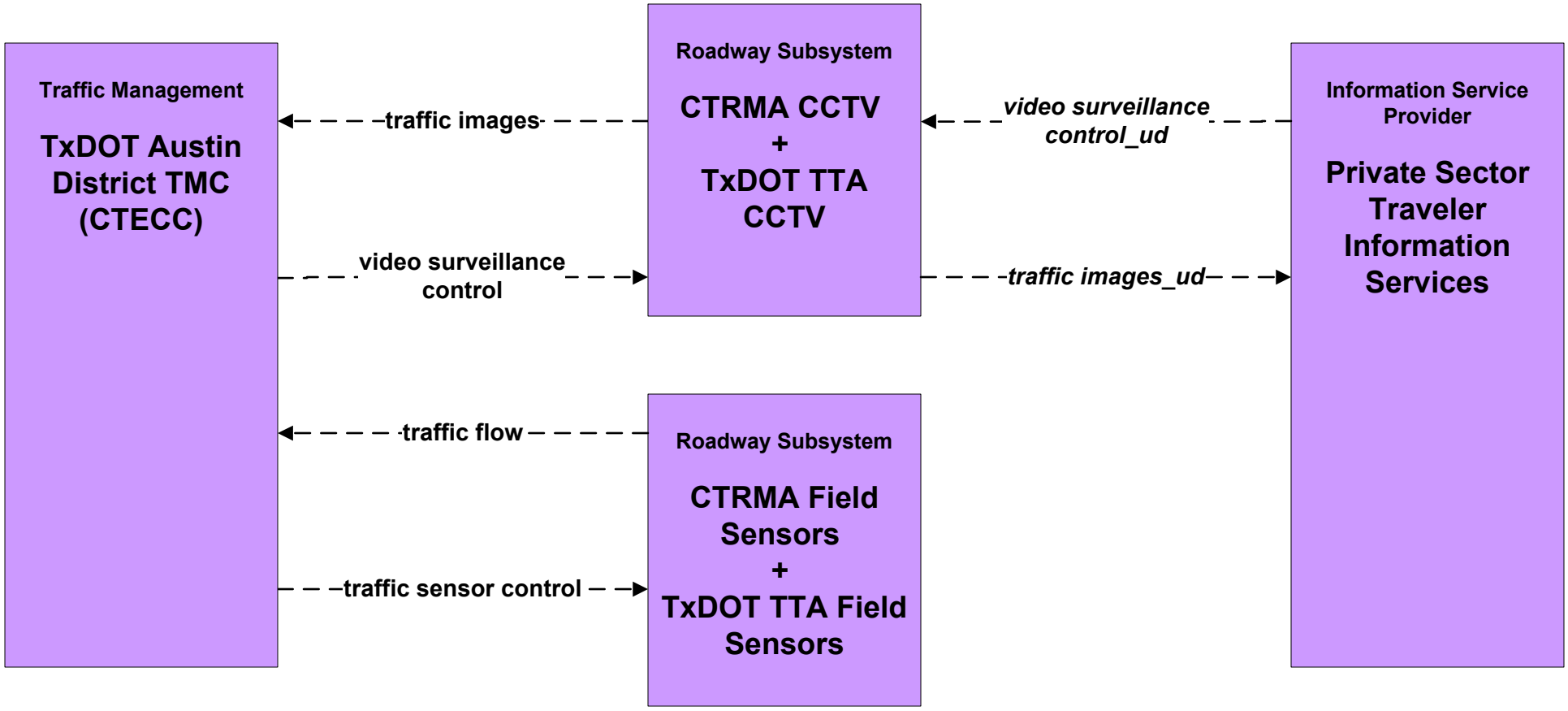
Customized Market Package Diagrams

Advanced Traffic Management Systems (ATMS)

ATMS01 - Network Surveillance
TxDOT Austin District TMC (CTECC) (1 of 2)



ATMS01 - Network Surveillance
TxDOT Austin District TMC (CTECC) (2 of 2)



LEGEND

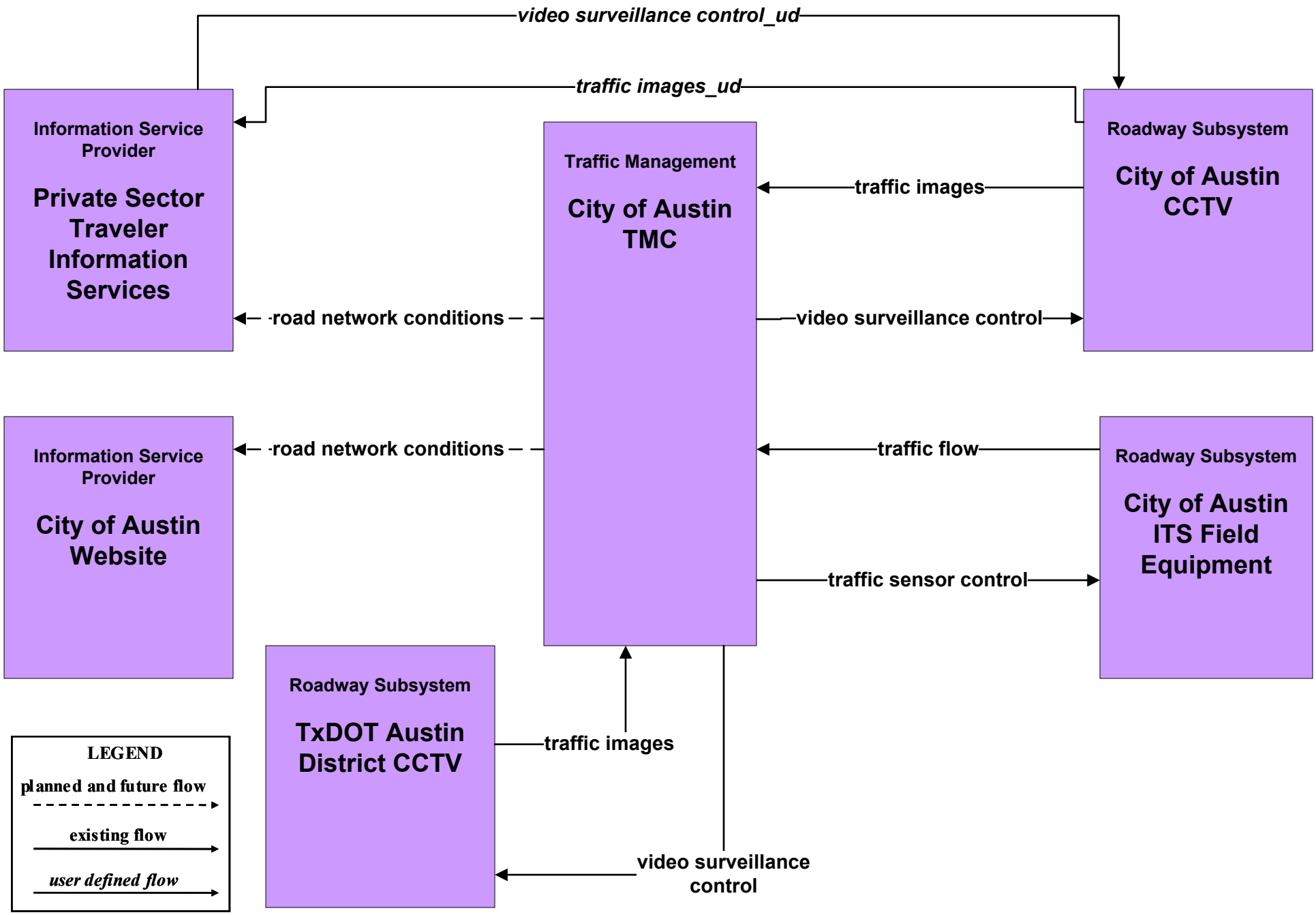
planned and future flow

existing flow

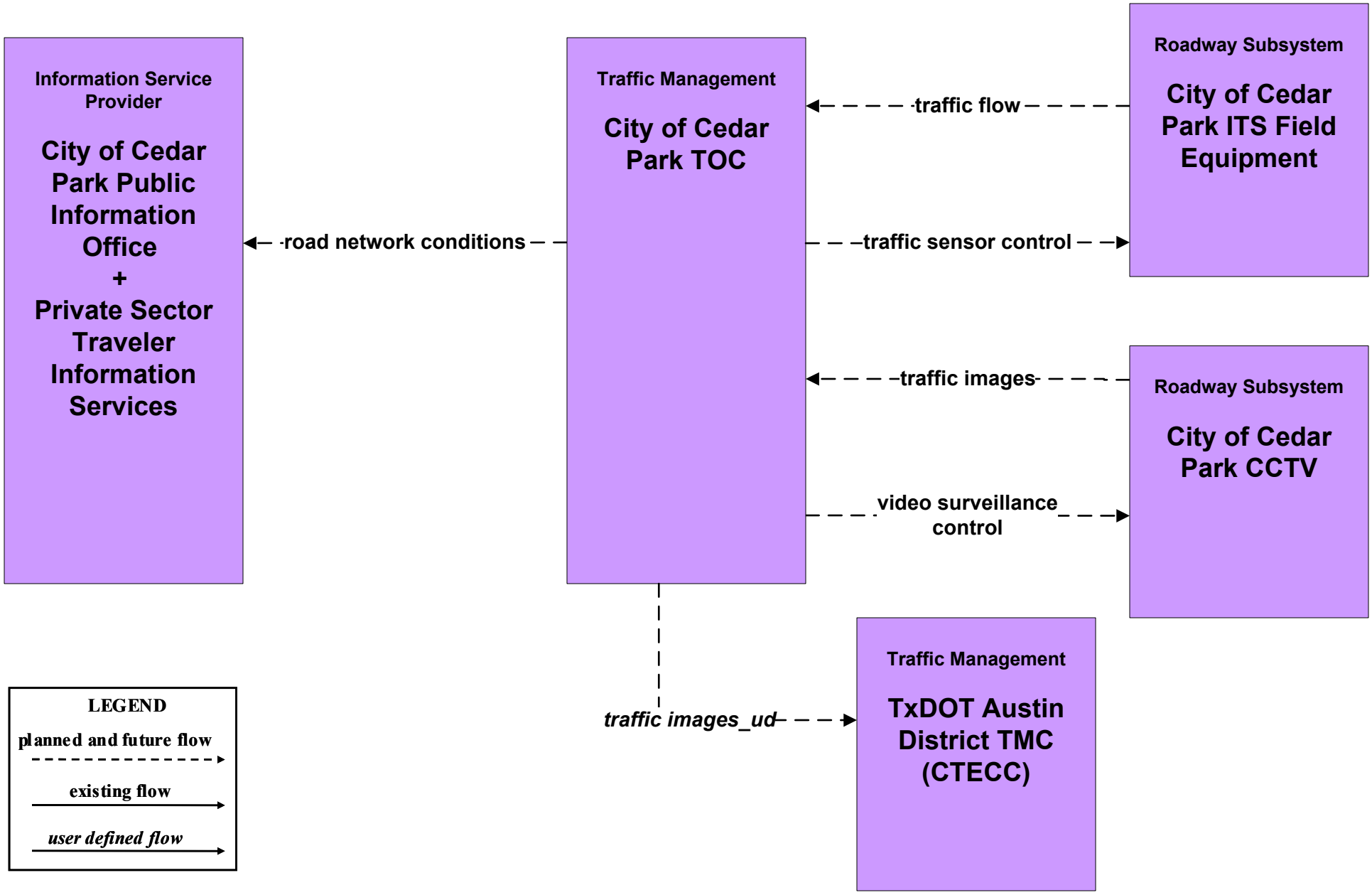
user defined flow

TxDOT will control CTRMA and TTA CCTV and field sensors

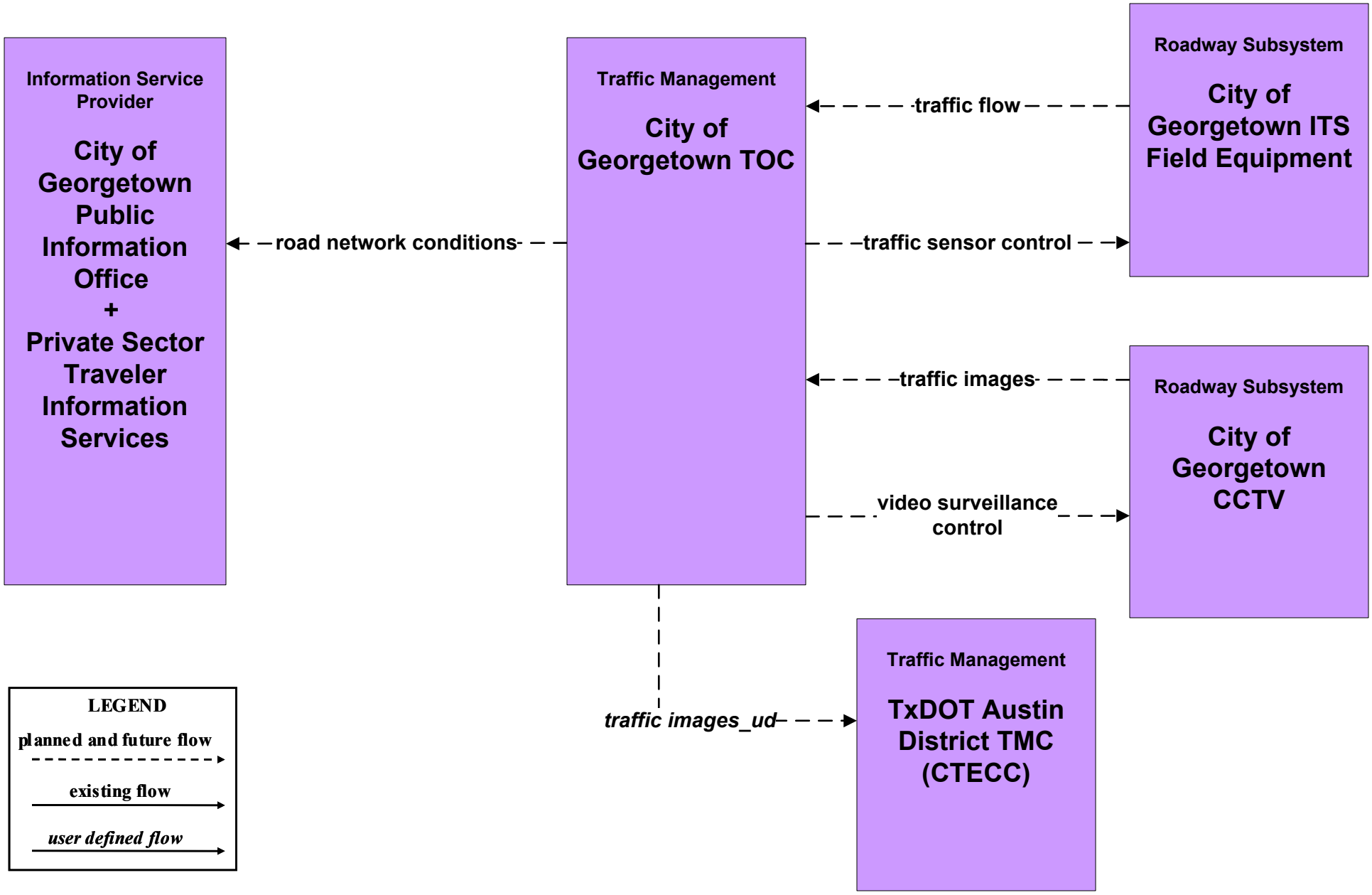
ATMS01 - Network Surveillance
City of Austin Traffic Management Center



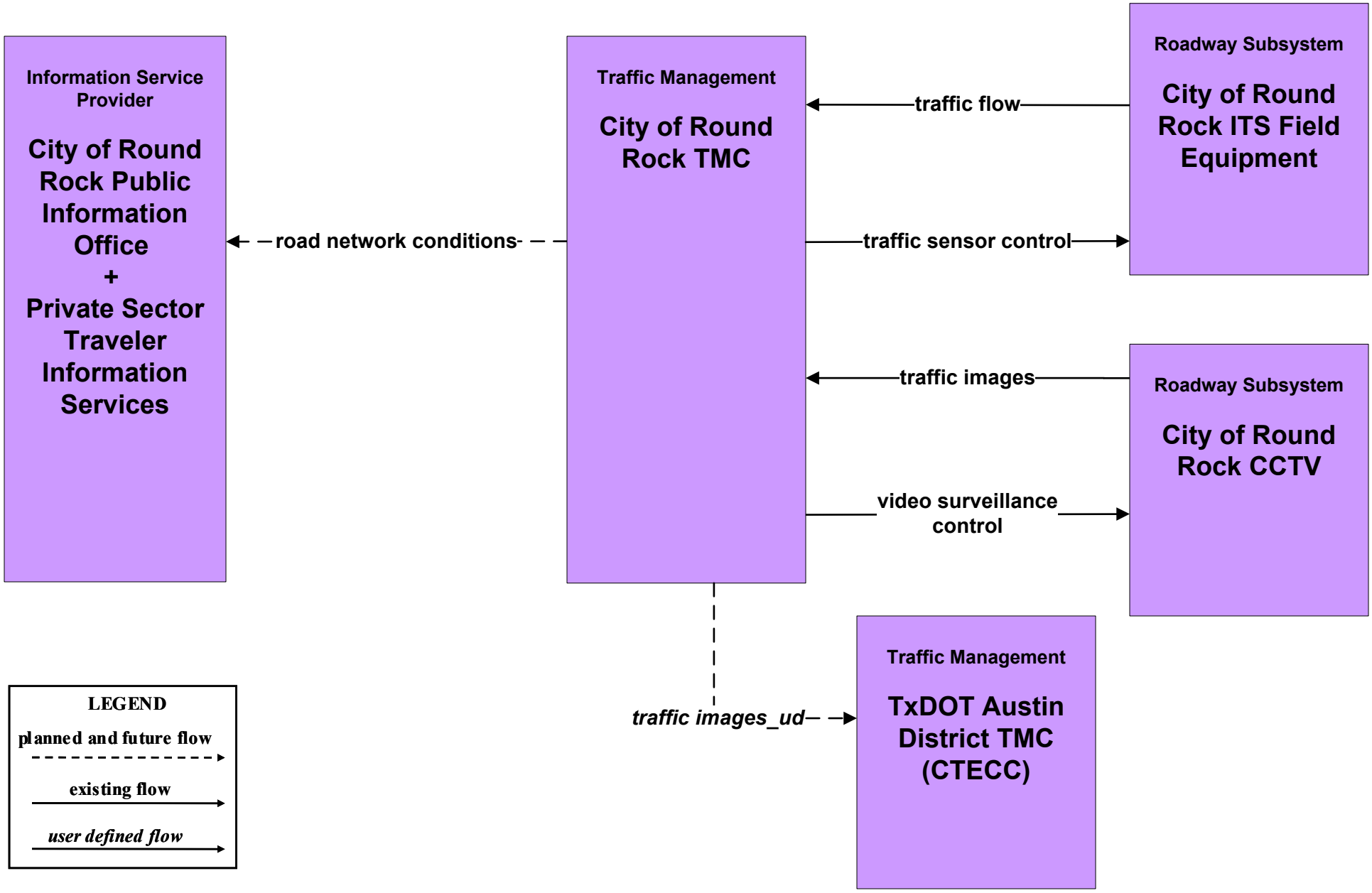
ATMS01 - Network Surveillance
City of Cedar Park Traffic Management Center



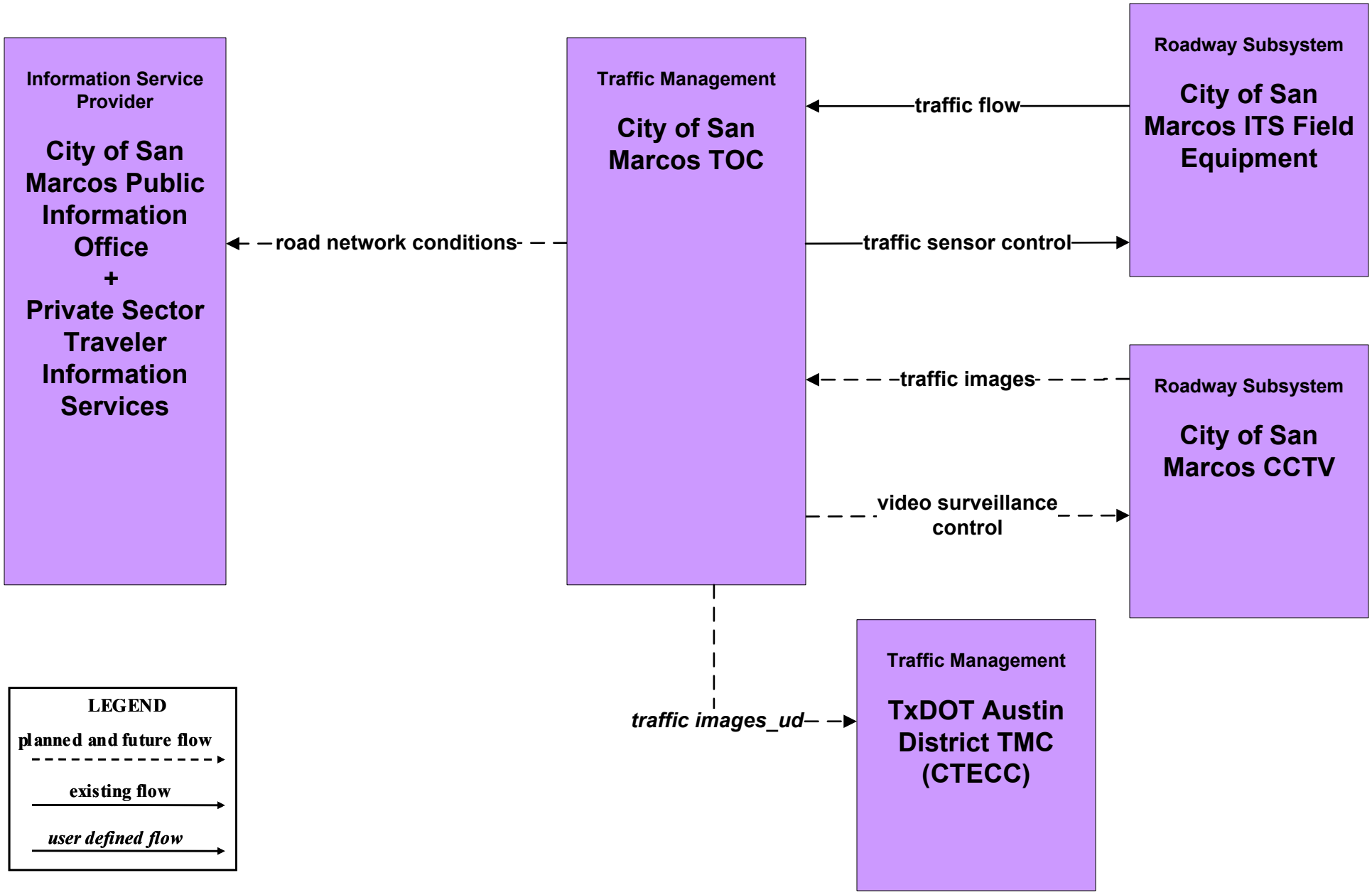
ATMS01 - Network Surveillance
City of Georgetown Traffic Management Center



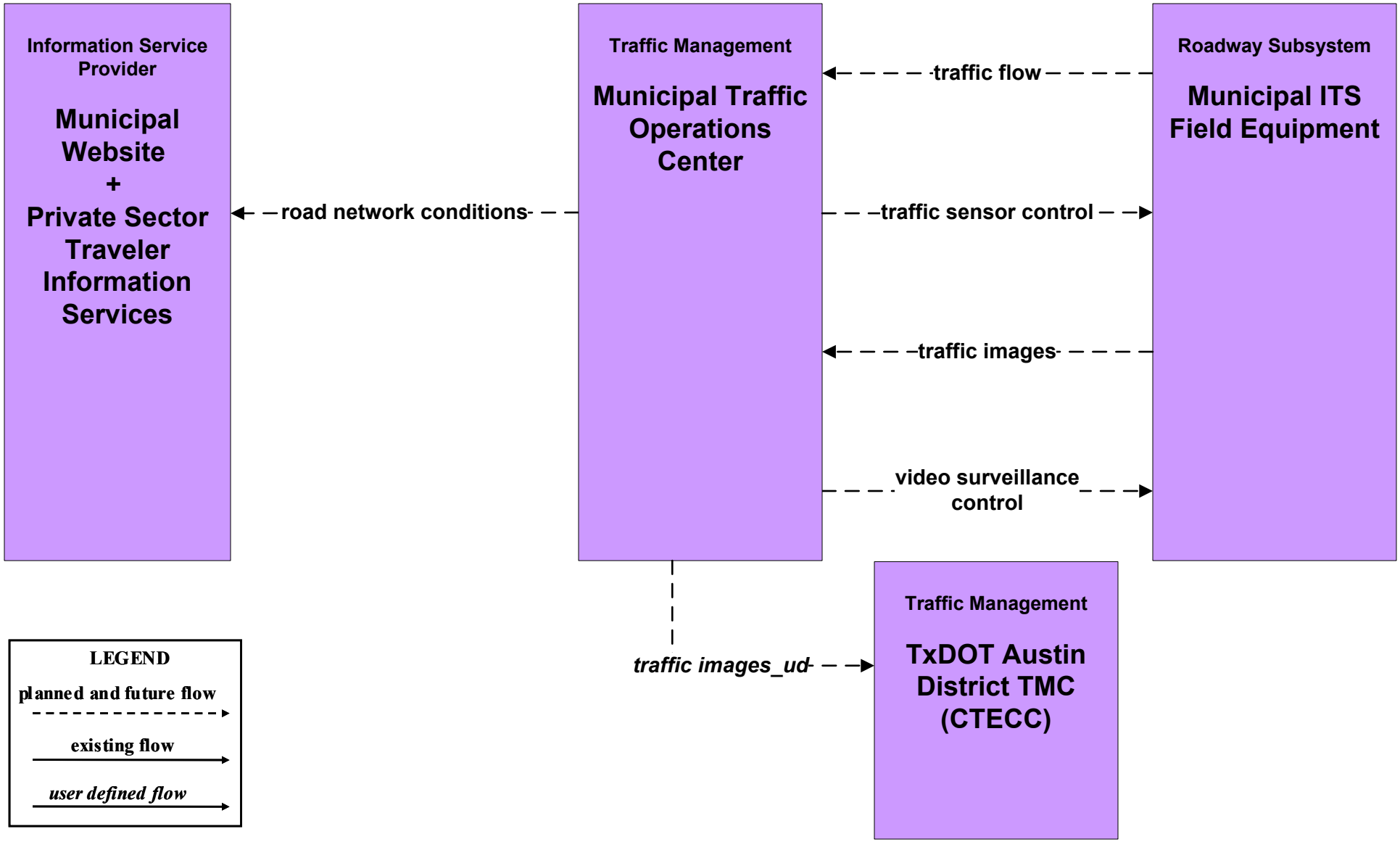
ATMS01 - Network Surveillance
City of Round Rock Traffic Management Center



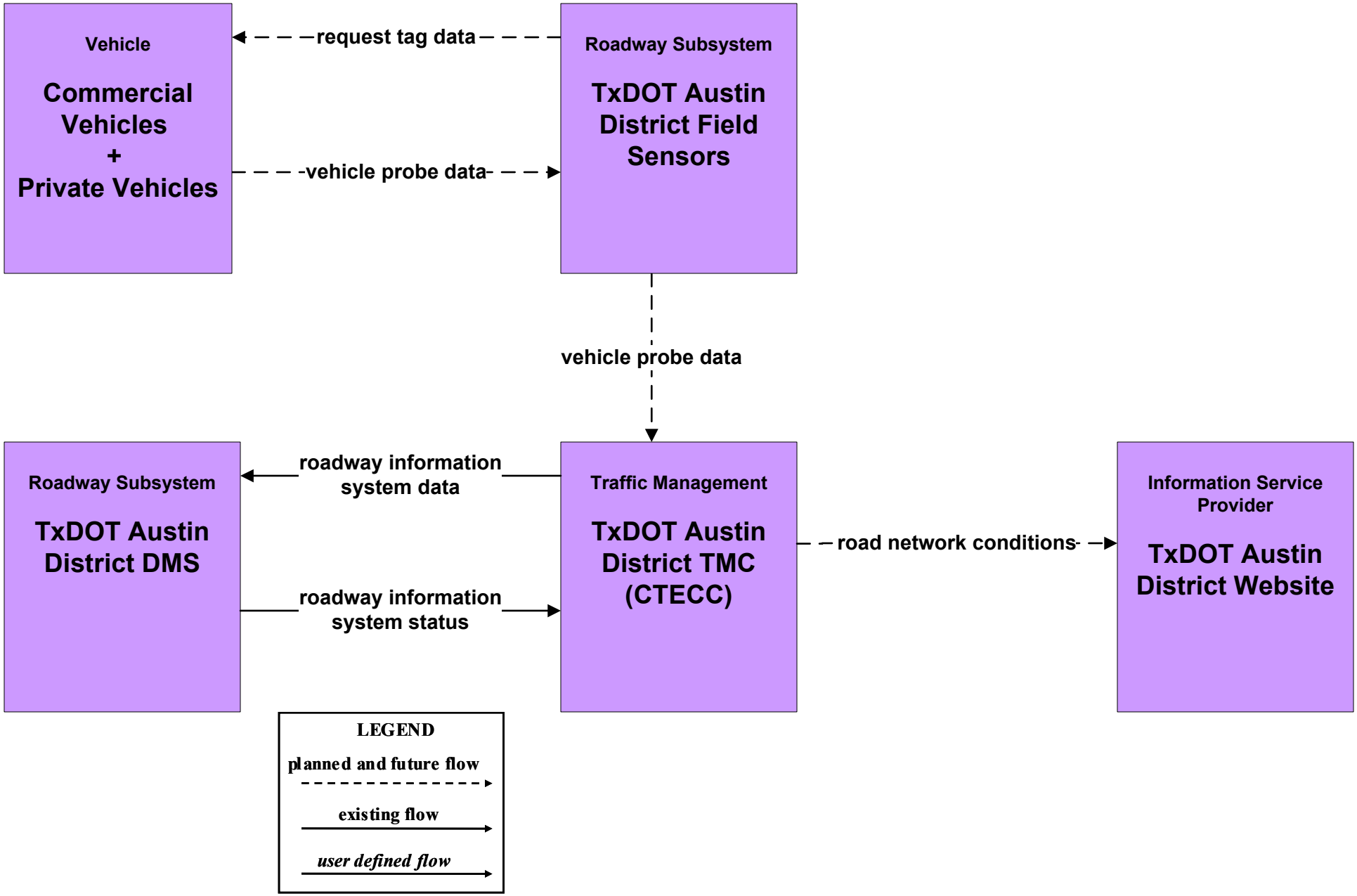
ATMS01 - Network Surveillance
City of San Marcos Rock Traffic Management Center



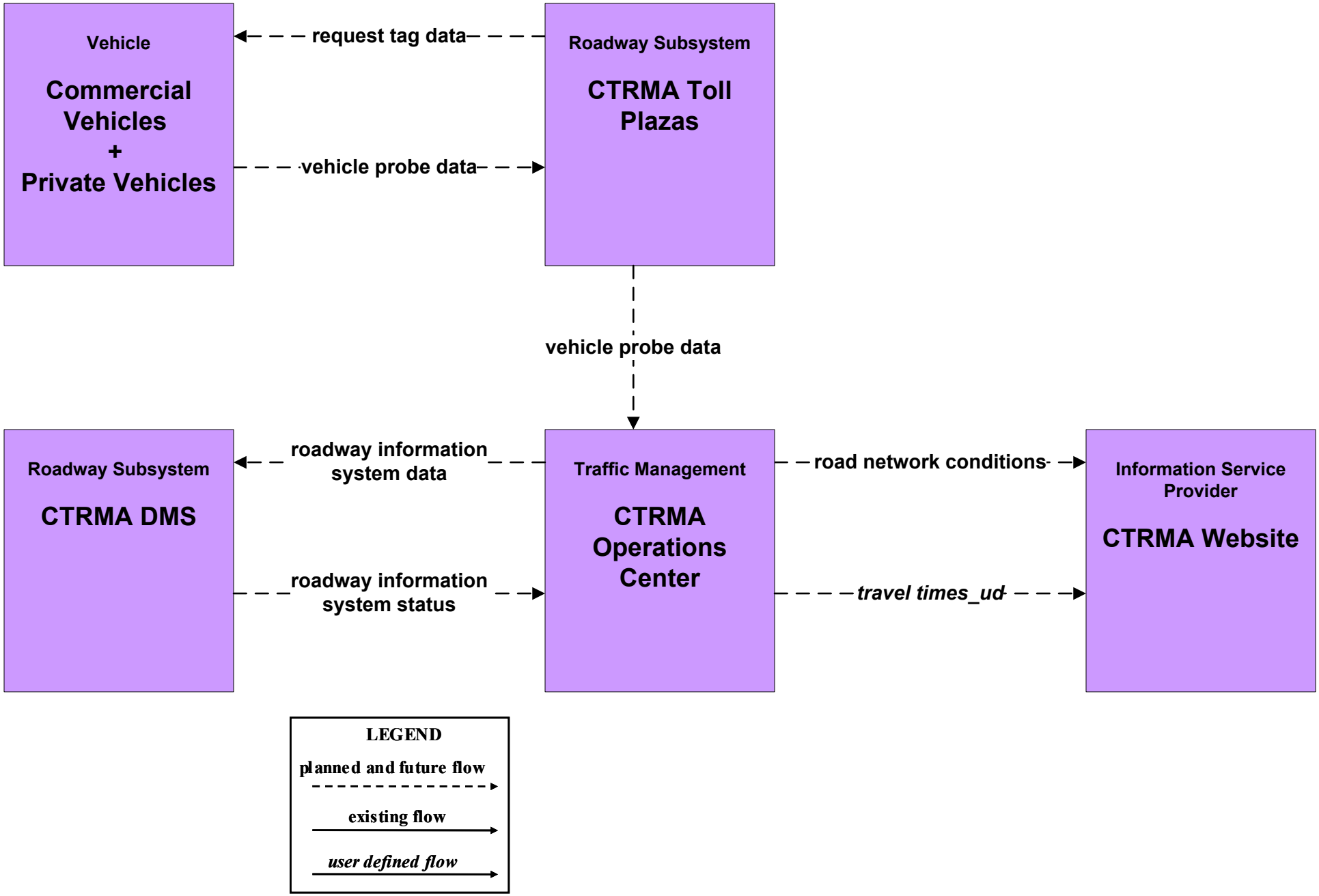
ATMS01 - Network Surveillance
Municipal Traffic Operations Center



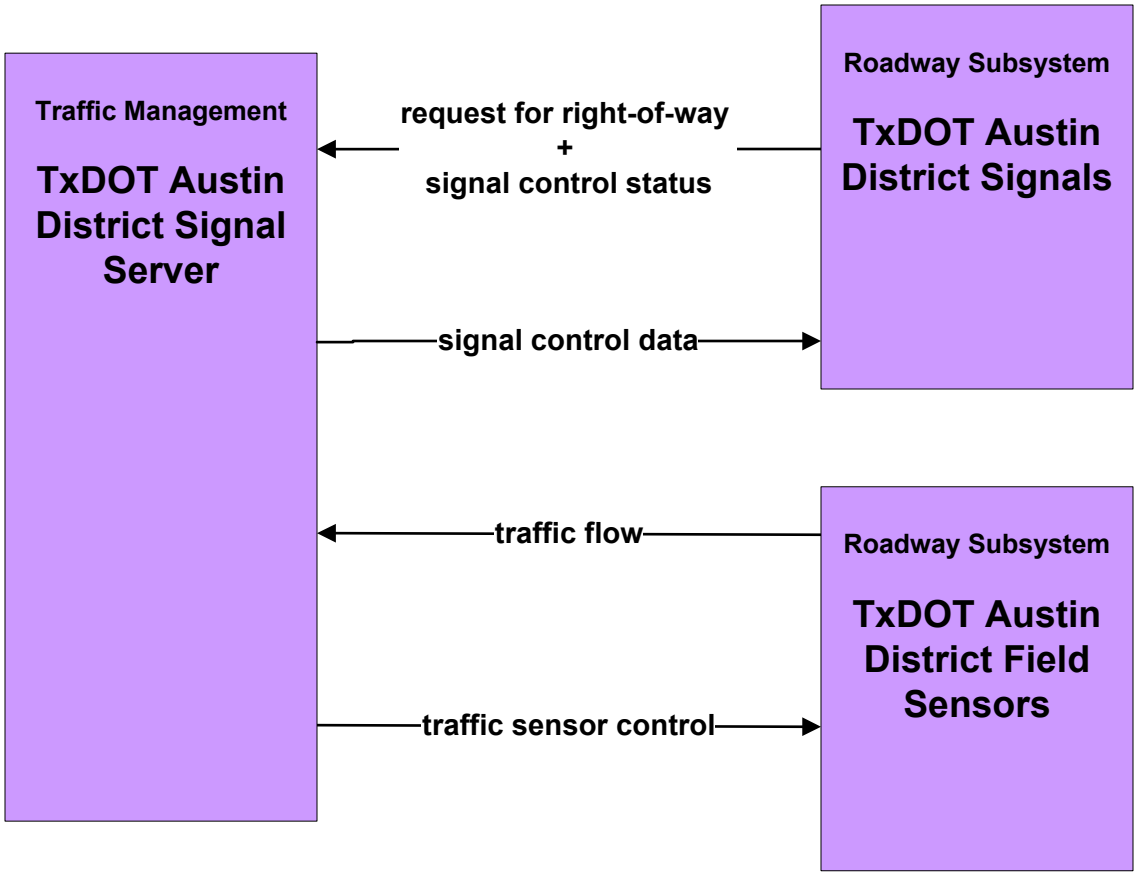
ATMS02 - Probe Surveillance
TxDOT Austin District TMC (CTECC)



ATMS02 - Probe Surveillance
CTRMA



ATMS03 - Surface Street Control
TxDOT Austin District Signal Server



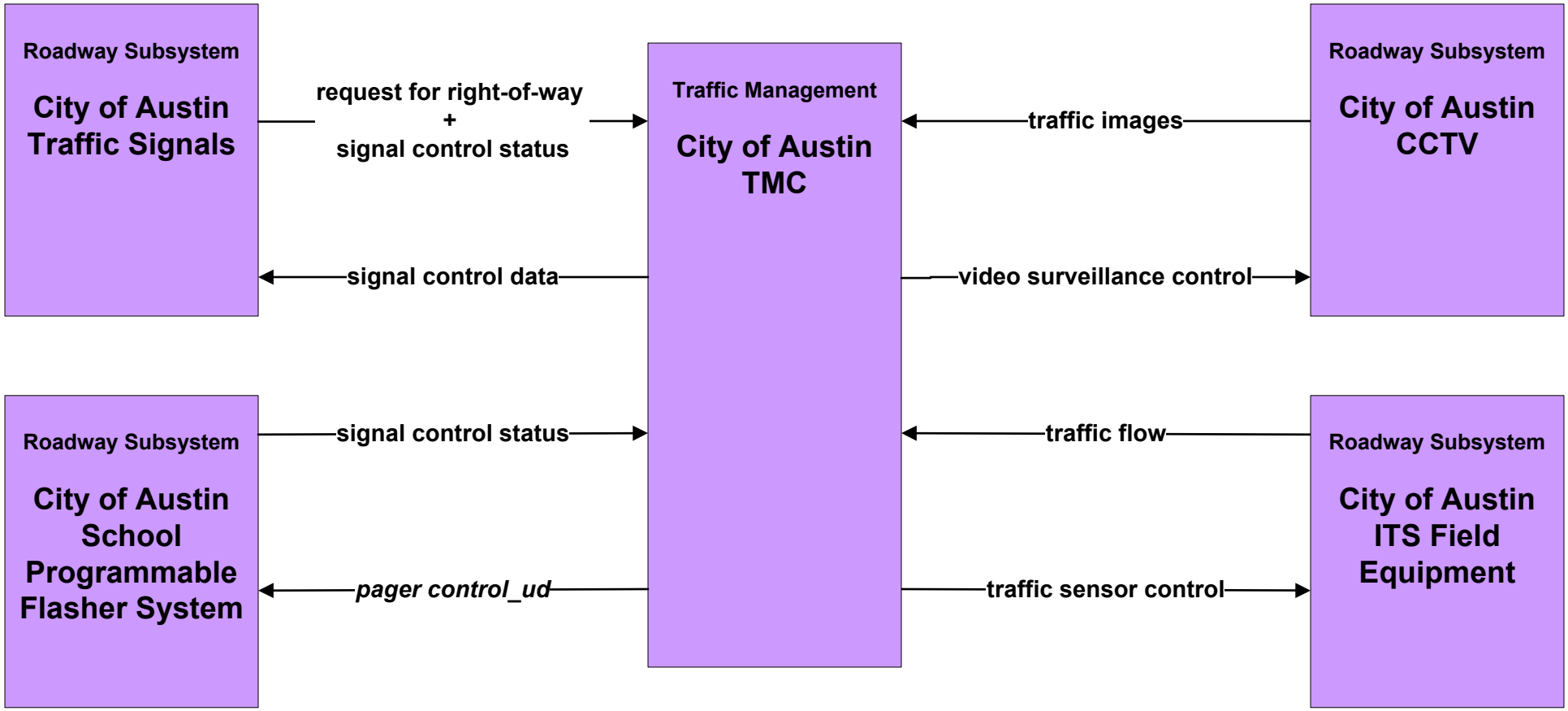
LEGEND

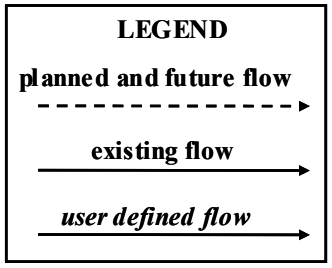
planned and future flow

existing flow

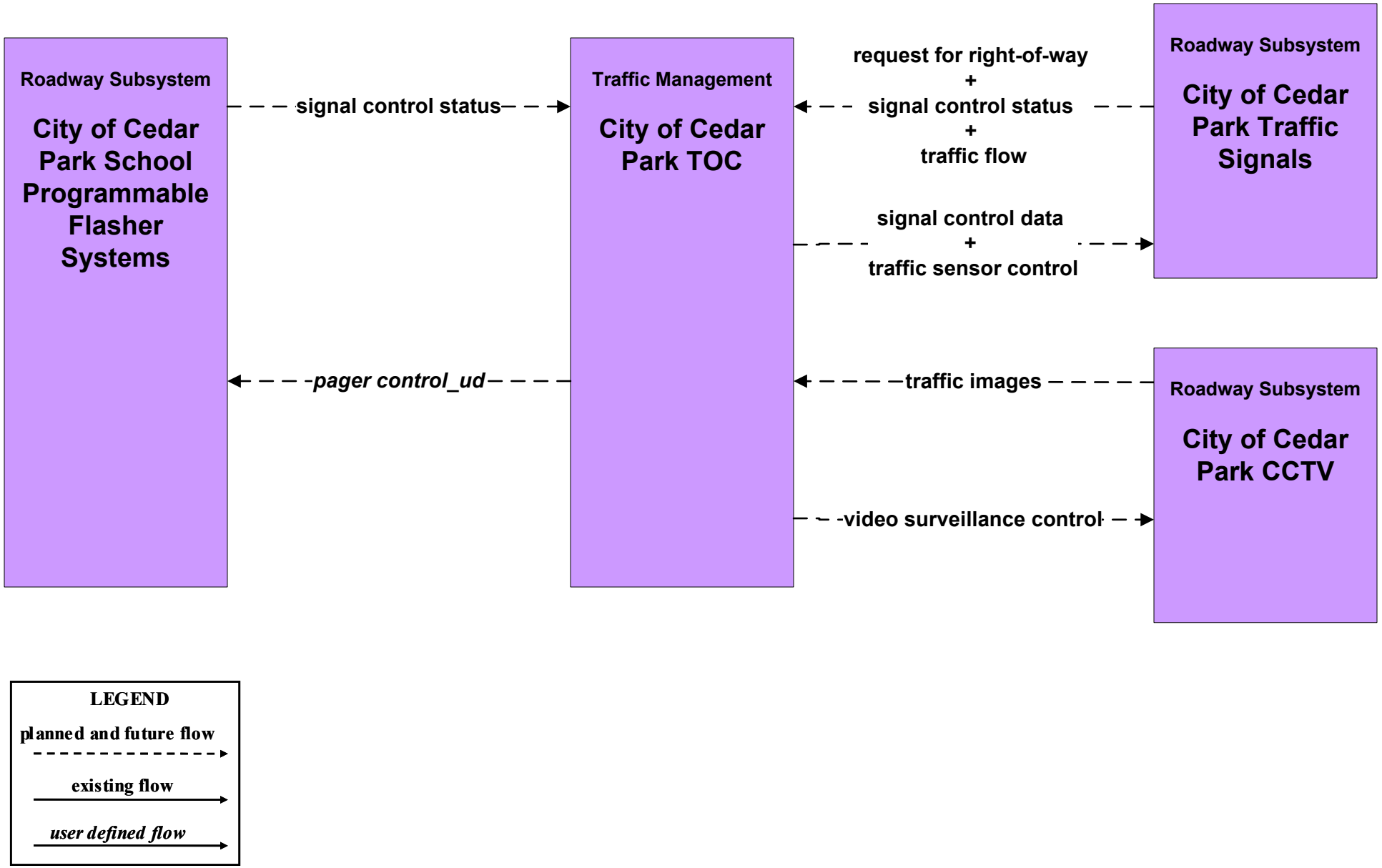
user defined flow

ATMS03 - Surface Street Control
City of Austin Traffic Management Center

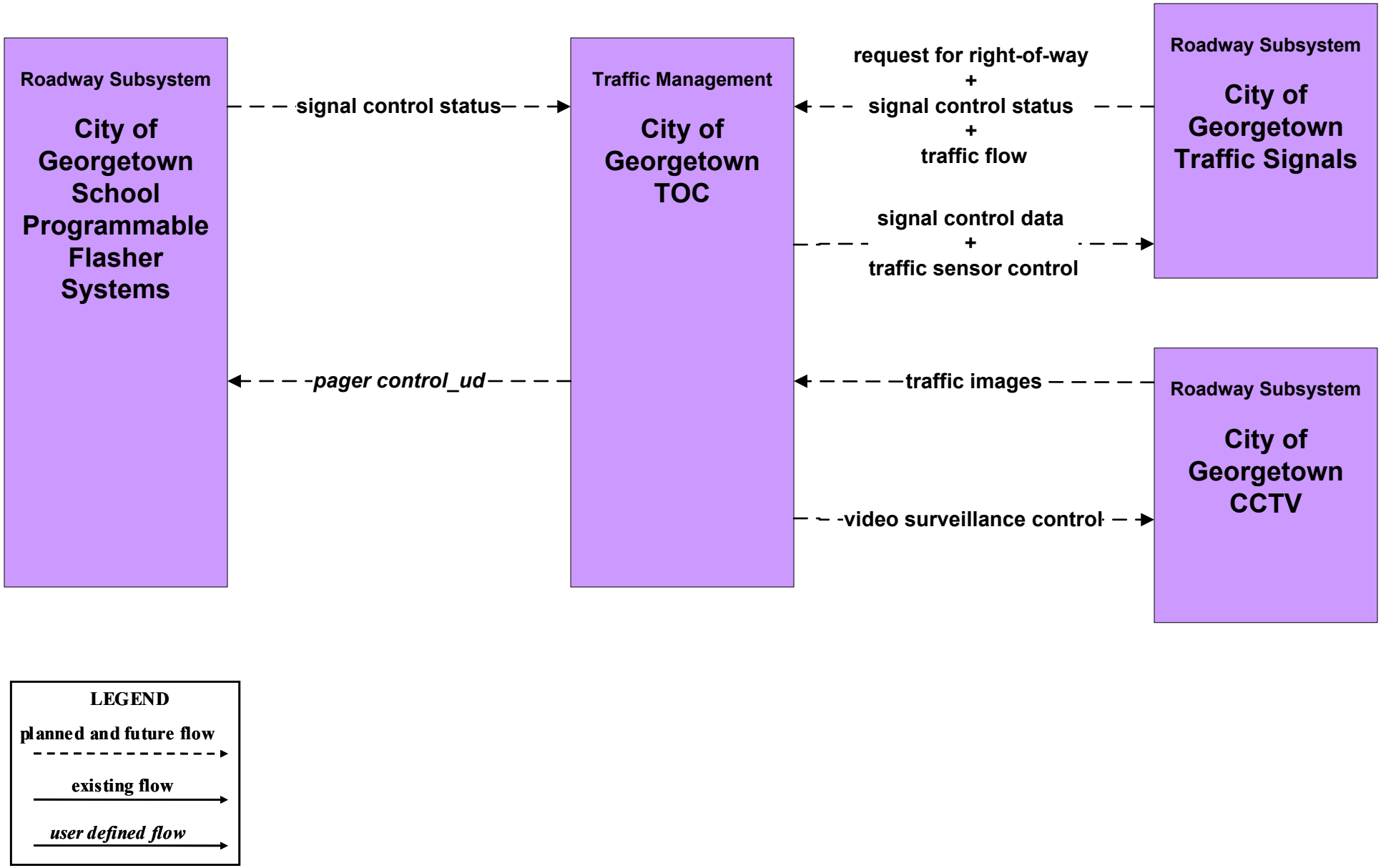




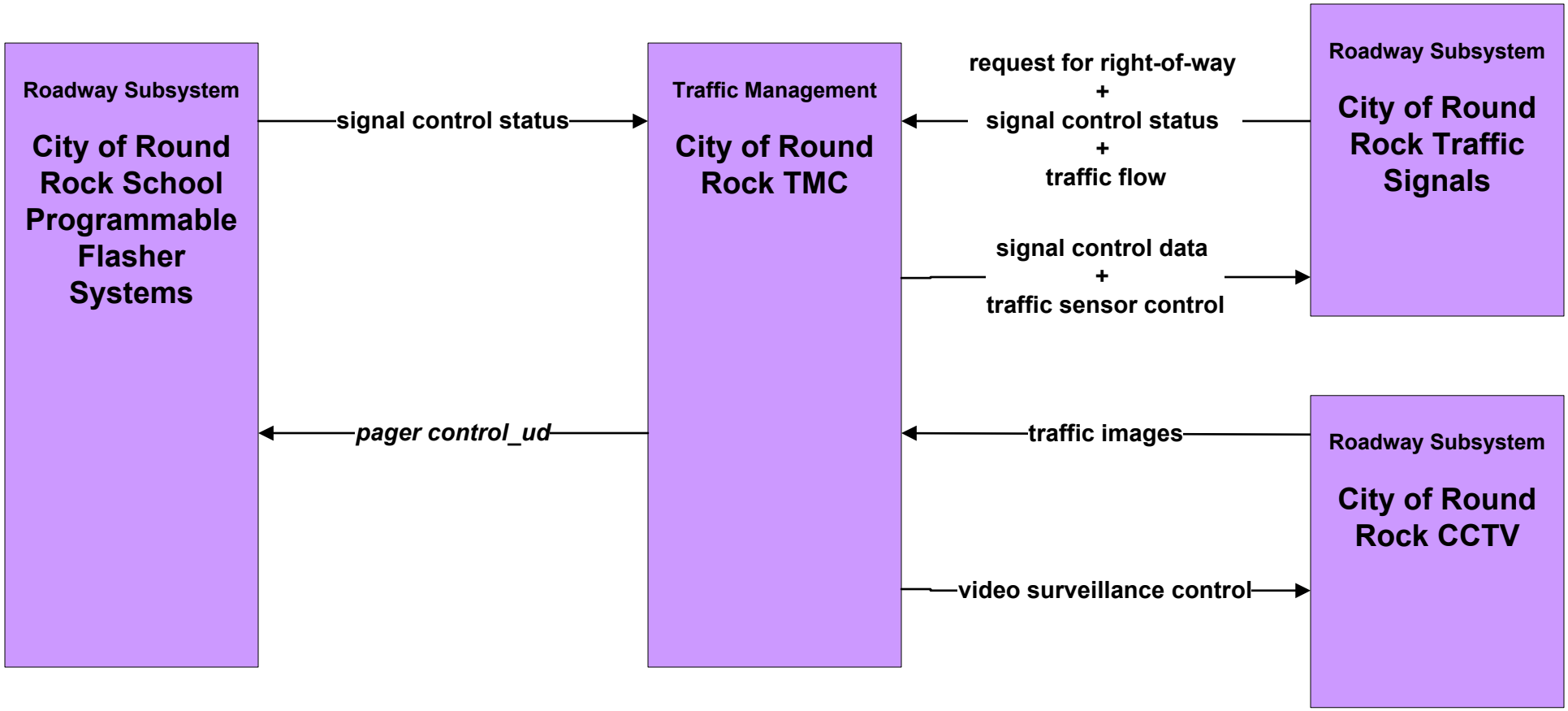
ATMS03 - Surface Street Control
City of Cedar Park Traffic Operations Center

