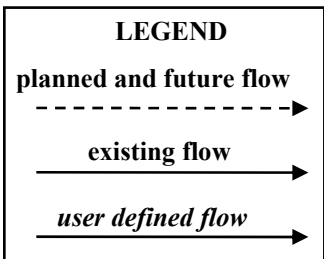
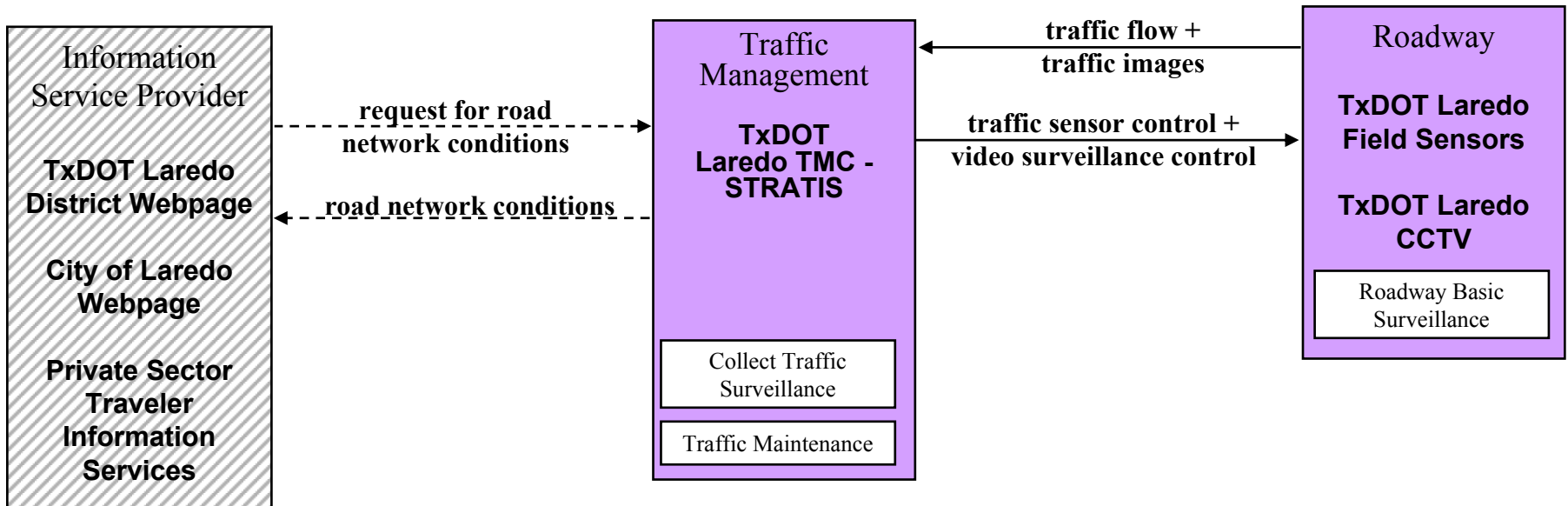


Laredo, TX Regional ITS Architecture
Customized Market Package Diagrams

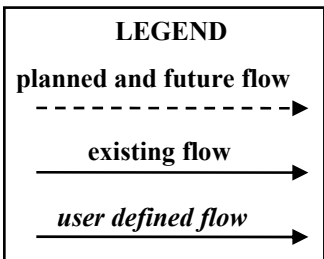
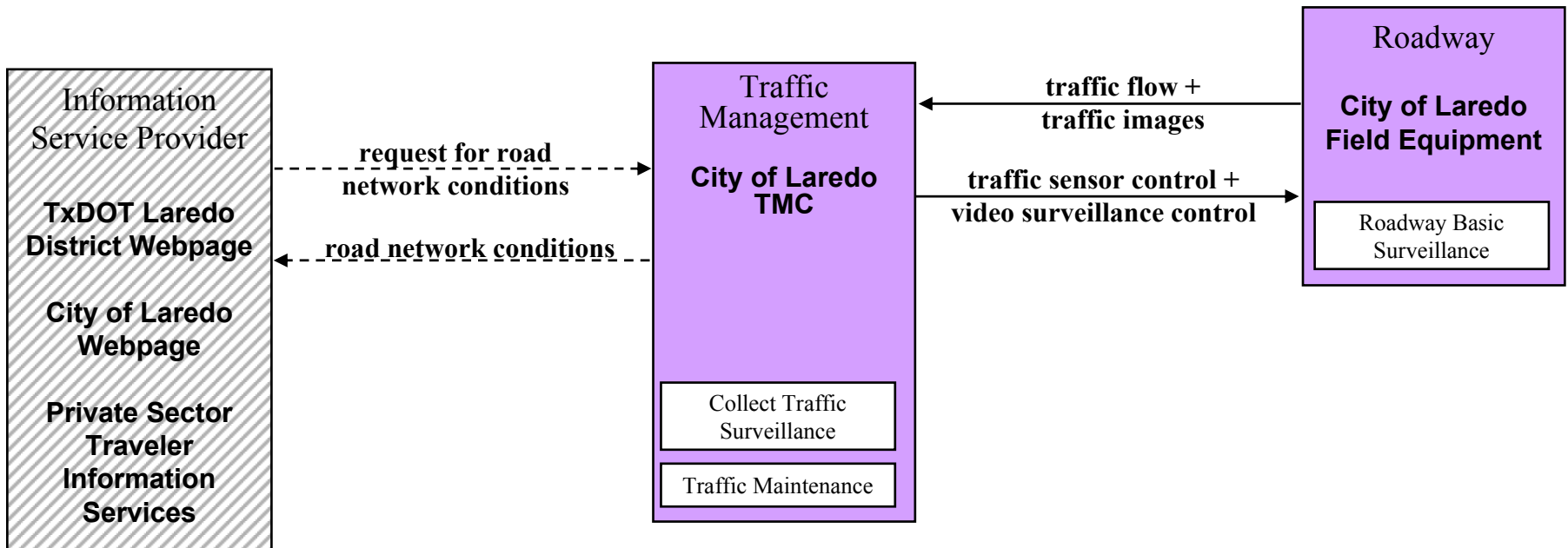
Advanced Traffic Management
Systems (ATMS)

ATMS1 - Network Surveillance

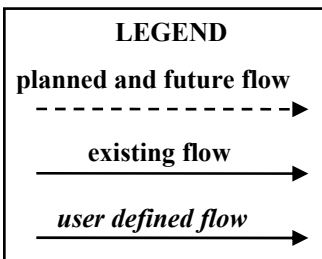