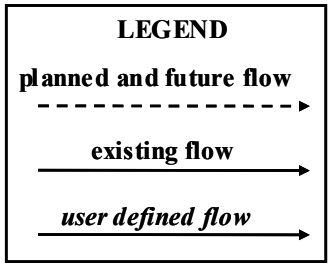


ATMS03 - Surface Street Control
City of Georgetown Traffic Operations Center

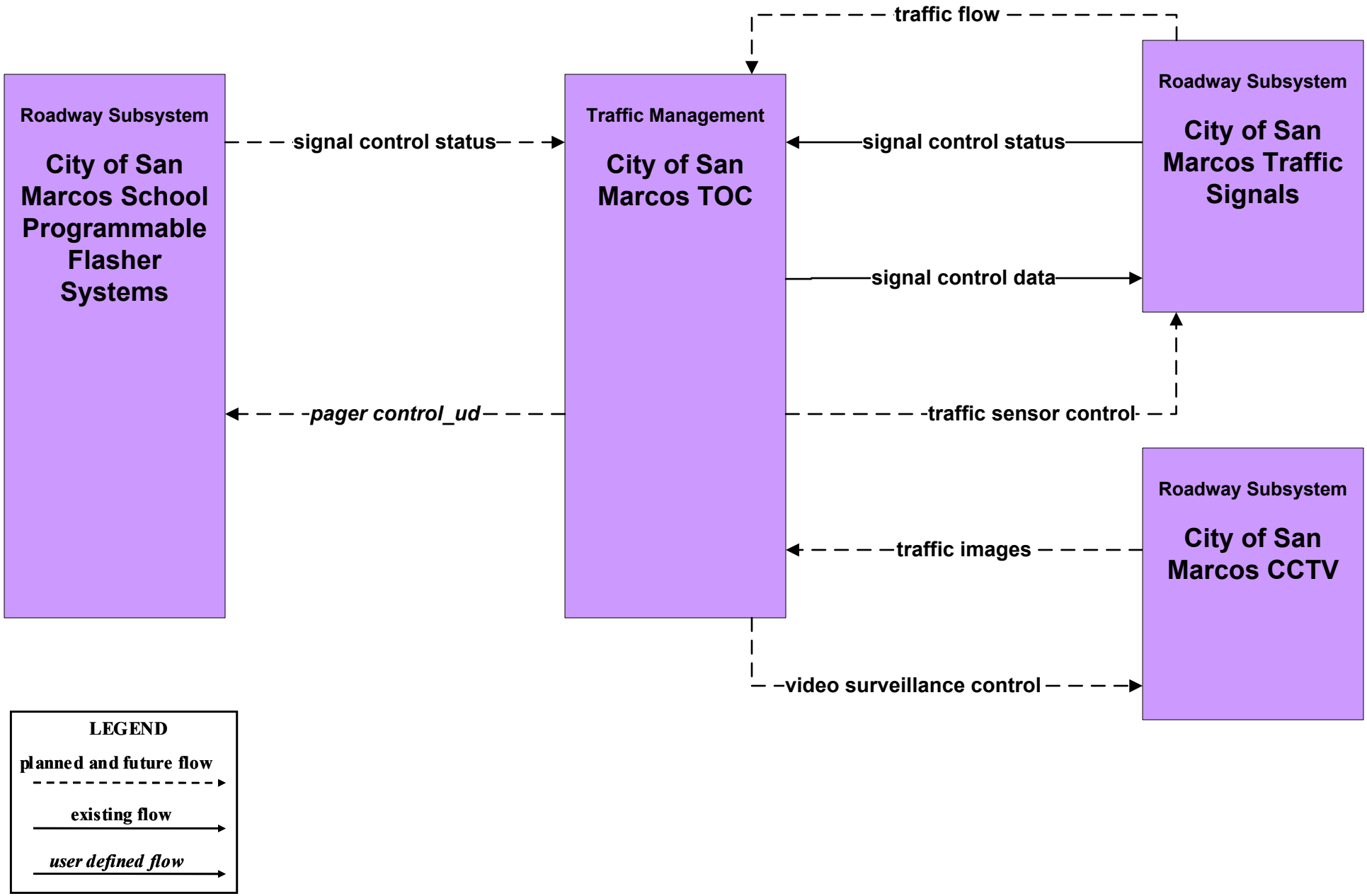


ATMS03 - Surface Street Control
City of Round Rock Traffic Management Center

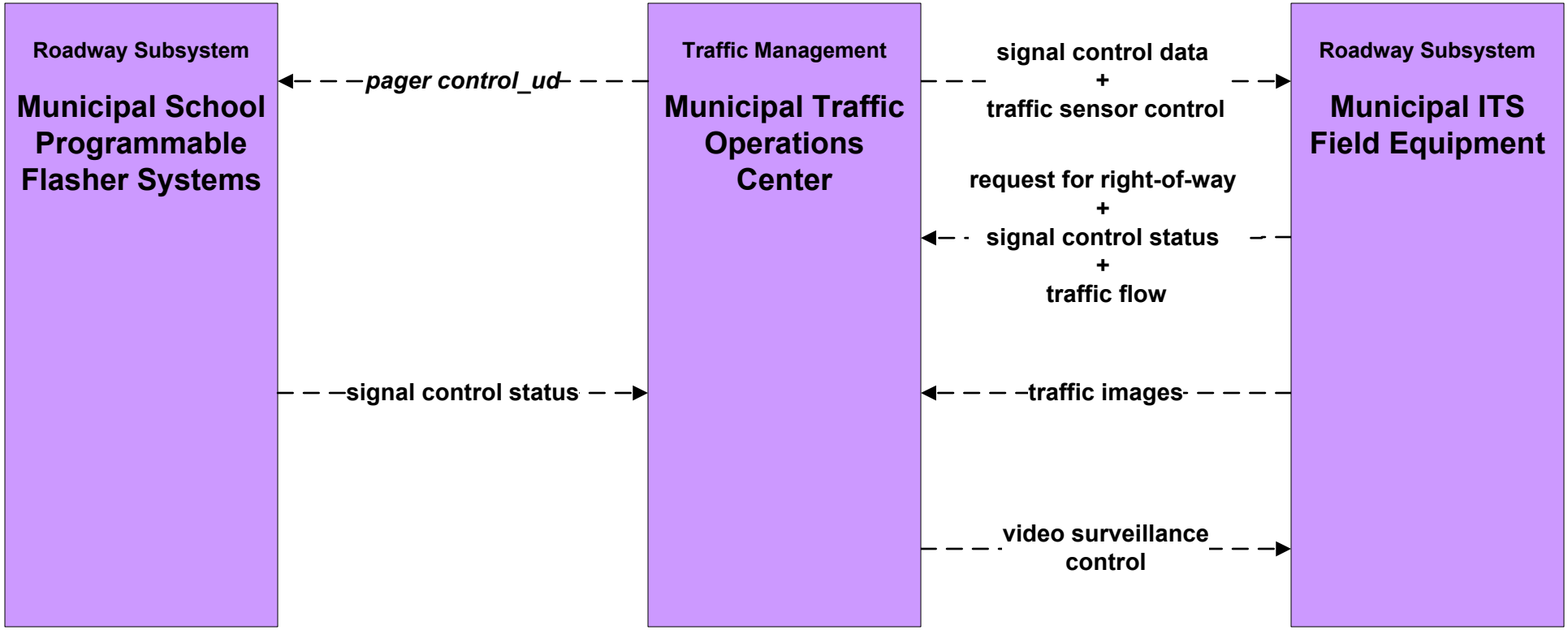


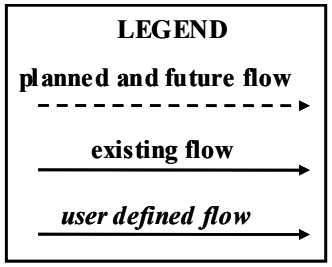


ATMS03 - Surface Street Control
City of San Marcos Traffic Operations Center

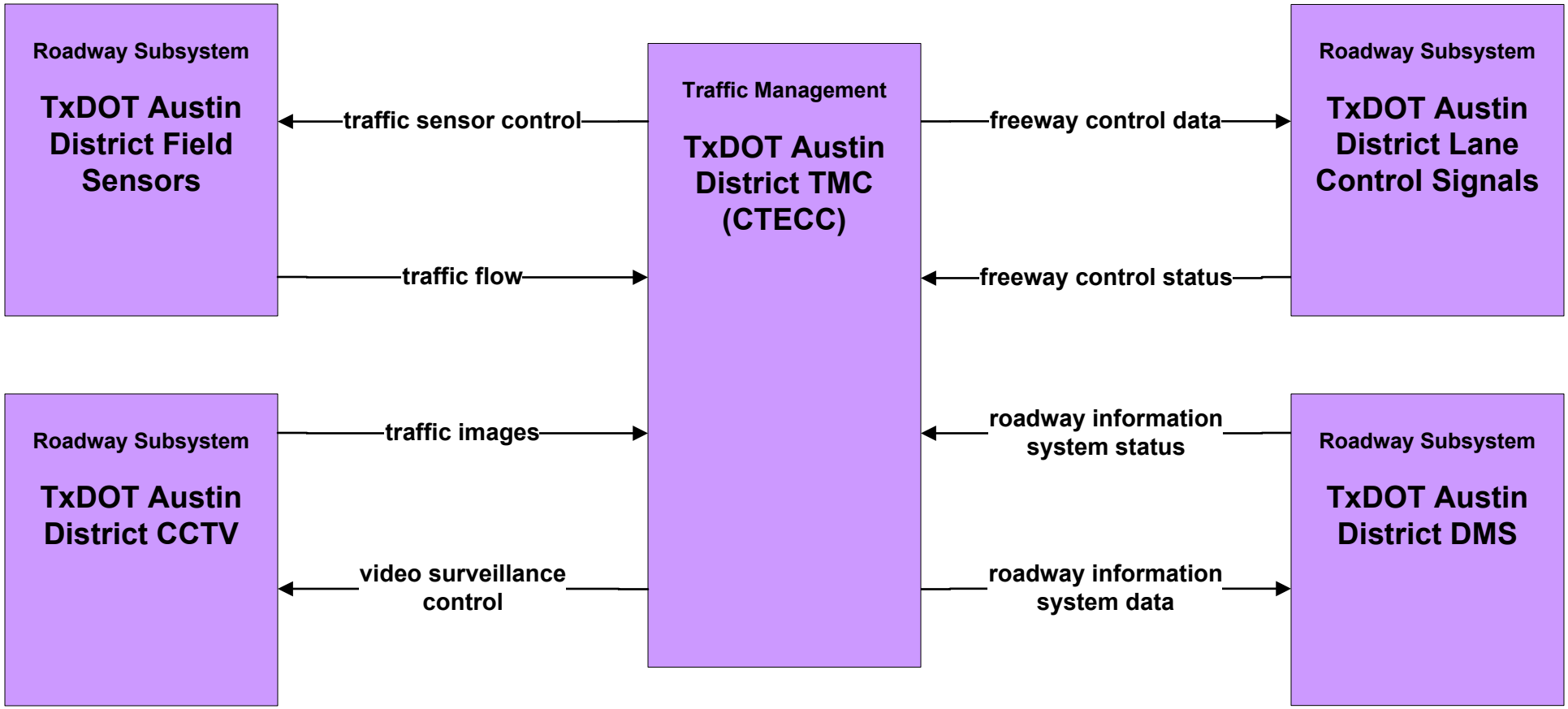


ATMS03 - Surface Street Control
Municipal Traffic Operations Center





ATMS04 - Freeway Control
TxDOT Austin District TMC (CTECC)



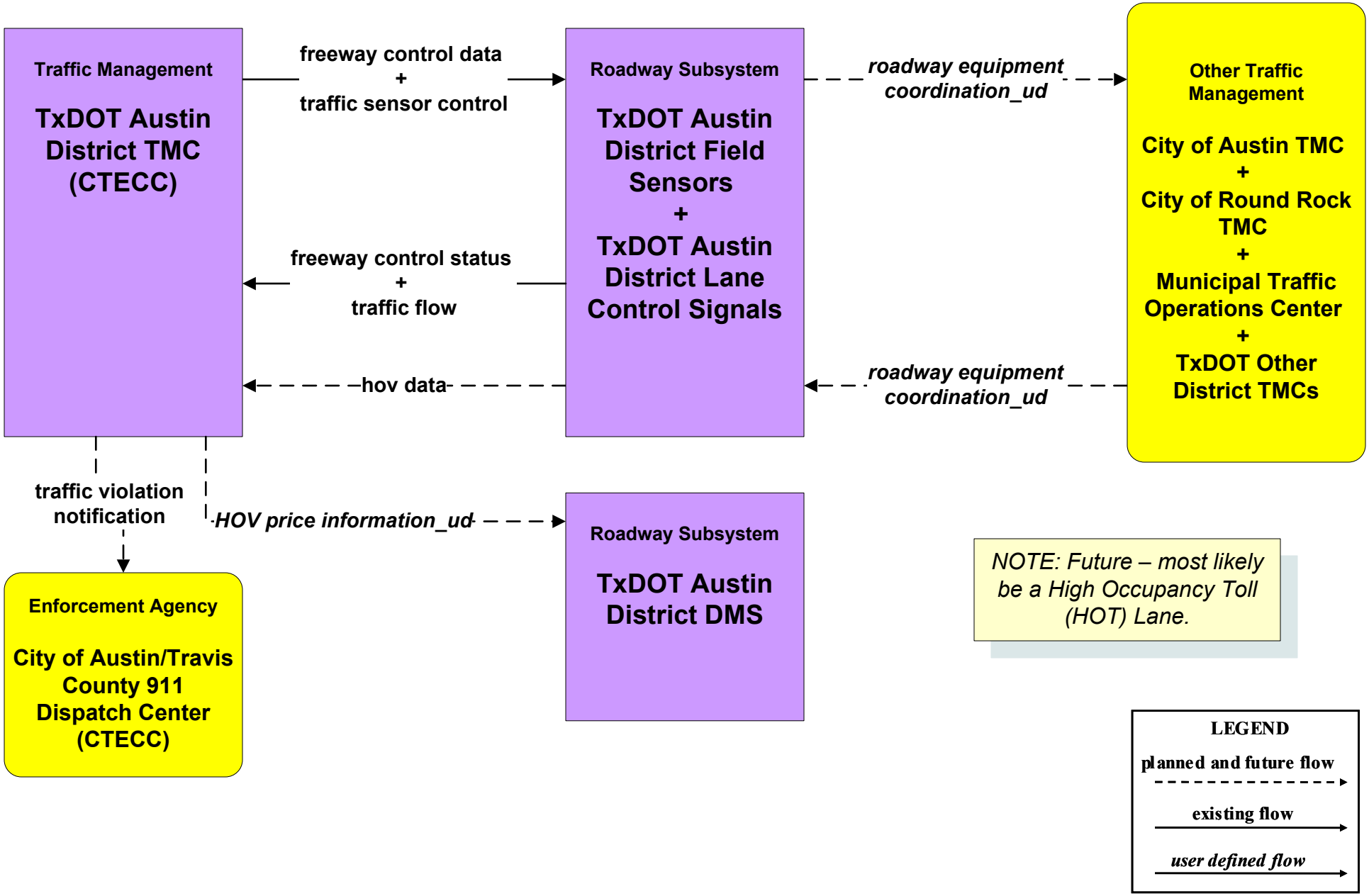
LEGEND

planned and future flow

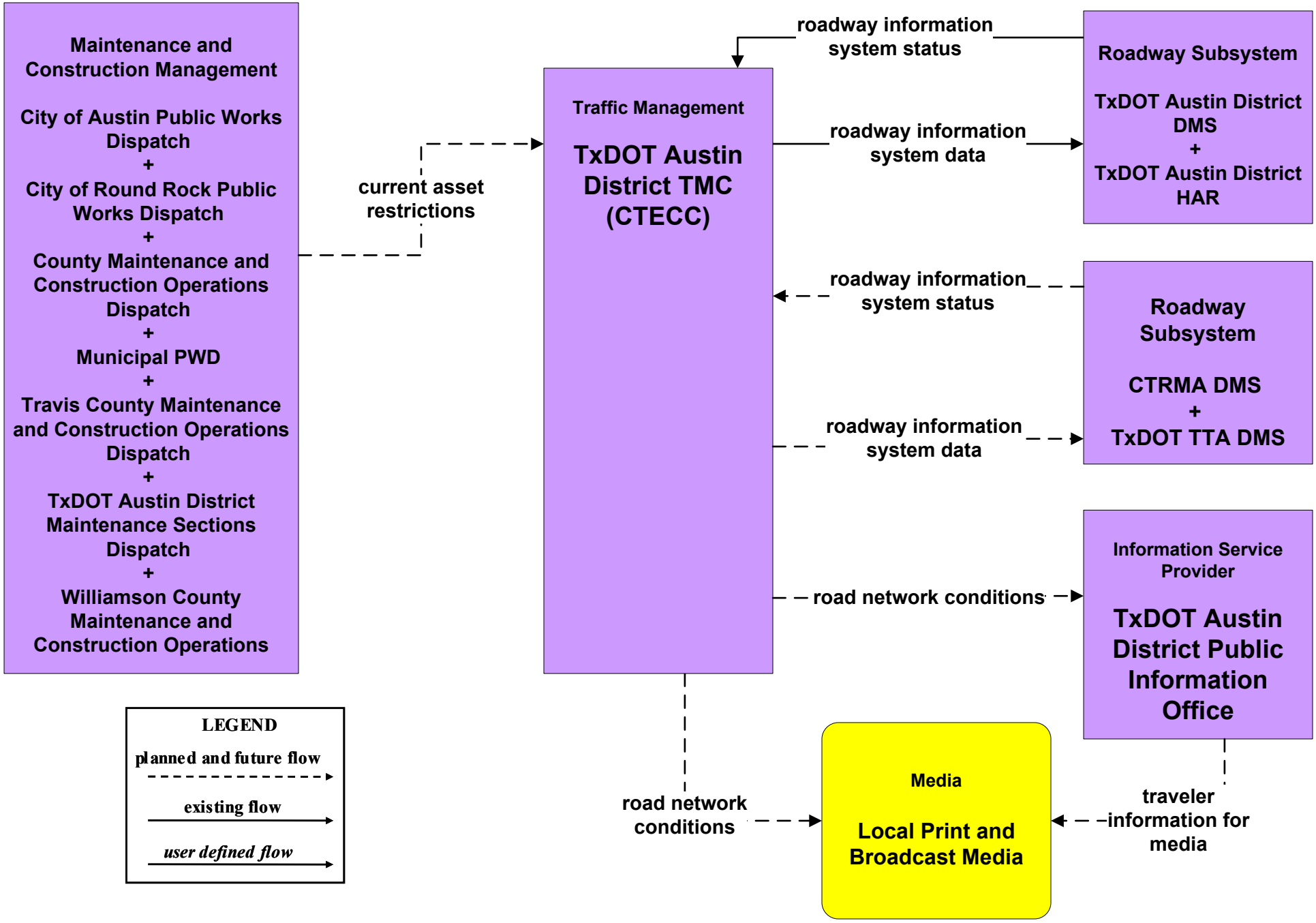
existing flow

user defined flow

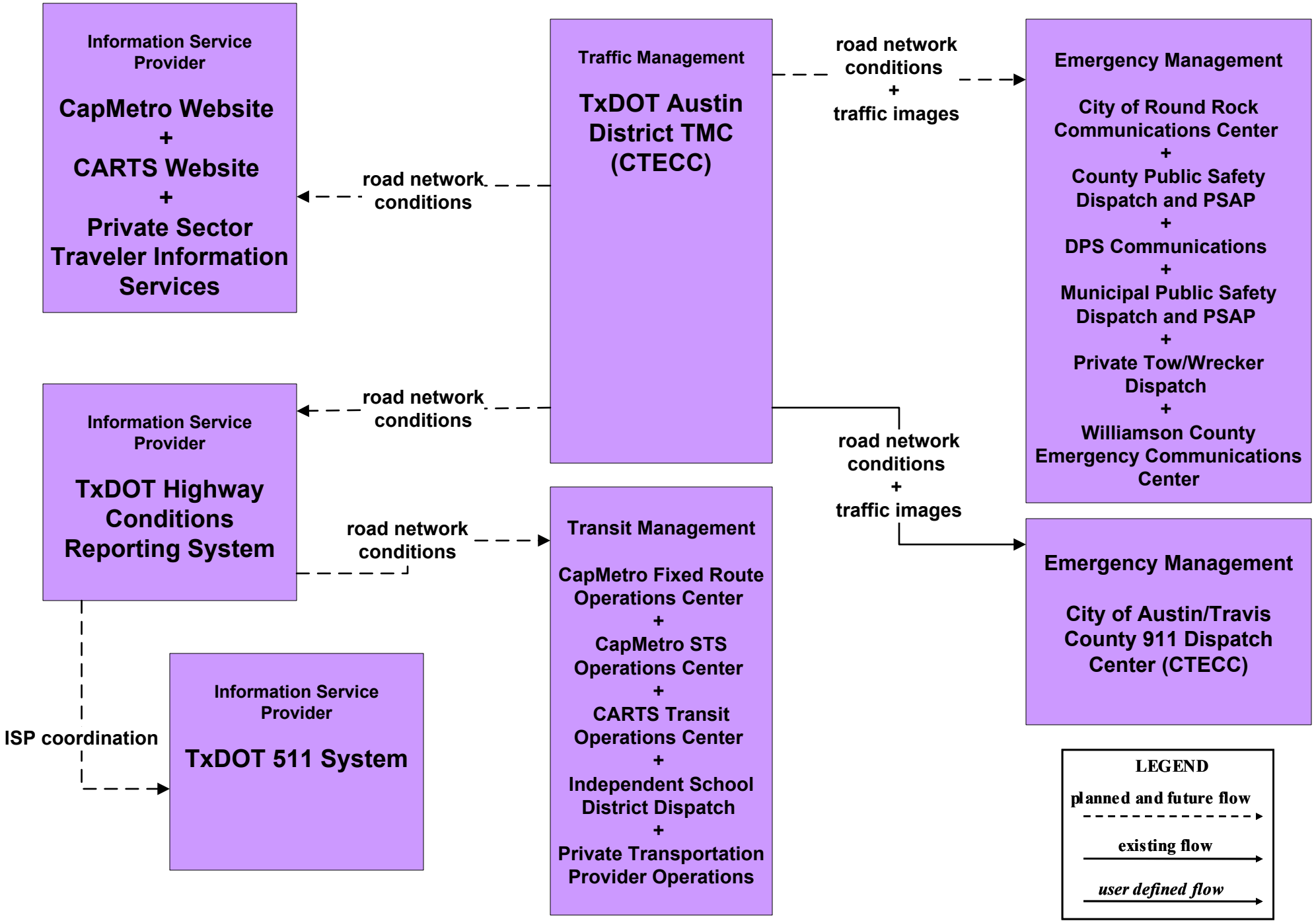
ATMS05 - HOV Lane Management
TxDOT Austin District TMC (CTECC)



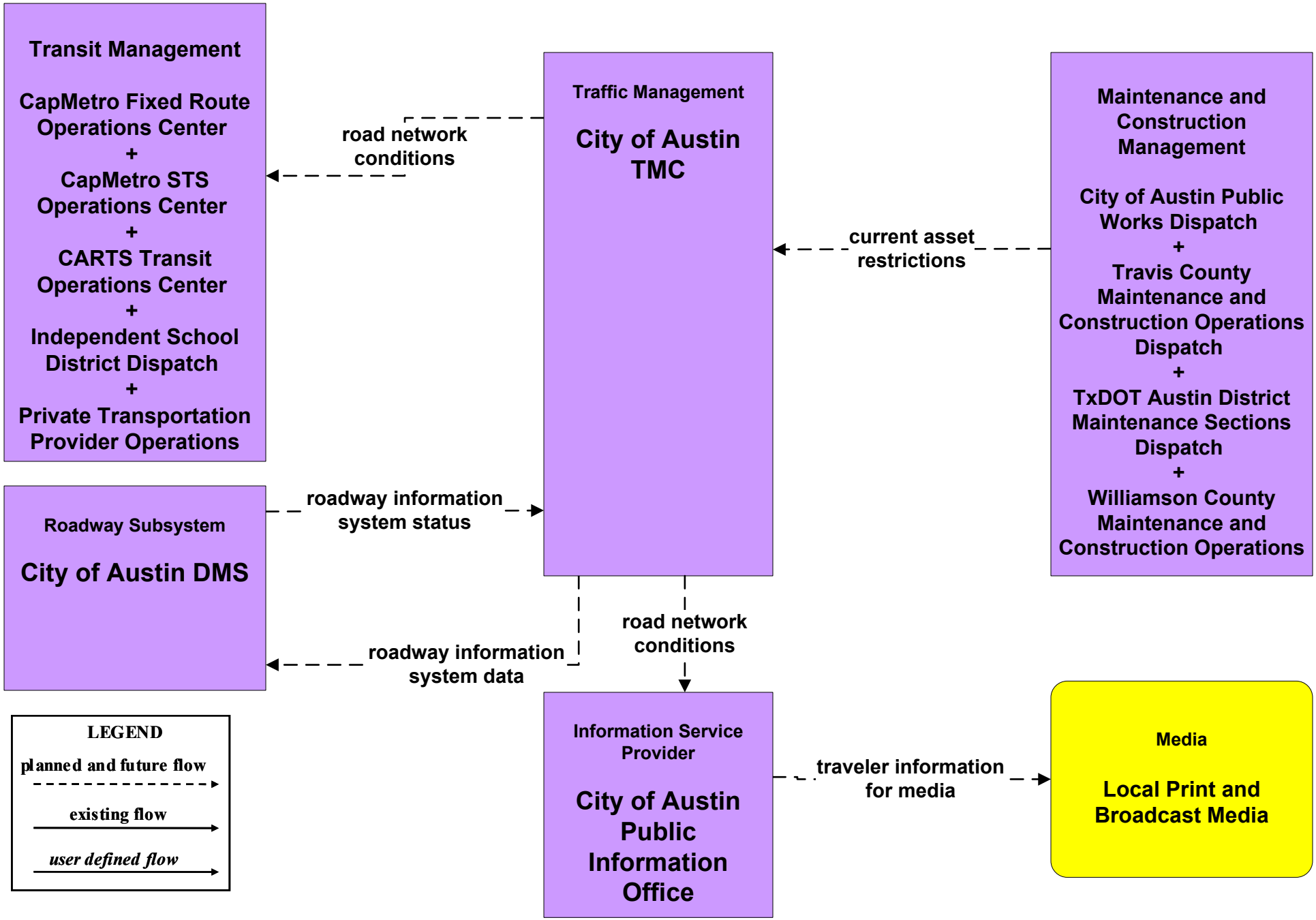
ATMS06 - Traffic Information Dissemination
TxDOT Austin District TMC (CTECC) (1 of 2)



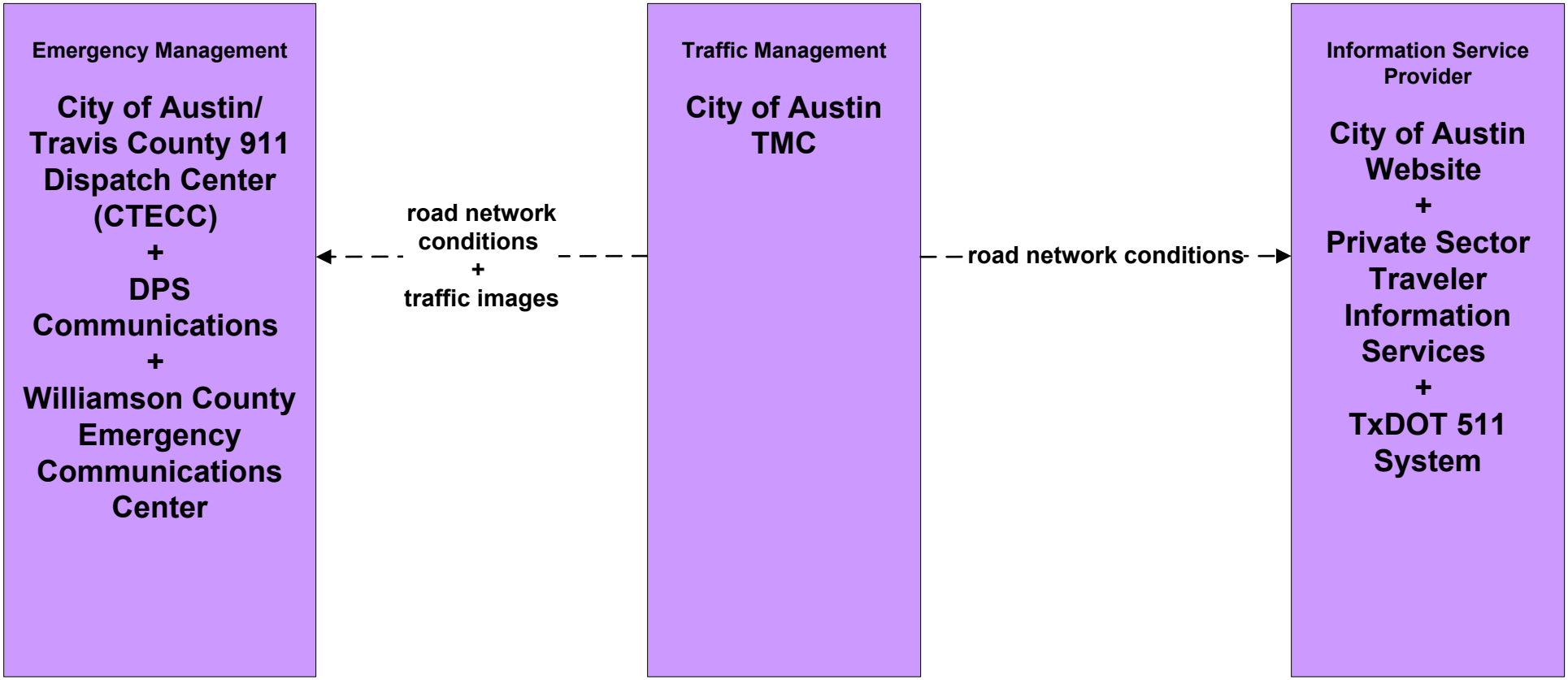
ATMS06 - Traffic Information Dissemination
TxDOT Austin District TMC (CTECC) (2 of 2)

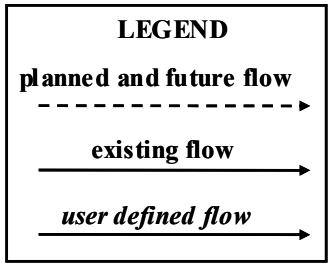


ATMS06 - Traffic Information Dissemination
City of Austin Traffic Management Center (1 of 2)

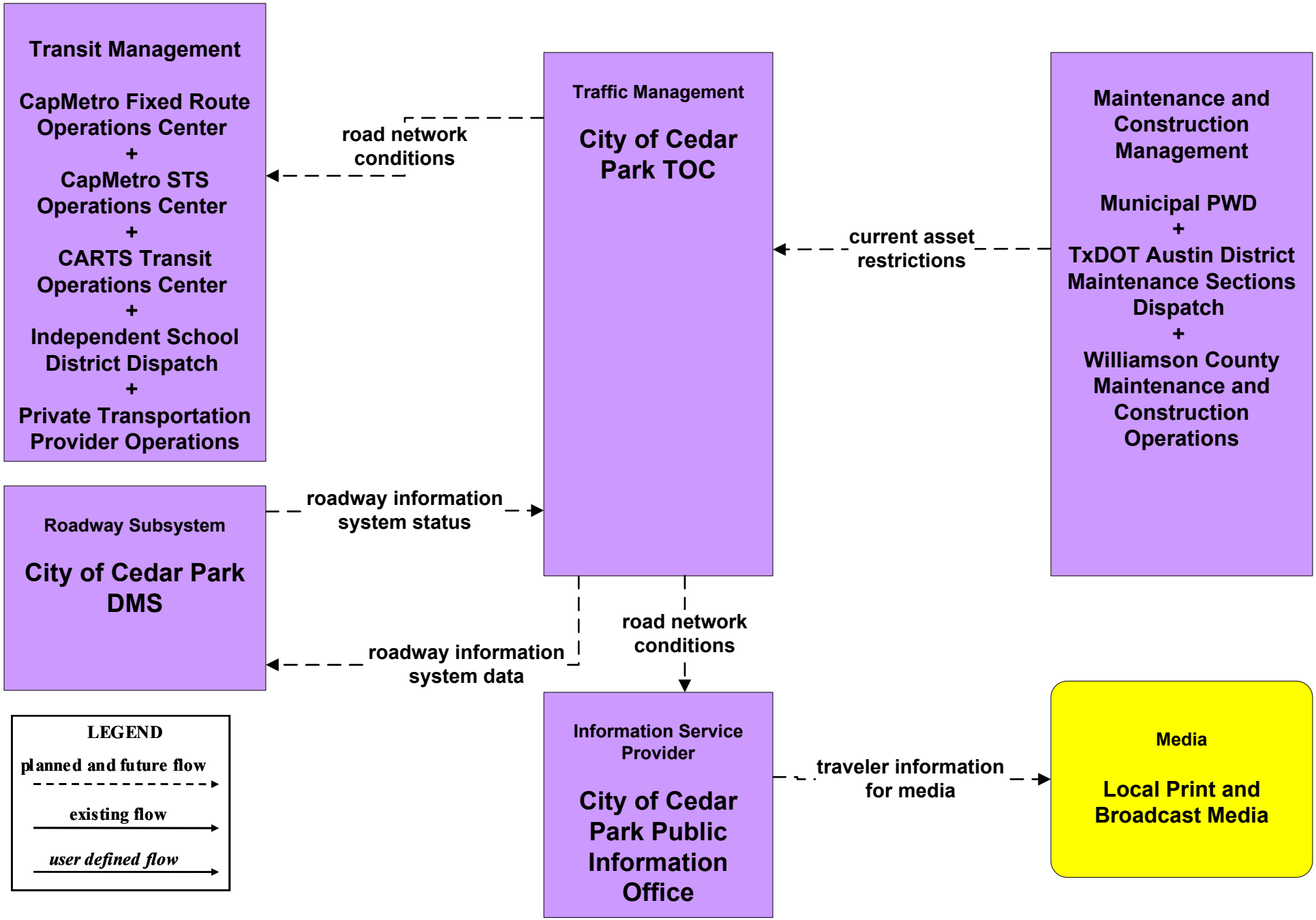


ATMS06 - Traffic Information Dissemination
City of Austin Traffic Management Center (2 of 2)

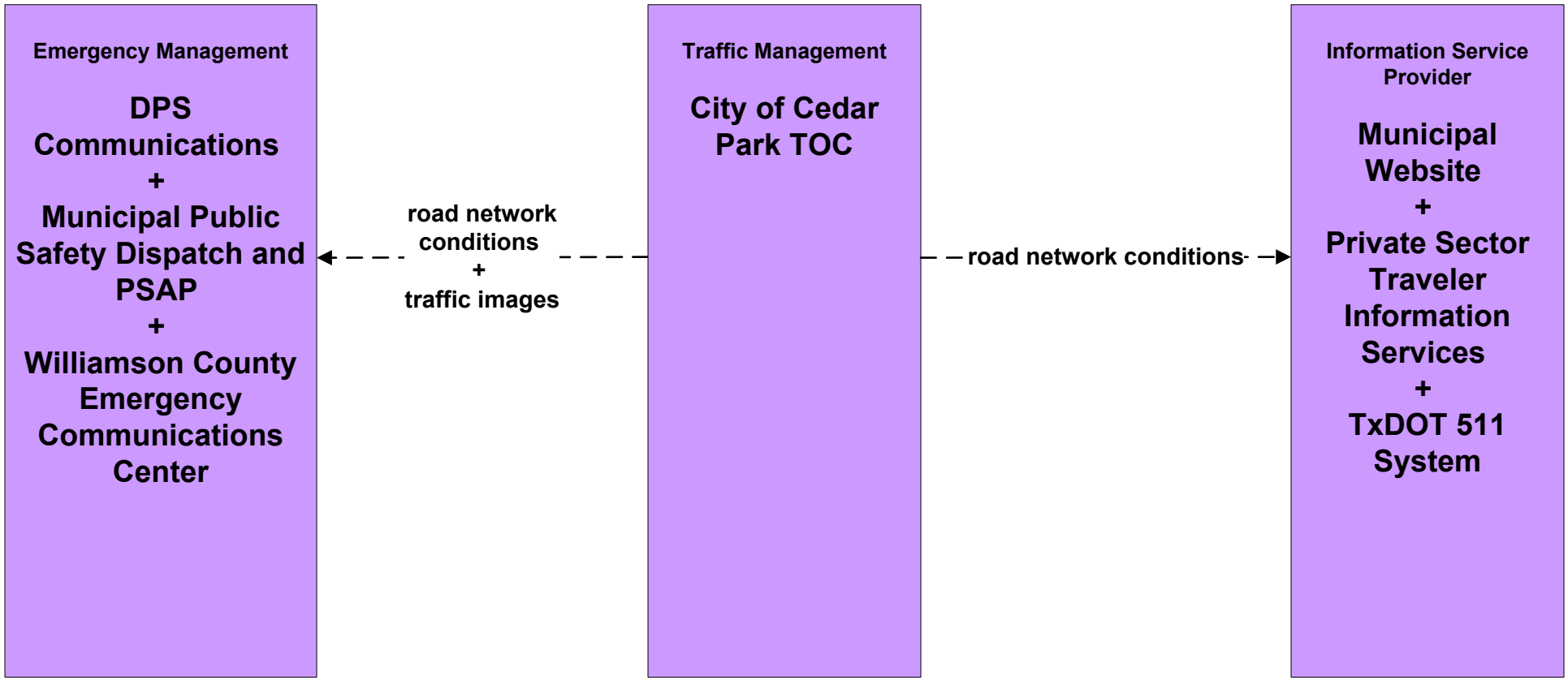


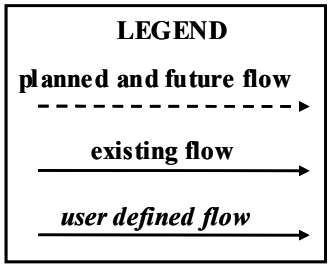


ATMS06 - Traffic Information Dissemination
City of Cedar Park Traffic Operations Center (1 of 2)

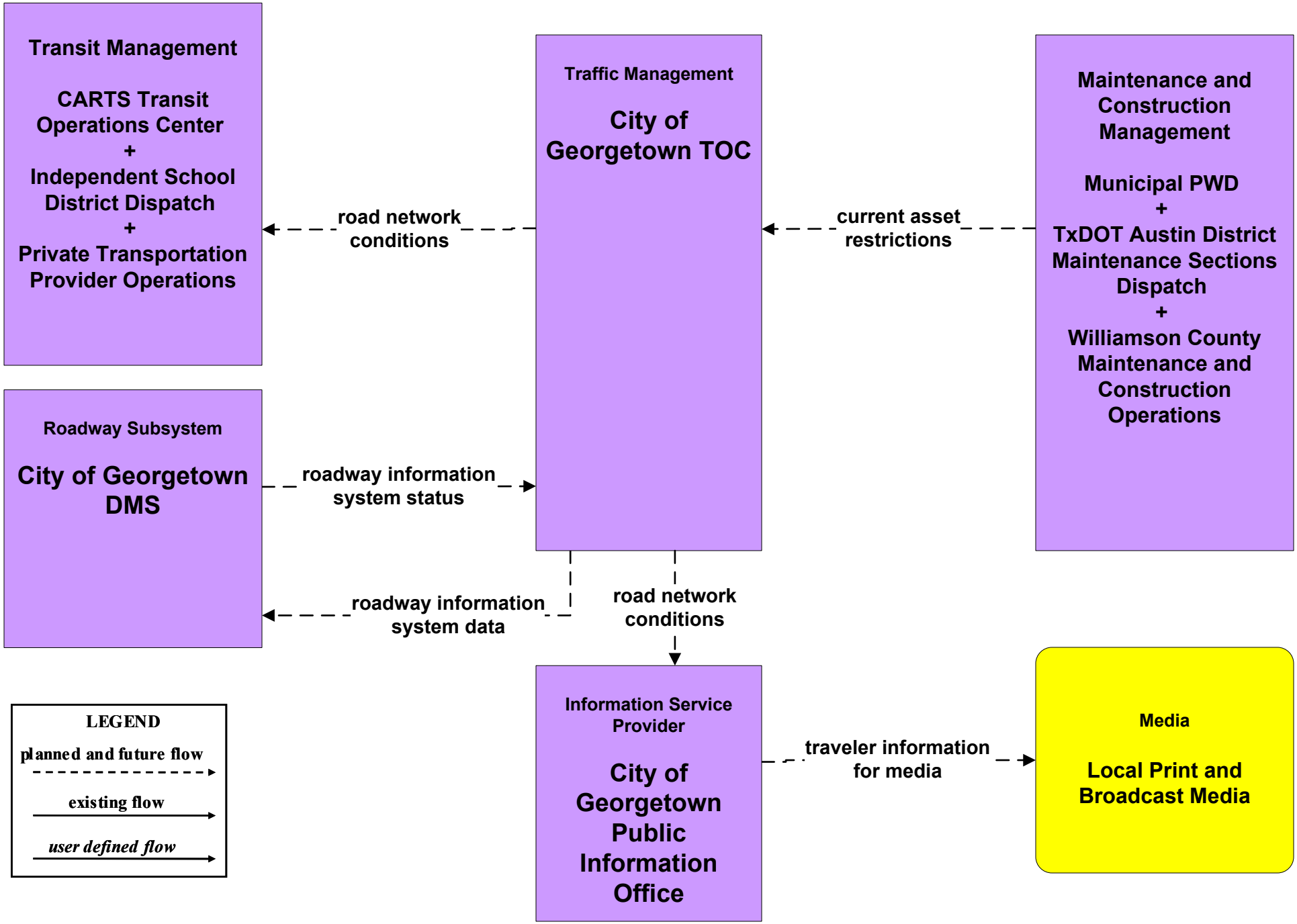


ATMS06 - Traffic Information Dissemination
City of Cedar Park Traffic Operations Center (2 of 2)

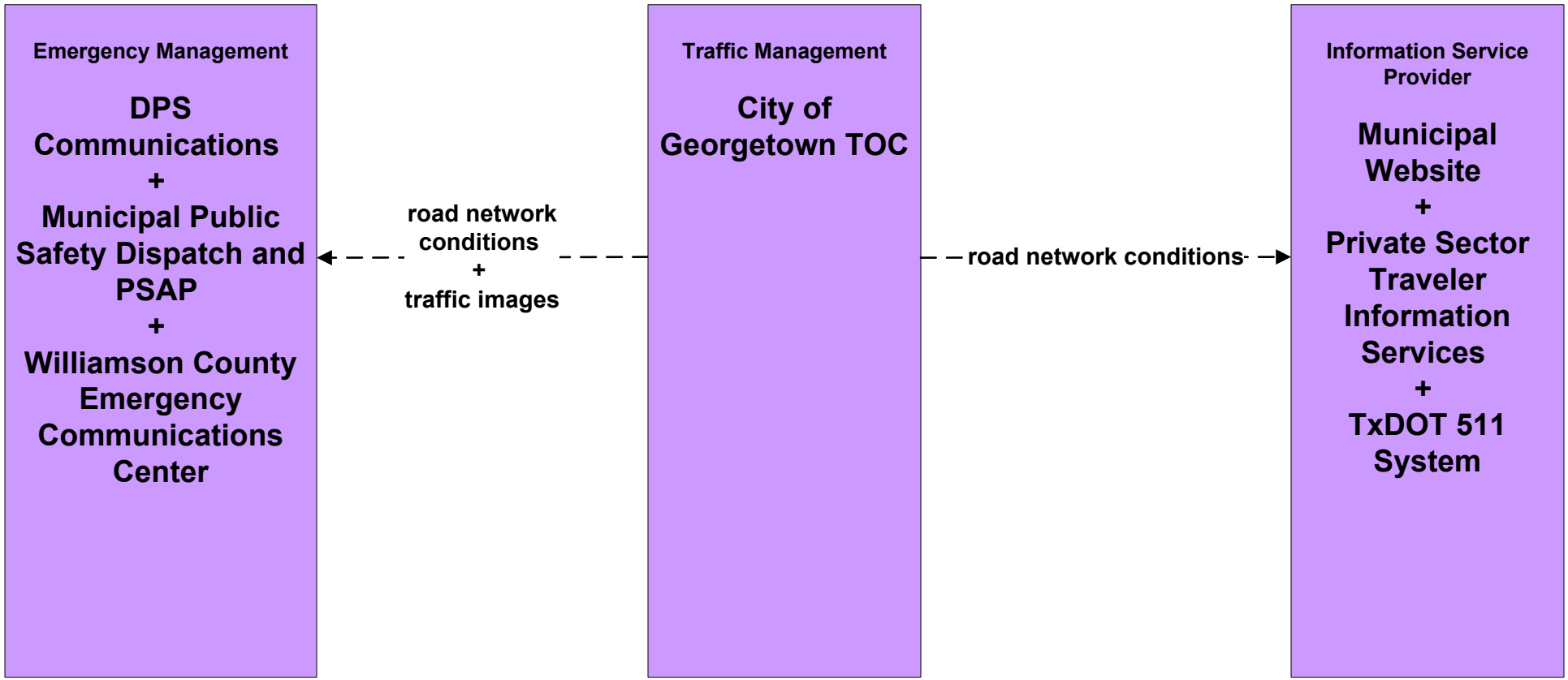


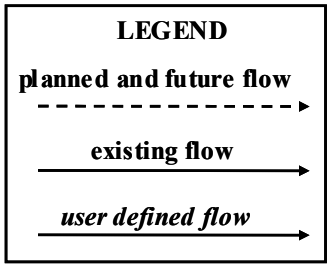


ATMS06 - Traffic Information Dissemination
City of Georgetown Traffic Operations Center (1 of 2)

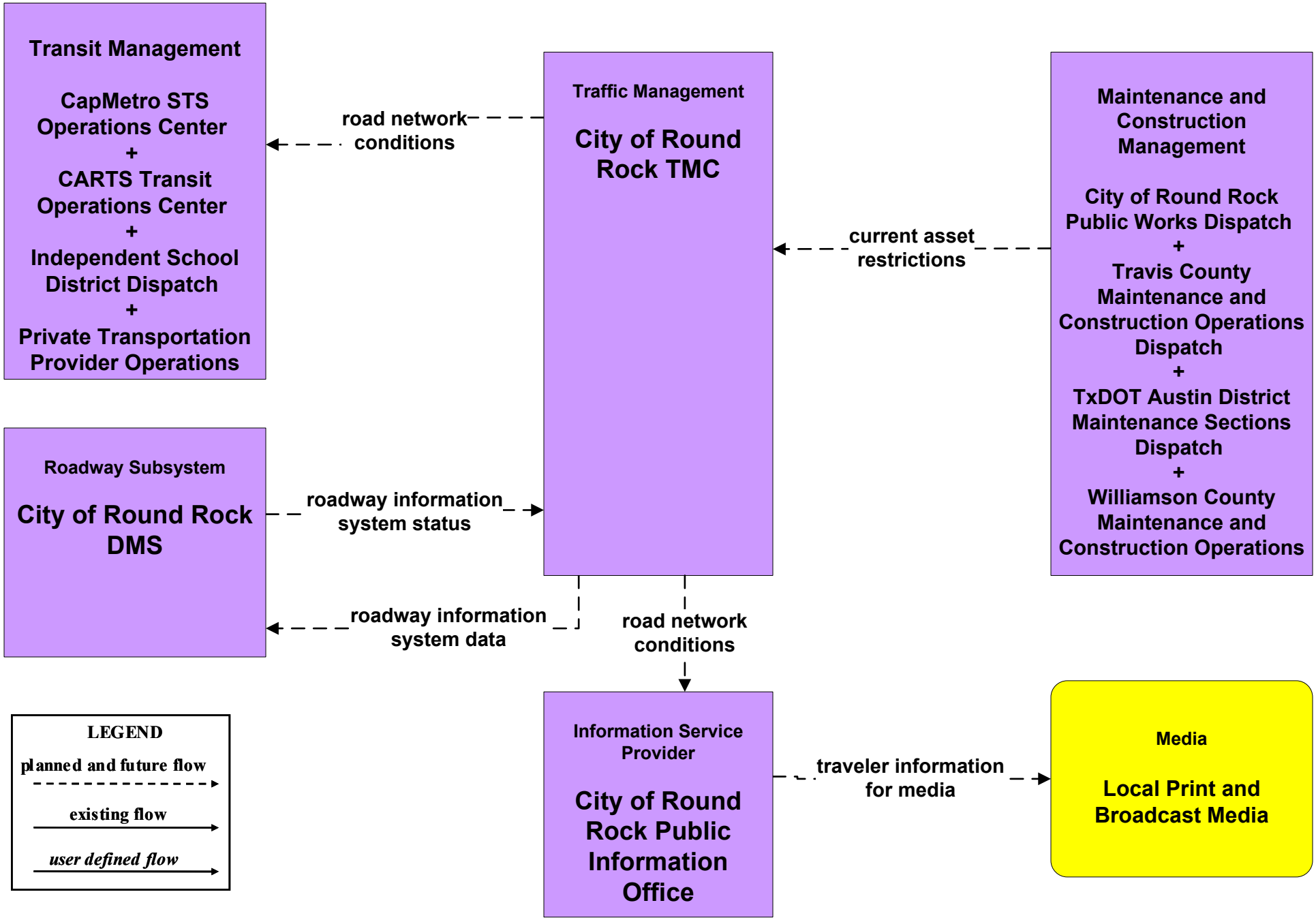


ATMS06 - Traffic Information Dissemination
City of Georgetown Traffic Operations Center (2 of 2)

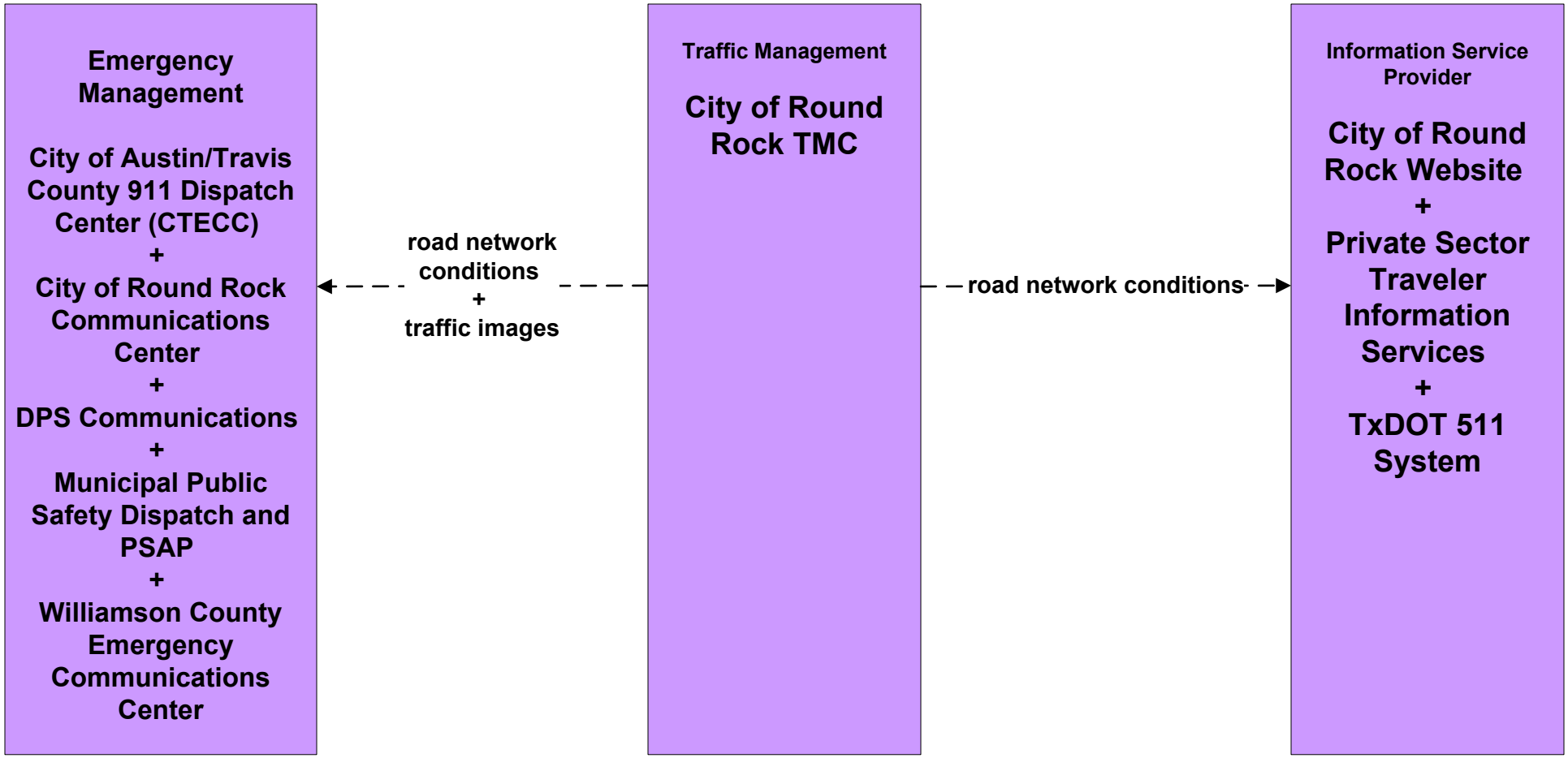


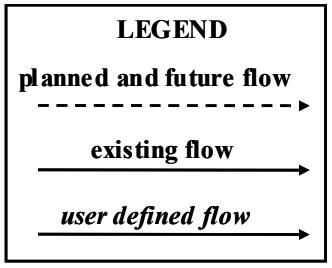


ATMS06 - Traffic Information Dissemination
City of Round Rock Traffic Management Center (1 of 2)

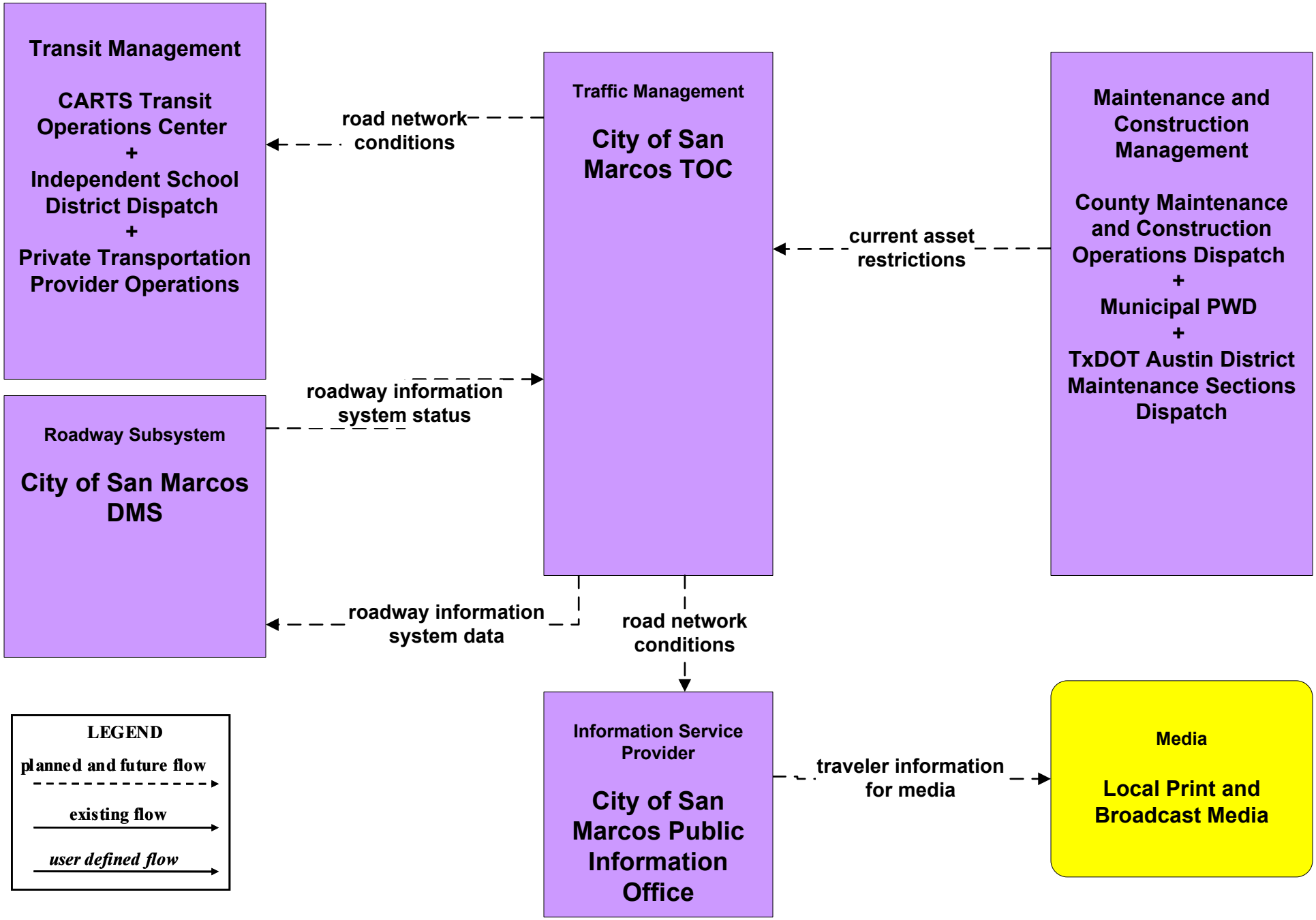


ATMS06 - Traffic Information Dissemination
City of Round Rock Traffic Management Center (2 of 2)

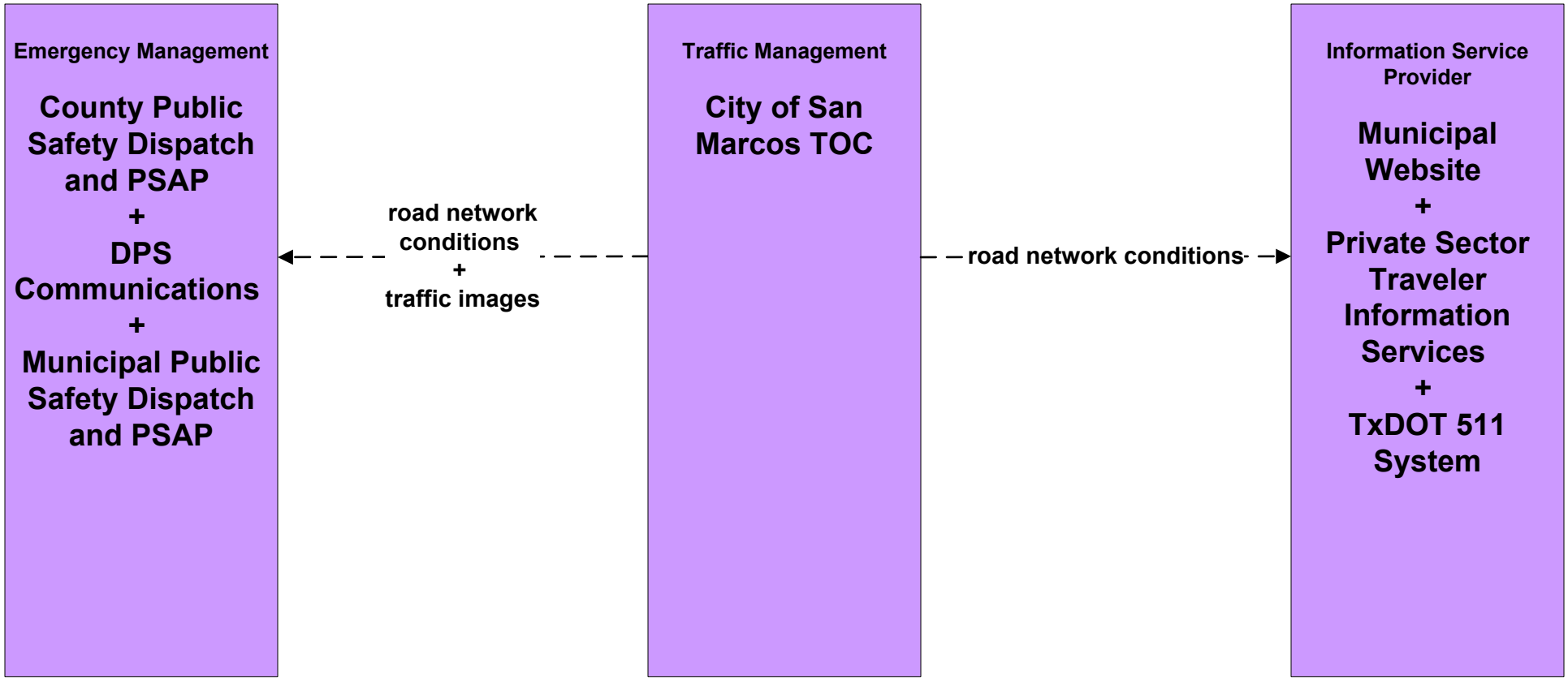


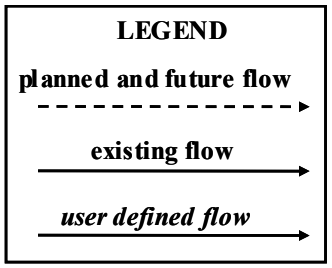


ATMS06 - Traffic Information Dissemination
City of San Marcos Traffic Operations Center (1 of 2)

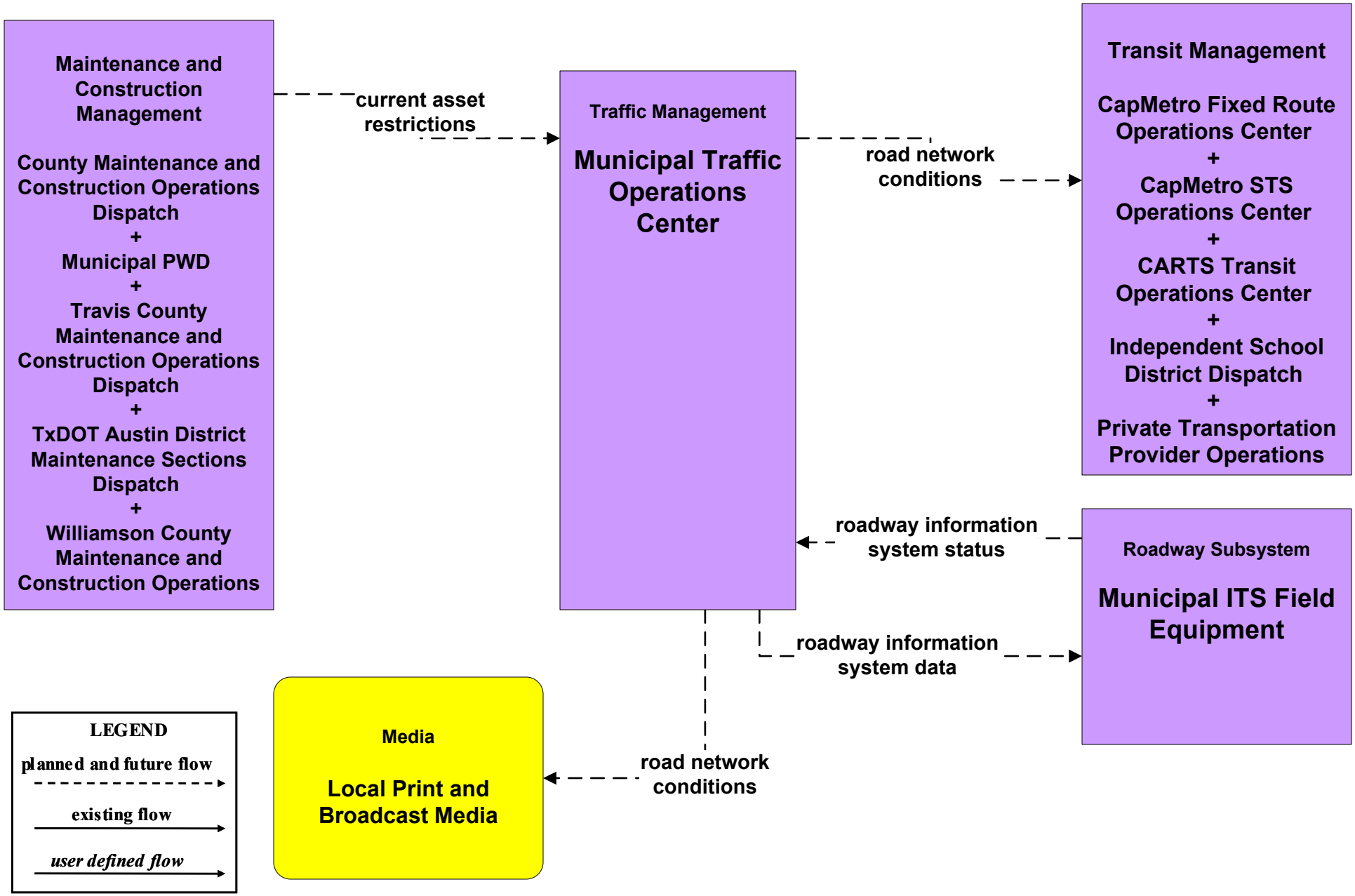


ATMS06 - Traffic Information Dissemination
City of San Marcos Traffic Operations Center (2 of 2)

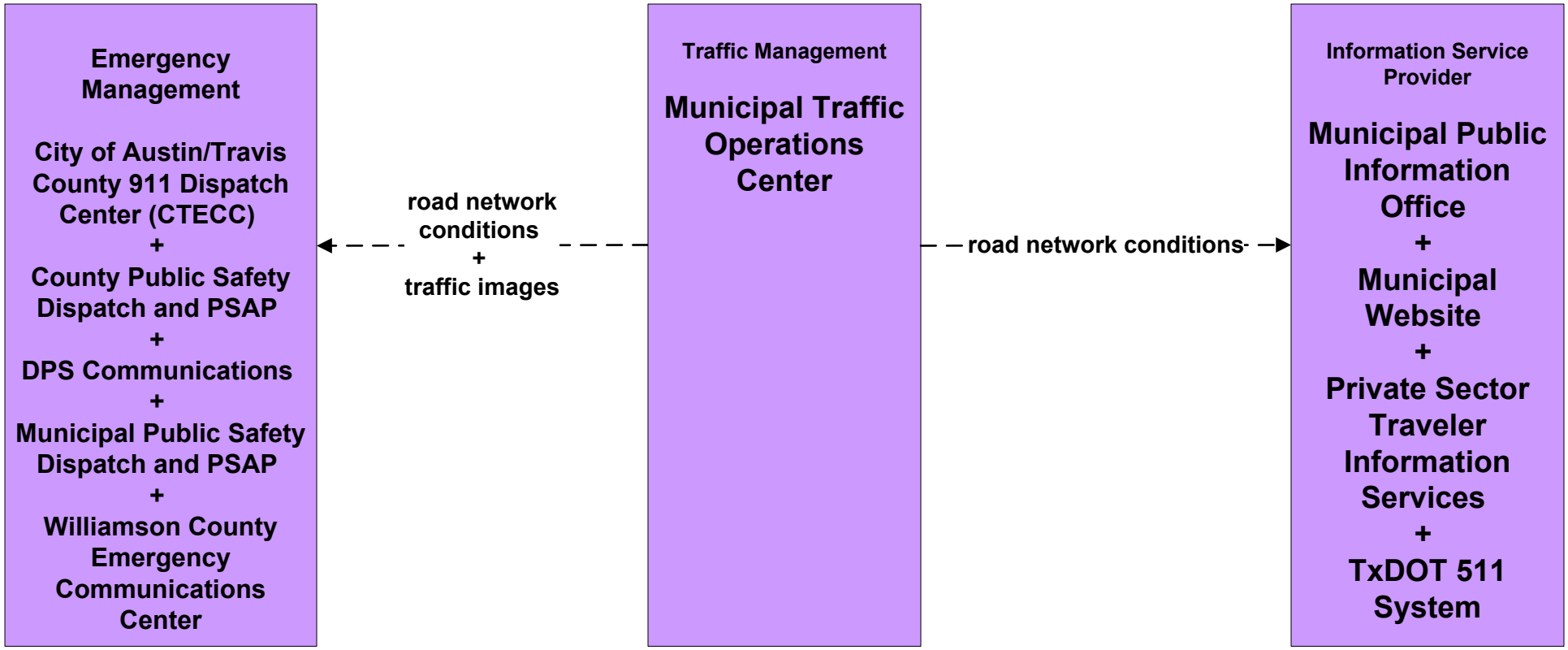


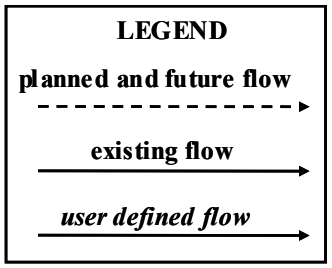


ATMS06 - Traffic Information Dissemination
Municipal Traffic Operations Center (1 of 2)

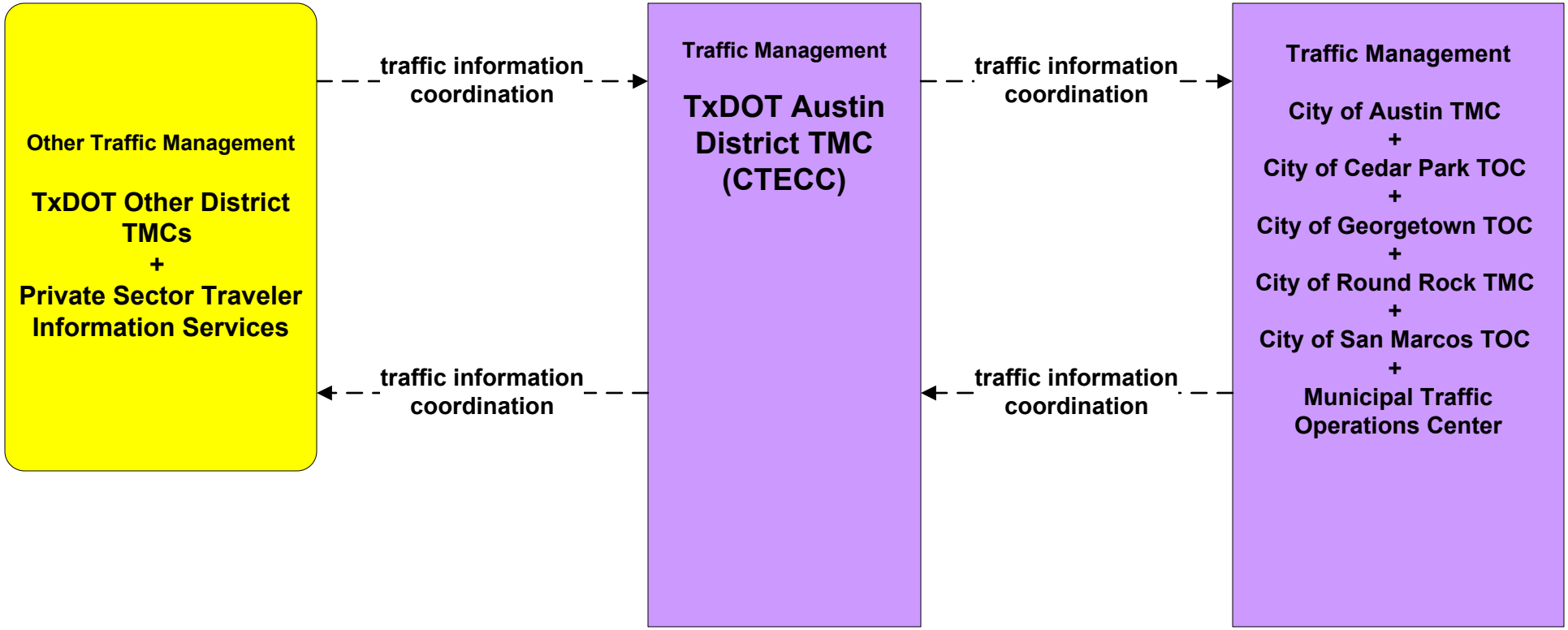


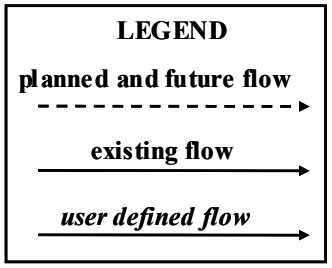
ATMS06 - Traffic Information Dissemination
Municipal Traffic Operations Center (2 of 2)



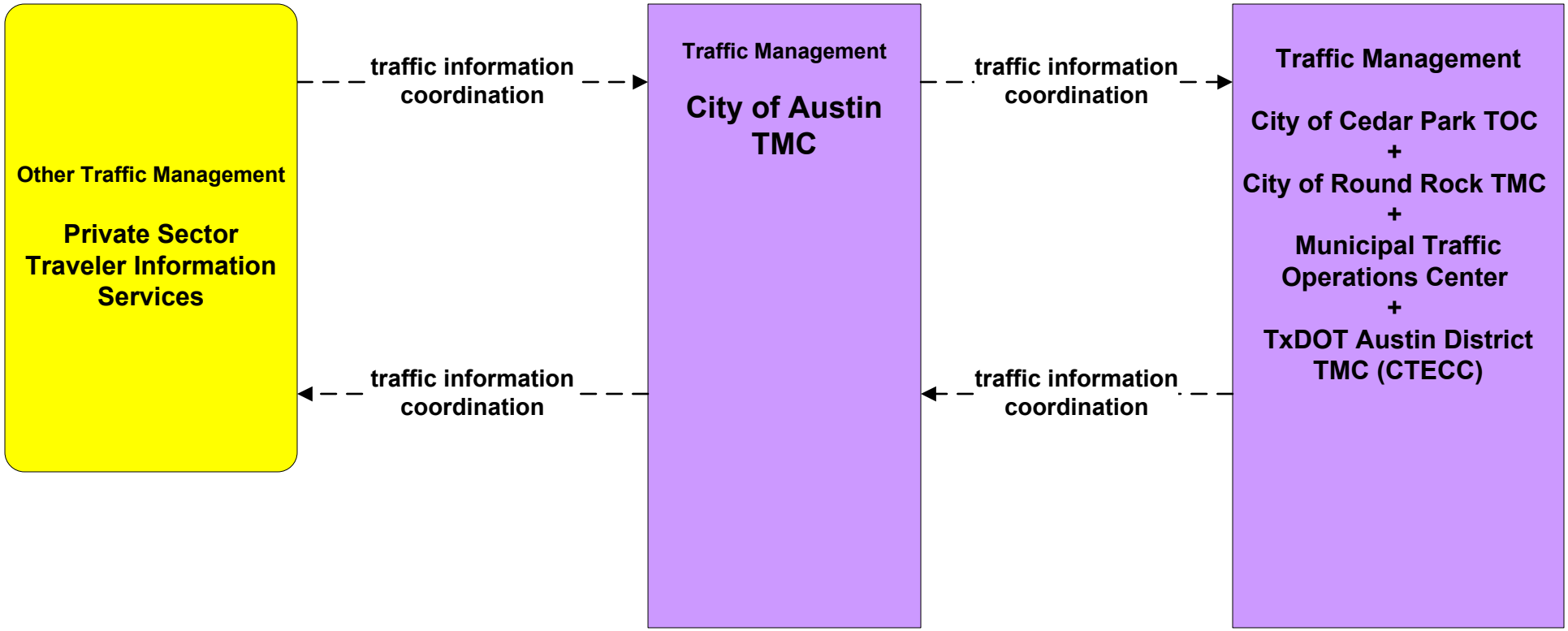


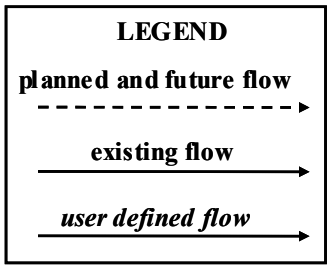
ATMS07 - Regional Traffic Control
TxDOT Austin District TMC (CTECC)



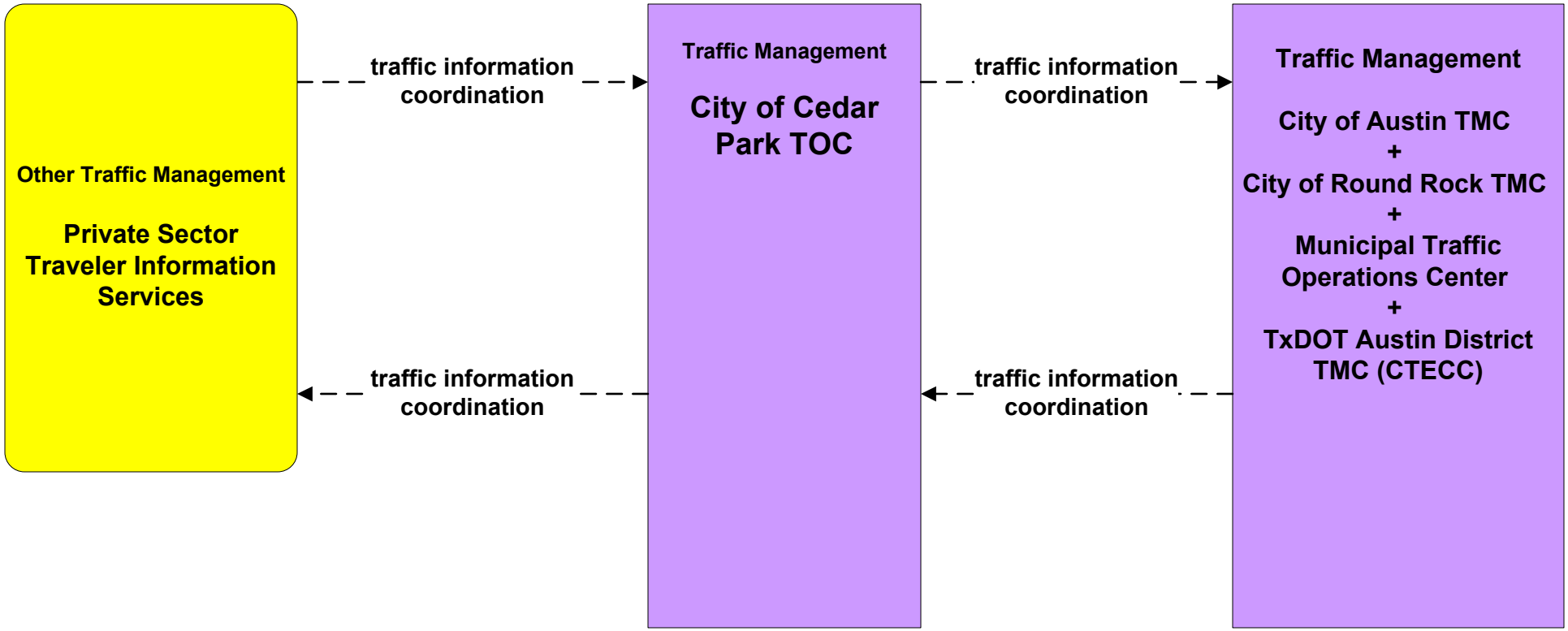


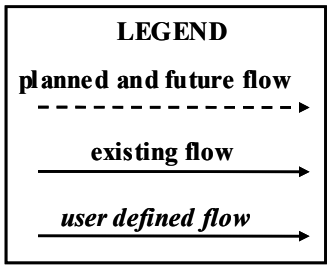
ATMS07 - Regional Traffic Control
City of Austin TMC



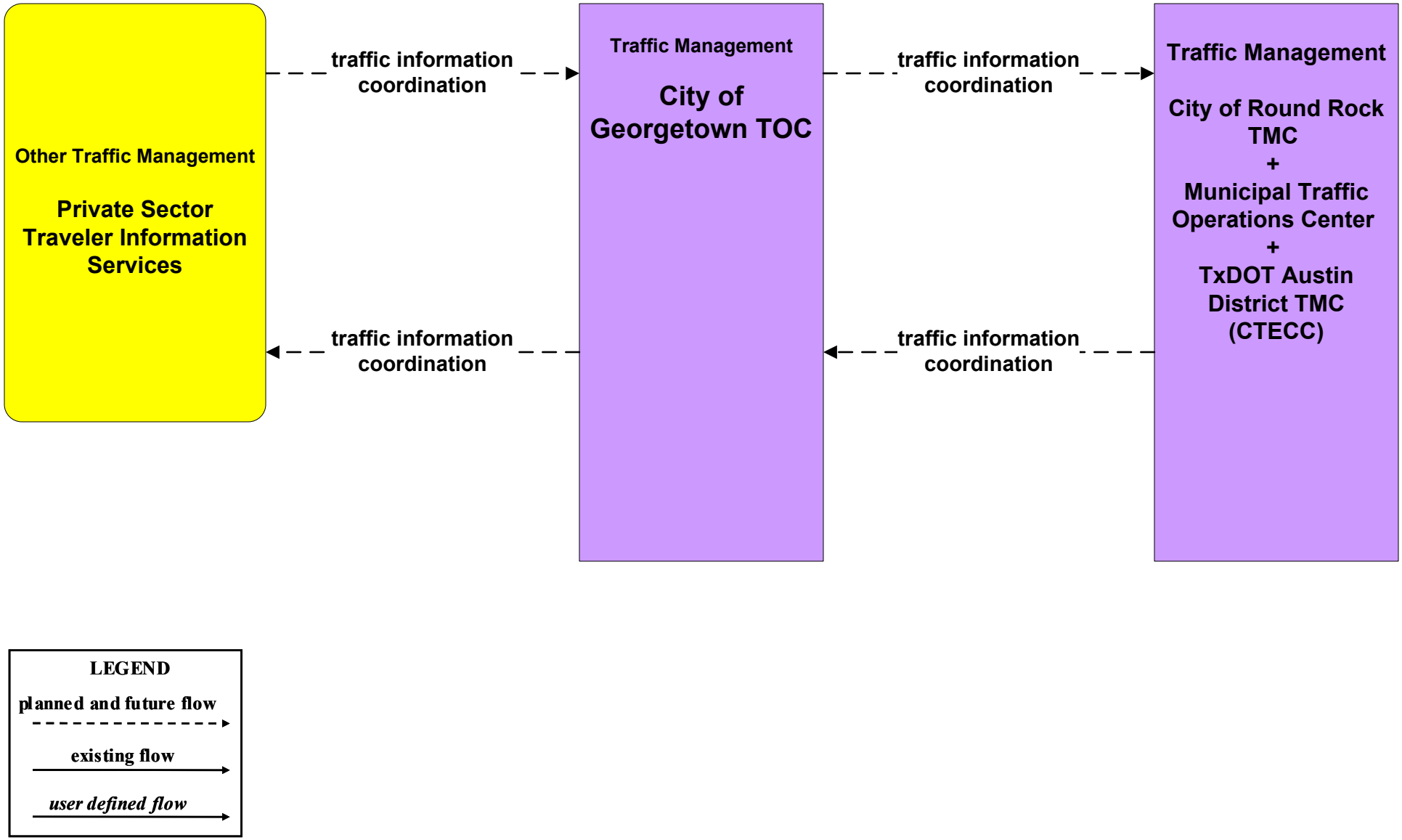


ATMS07 - Regional Traffic Control
City of Cedar Park TOC

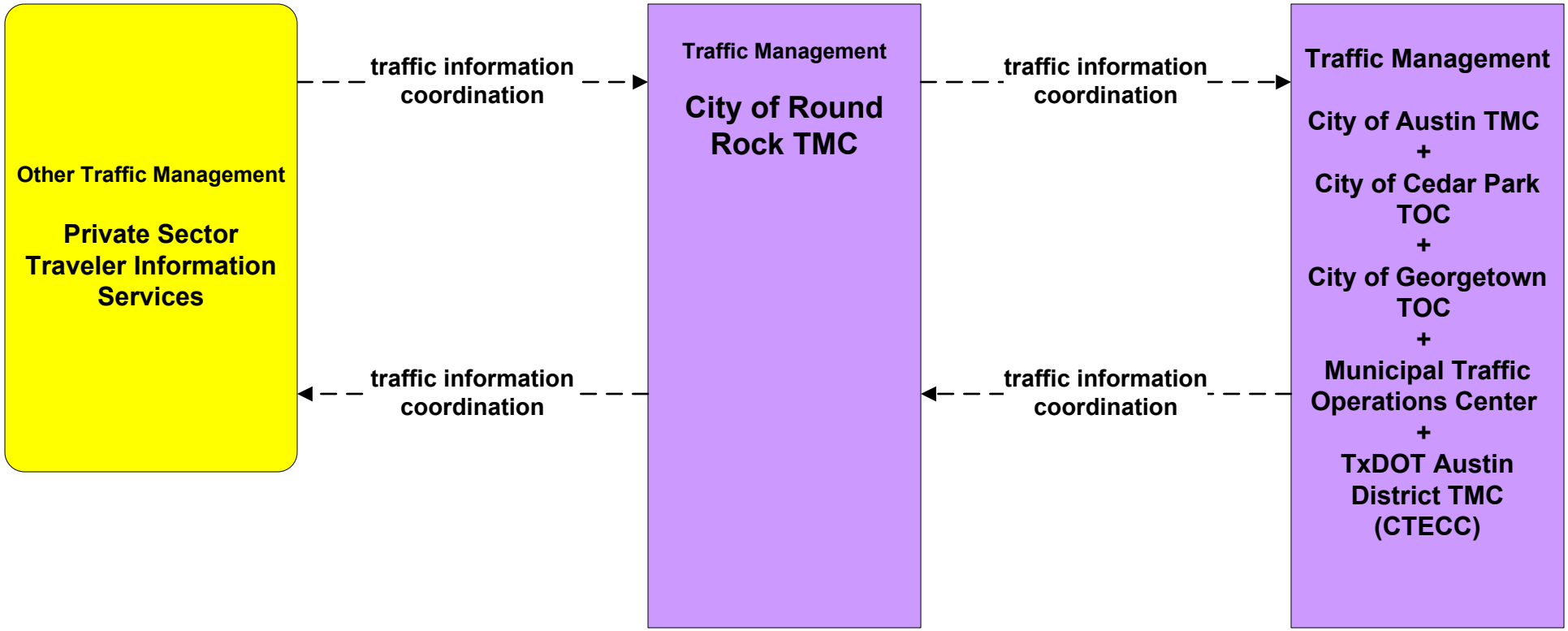


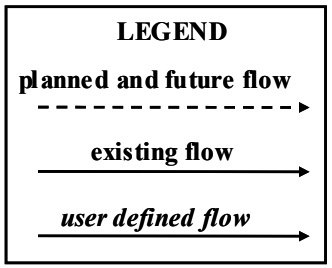


ATMS07 - Regional Traffic Control
City of Georgetown TOC

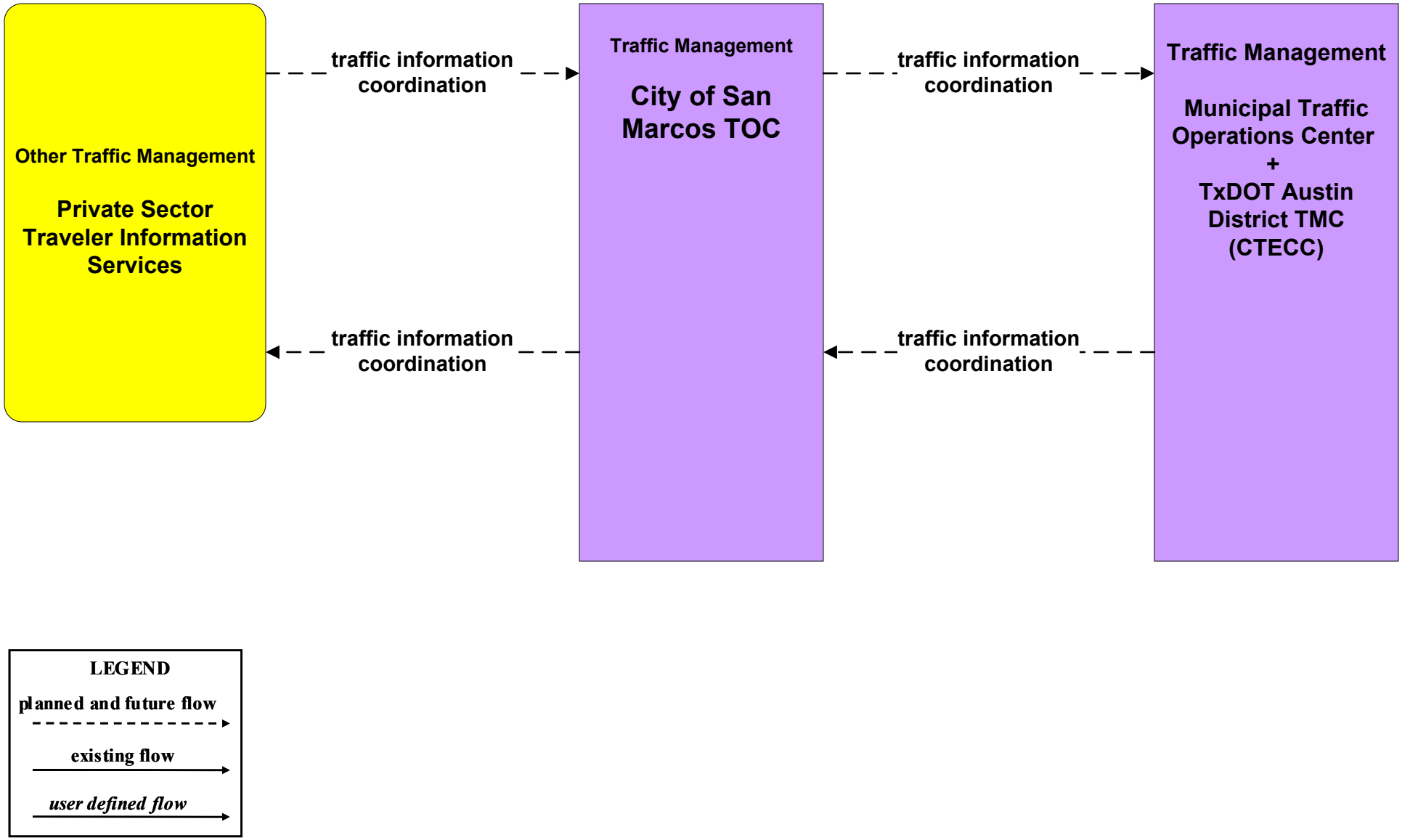


ATMS07 - Regional Traffic Control
City of Round Rock TMC

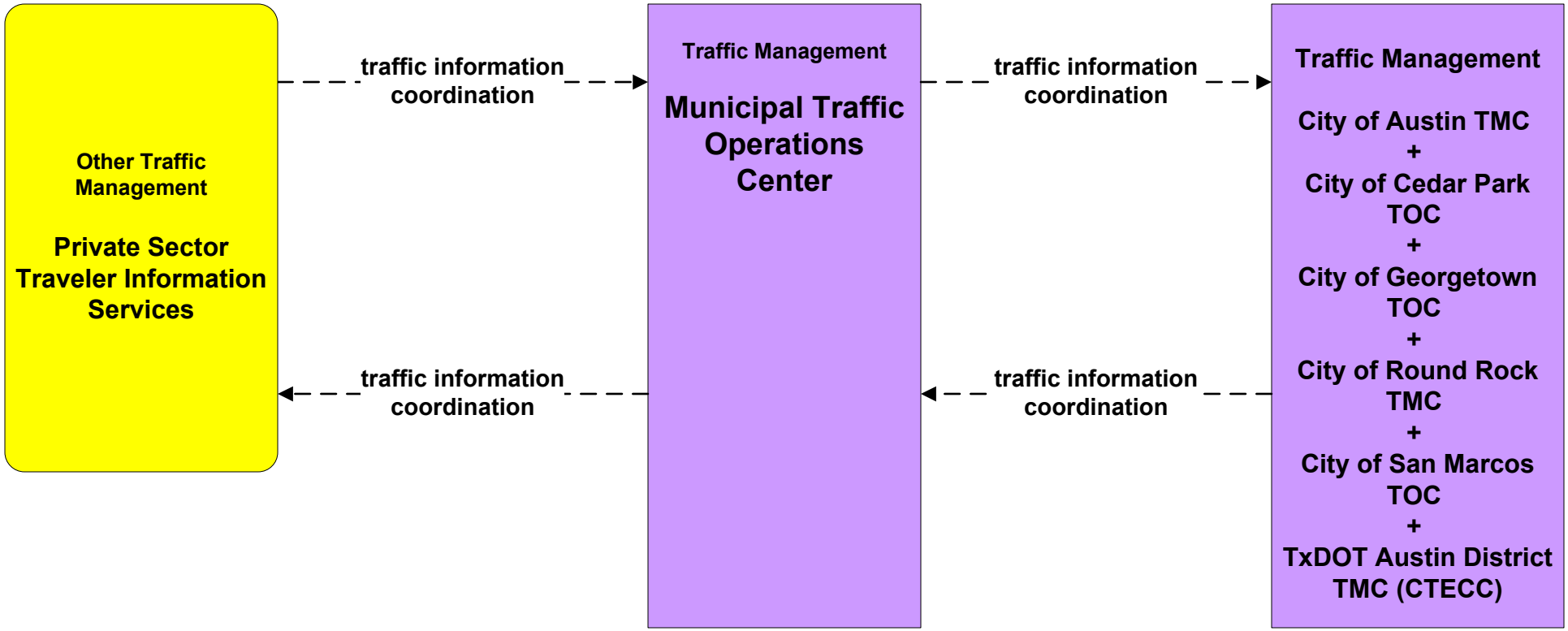




ATMS07 - Regional Traffic Control
City of San Marcos TOC



ATMS07 - Regional Traffic Control
Municipal TOC



LEGEND

planned and future flow

existing flow

user defined flow

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

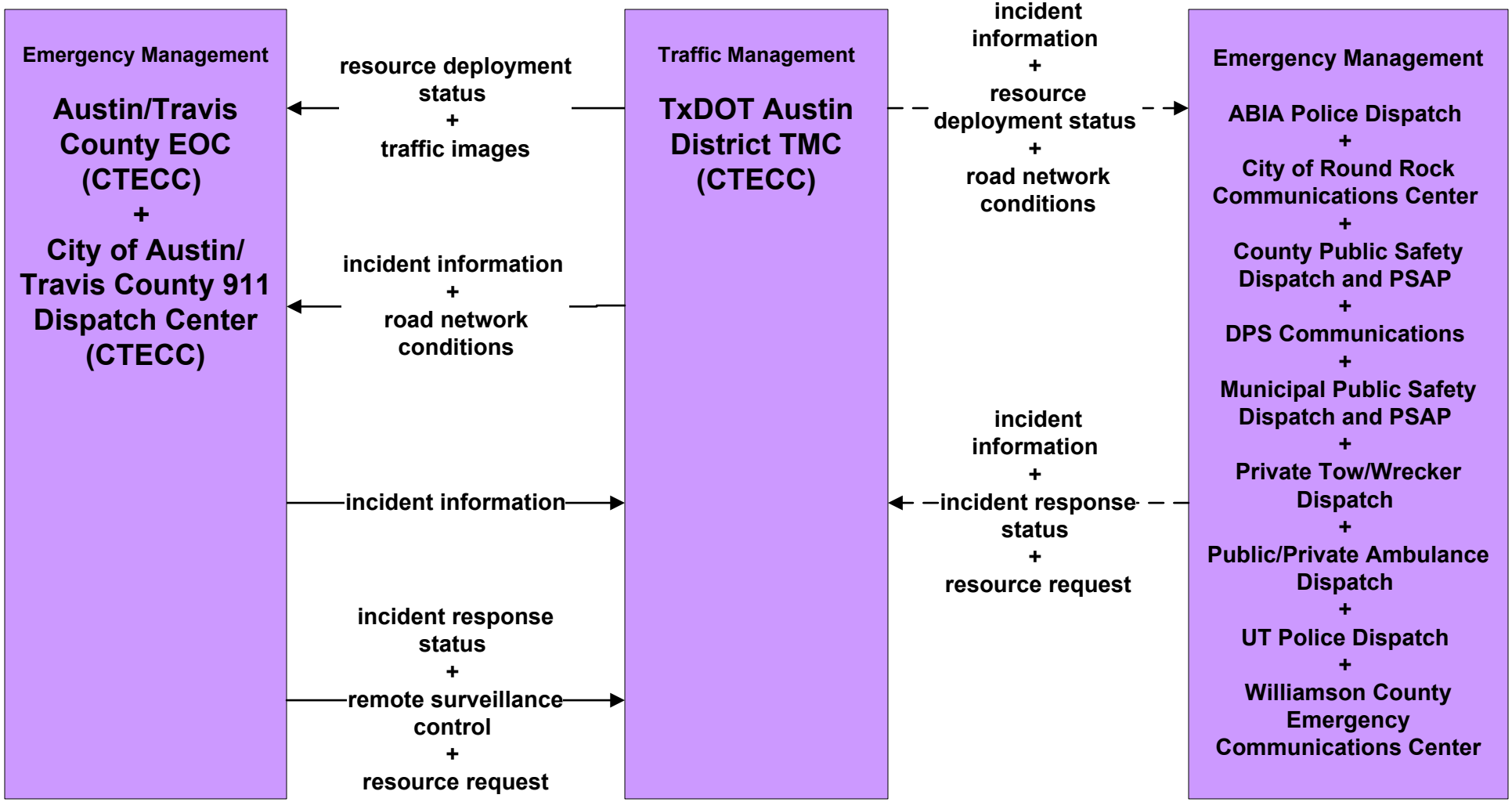
EM2 Covered

Emergency Vehicle Preemption

ATMS08 - Incident Management

Traffic Management ←→ Emergency Management

ATMS08 - Incident Management
TxDOT Austin District TMC – (TM to EM)



LEGEND

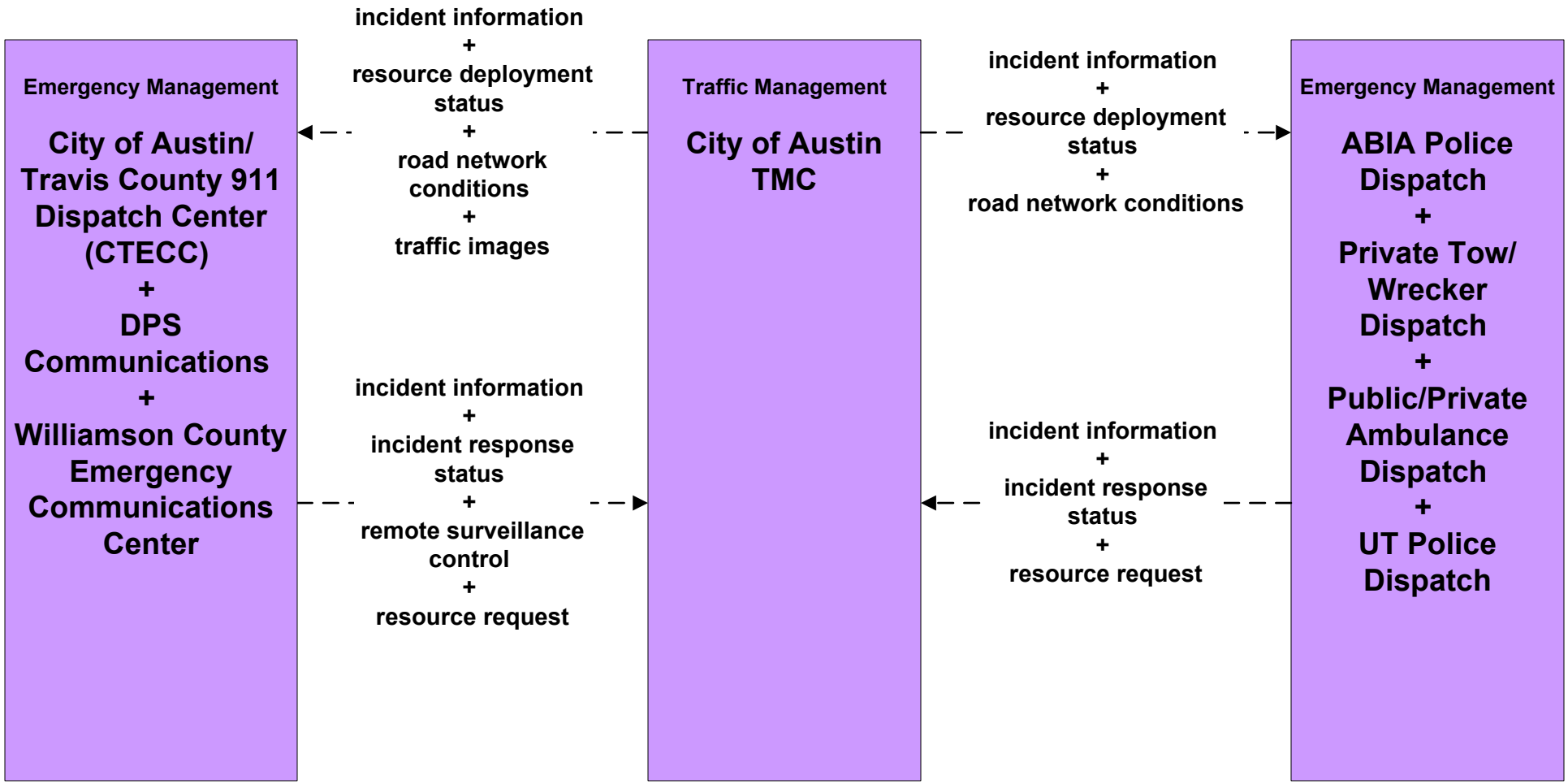
planned and future flow

existing flow

user defined flow

Transit providers get "road network conditions" (for incident information) directly from CTECC (see APTS2 and APTS3).

ATMS08 - Incident Management
City of Austin TMC – (TM to EM)



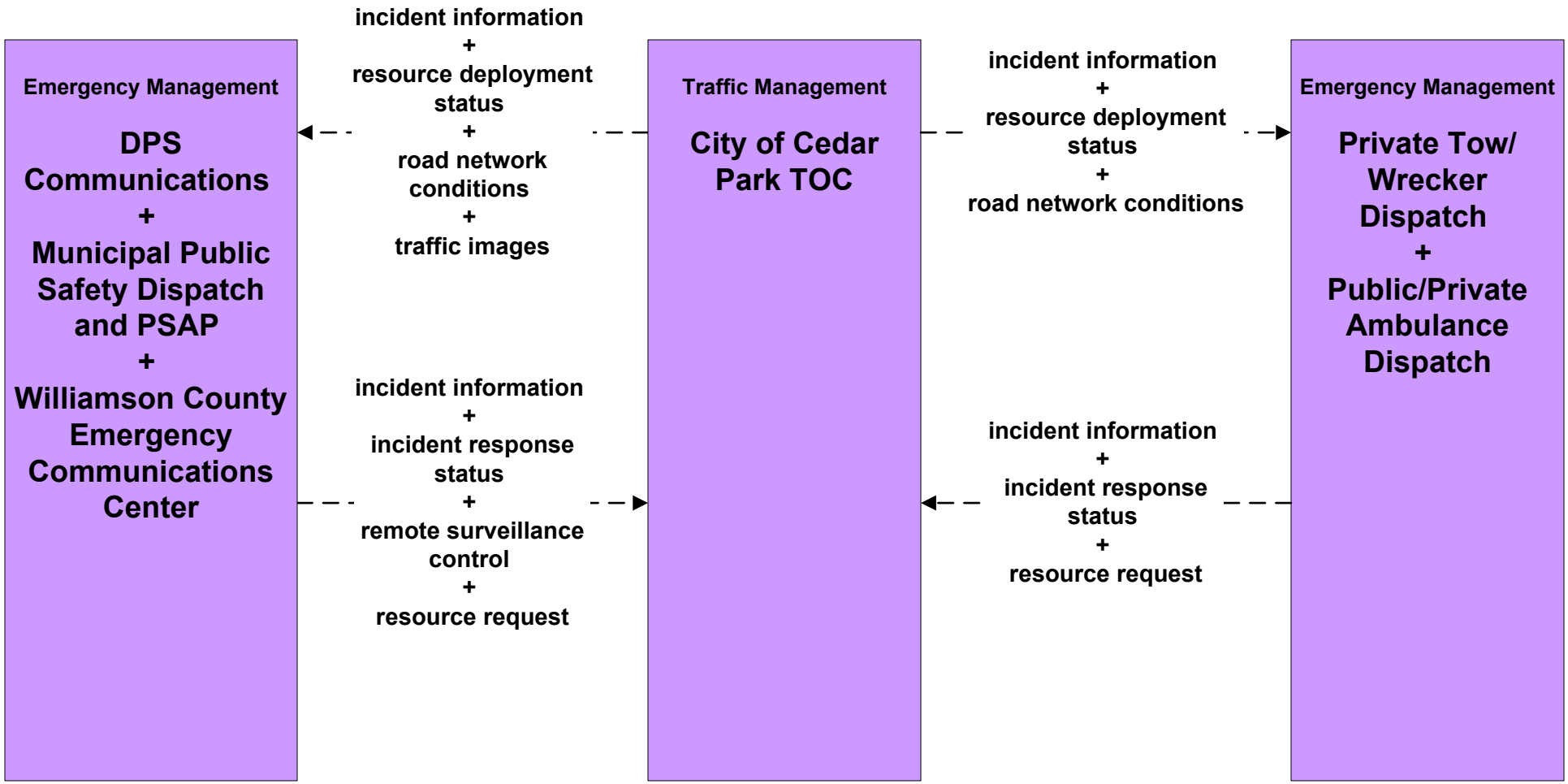
LEGEND

planned and future flow

existing flow

user defined flow

ATMS08 - Incident Management
City of Cedar Park TOC – (TM to EM)



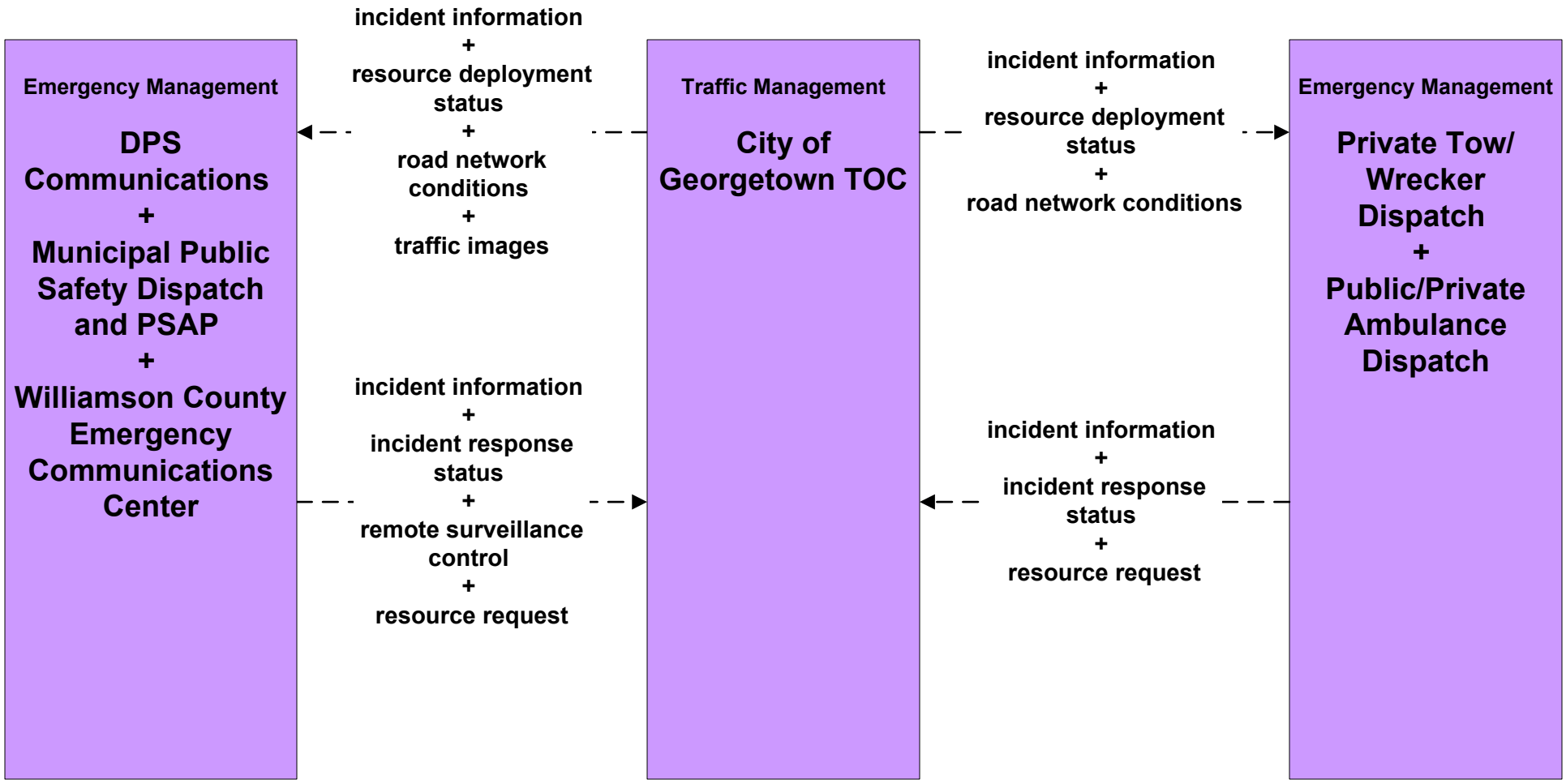
LEGEND

planned and future flow

existing flow

user defined flow

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



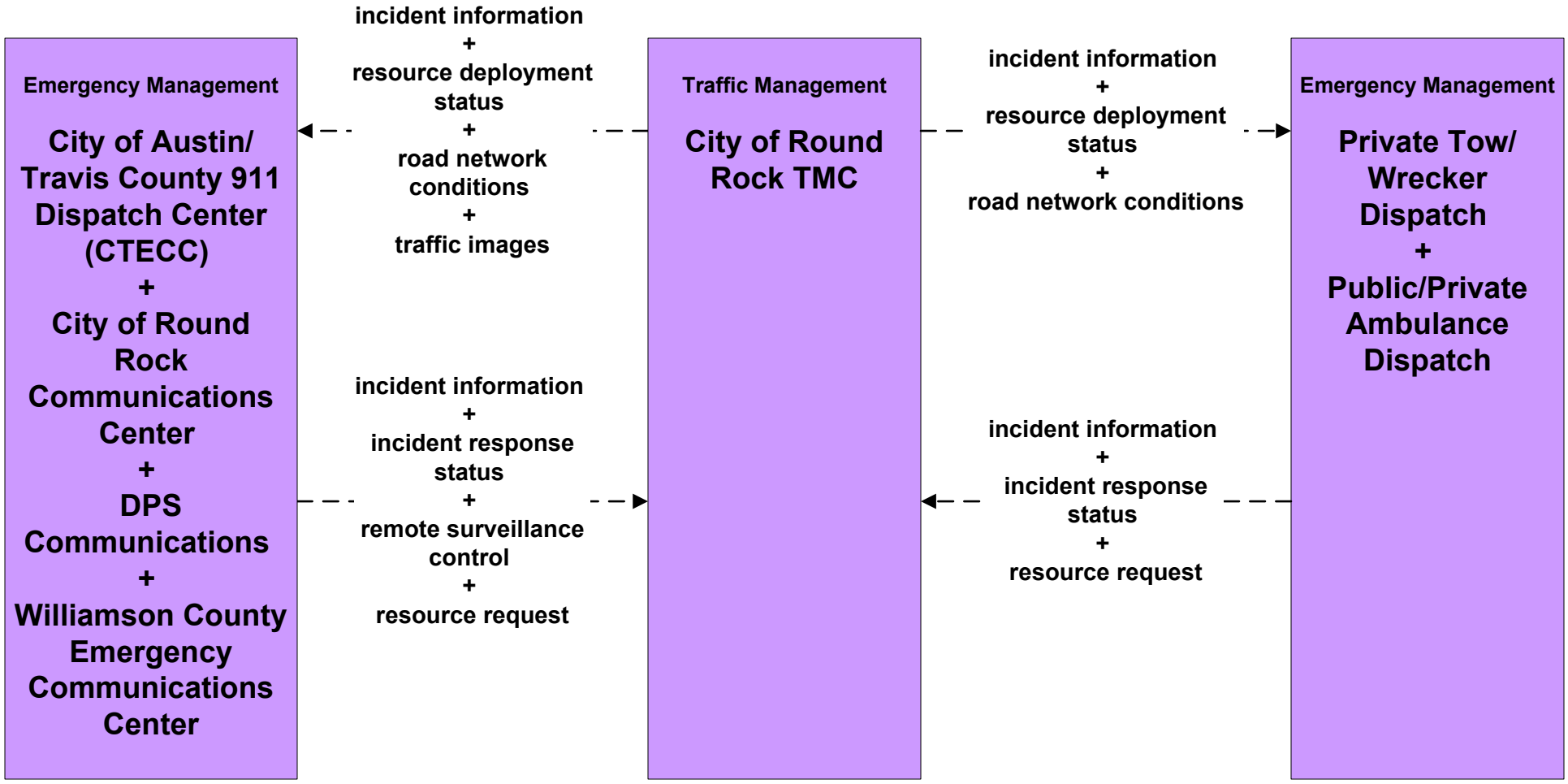
LEGEND

planned and future flow

existing flow

user defined flow

ATMS08 - Incident Management
City of Round Rock TMC – (TM to EM)



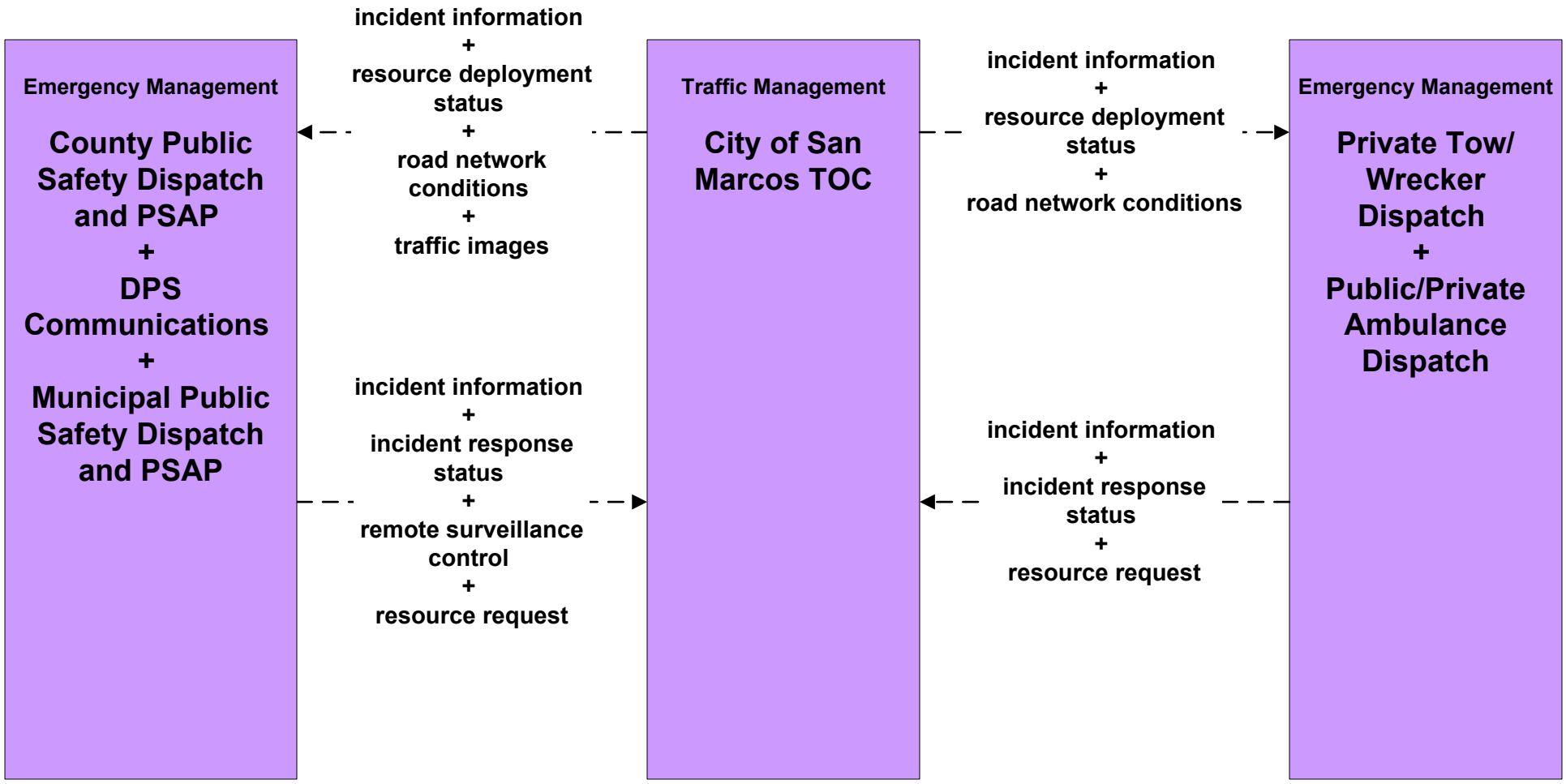
LEGEND

planned and future flow

existing flow

user defined flow

ATMS08 - Incident Management
City of San Marcos TMC – (TM to EM)



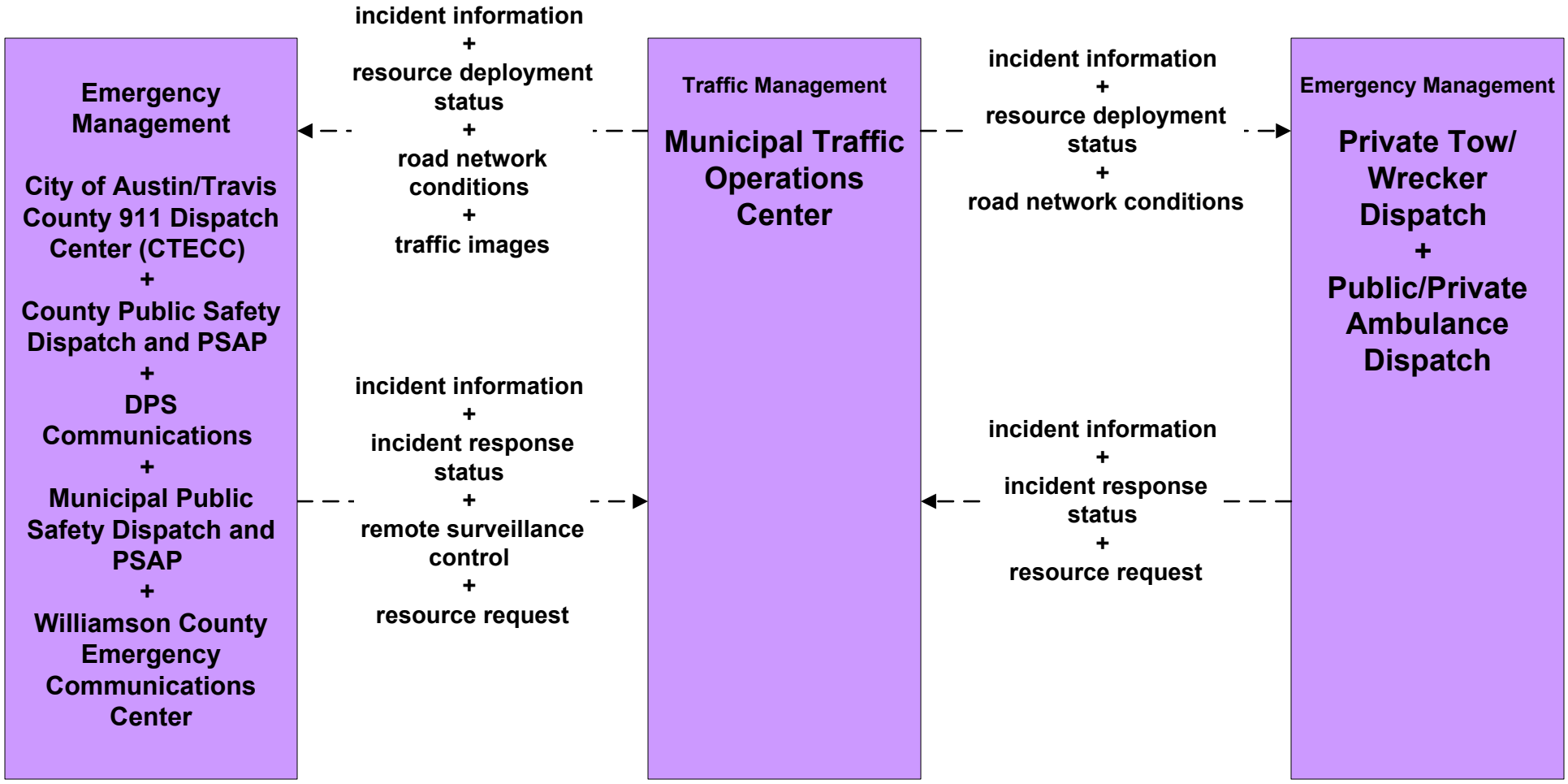
LEGEND

planned and future flow

existing flow

user defined flow

ATMS08 - Incident Management
Municipal Traffic Operations Center – (TM to EM)



LEGEND

planned and future flow

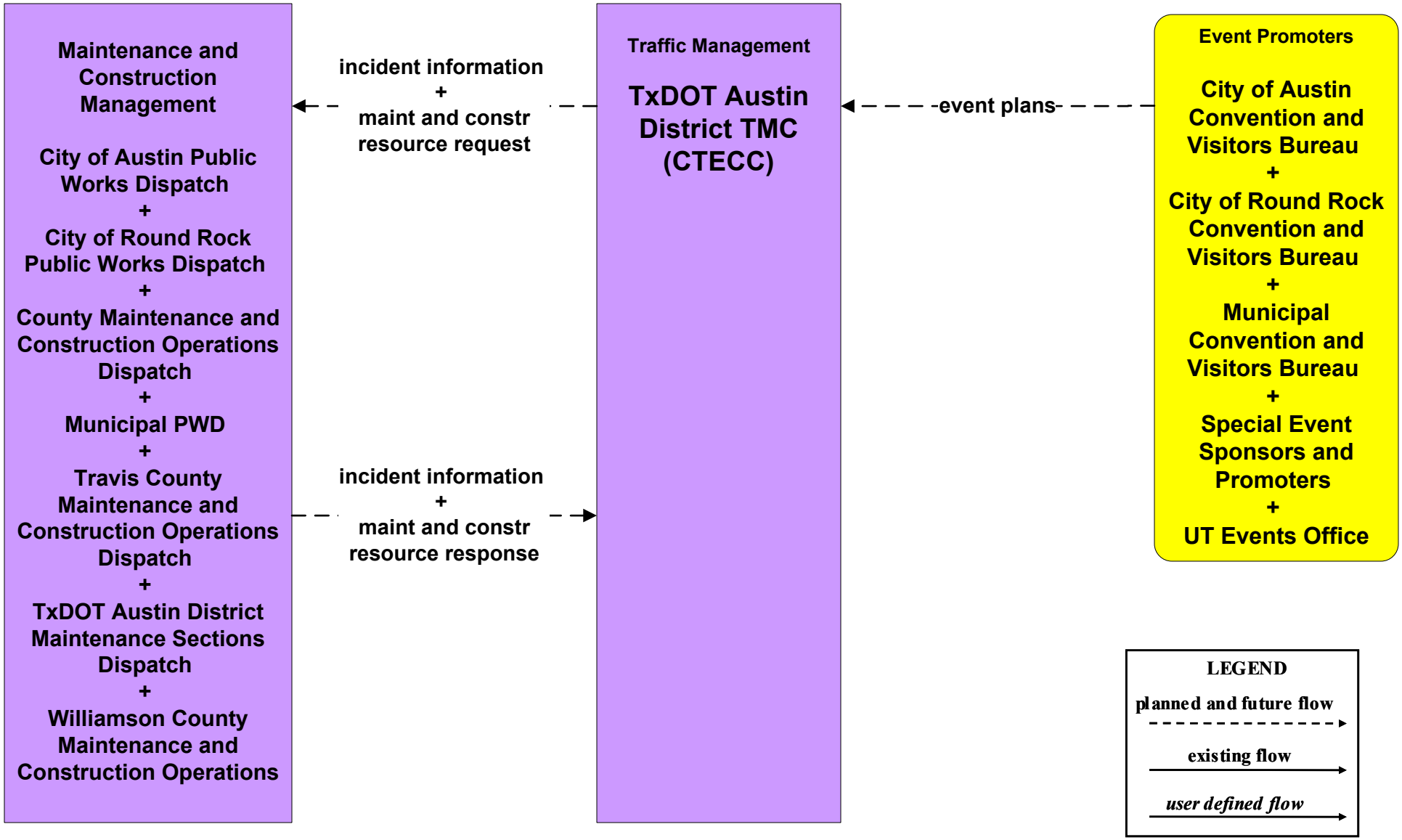
existing flow

user defined flow

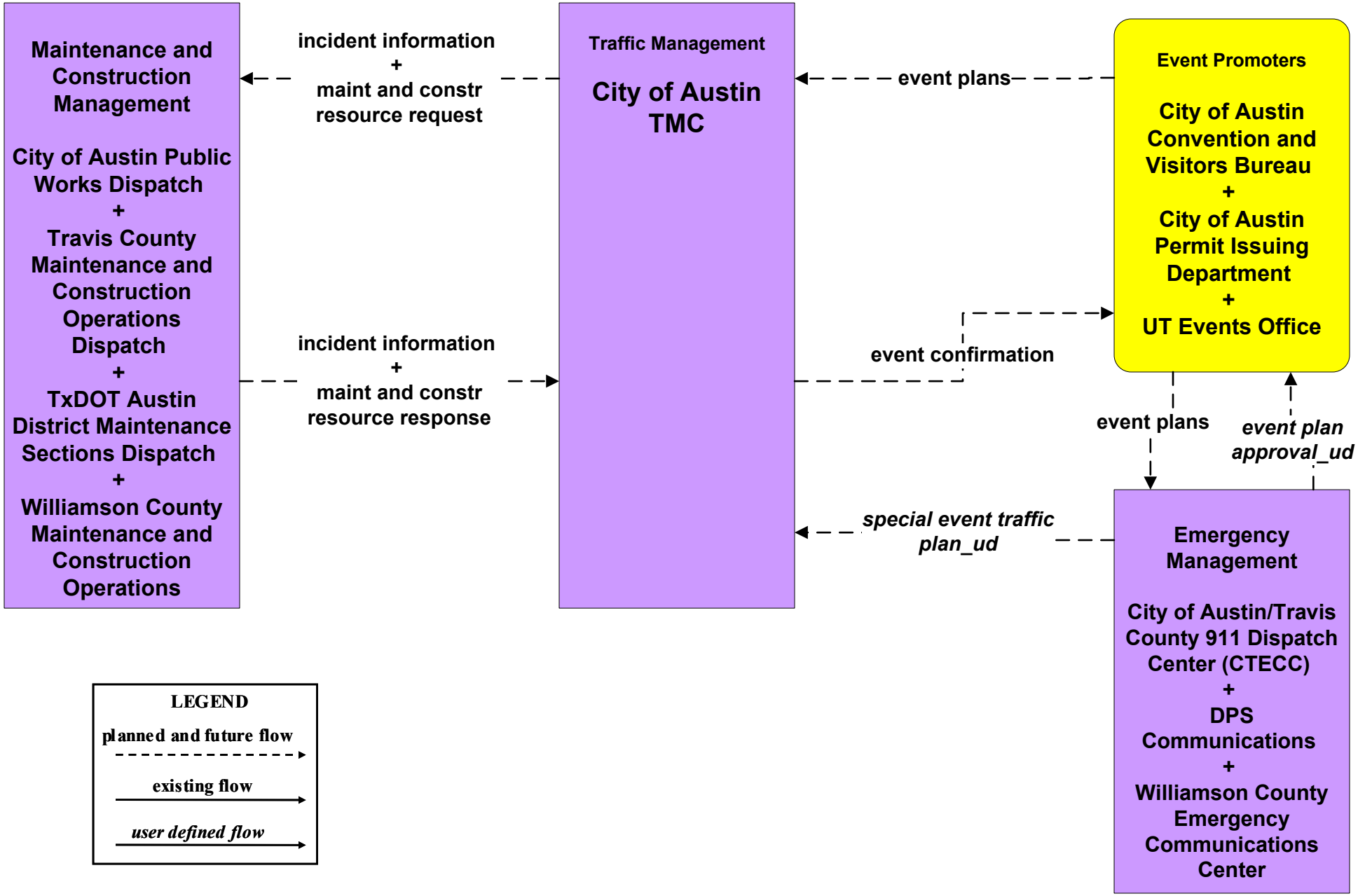
ATMS08 - Incident Management

Traffic Management ←→ Maintenance and Construction Management

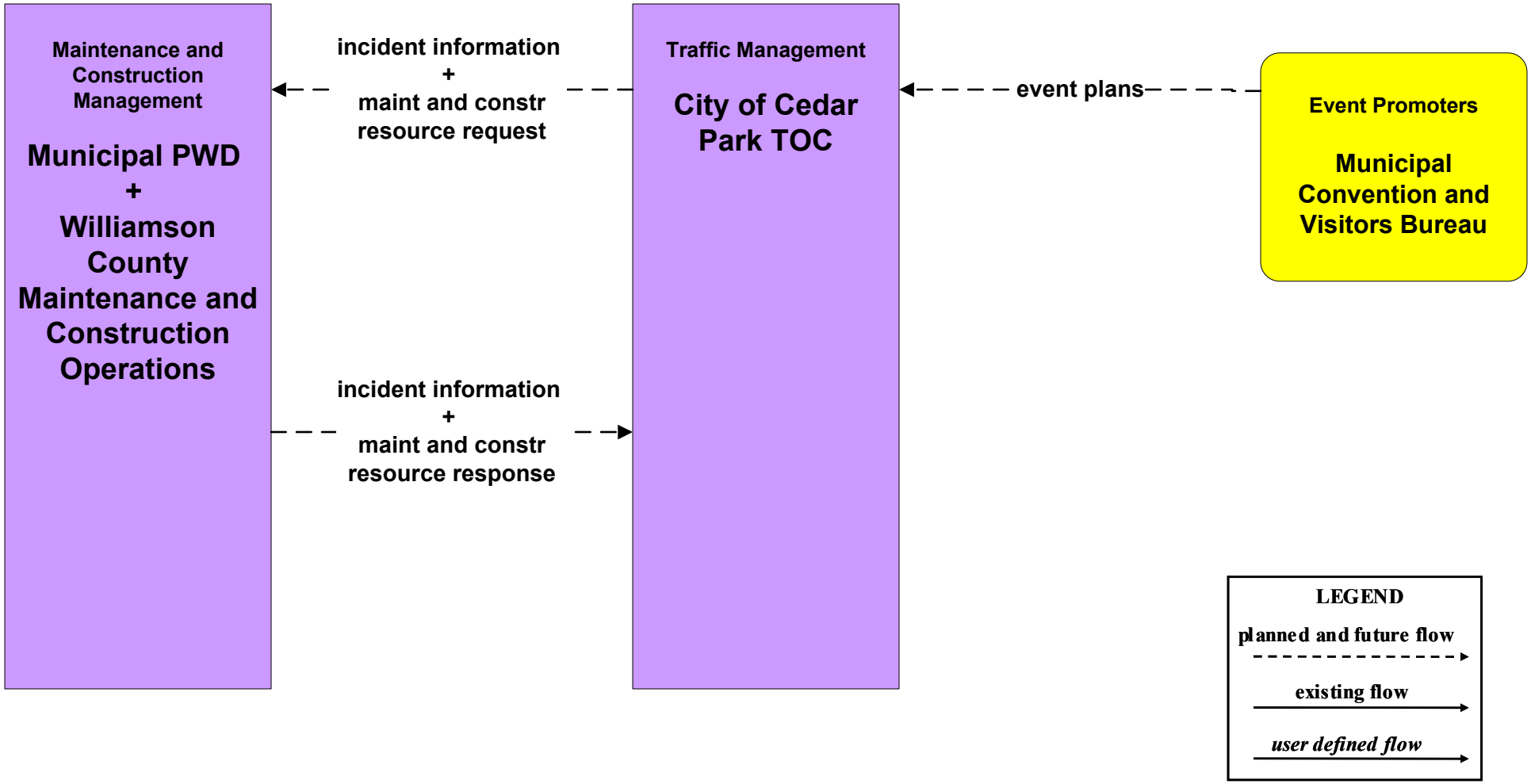
ATMS08 - Incident Management
TxDOT Austin Traffic Management Center – (TM to MCM)



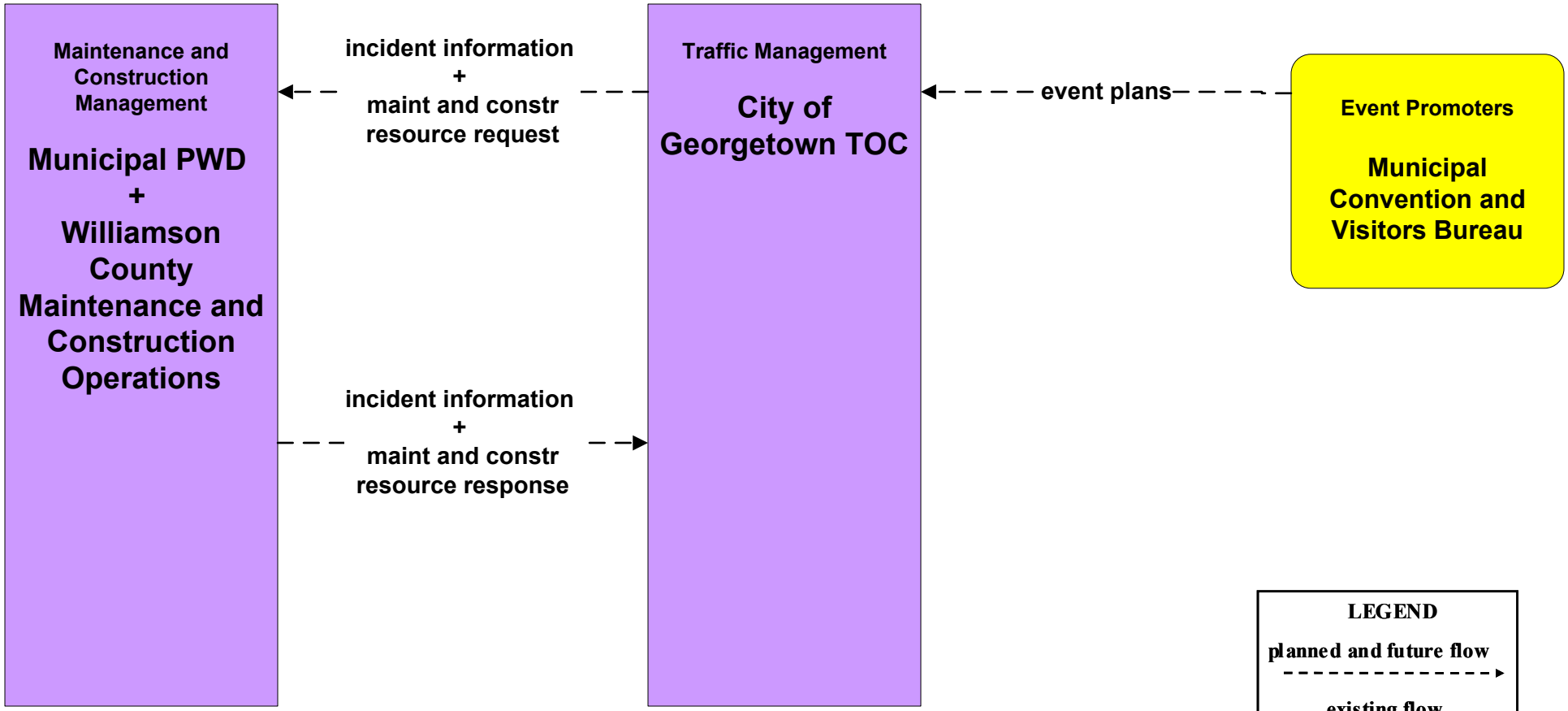
ATMS08 - Incident Management
City of Austin Traffic Management Center – (TM to MCM)



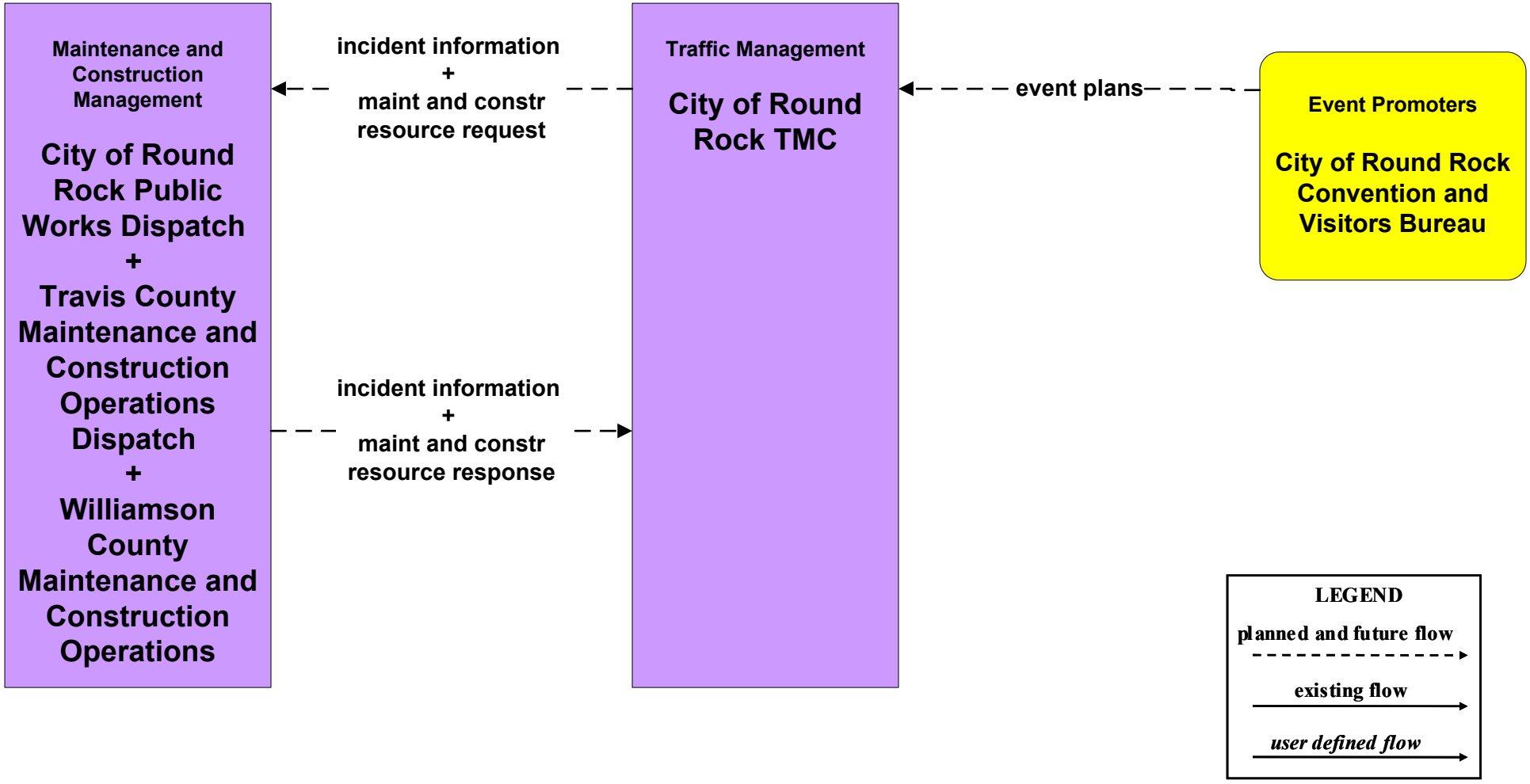
ATMS08 - Incident Management
City of Cedar Park Traffic Operations Center – (TM to MCM)



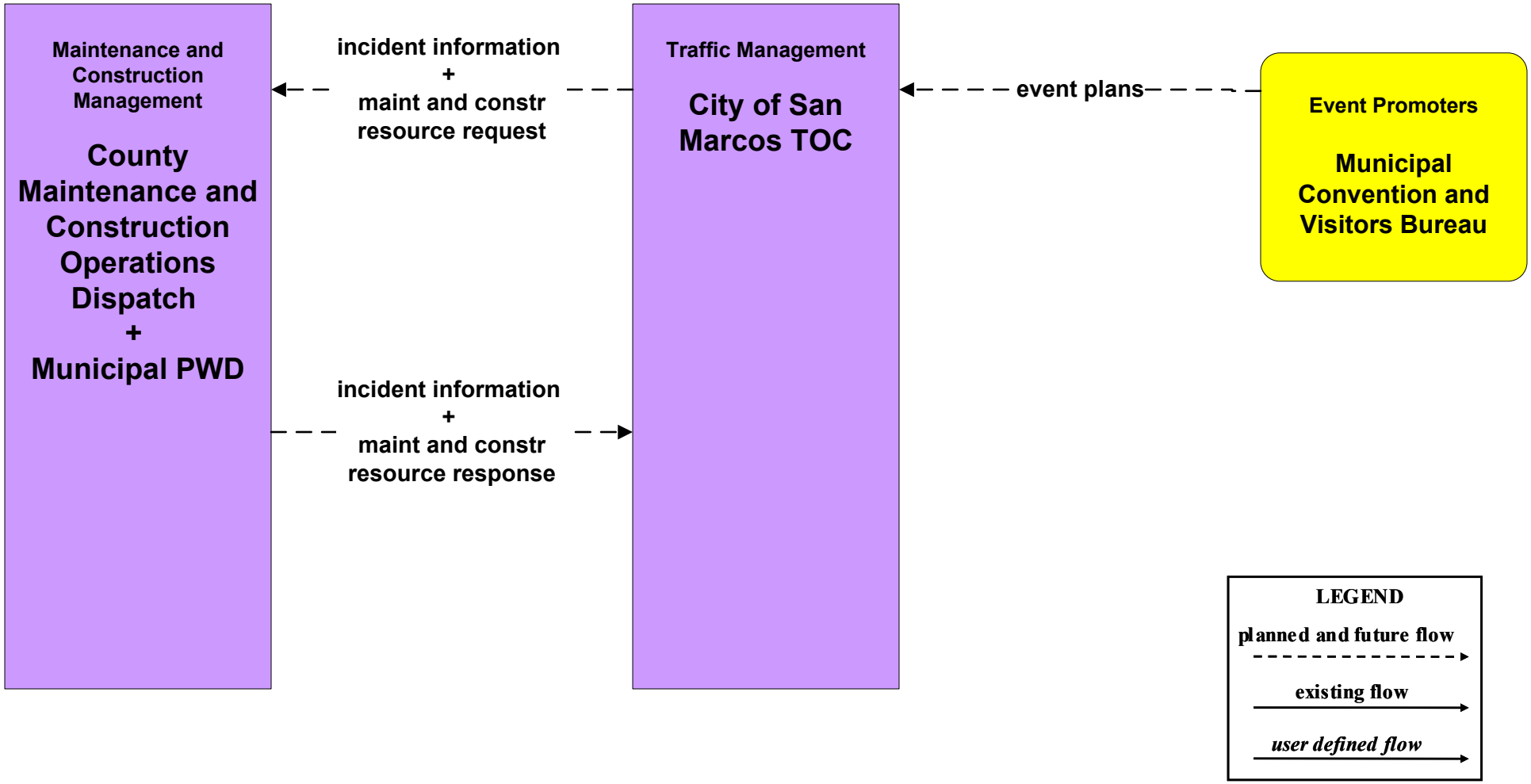
ATMS08 - Incident Management
City of Georgetown Traffic Operations Center – (TM to MCM)



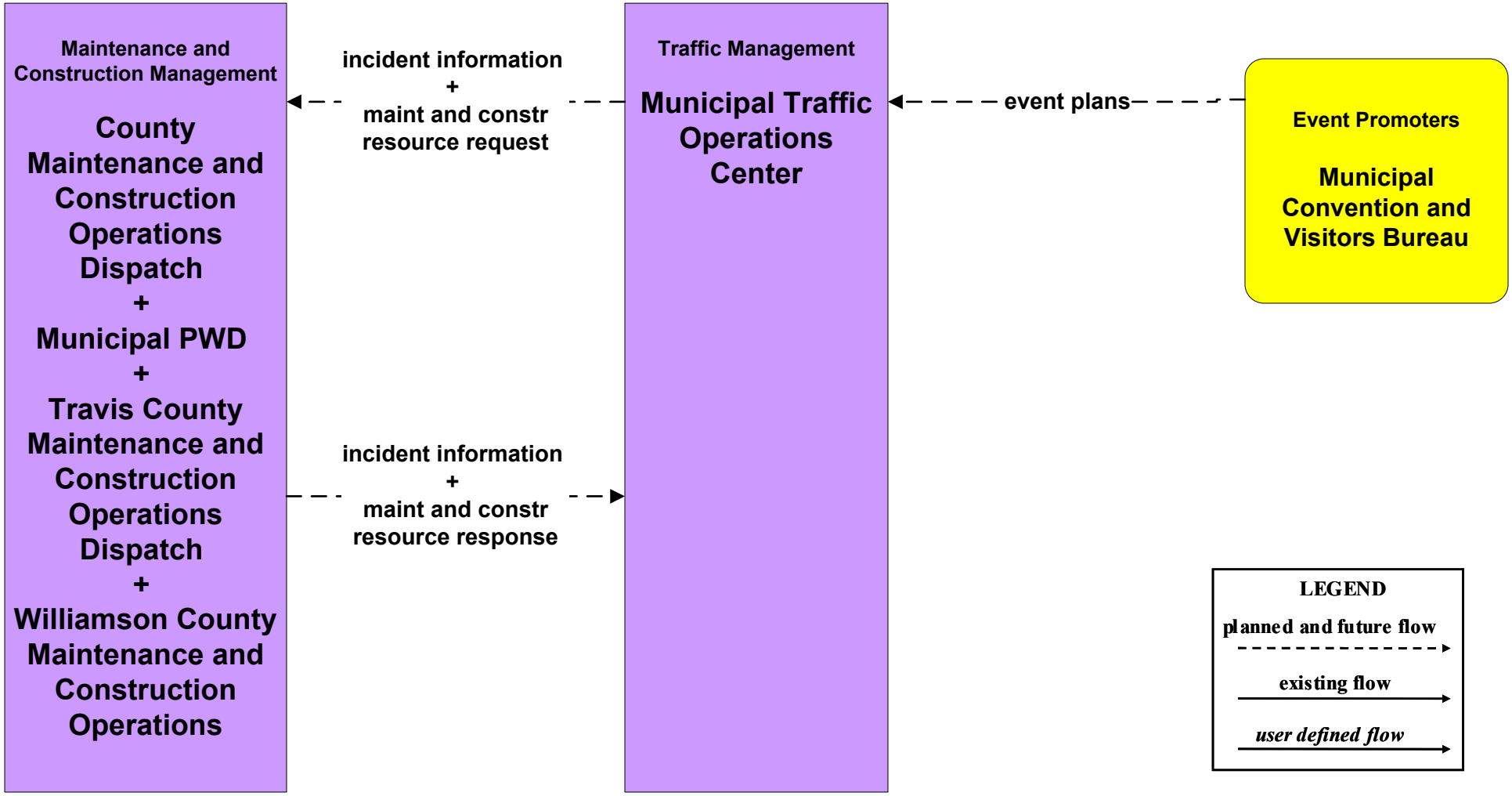
ATMS08 - Incident Management
City of Round Rock Traffic Management Center – (TM to MCM)



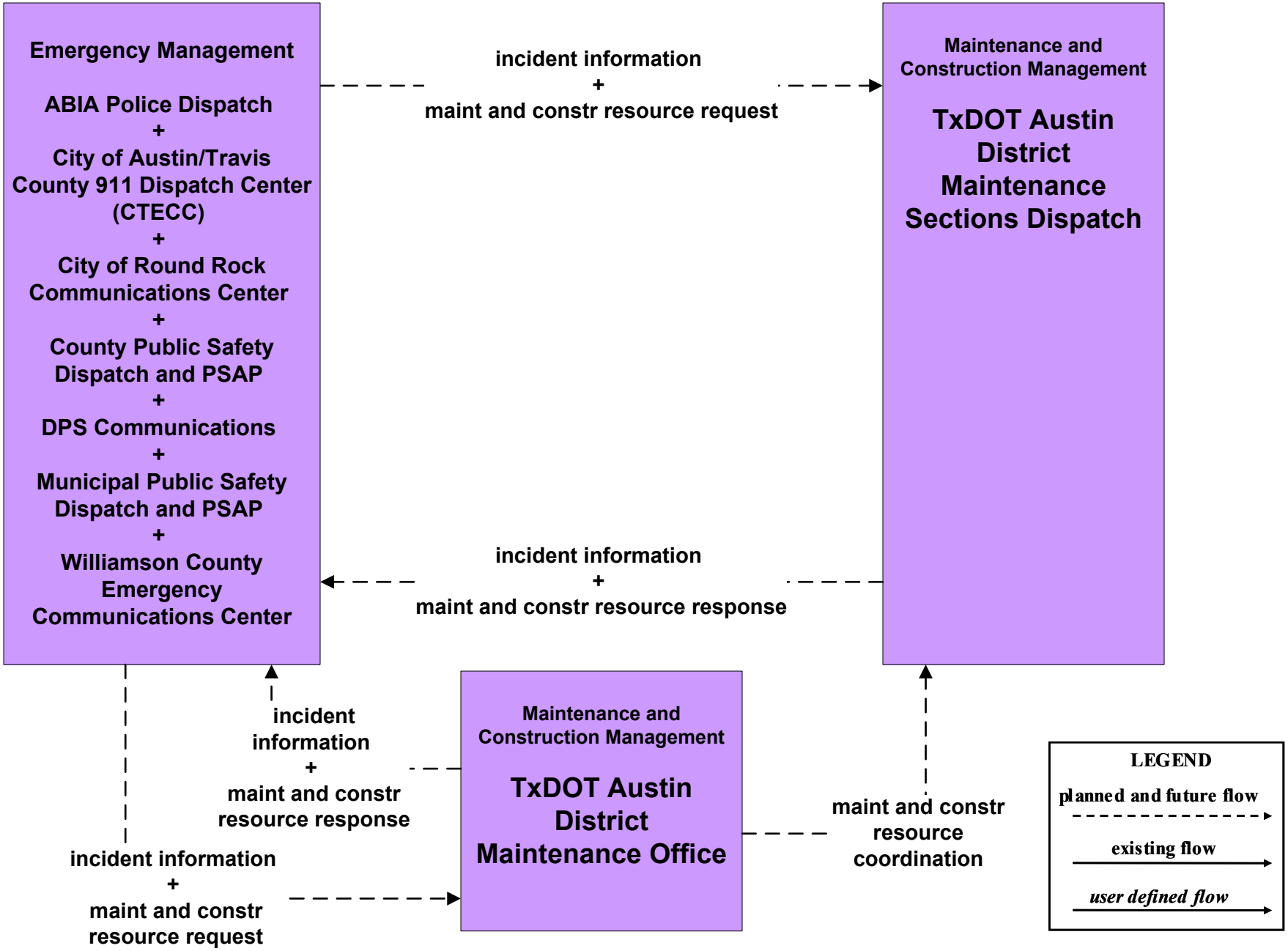
ATMS08 - Incident Management
City of San Marcos Traffic Operations Center – (TM to MCM)



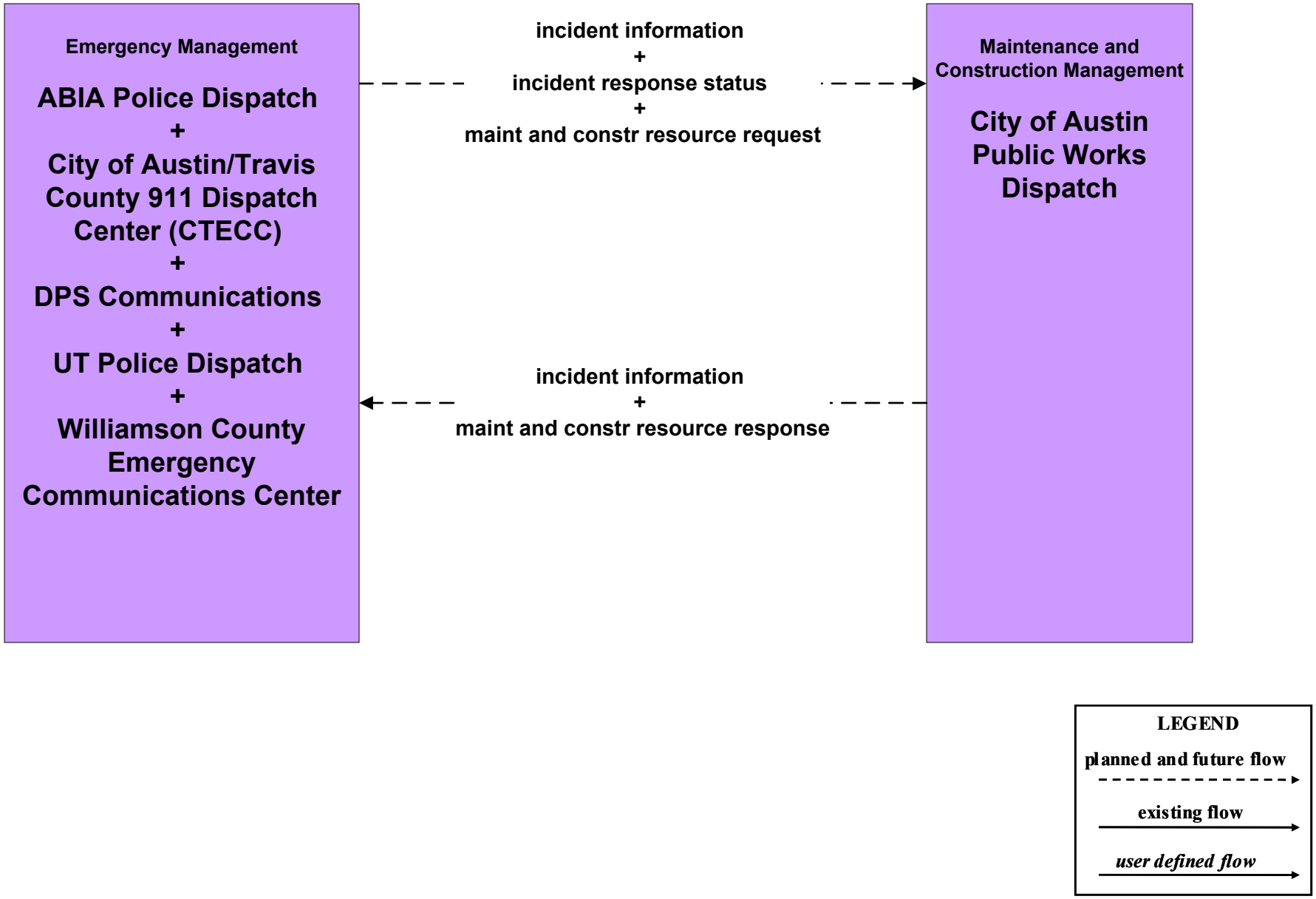
ATMS08 - Incident Management
Municipal Traffic Operations Center – (TM to MCM)



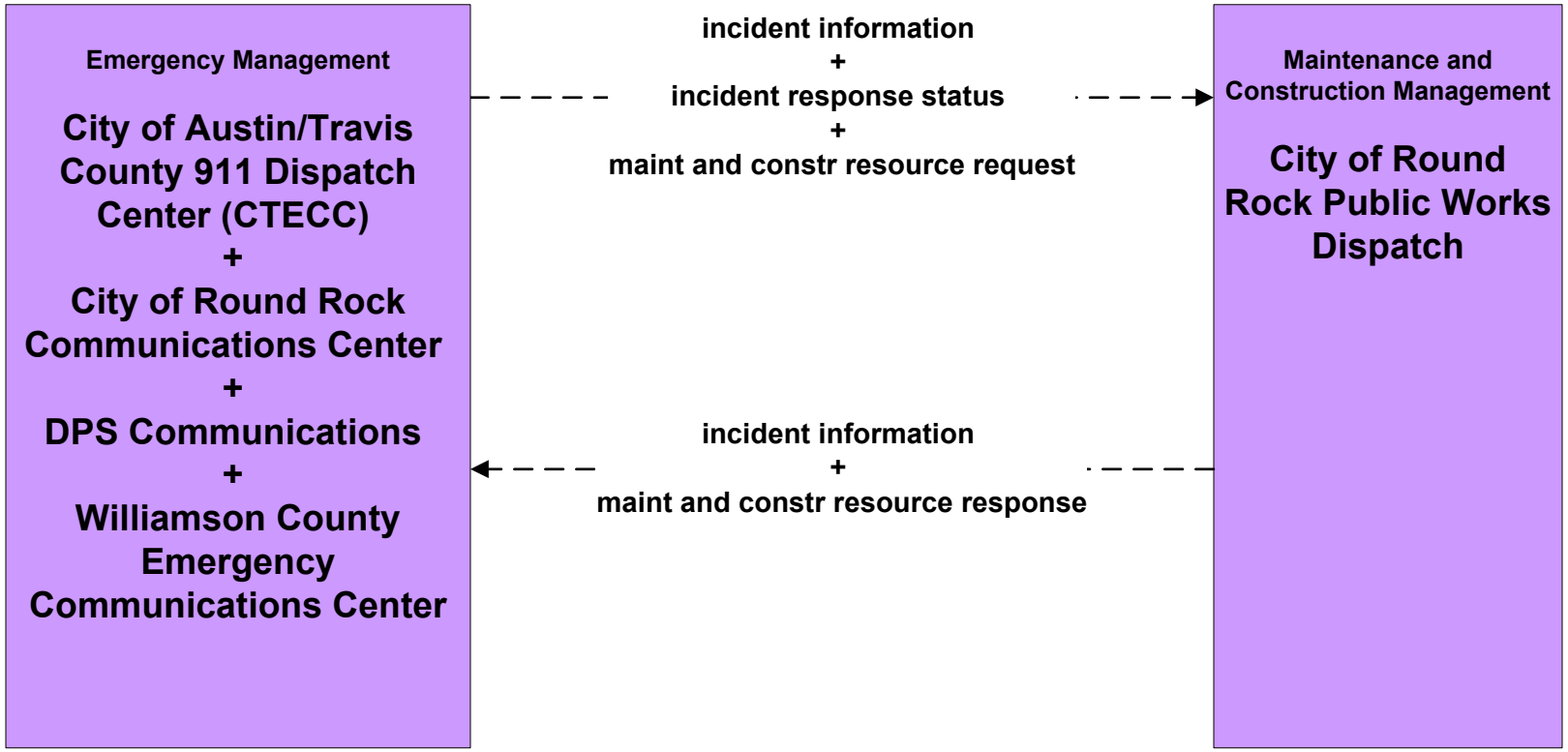
ATMS08 - Incident Management
TxDOT Austin District Maintenance Sections – (MCM to EM)

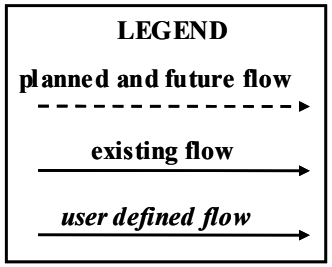


ATMS08 - Incident Management
City of Austin Maintenance System – (MCM to EM)

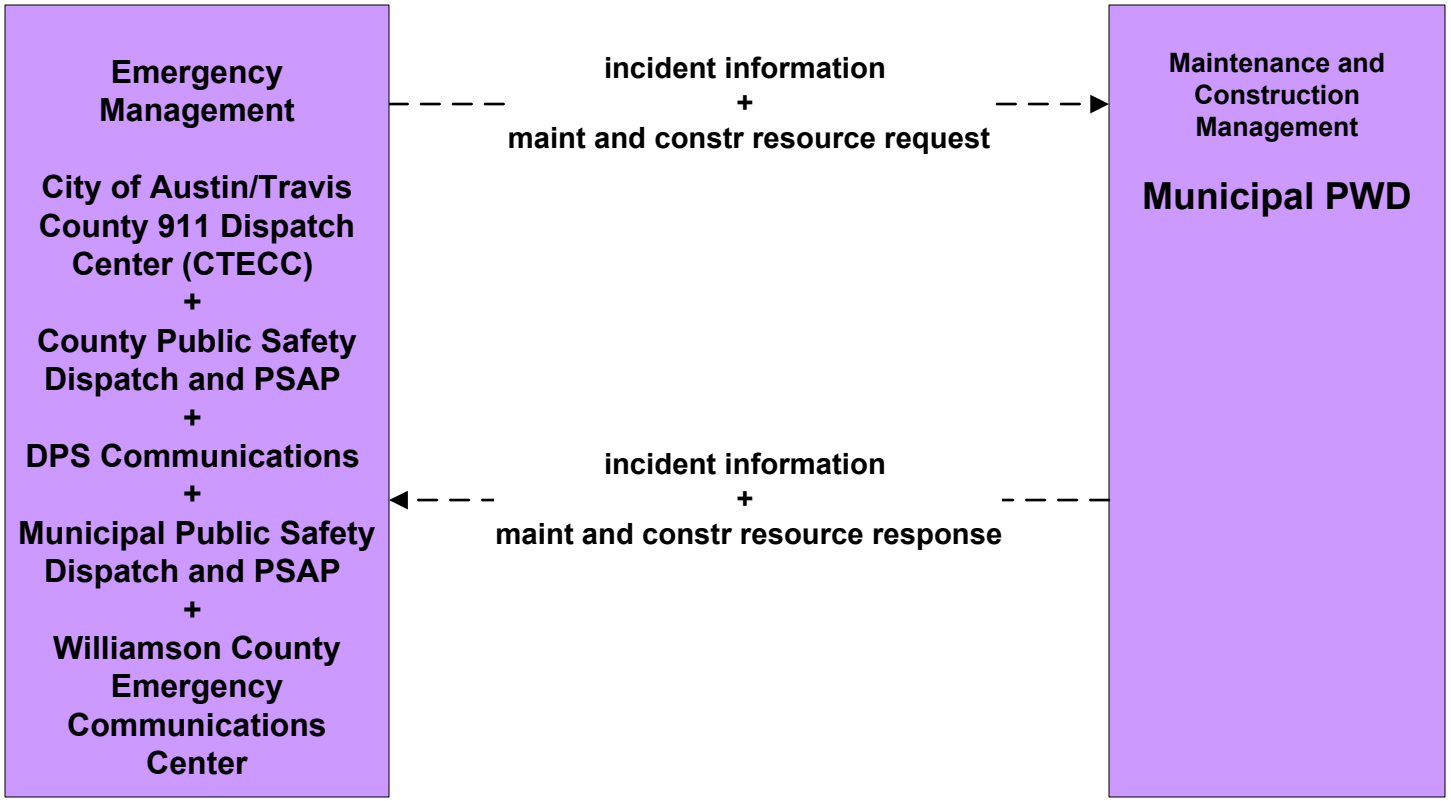


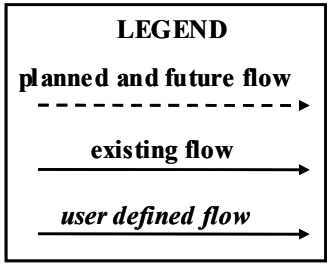
ATMS08 - Incident Management
City of Round Rock Maintenance System – (MCM to EM)



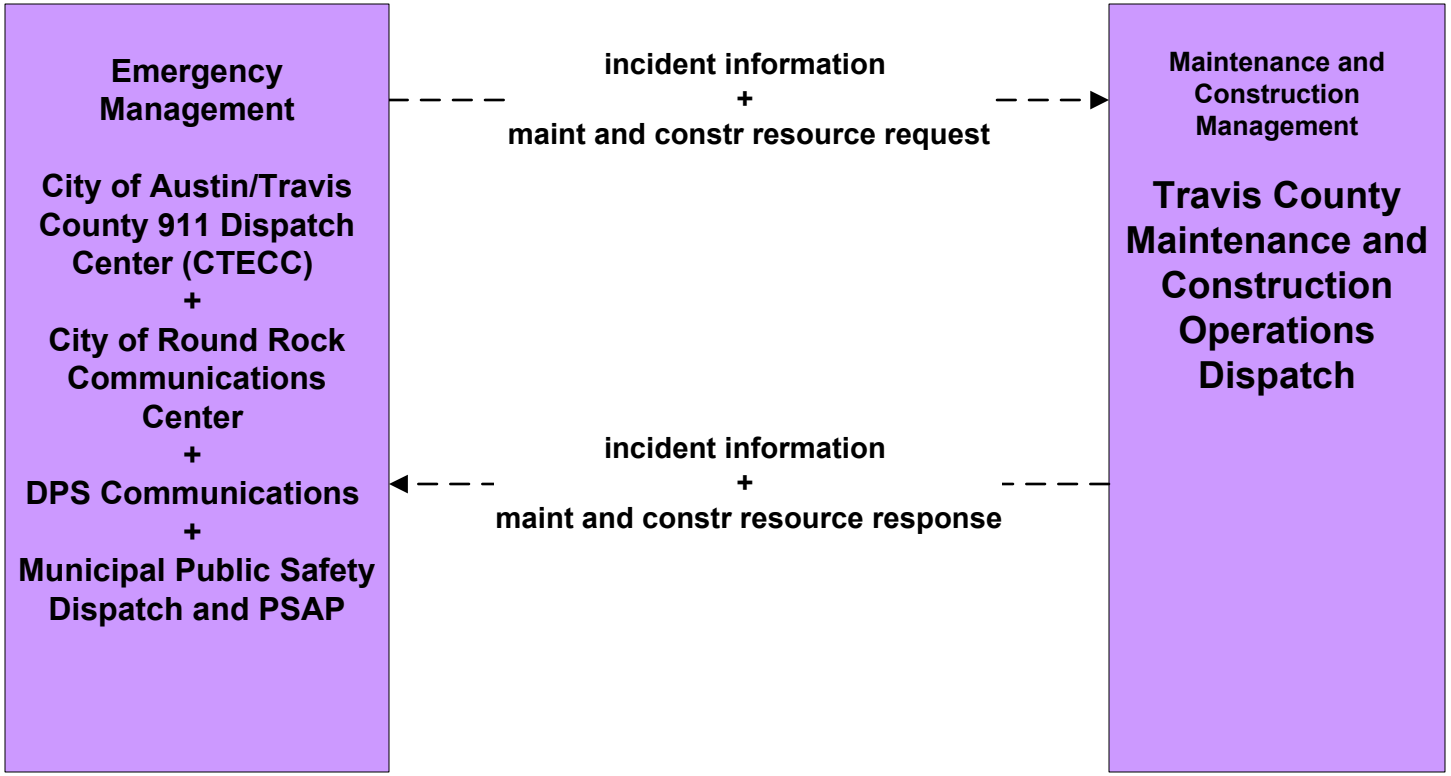


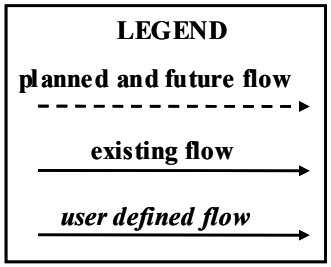
ATMS08 - Incident Management
Municipal PWD – (MCM to EM)



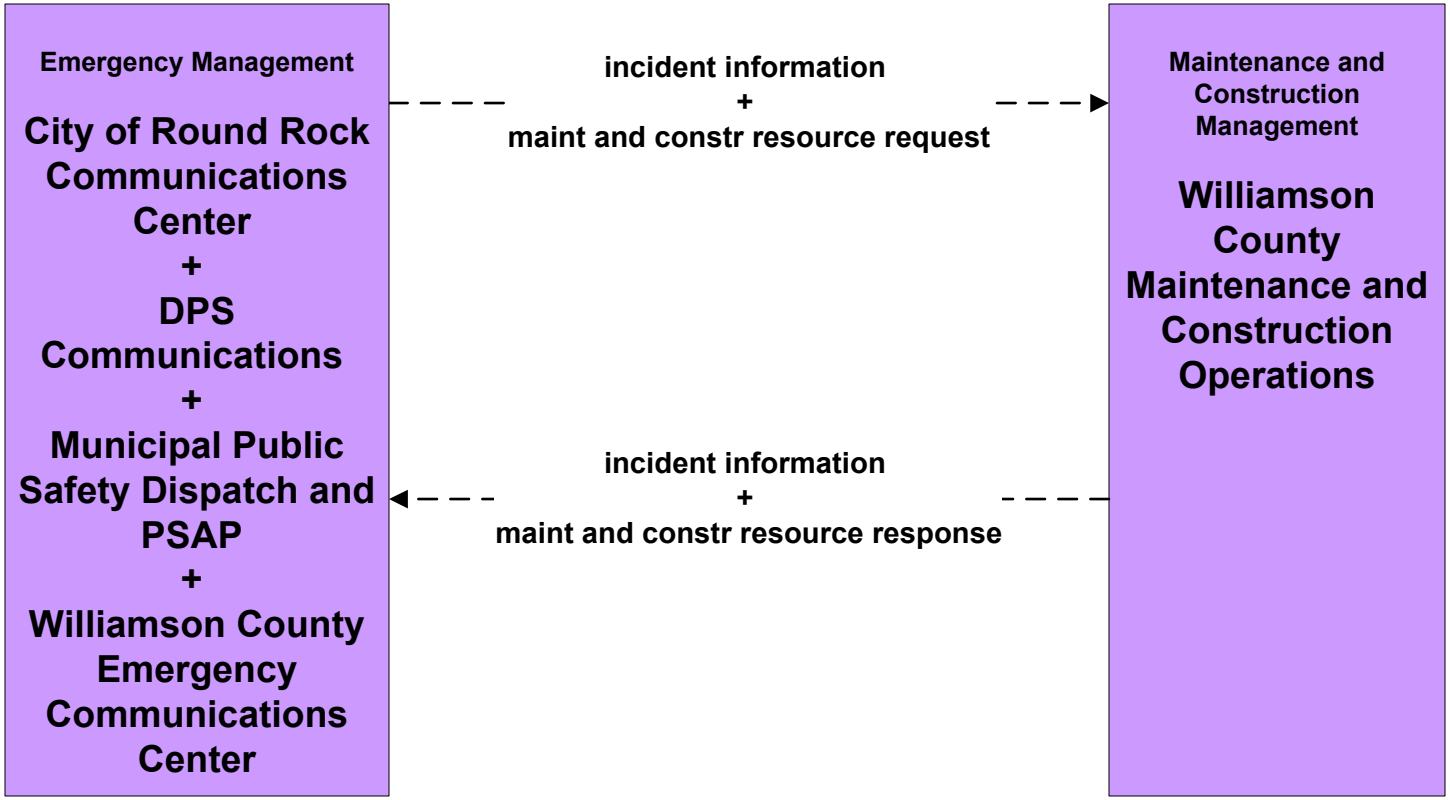


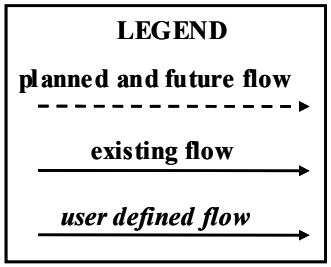
ATMS08 - Incident Management
Travis County Maintenance and Construction Operations – (MCM to EM)



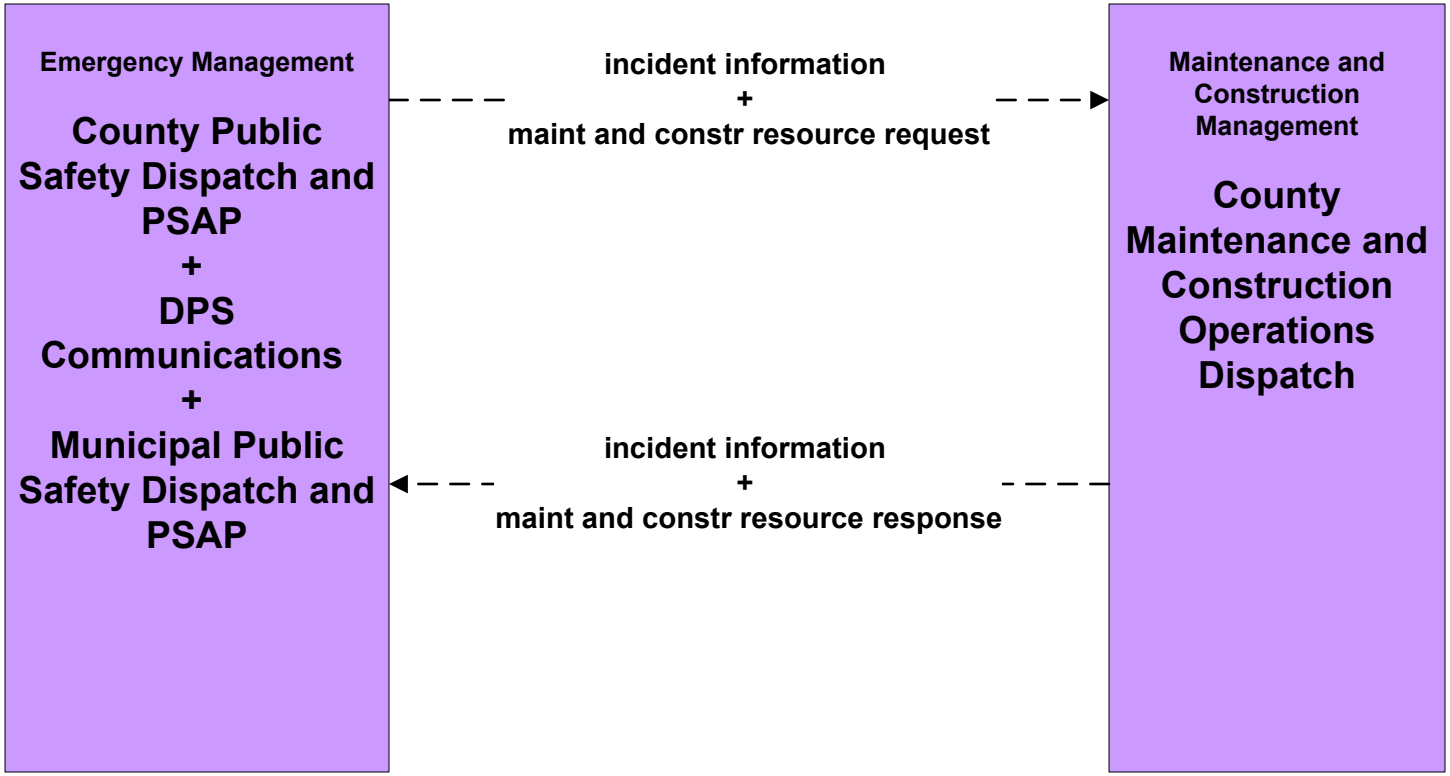


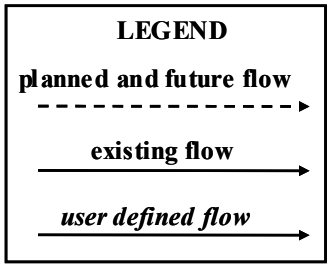
ATMS08 - Incident Management
Williamson County Maintenance and Construction Operations – (MCM to EM)





ATMS08 - Incident Management
County Maintenance and Construction Operations – (MCM to EM)

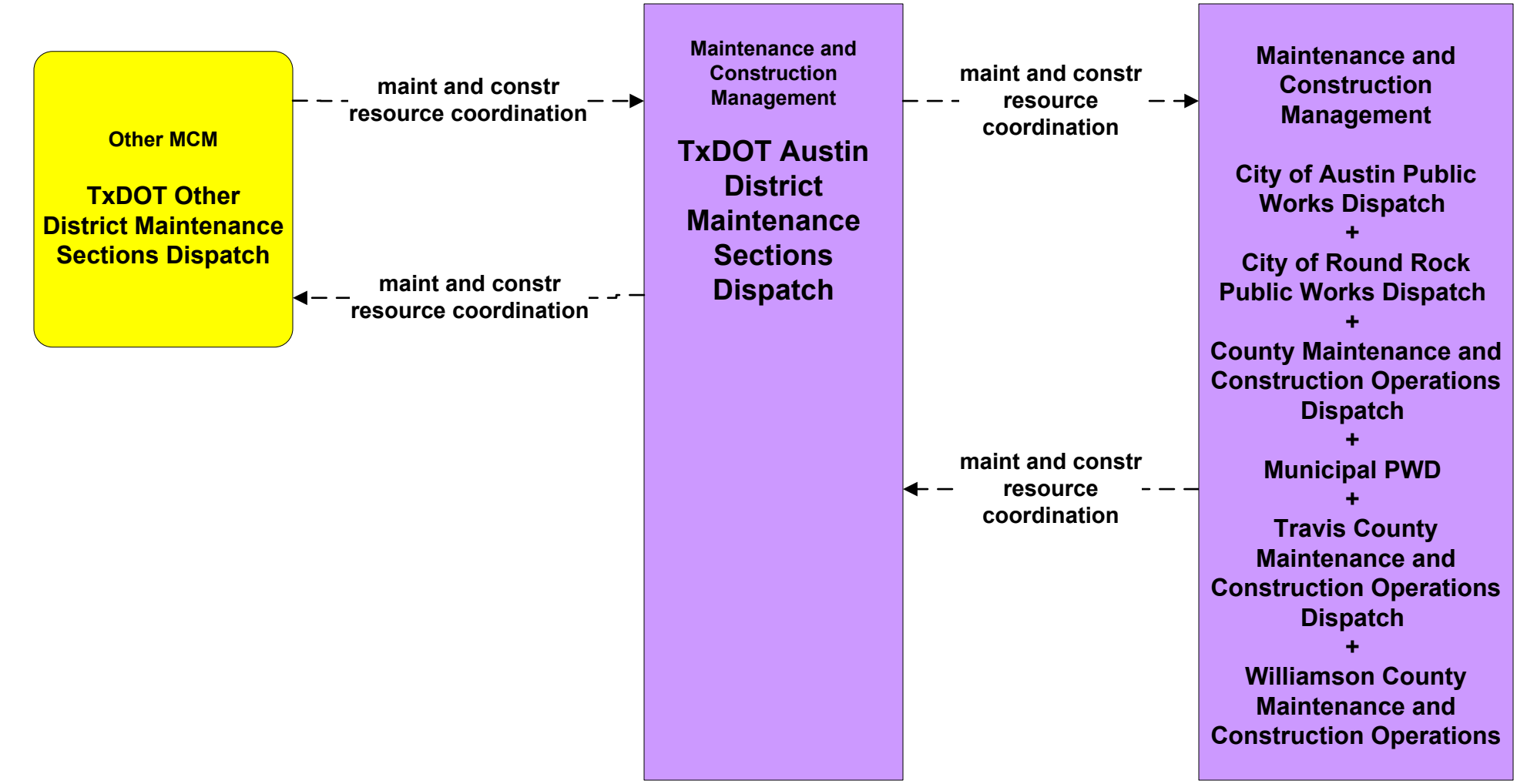




ATMS08 - Incident Management

Maintenance and Construction Management ←→ Maintenance and Construction Management

ATMS08 - Incident Management
TxDOT Austin District Maintenance Sections – (MCM to Other MCM)



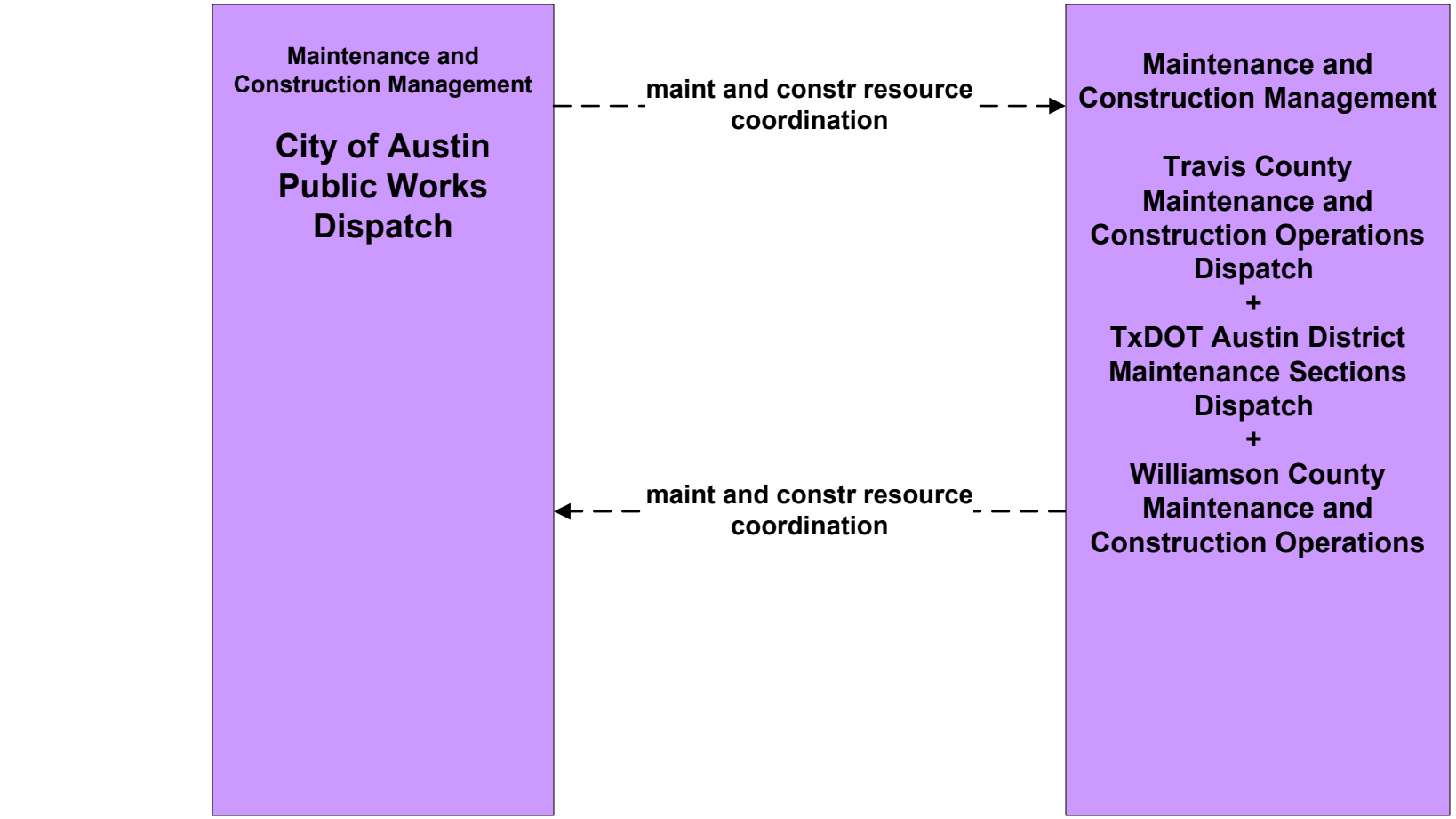
LEGEND

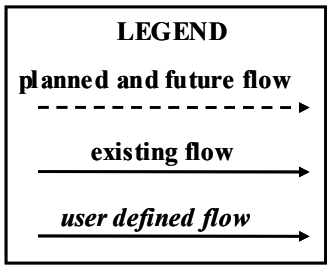
planned and future flow

existing flow

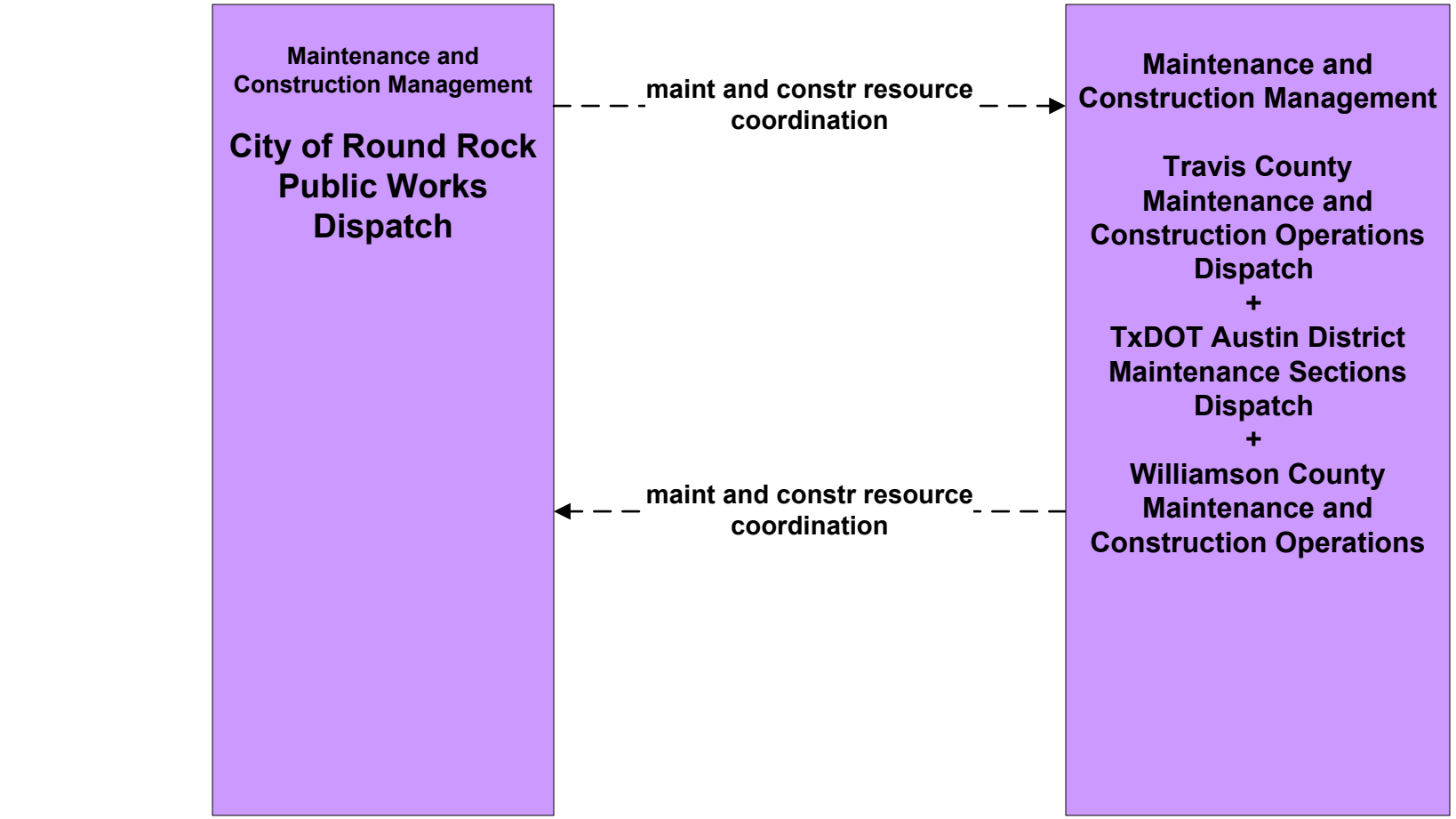
user defined flow

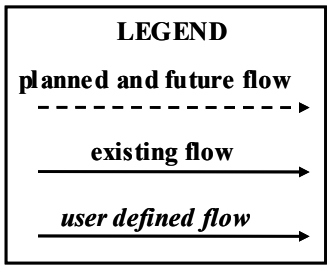
ATMS08 - Incident Management
City of Austin Maintenance System – (MCM to Other MCM)



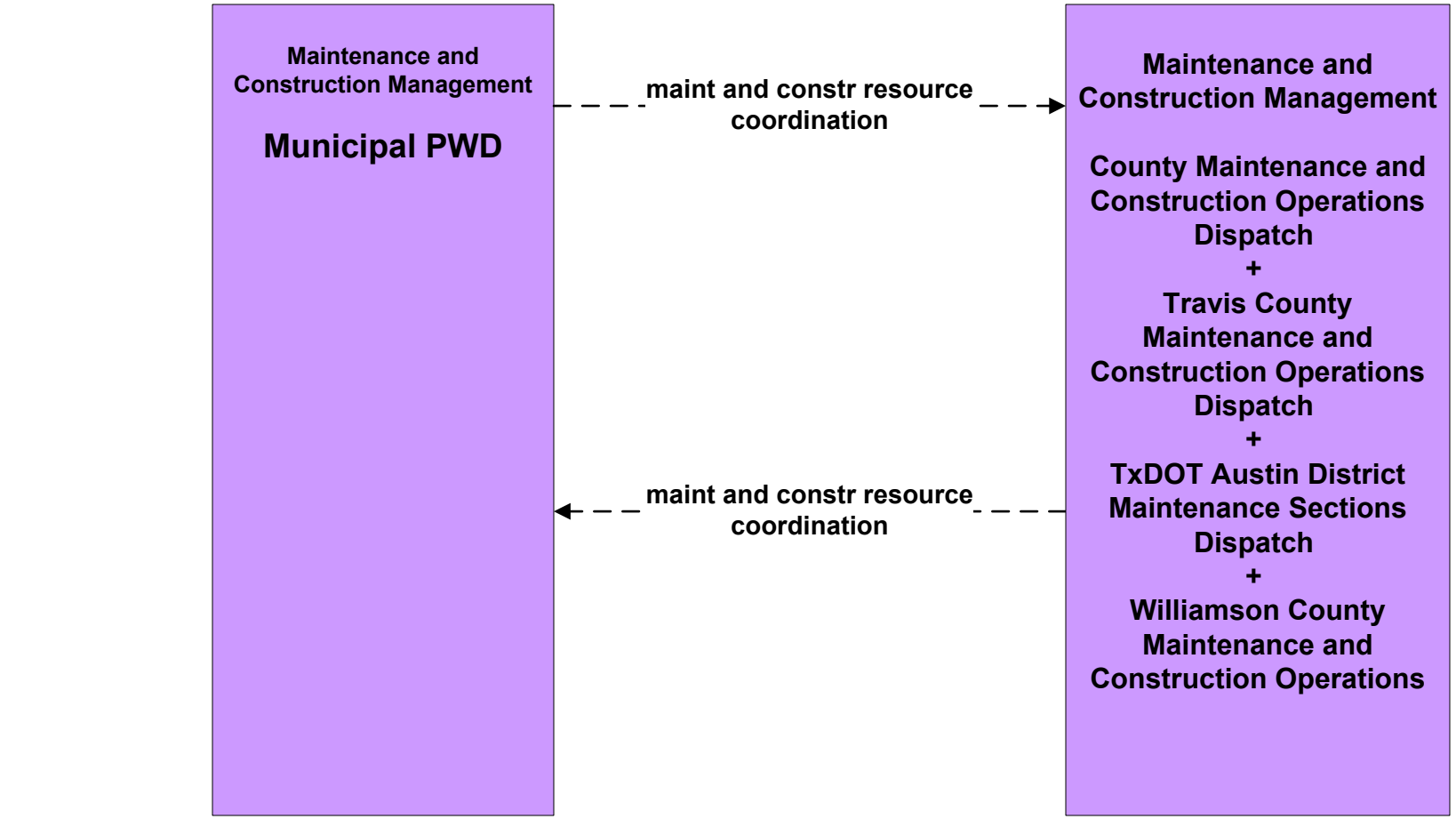


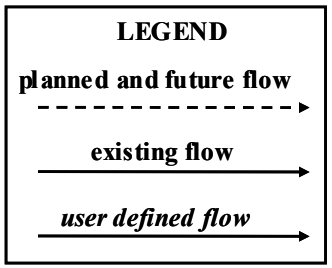
ATMS08 - Incident Management
City of Round Rock Maintenance System – (MCM to Other MCM)



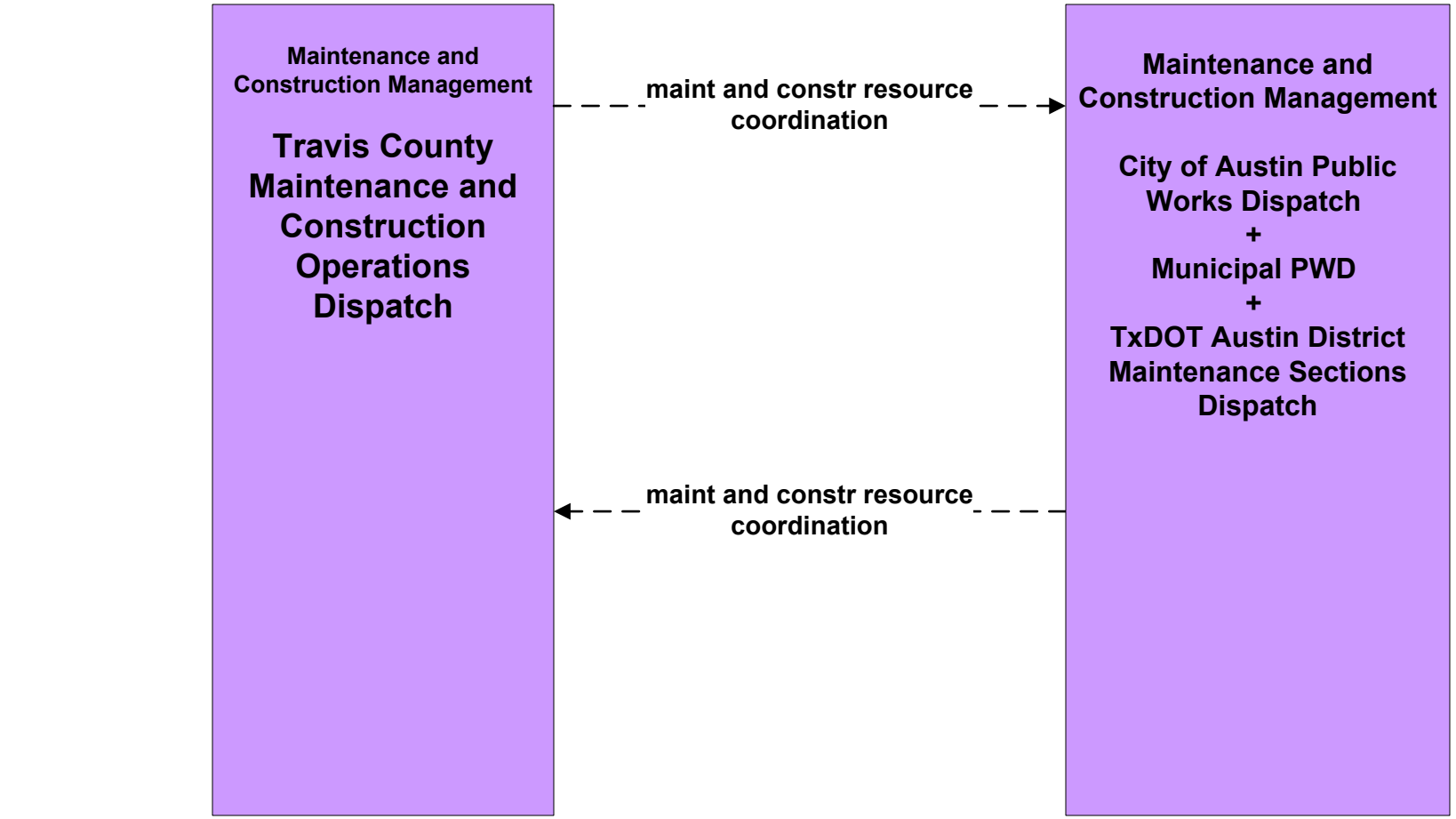


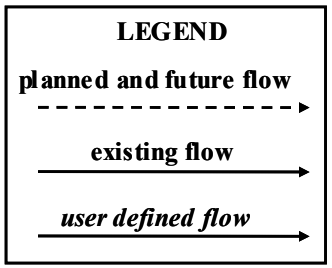
ATMS08 - Incident Management
Municipal PWD – (MCM to Other MCM)



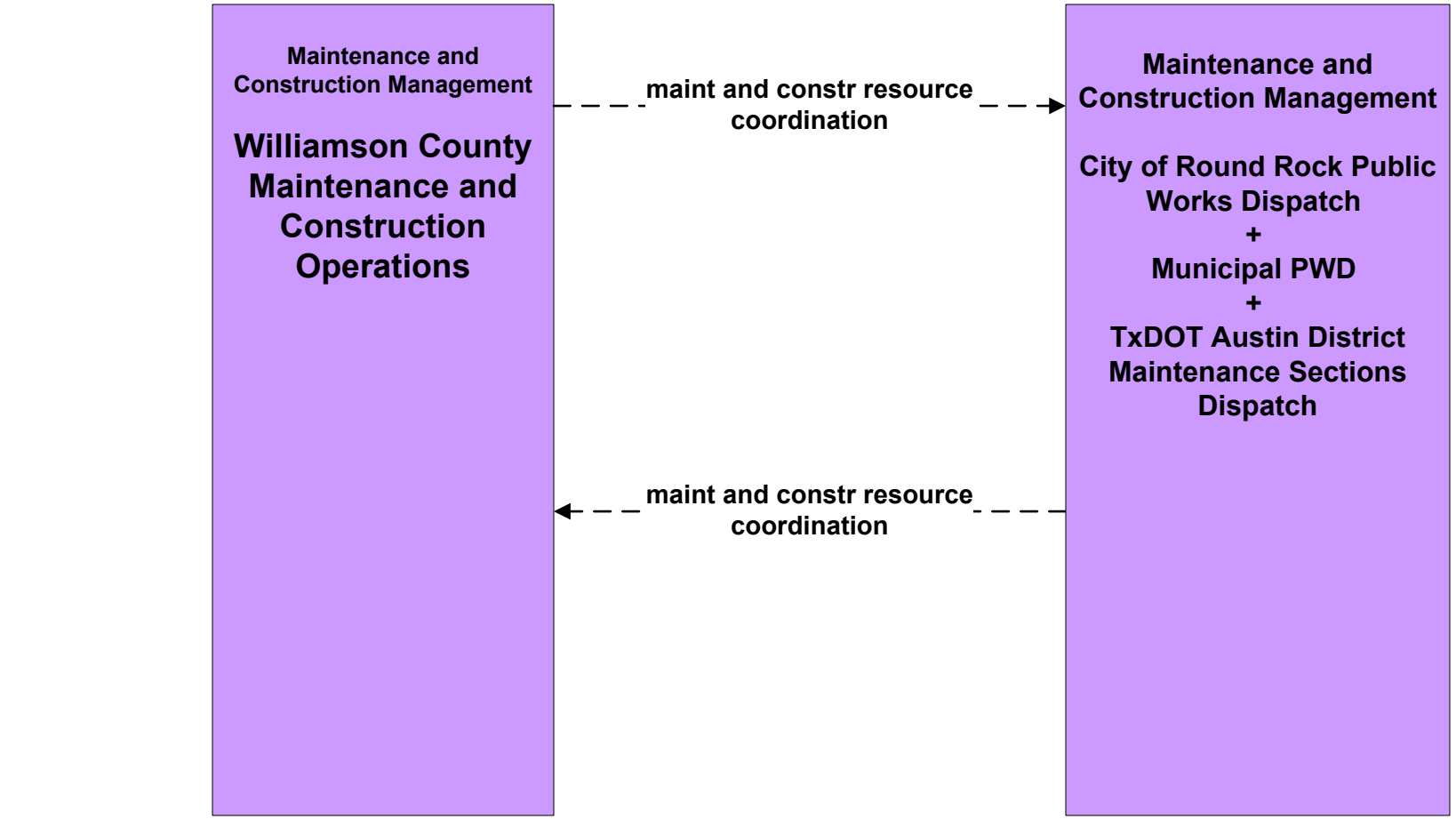


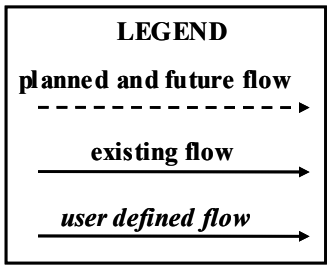
ATMS08 - Incident Management
Travis County Maintenance and Constructions Operations – (MCM to Other MCM)



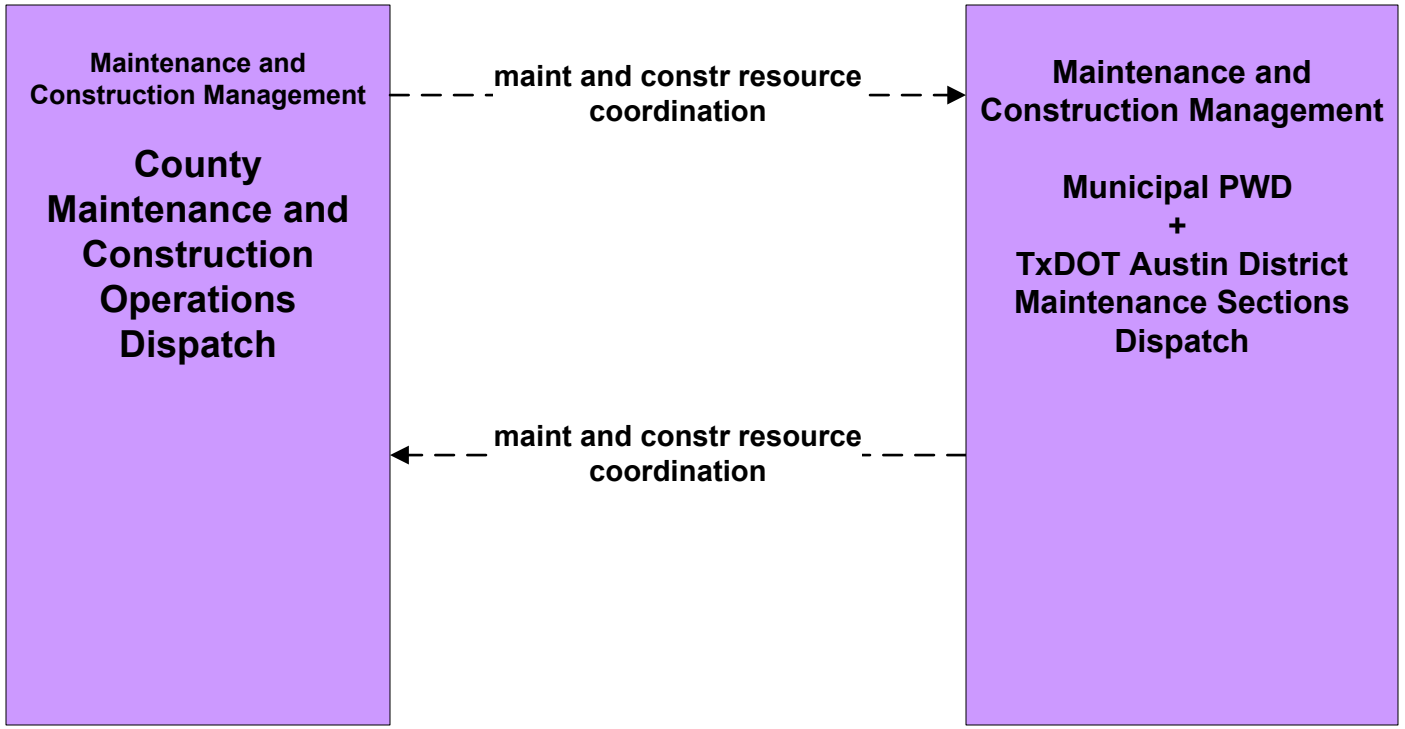


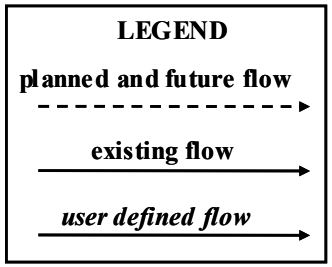
ATMS08 - Incident Management
Williamson County Maintenance and Construction Operations – (MCM to Other MCM)





ATMS08 - Incident Management
County Maintenance and Construction Operations – (MCM to Other MCM)

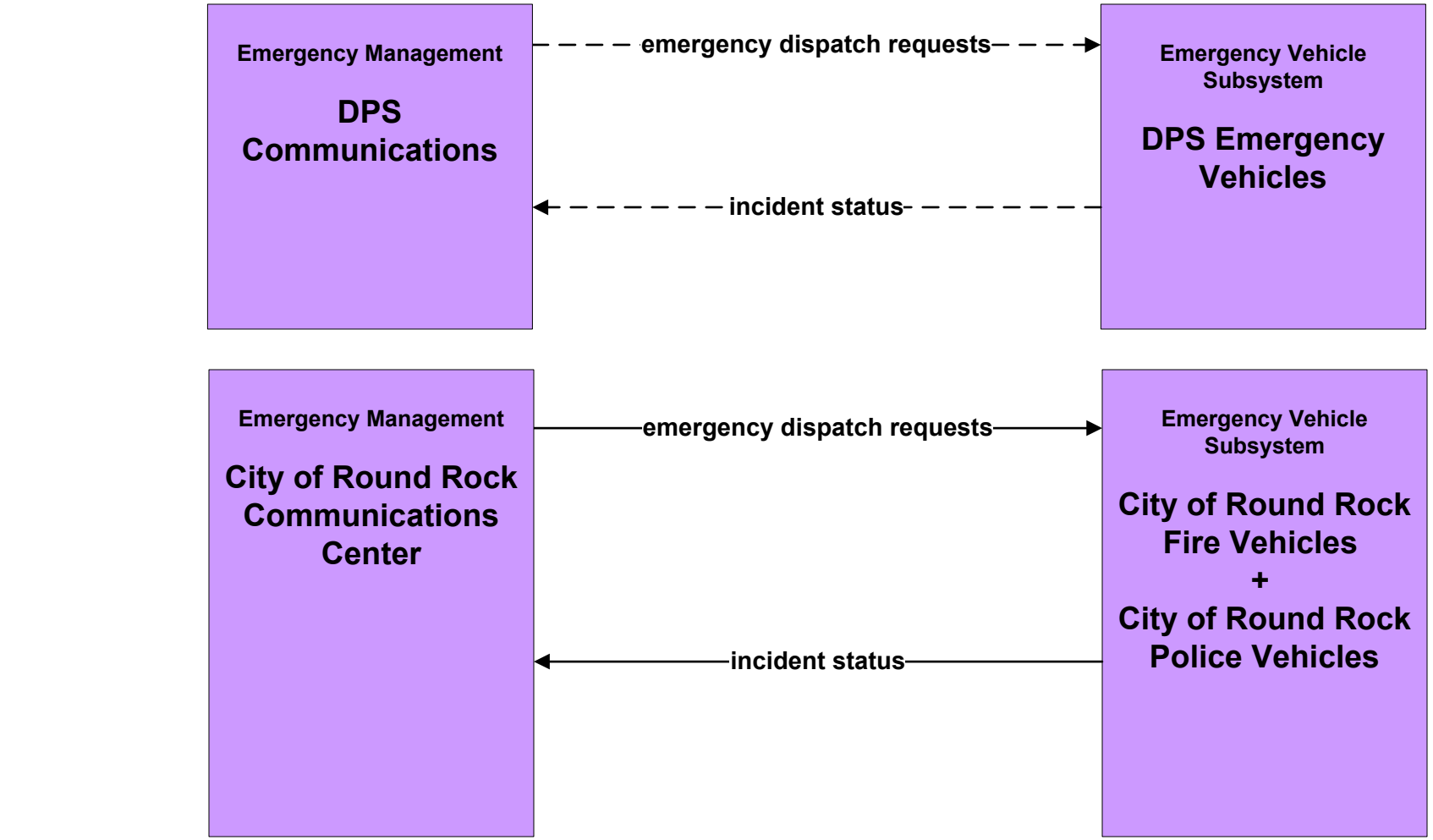




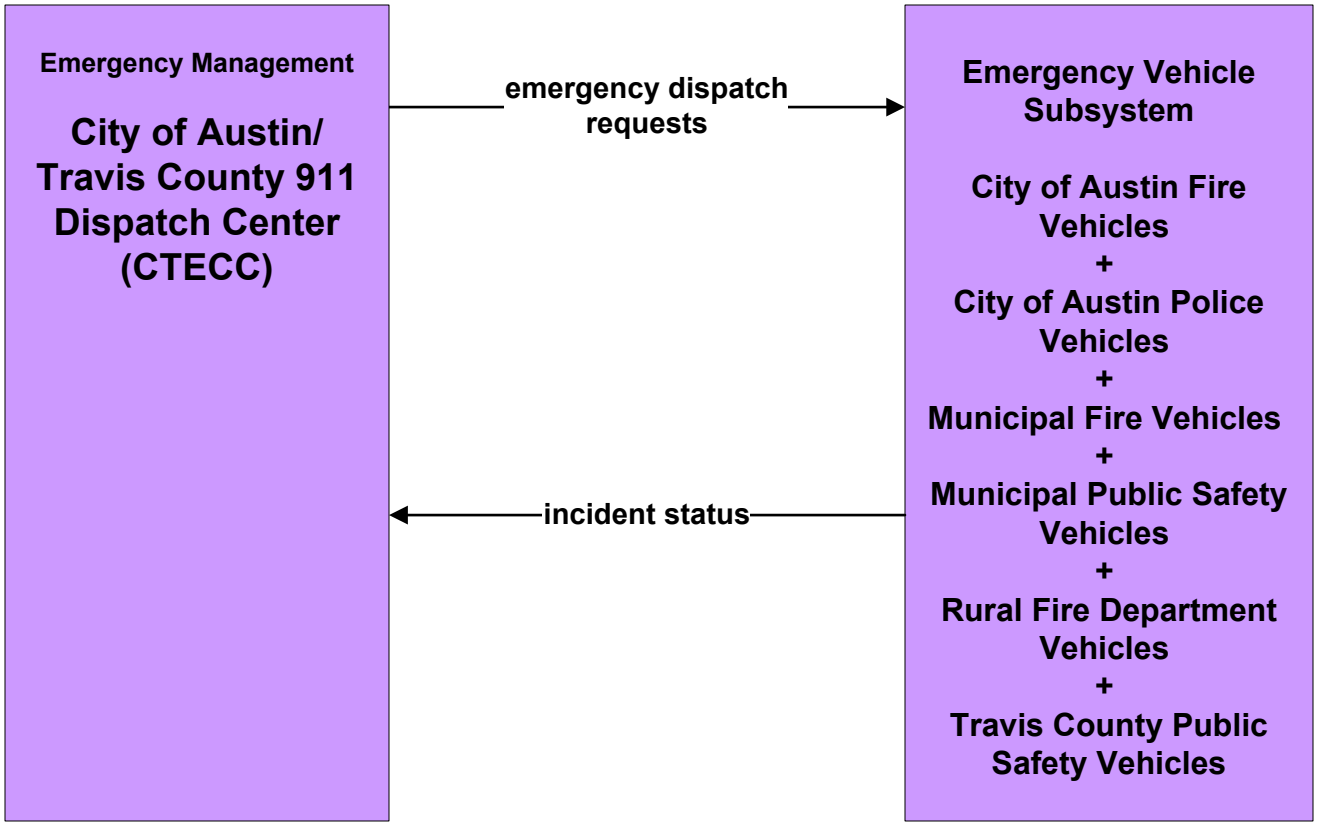
ATMS08 - Incident Management

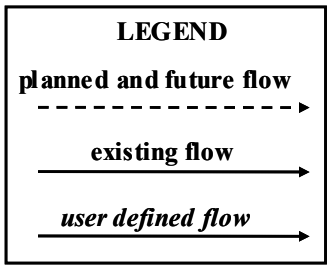
Emergency Management ←→ Emergency Vehicles

ATMS08 - Incident Management
(EM to EVS)



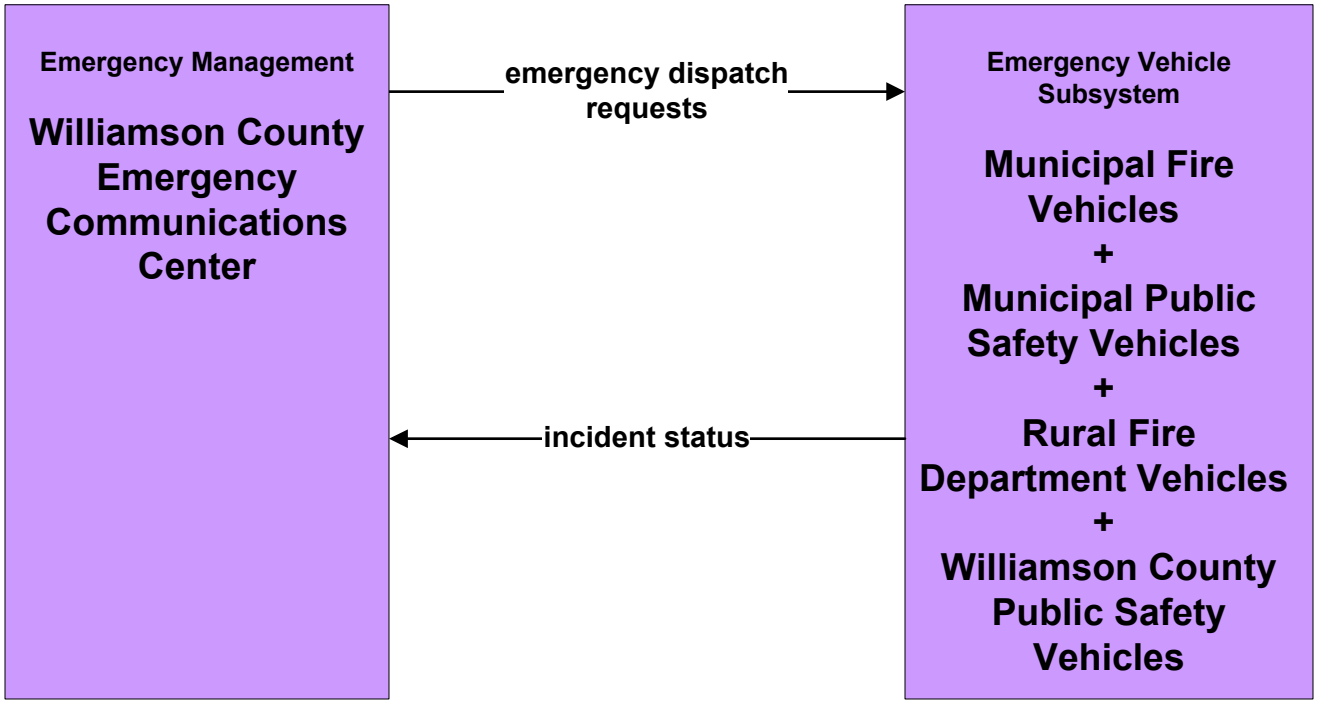
ATMS08 - Incident Management
(EM to EVS)





Travis County public safety vehicles include Sheriff and EMS vehicles.

ATMS08 - Incident Management
(EM to EVS)



LEGEND

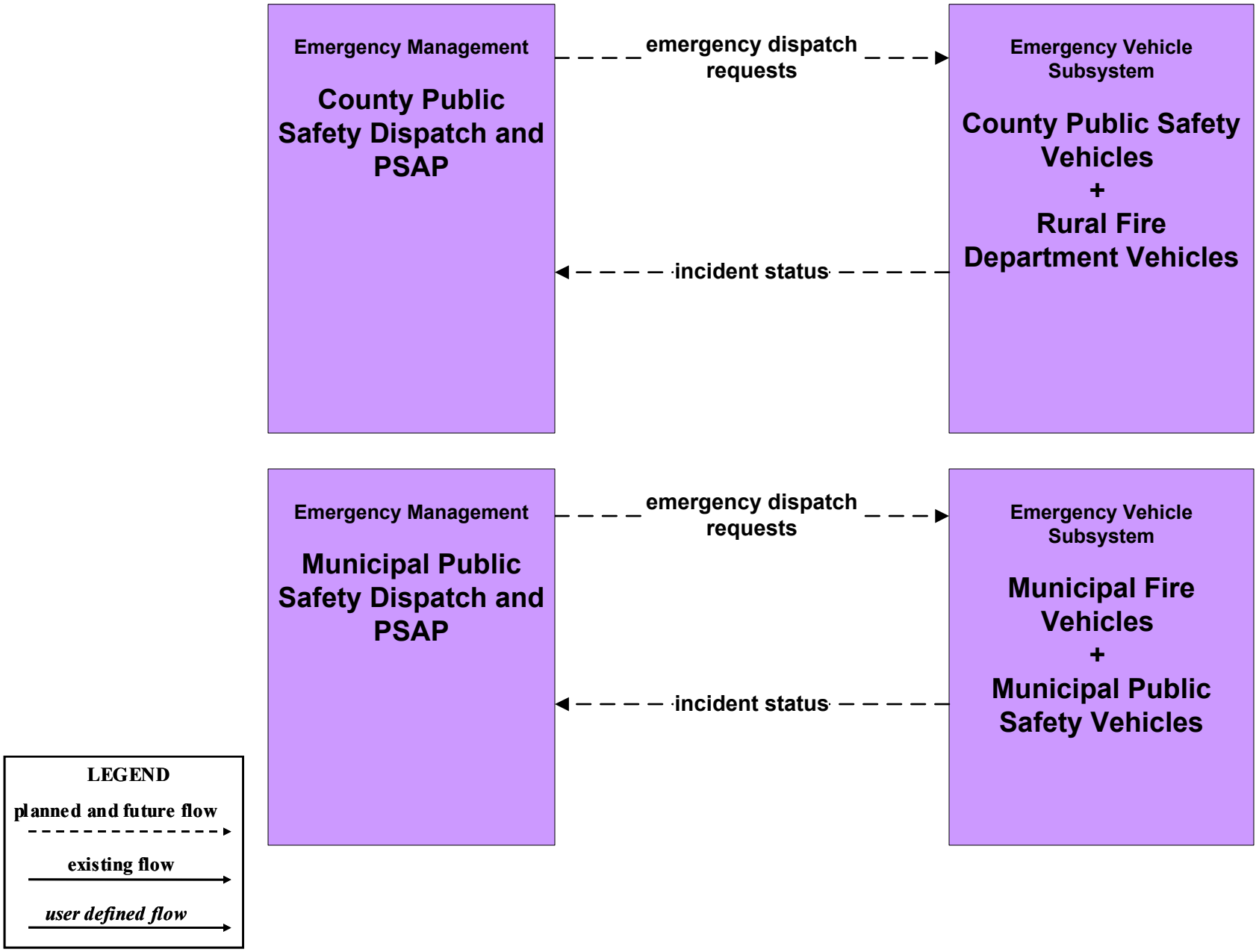
planned and future flow

existing flow

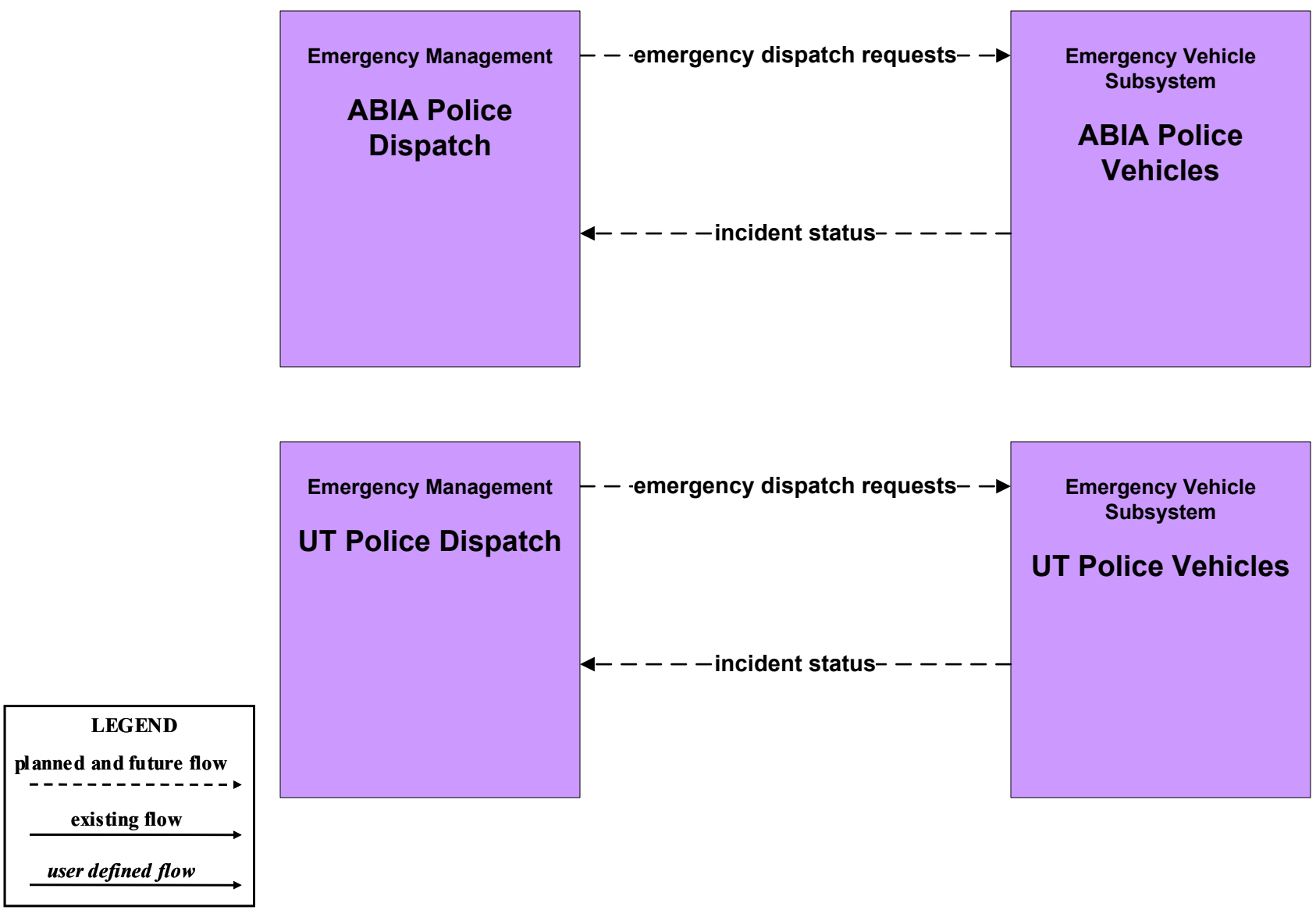
user defined flow

Williamson County public safety vehicles include Sheriff and EMS vehicles.

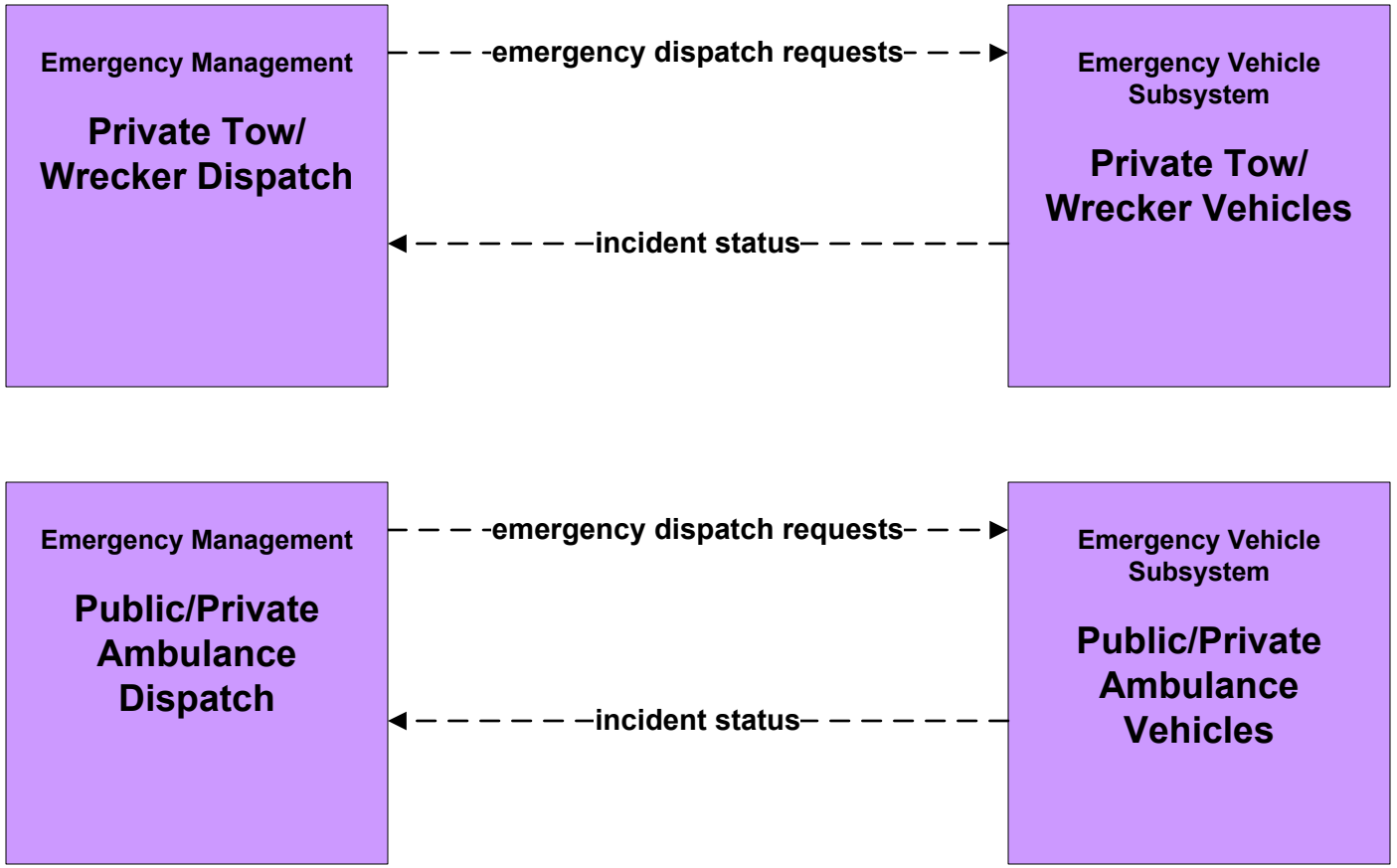
ATMS08 - Incident Management
(EM to EVS)



ATMS08 - Incident Management
(EM to EVS)



ATMS08 - Incident Management
(EM to EVS)



LEGEND

planned and future flow

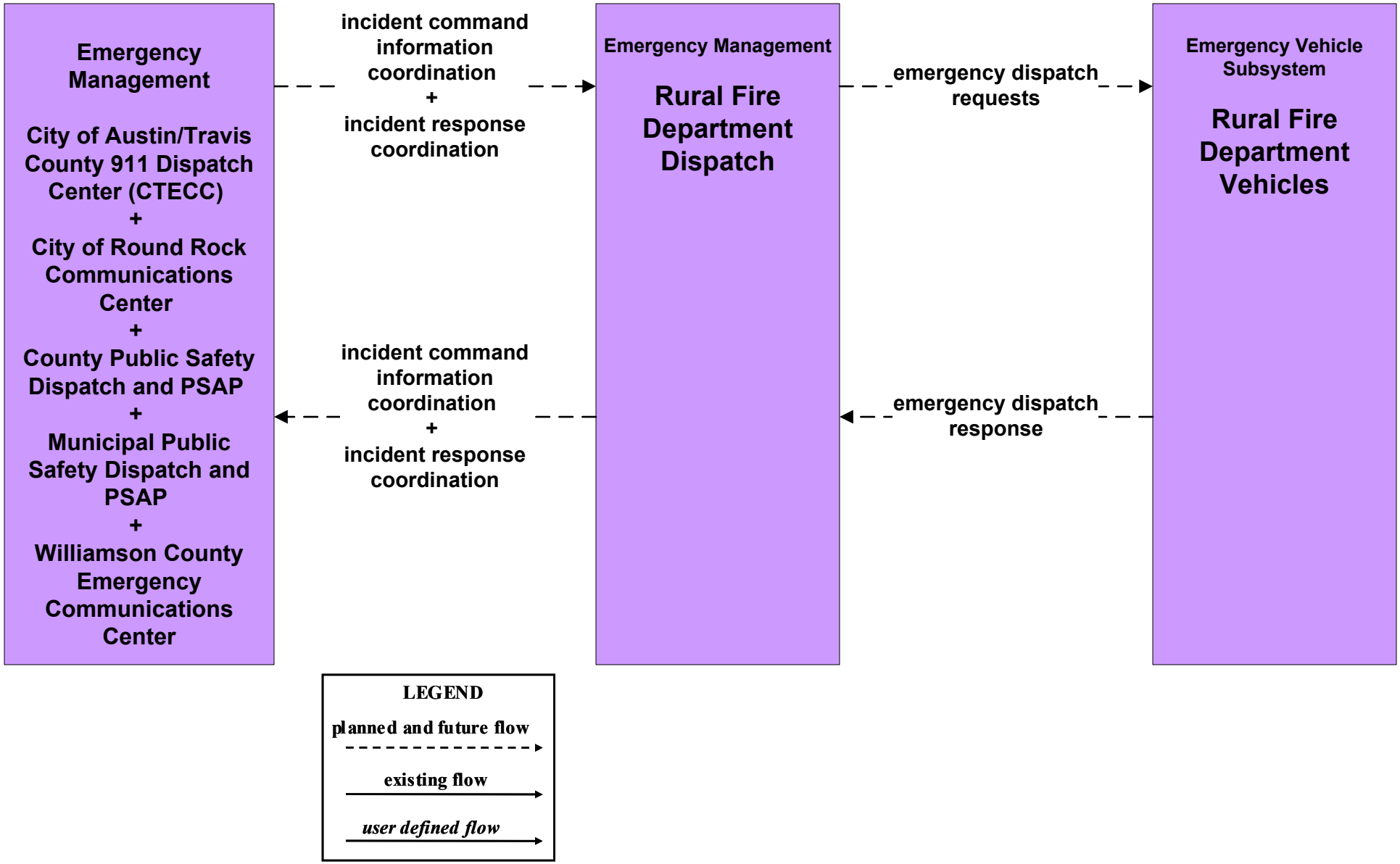
existing flow

user defined flow

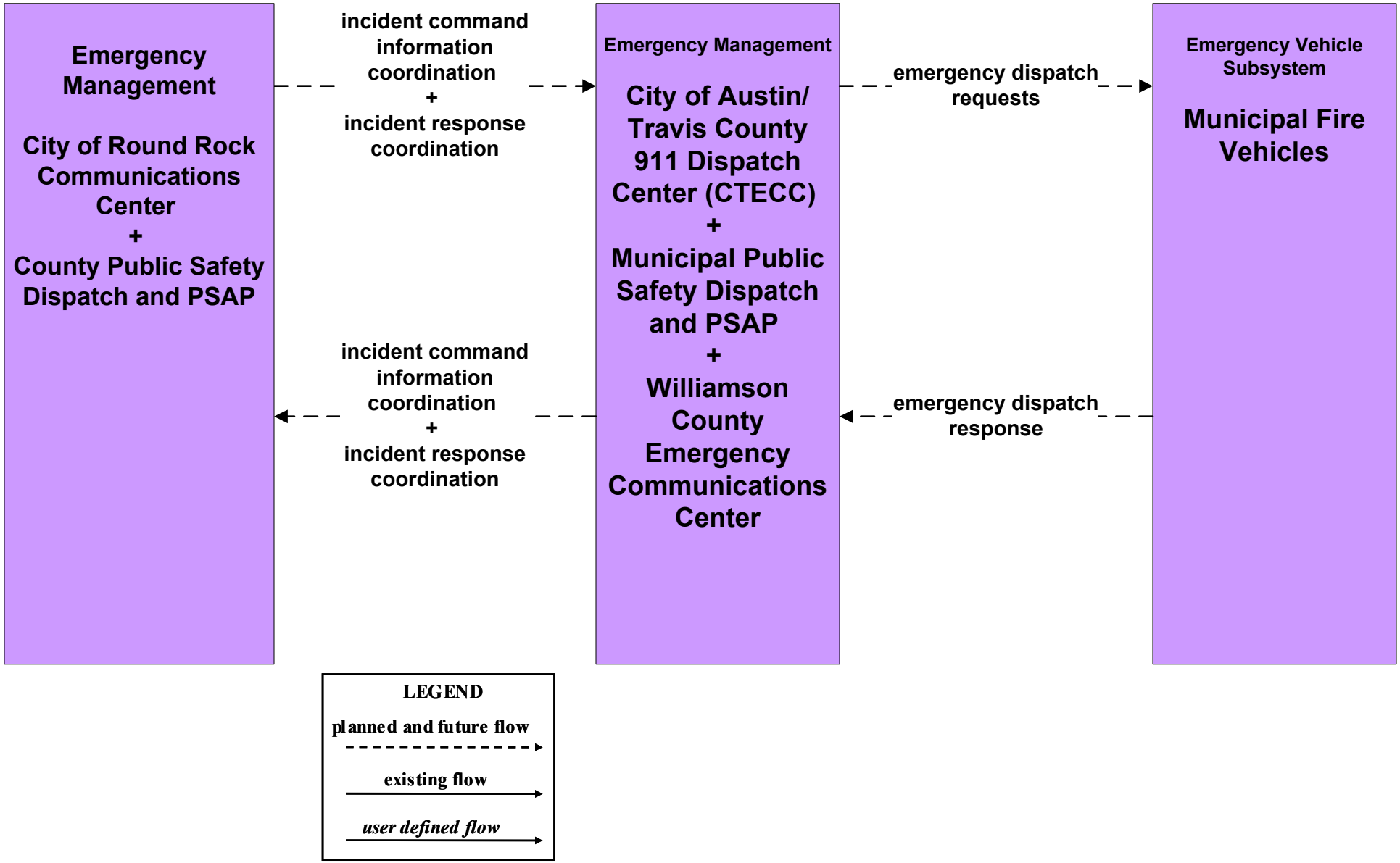
ATMS08 - Incident Management

Misc.

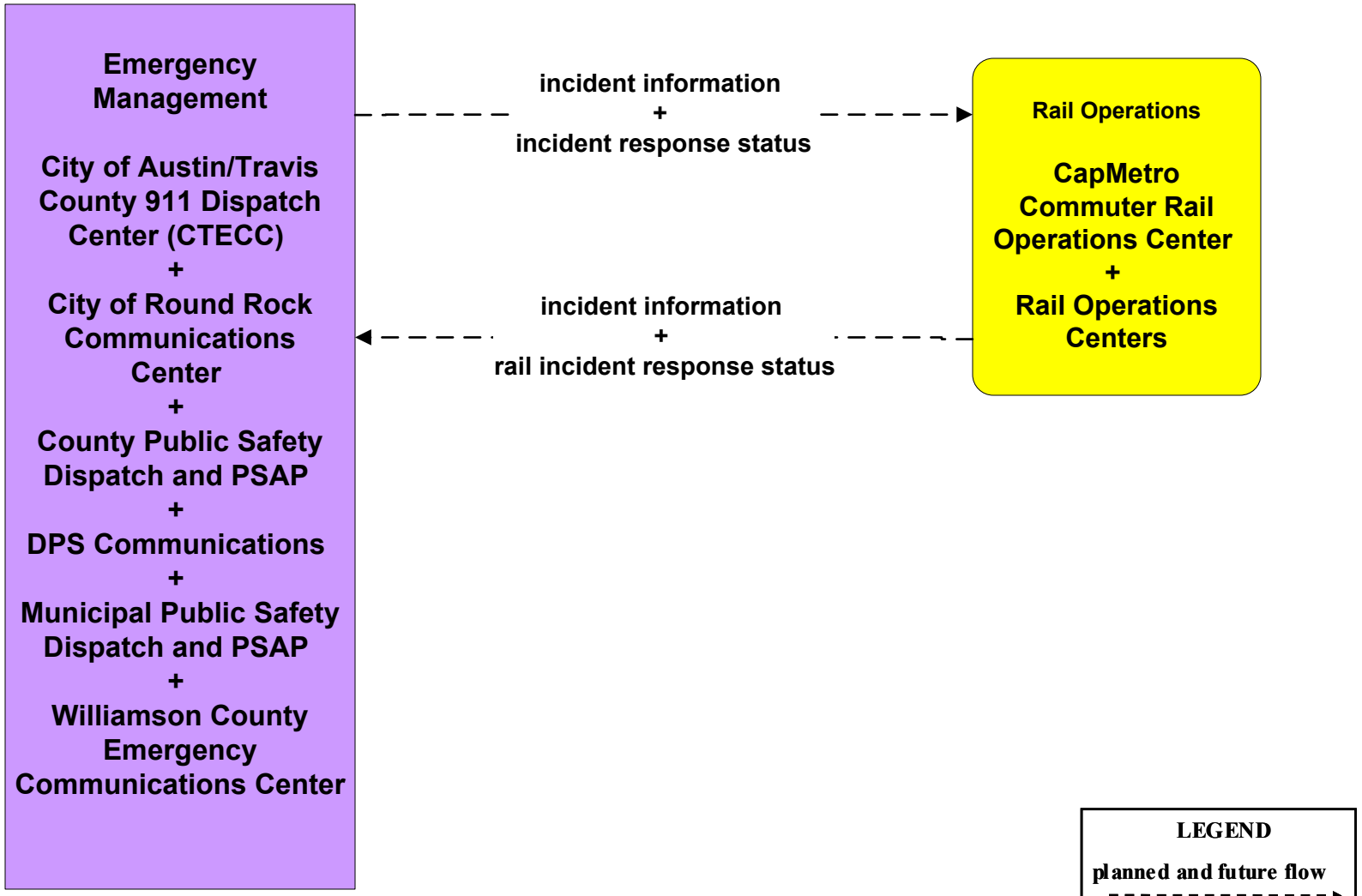
ATMS08 - Incident Management
Rural Fire Departments



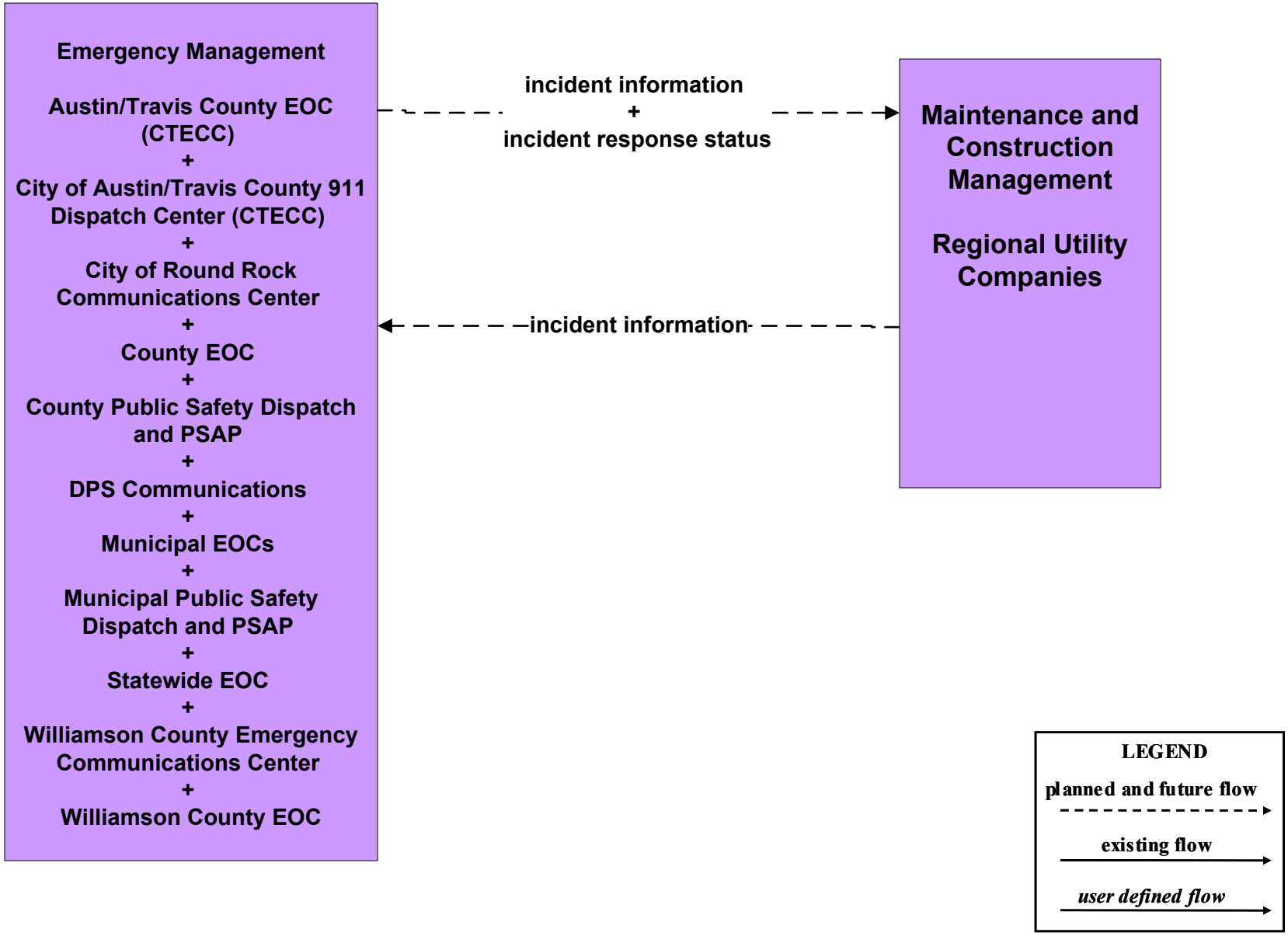
ATMS08 - Incident Management
Municipal Fire Departments



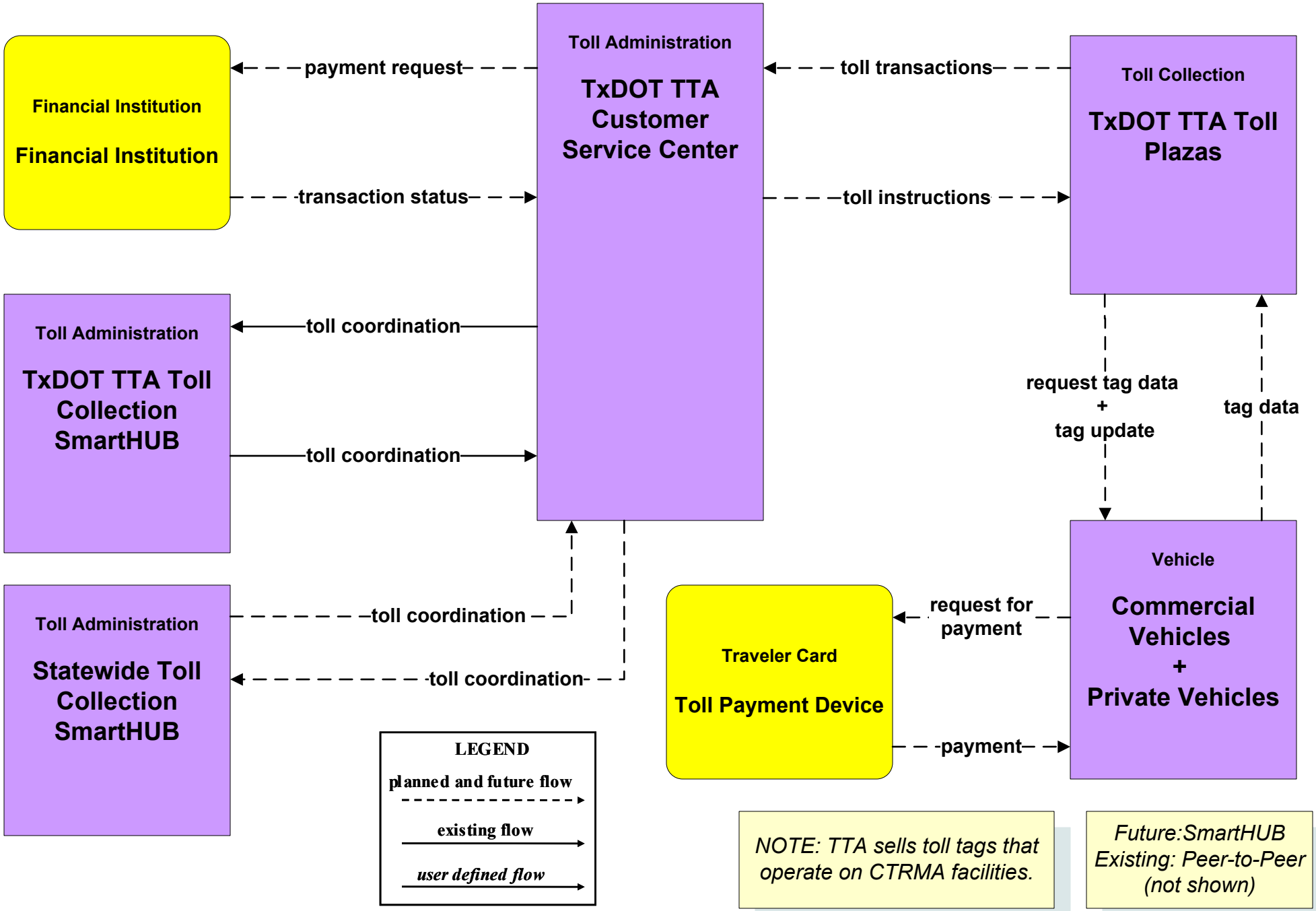
ATMS08 - Incident Management
Rail Operations Coordination



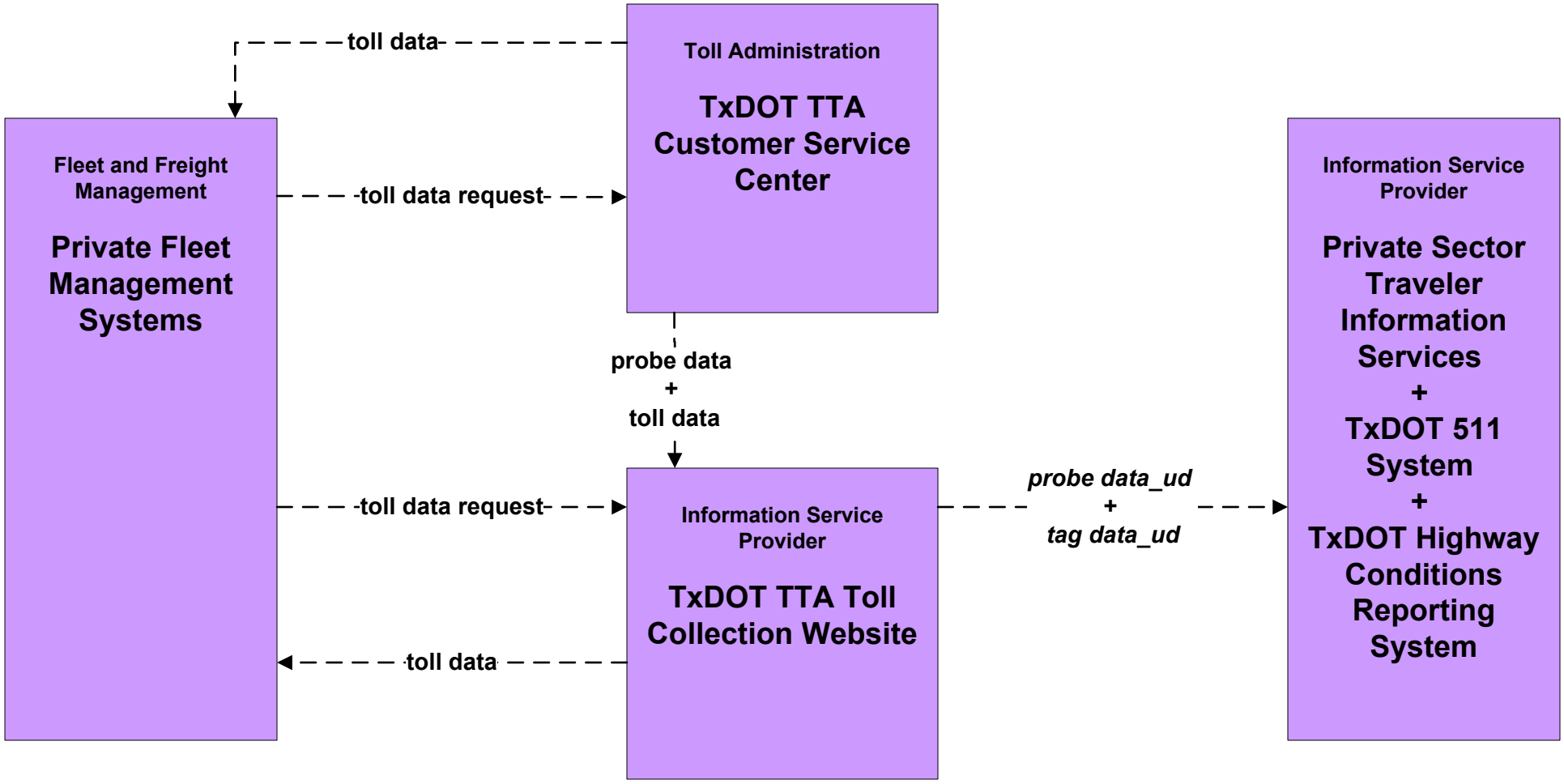
ATMS08 - Incident Management
Regional Utility Companies



ATMS10 - Electronic Toll Collection
TTA – Toll Administration (1 of 2)



ATMS10 - Electronic Toll Collection
TTA – Toll Administration (2 of 2)



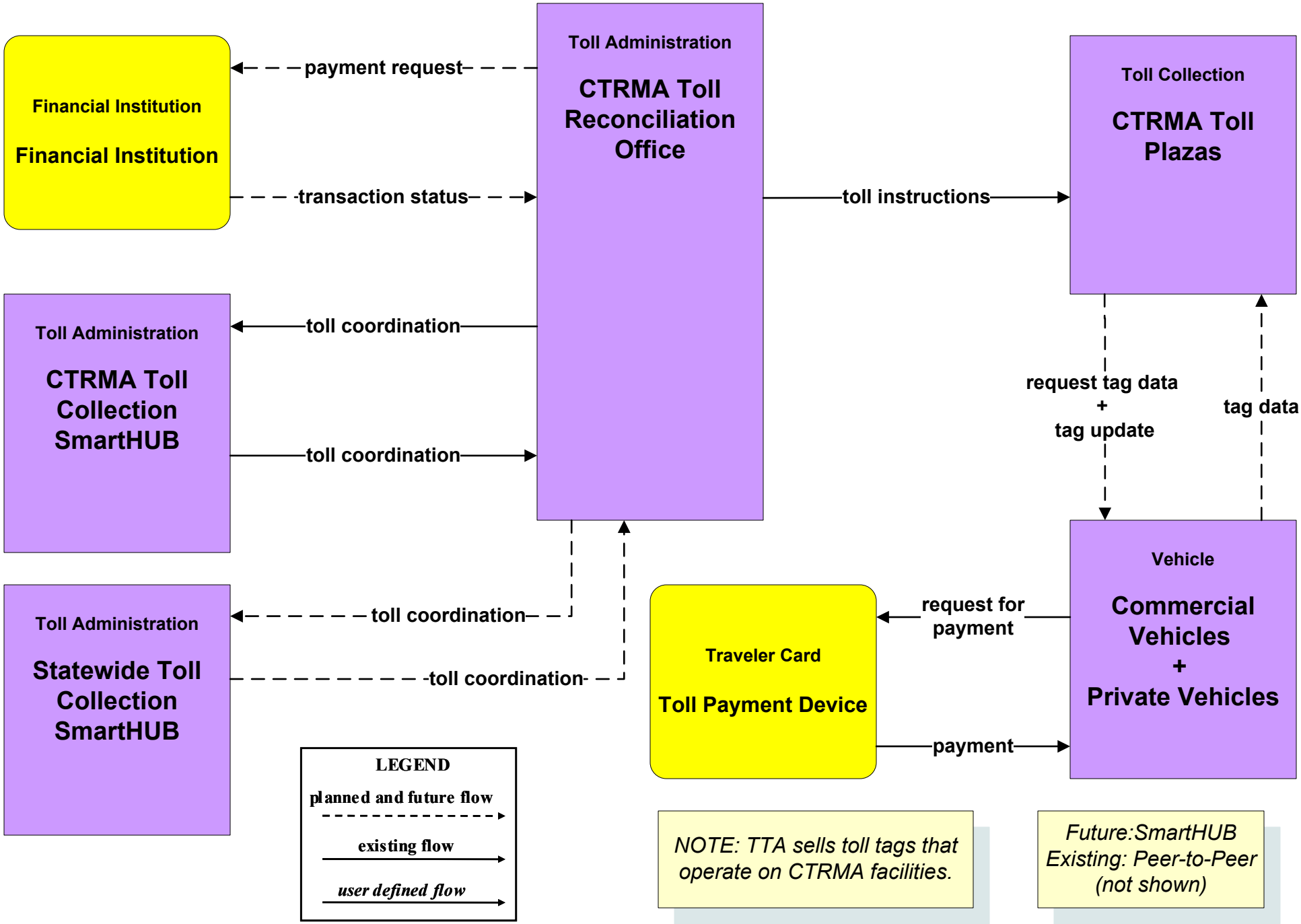
LEGEND

planned and future flow

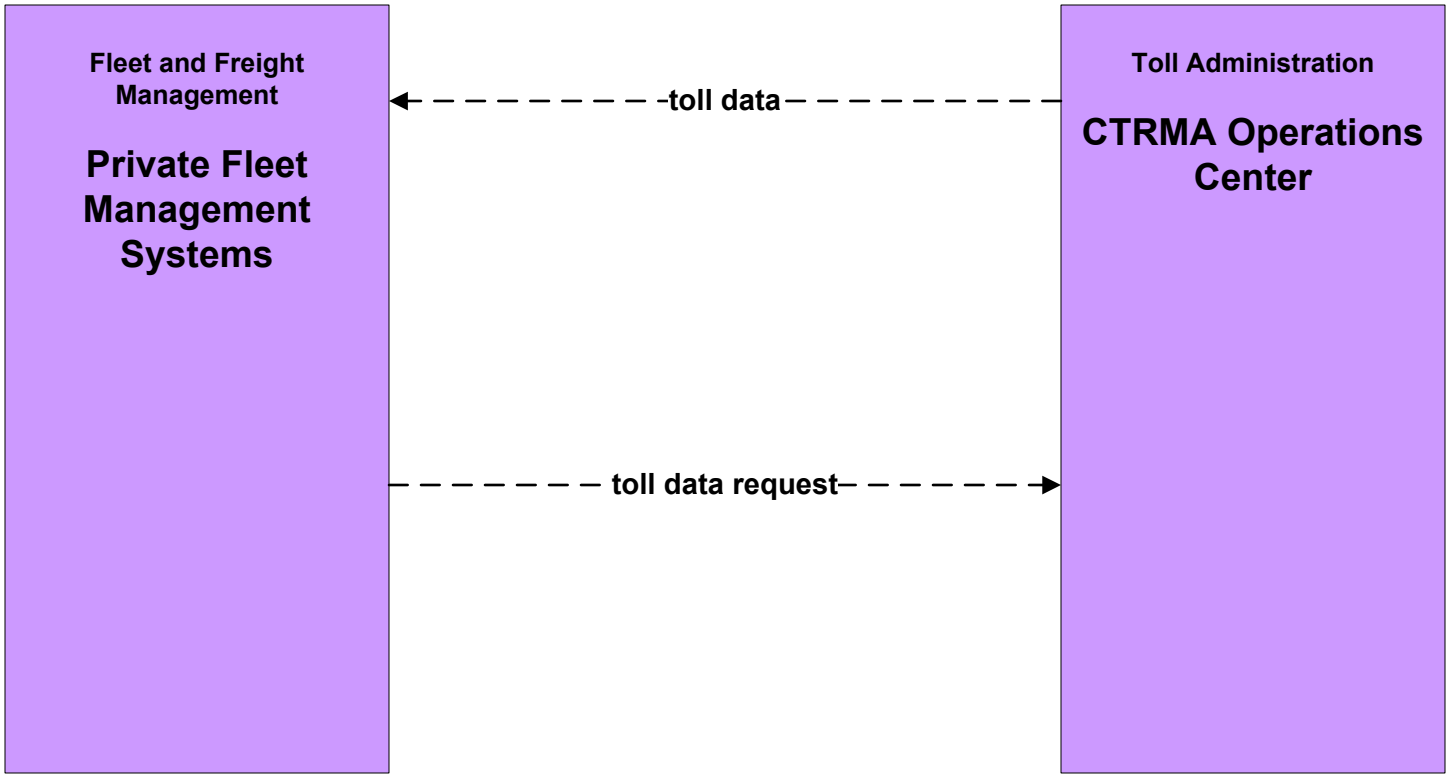
existing flow

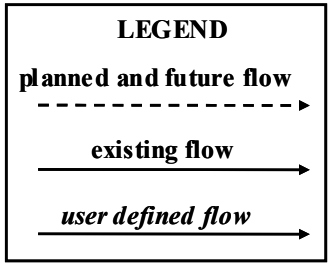
user defined flow

ATMS10 - Electronic Toll Collection
CTRMA - Toll Administration (1 of 2)

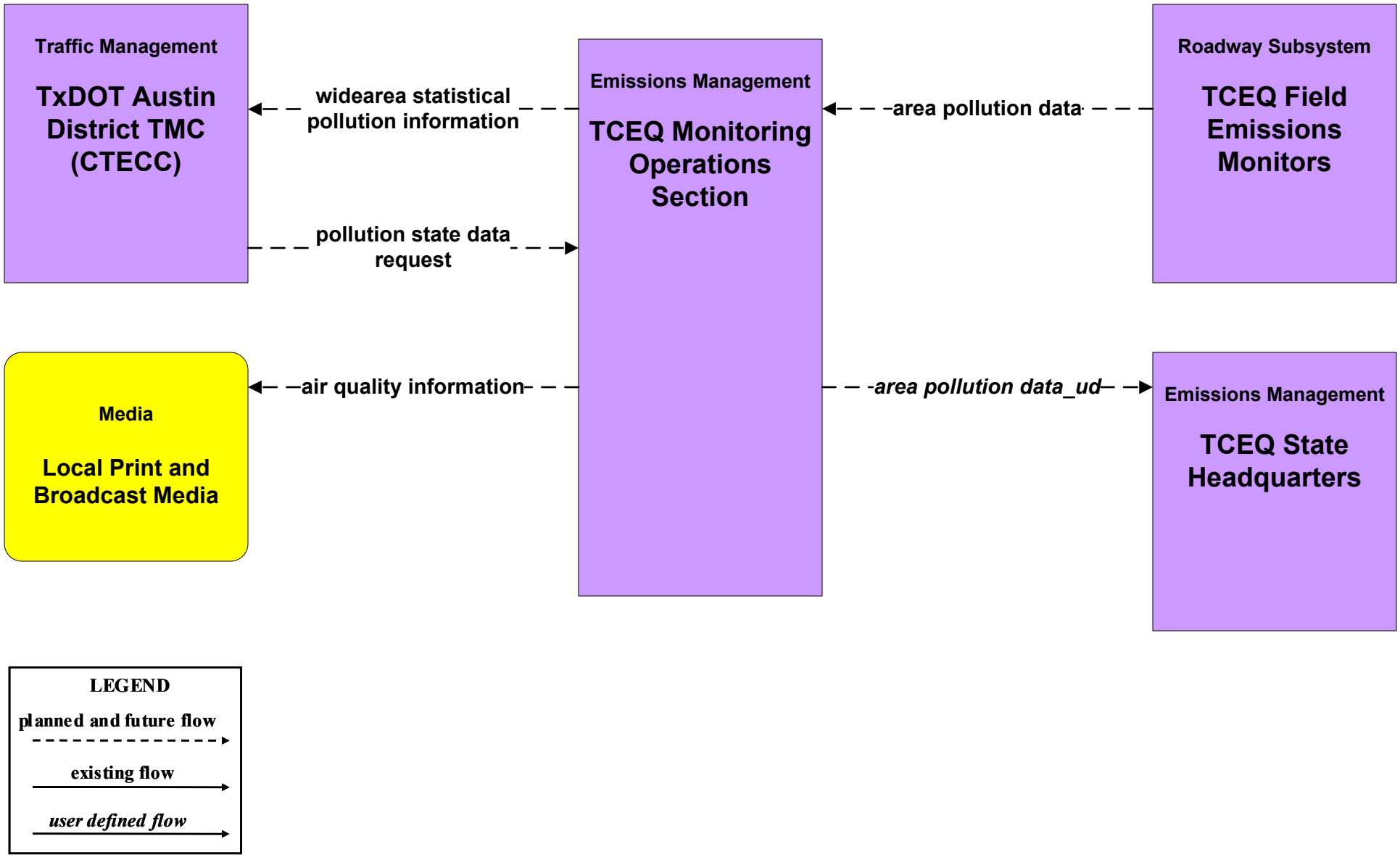


ATMS10 - Electronic Toll Collection
CTRMA – Toll Administration (2 of 2)



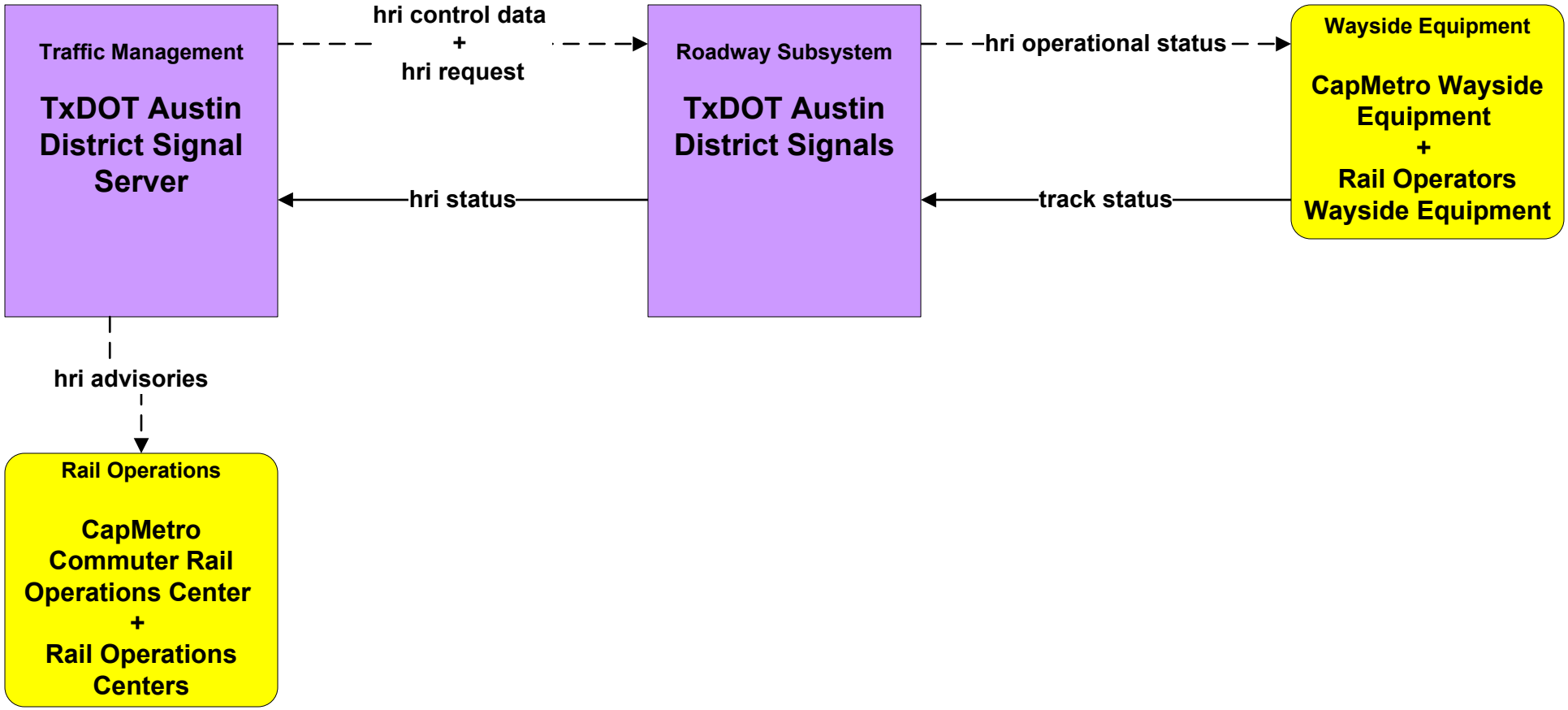


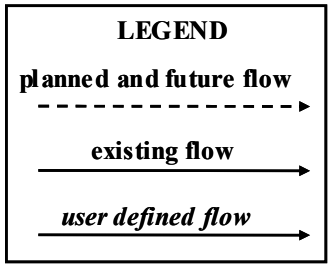
ATMS11 - Emissions Monitoring and Management
TCEQ



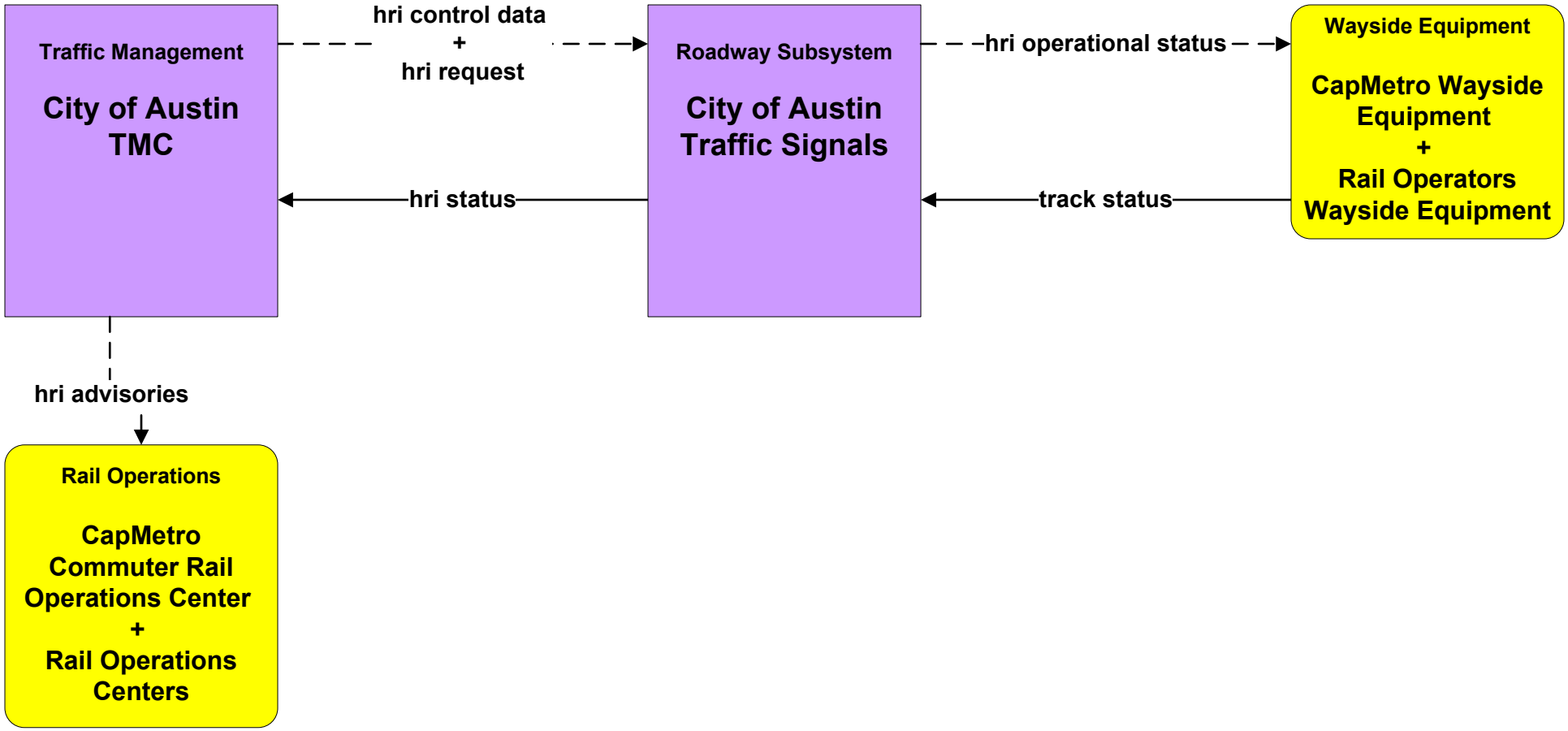
ATMS11 - Emissions Monitoring and Management
City of Austin

ATMS13 - Standard Railroad Grade Crossing
TxDOT Austin District Traffic Management Center (CTECC)





ATMS13 - Standard Railroad Grade Crossing
City of Austin Traffic Management Center



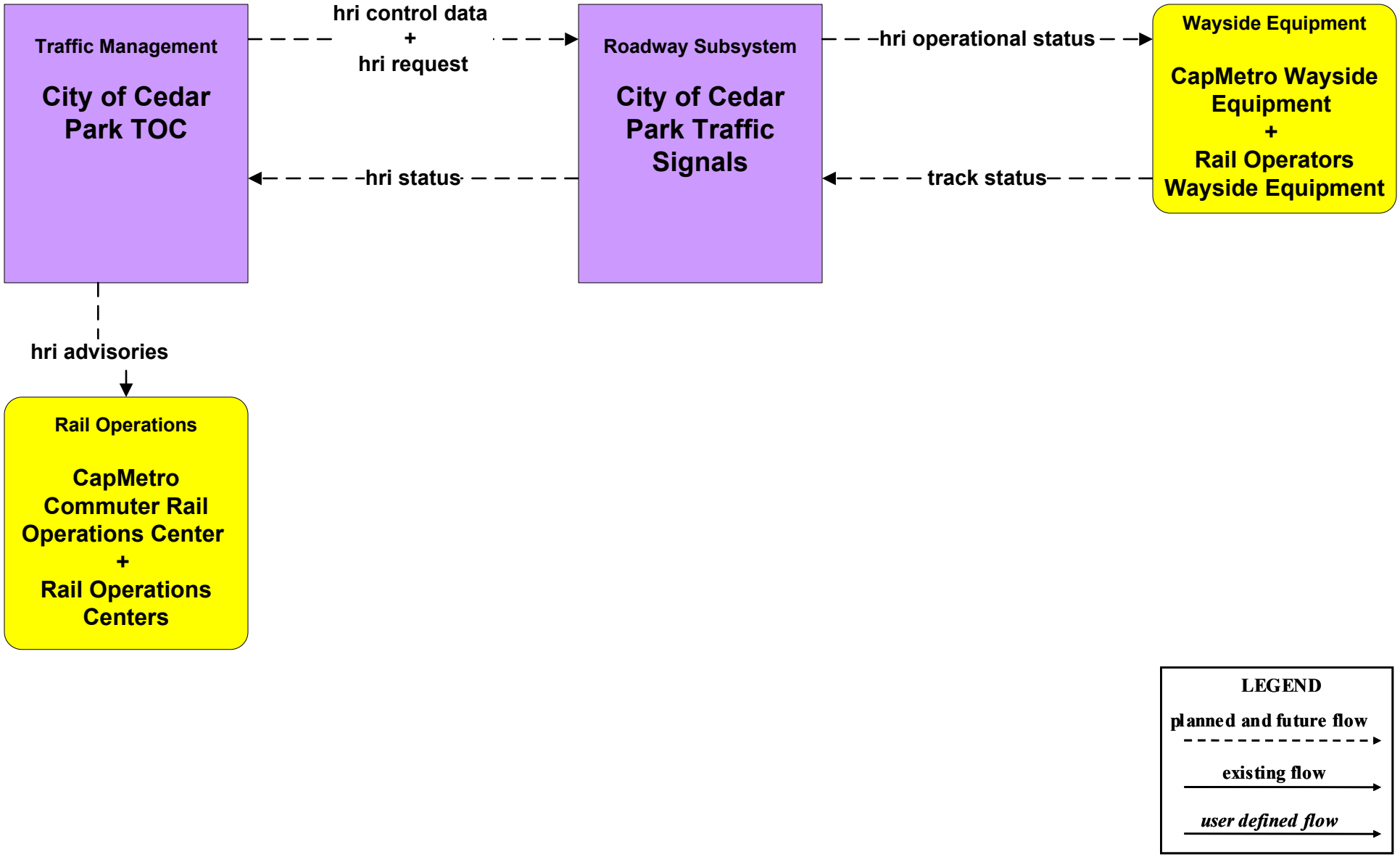
LEGEND

planned and future flow

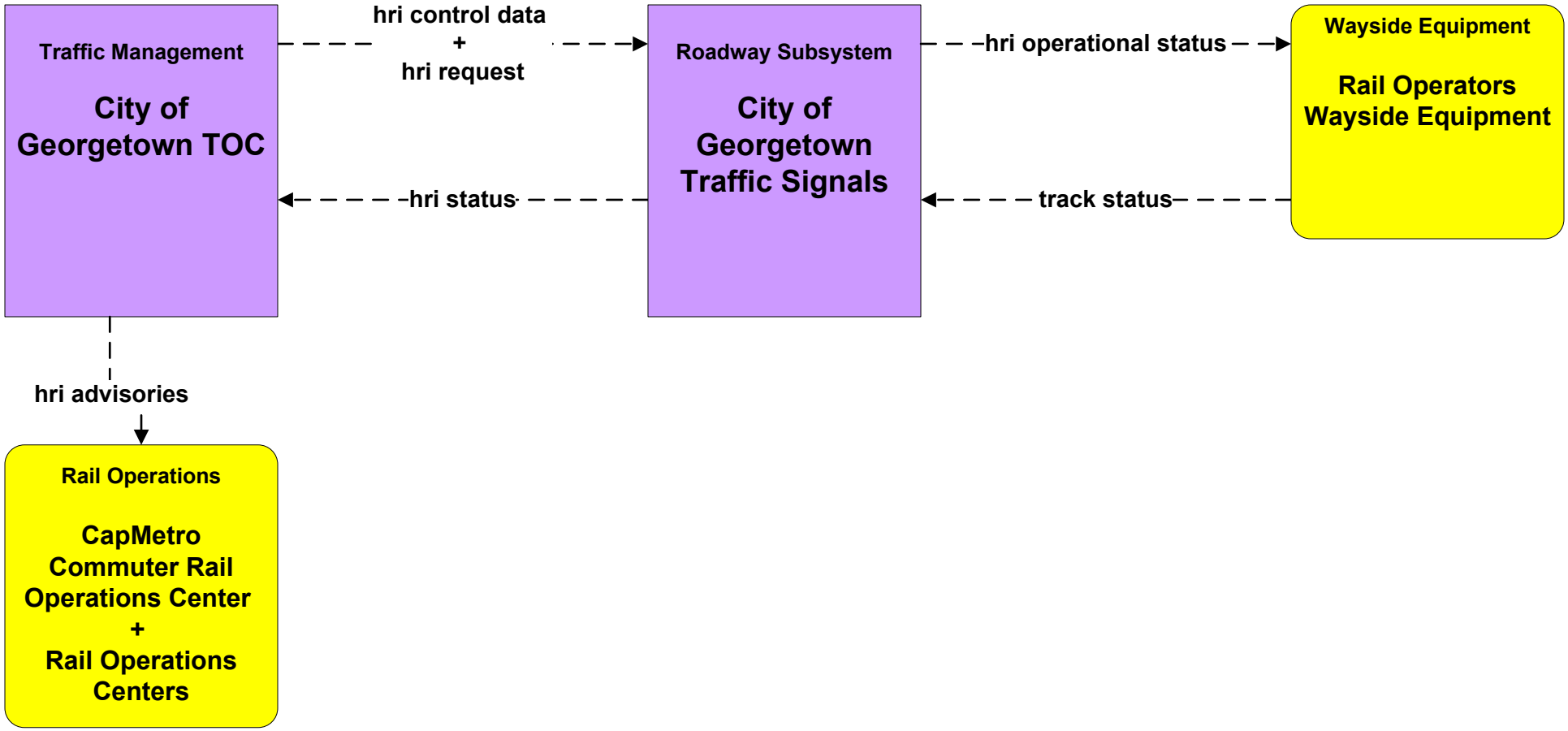
existing flow

user defined flow

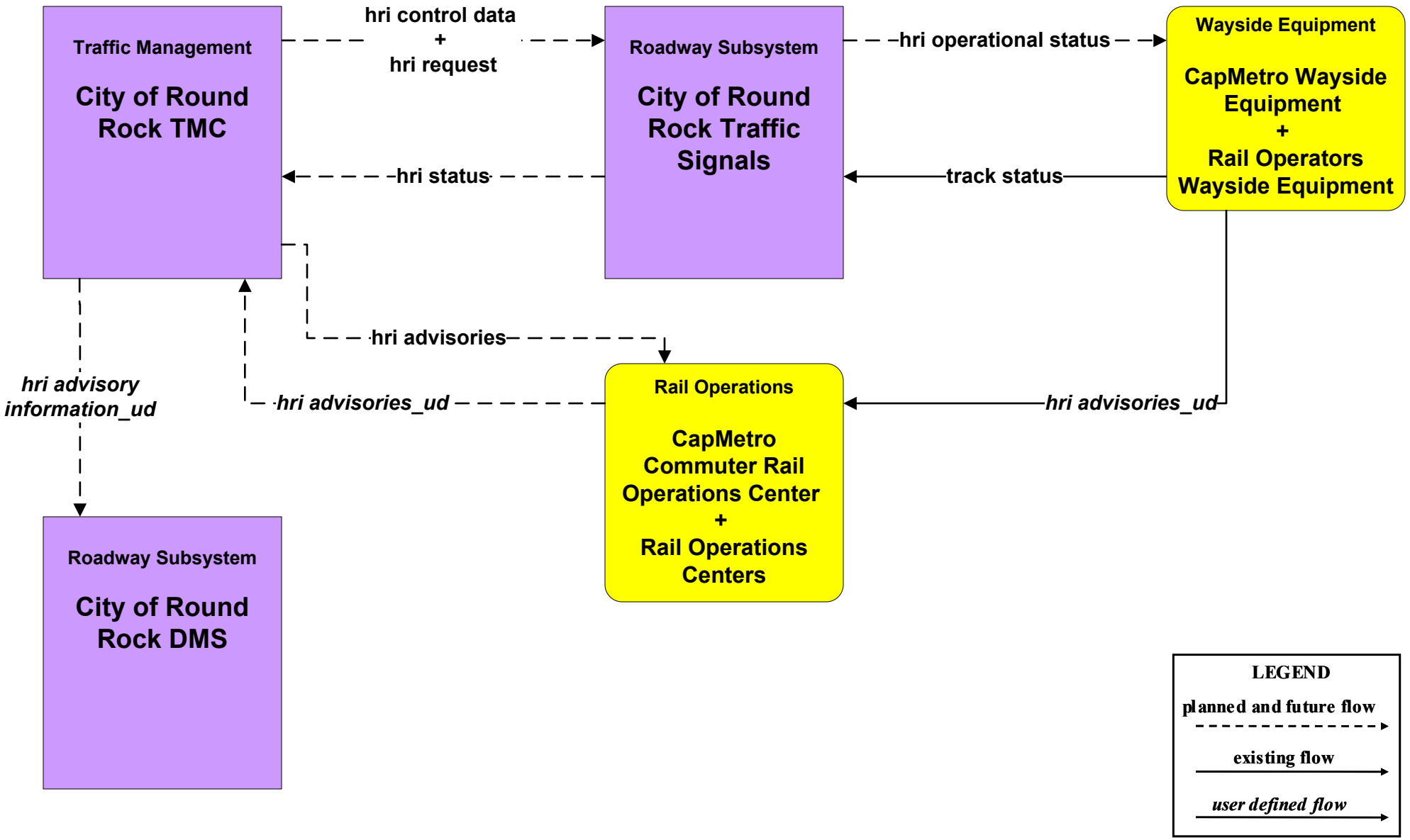
ATMS13 - Standard Railroad Grade Crossing
City of Cedar Park Traffic Operations Center



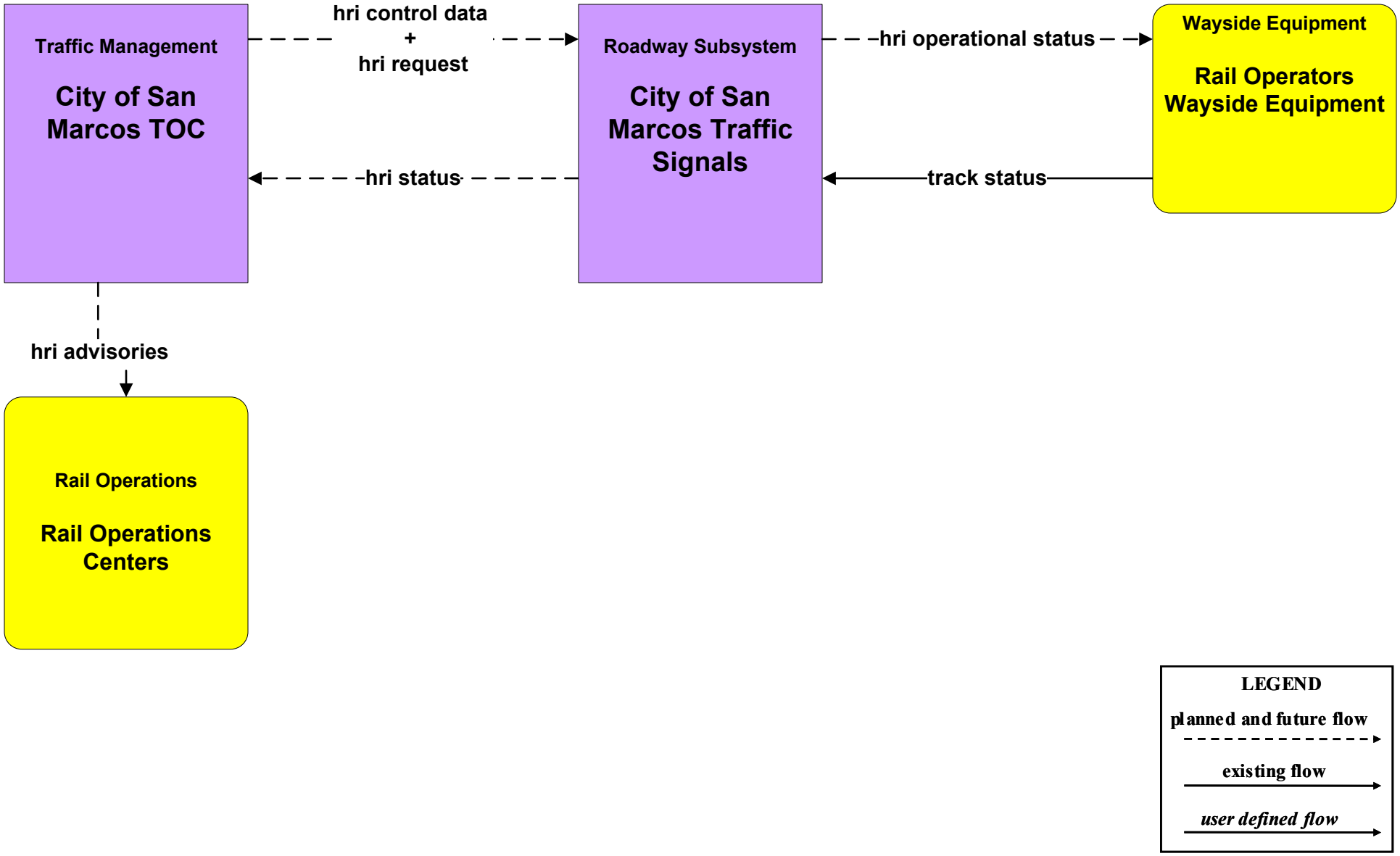
ATMS13 - Standard Railroad Grade Crossing
City of Georgetown Traffic Operations Center



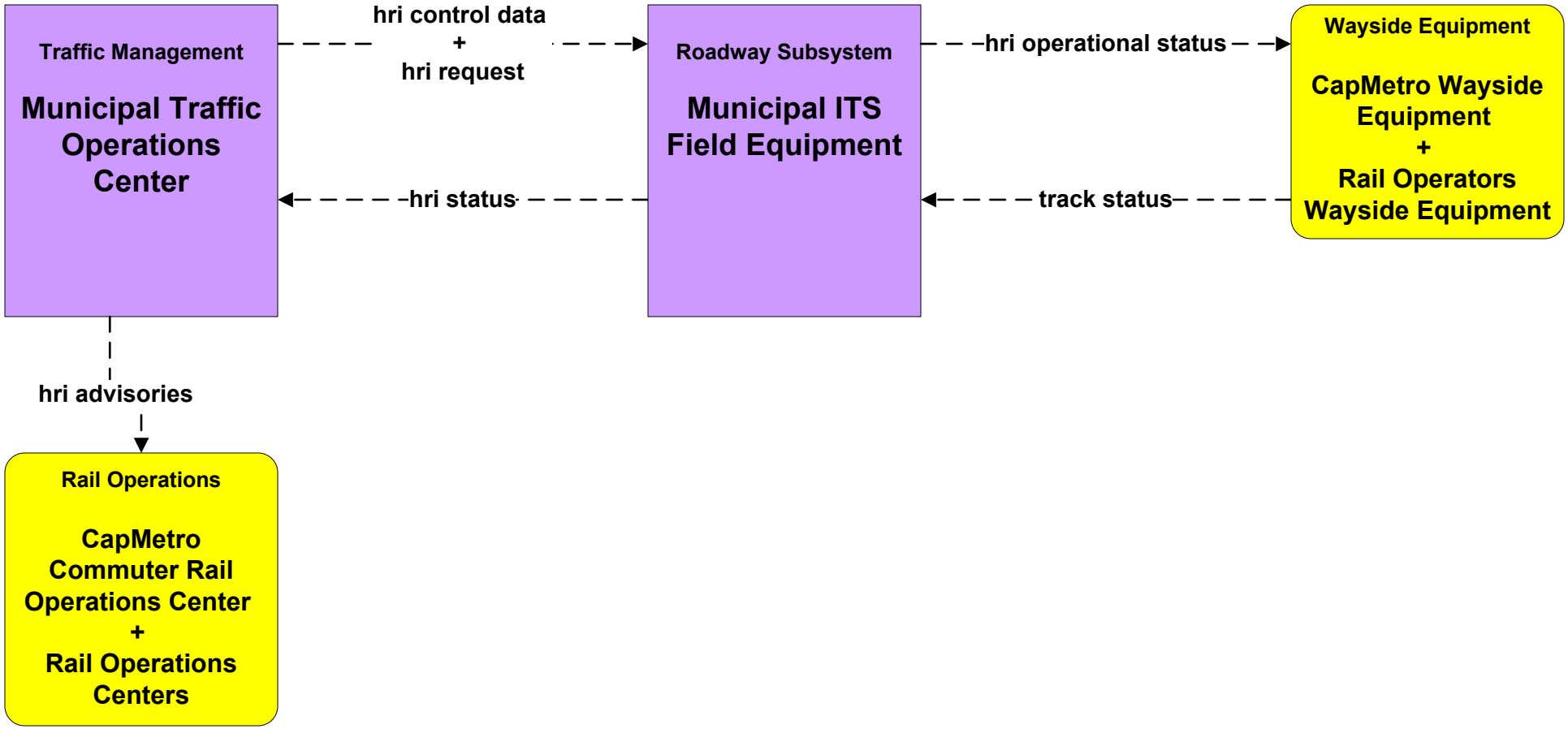
ATMS13 - Standard Railroad Grade Crossing
City of Round Rock Traffic Management Center



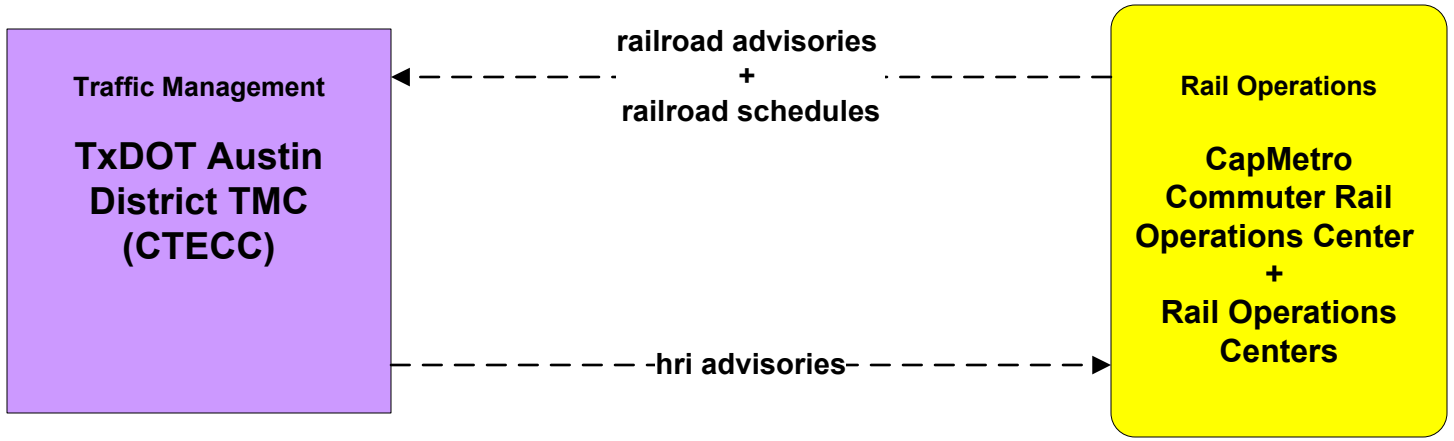
ATMS13 - Standard Railroad Grade Crossing
City of San Marcos Traffic Operations Center

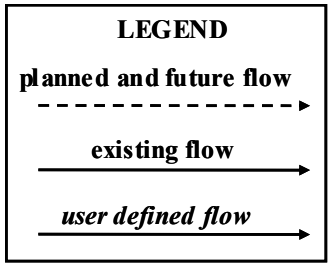


ATMS13 - Standard Railroad Grade Crossing
Municipal Traffic Operations Center

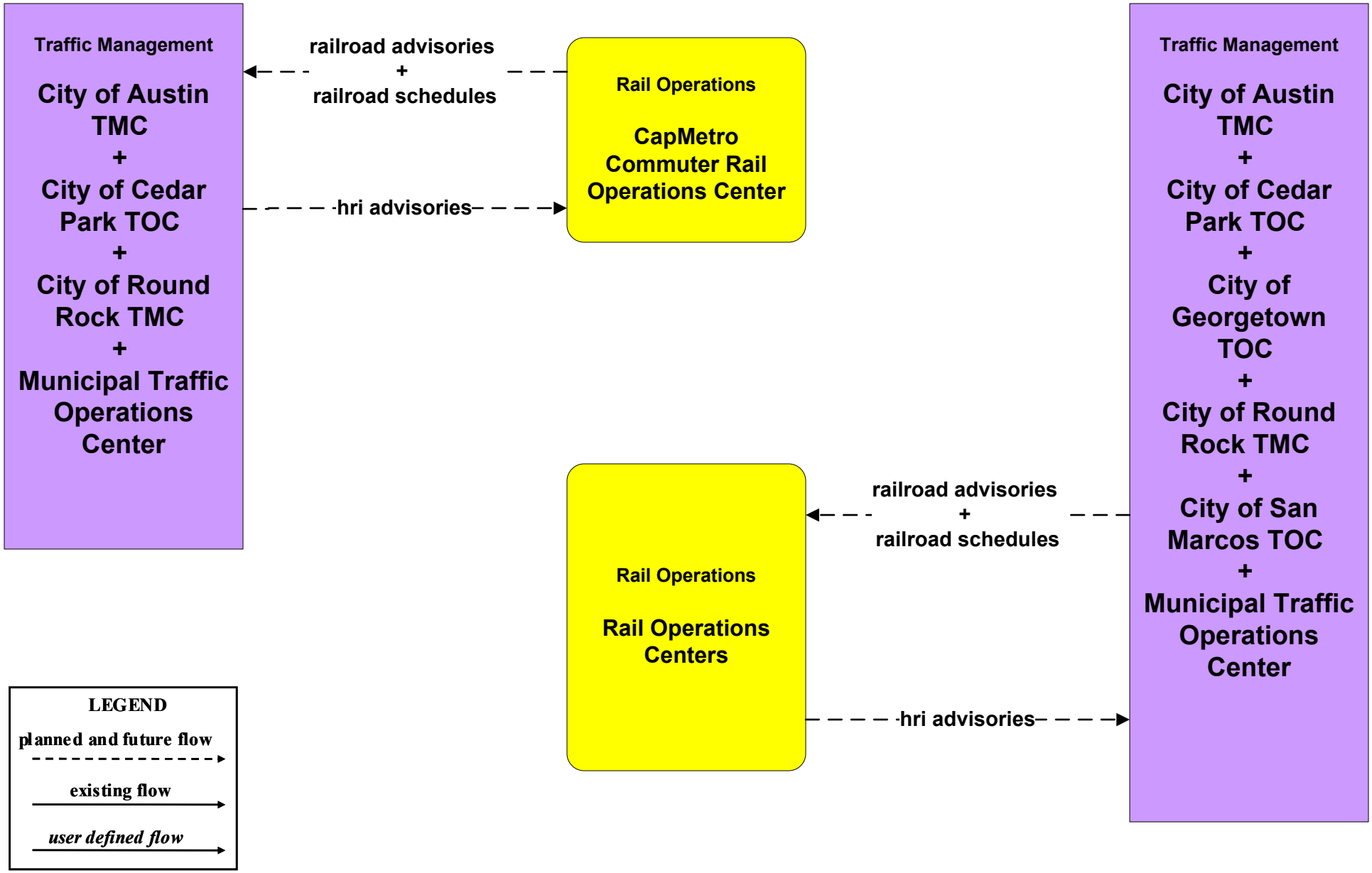


ATMS15 - Railroad Operations Coordination
TxDOT Austin District Traffic Management Center

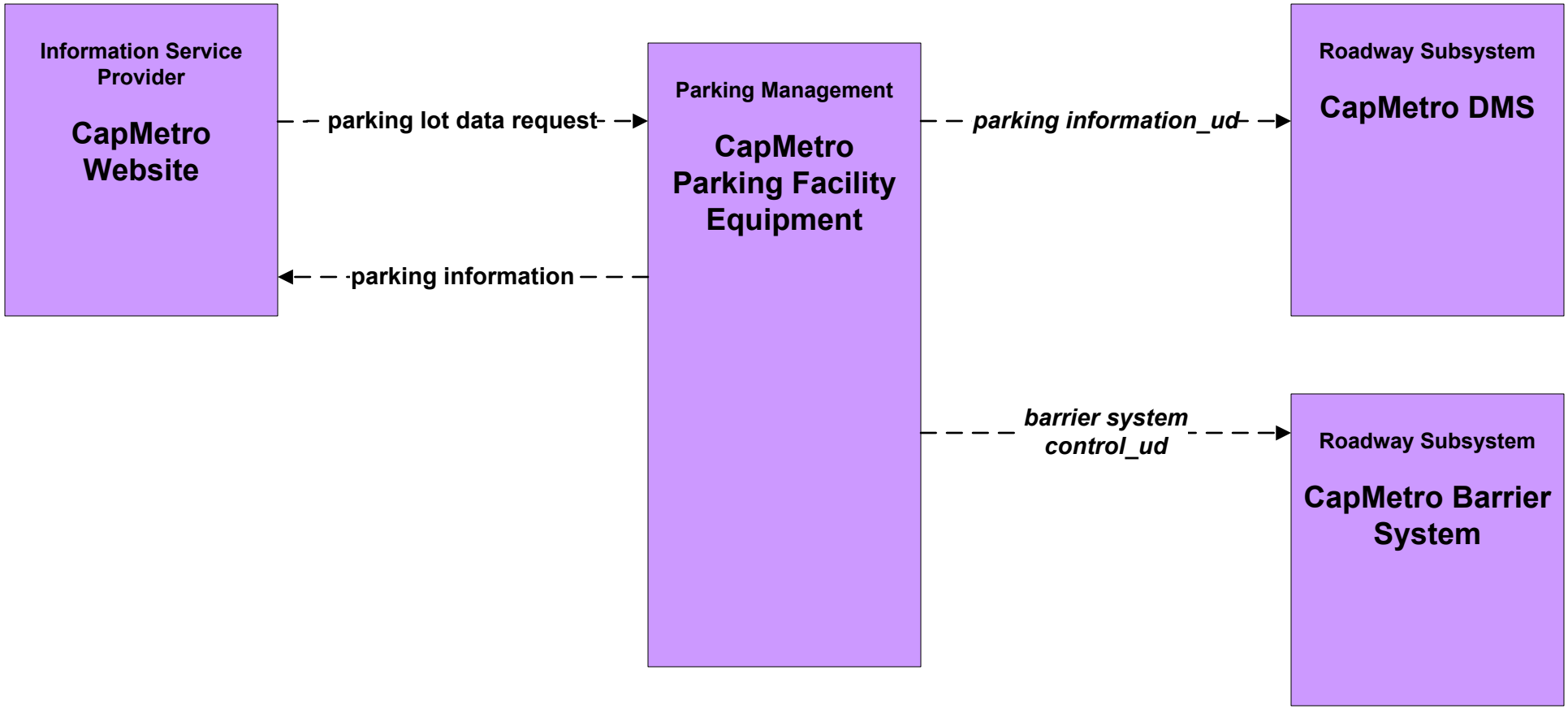


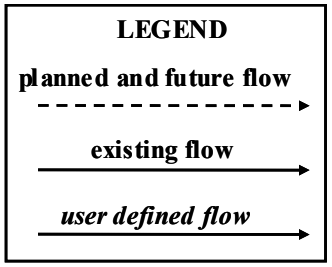


ATMS15 - Railroad Operations Coordination
City TMCs / City TOCs / Municipal Traffic Operations Center

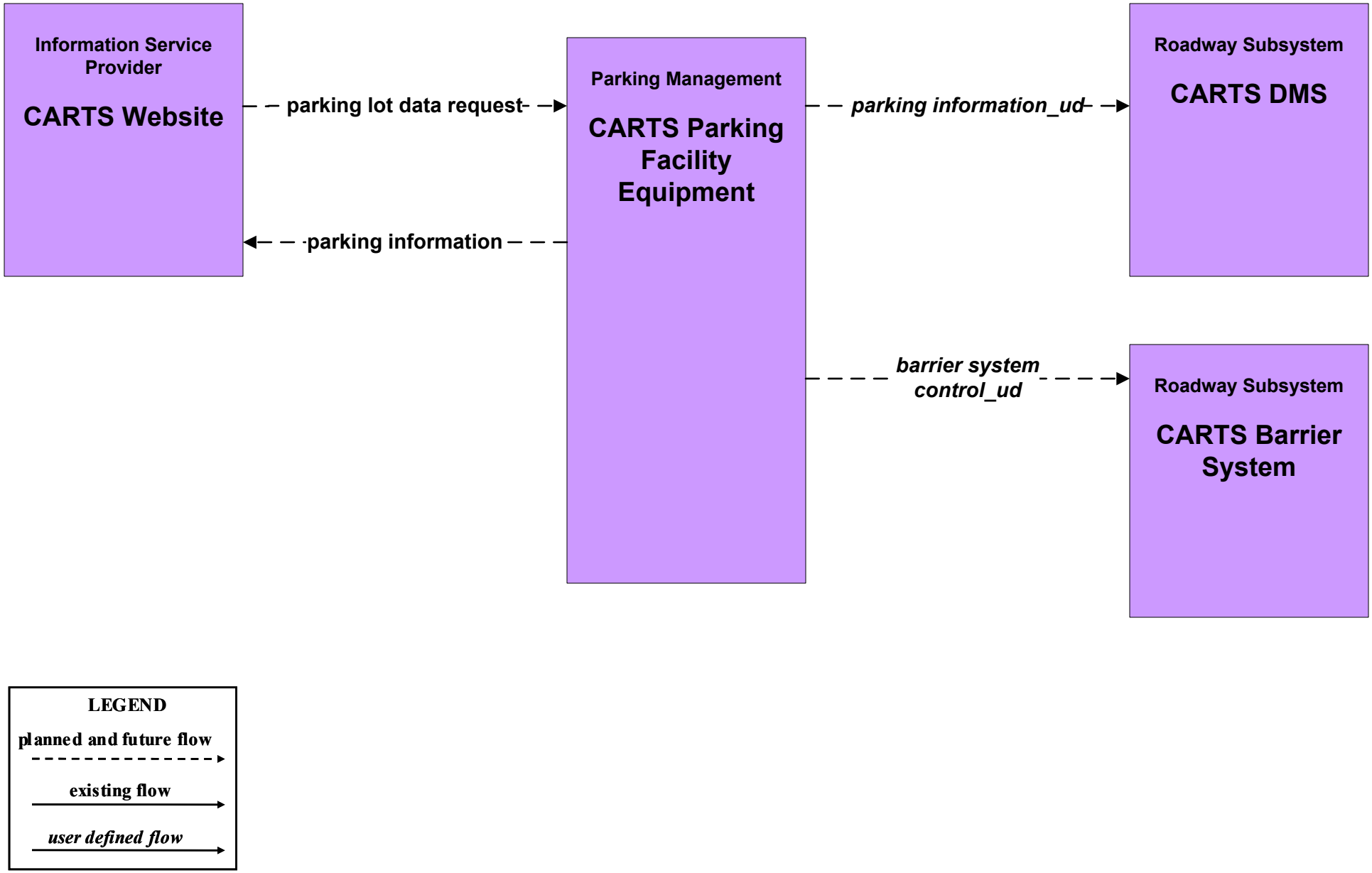


ATMS16 - Parking Facility Management
CapMetro

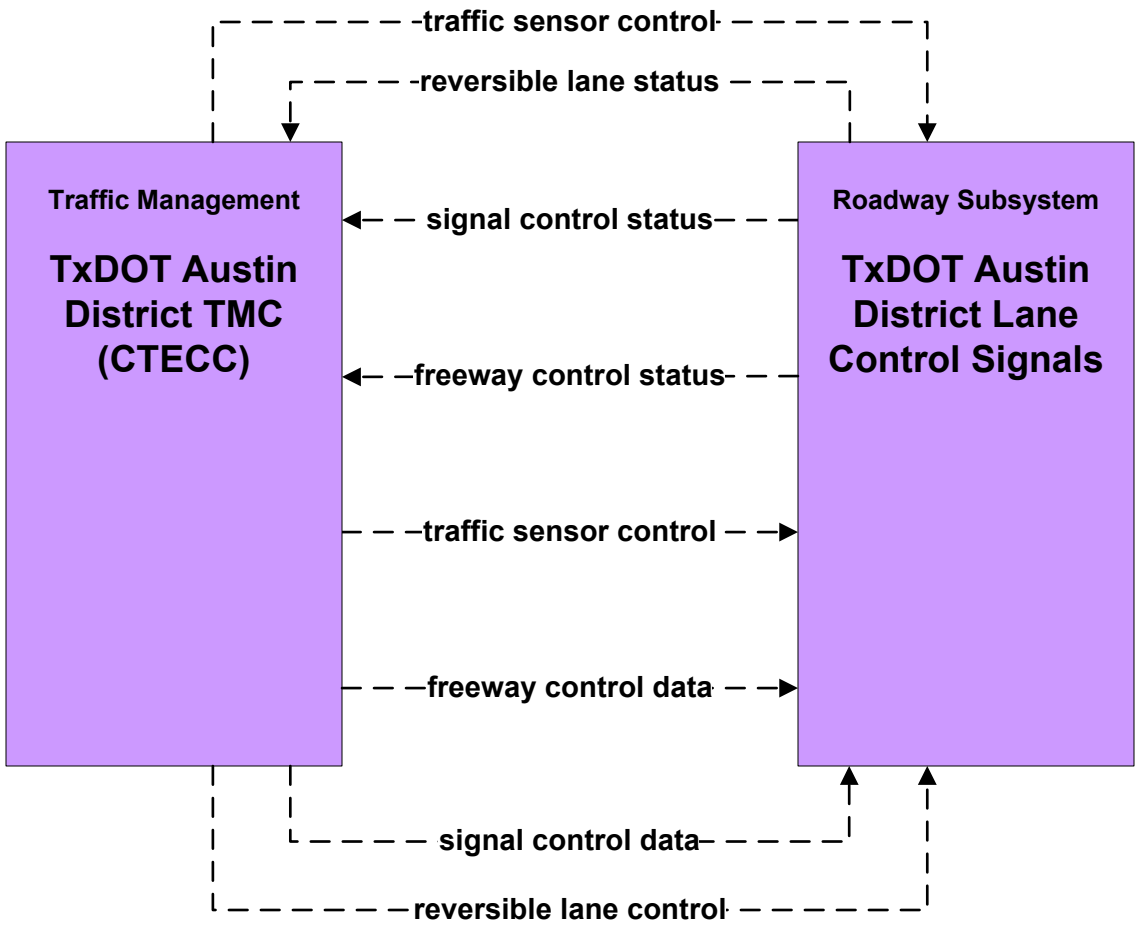


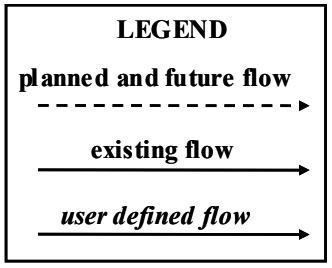


ATMS16 - Parking Facility Management
CARTS

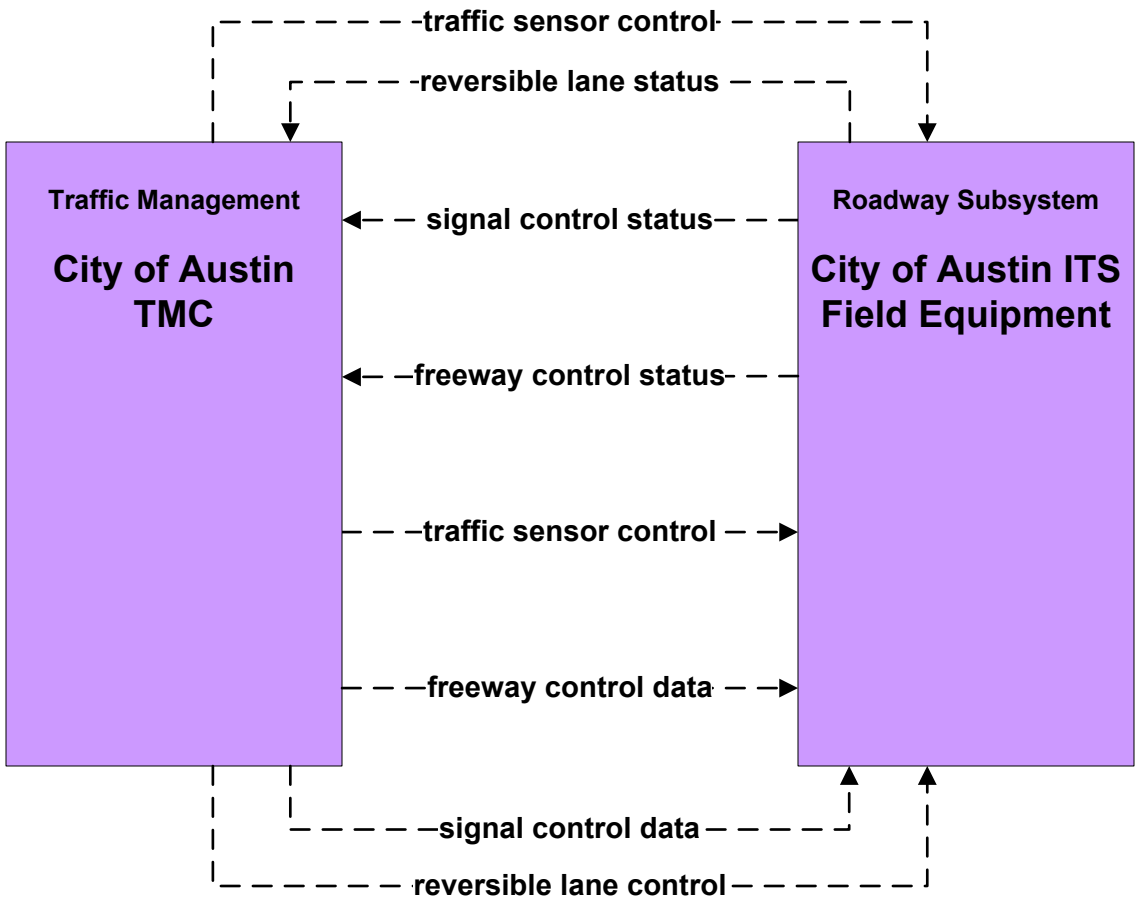


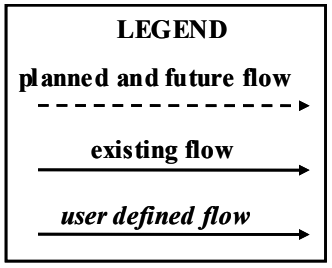
ATMS18 - Reversible Lane Management
TxDOT Austin / Texas Turnpike Authority



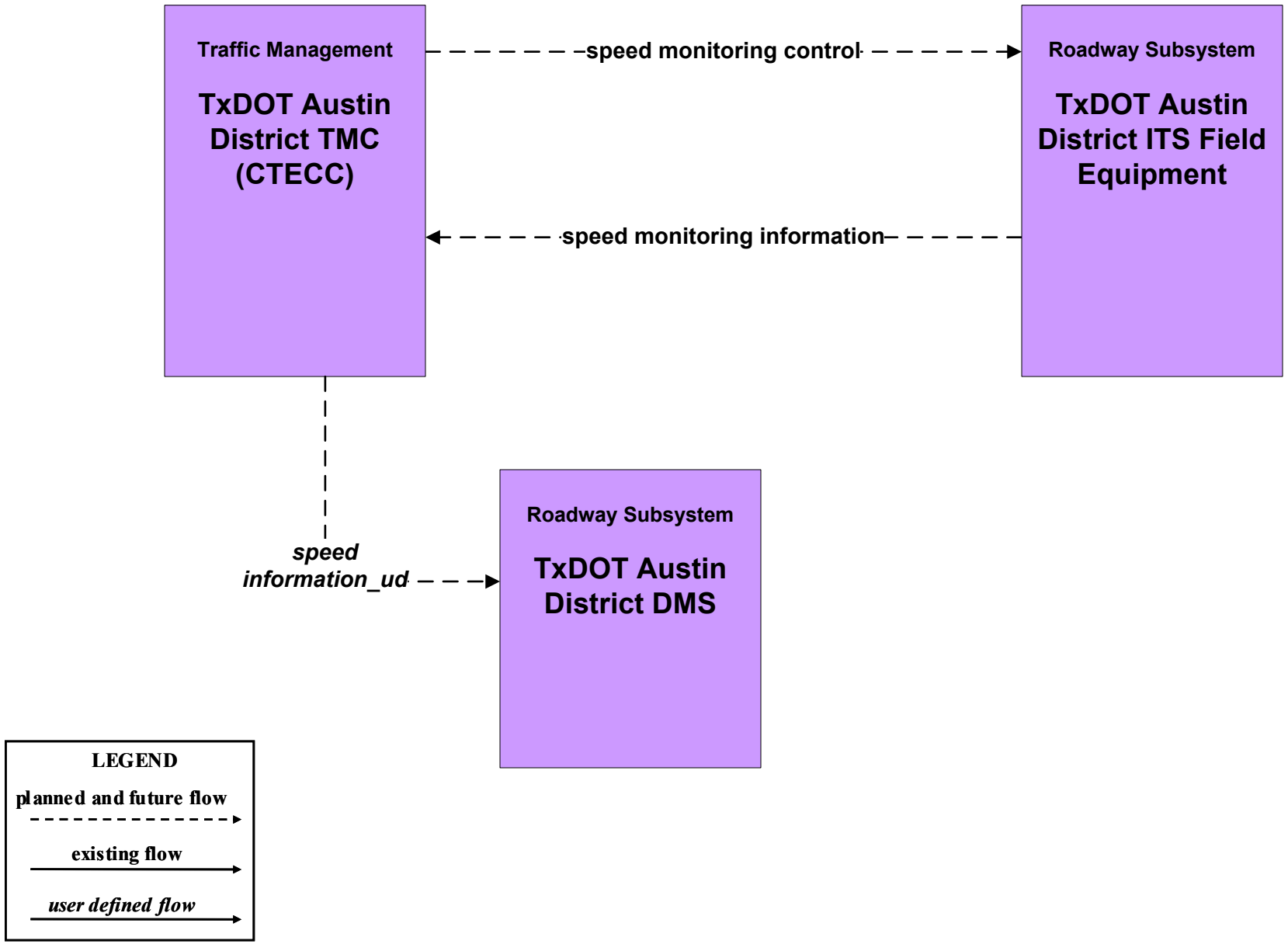


ATMS18 - Reversible Lane Management
City of Austin

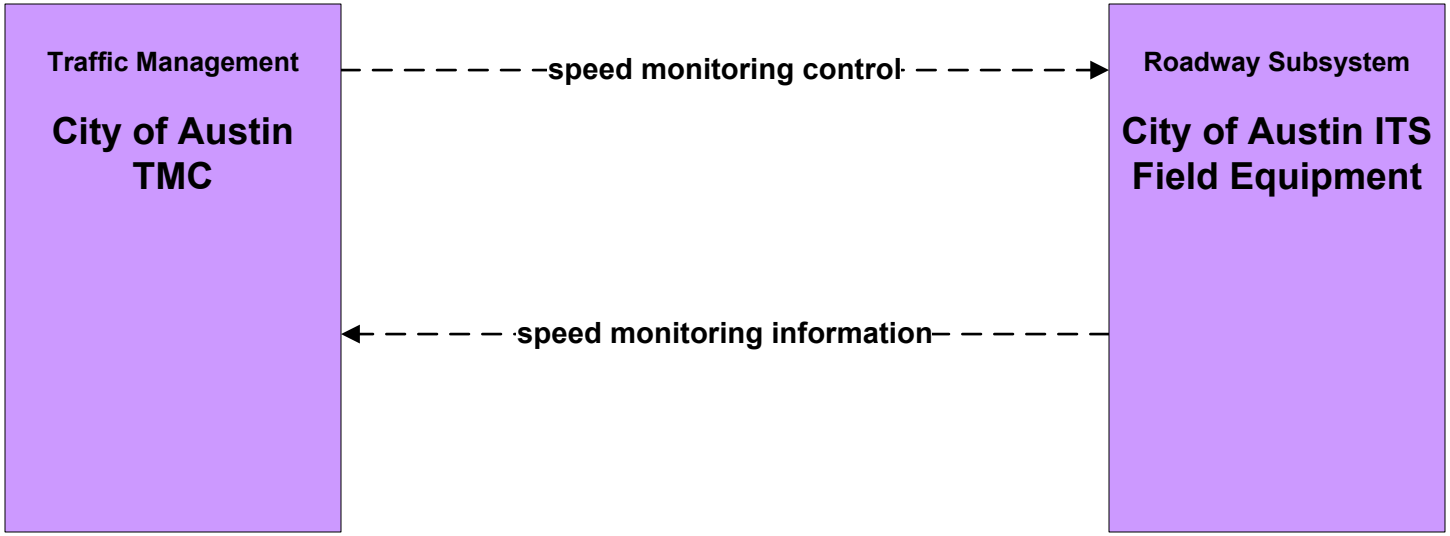


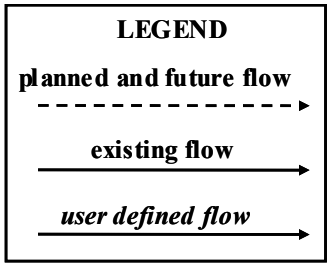


ATMS19 - Speed Monitoring
TxDOT Austin District

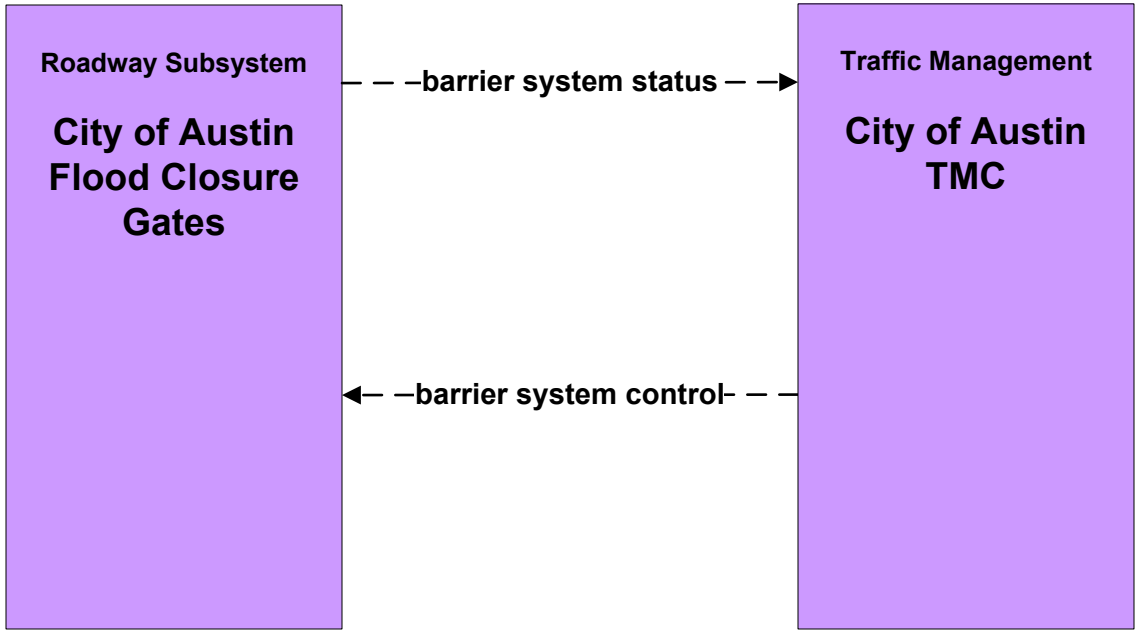


ATMS19 - Speed Monitoring
City of Austin



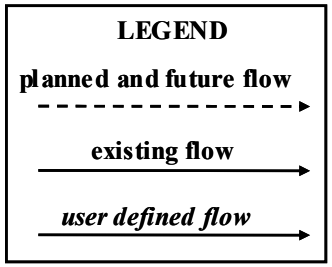


ATMS21 - Roadway Closure Management
City of Austin – Flood Closure Gates

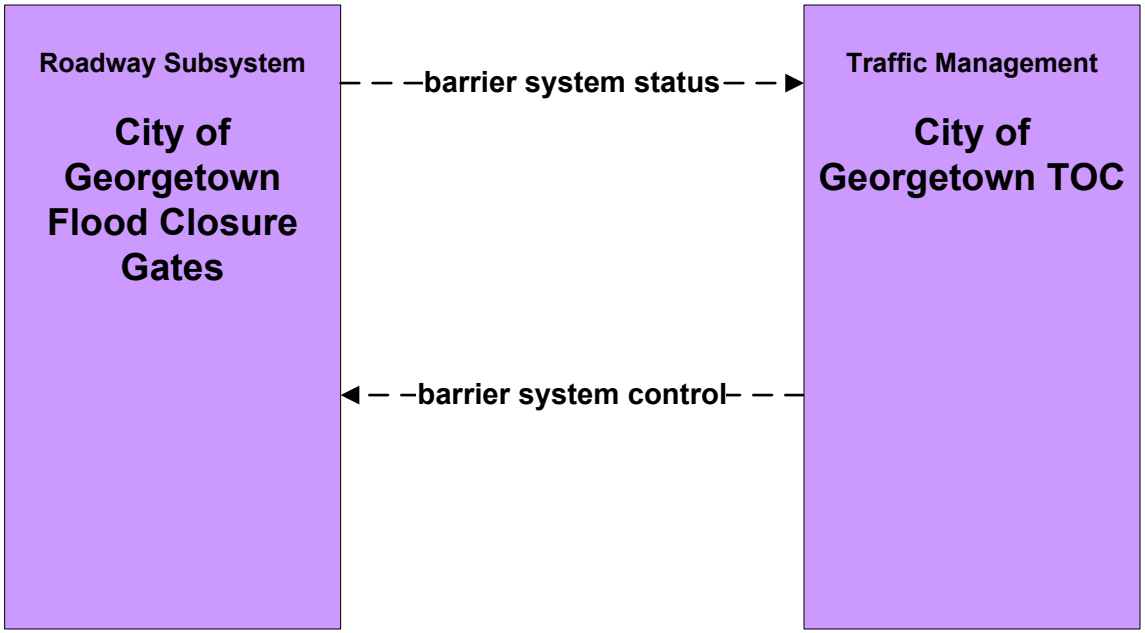


NOTE: Flood Gates are currently controlled by the Watershed Utility Department.

NOTE: Additional Flood Detection information can be found in EM07.



ATMS21 - Roadway Closure Management
City of Georgetown – Flood Closure Gates



NOTE: Additional Flood Detection information can be found in EM07.

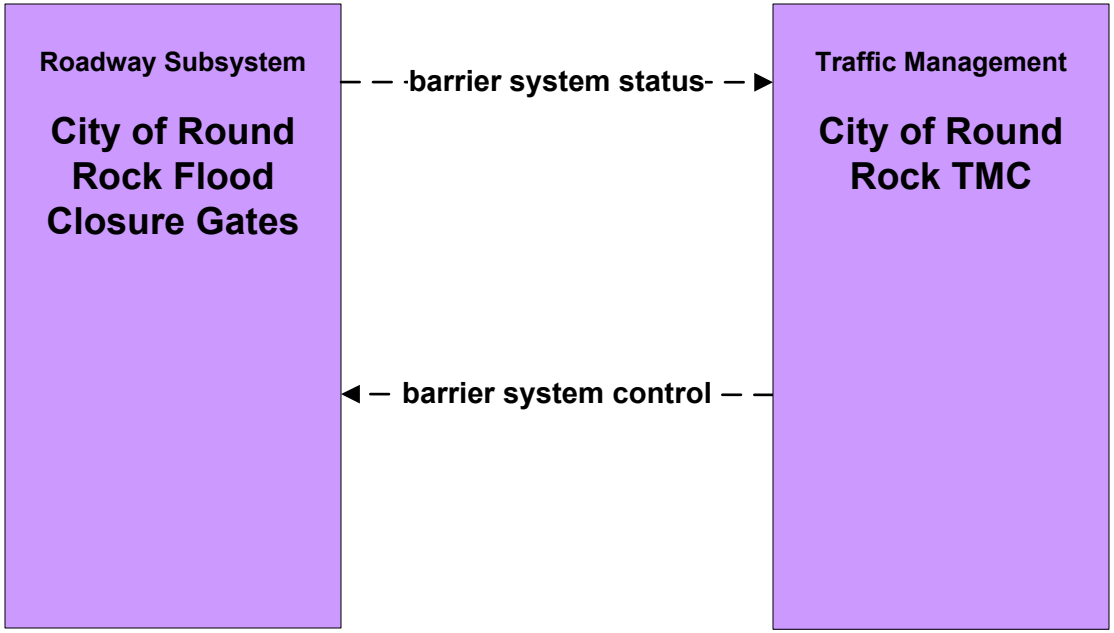
LEGEND

planned and future flow

existing flow

user defined flow

ATMS21 - Roadway Closure Management
City of Round Rock – Flood Closure Gates



NOTE: Additional Flood Detection information can be found in EM07.

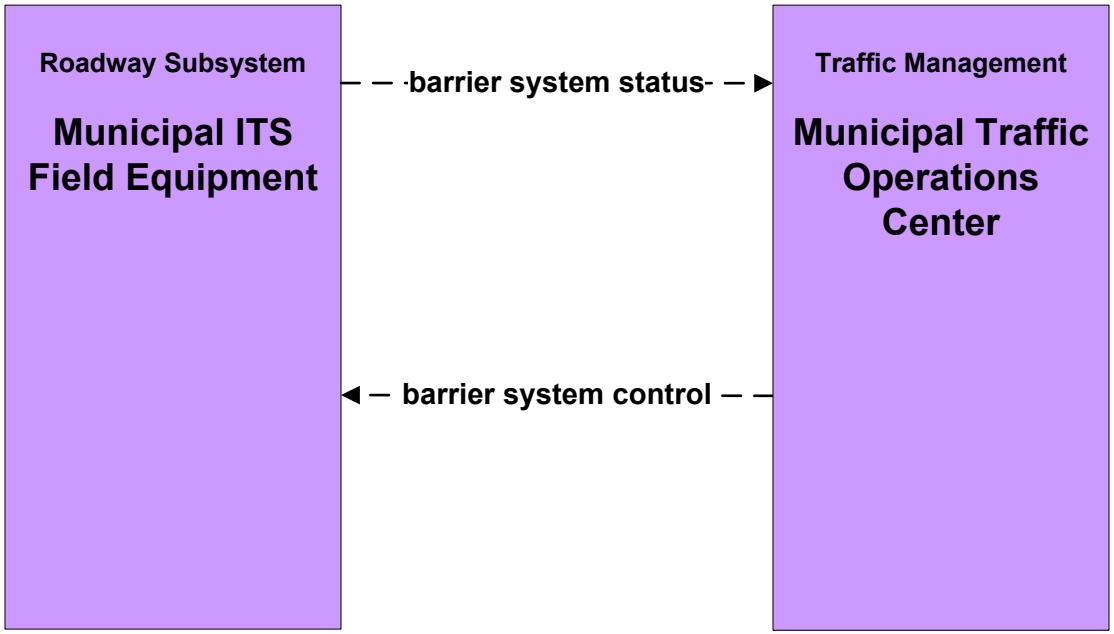
LEGEND

planned and future flow

existing flow

user defined flow

ATMS21 - Roadway Closure Management
Municipal – Flood Closure Gates



NOTE: Additional Flood Detection information can be found in EM07.

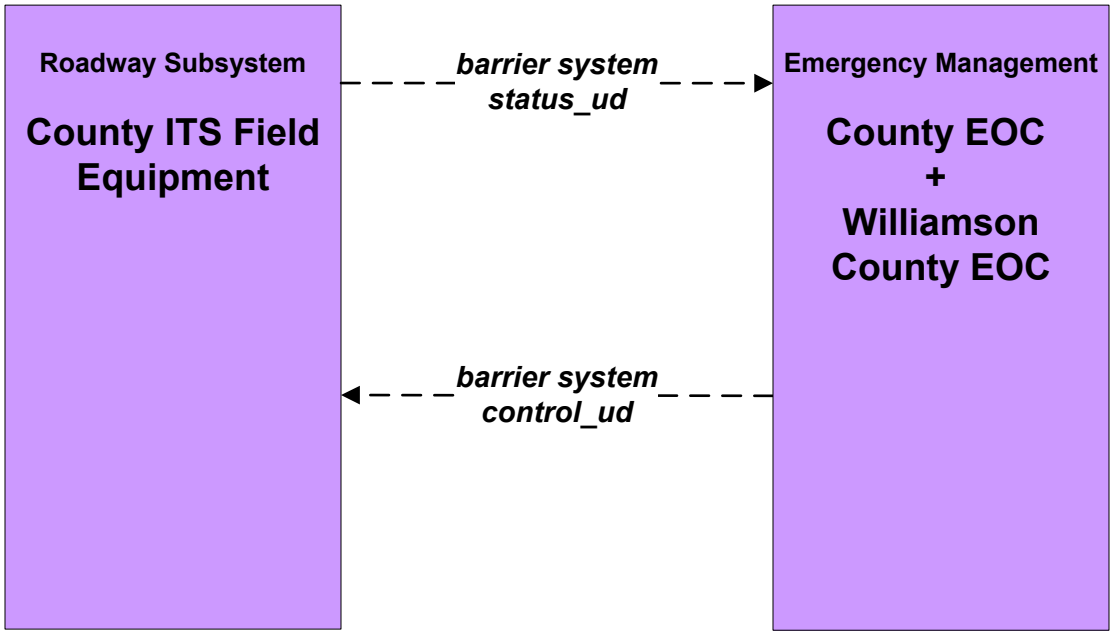
LEGEND

planned and future flow

existing flow

user defined flow

ATMS21 - Roadway Closure Management
County – Flood Closure Gates



Includes deploying flood monitoring devices and flood control gates in Hays and Williamson Counties.

NOTE: Additional Flood Detection information can be found in EM07.

LEGEND

planned and future flow

existing flow

user defined flow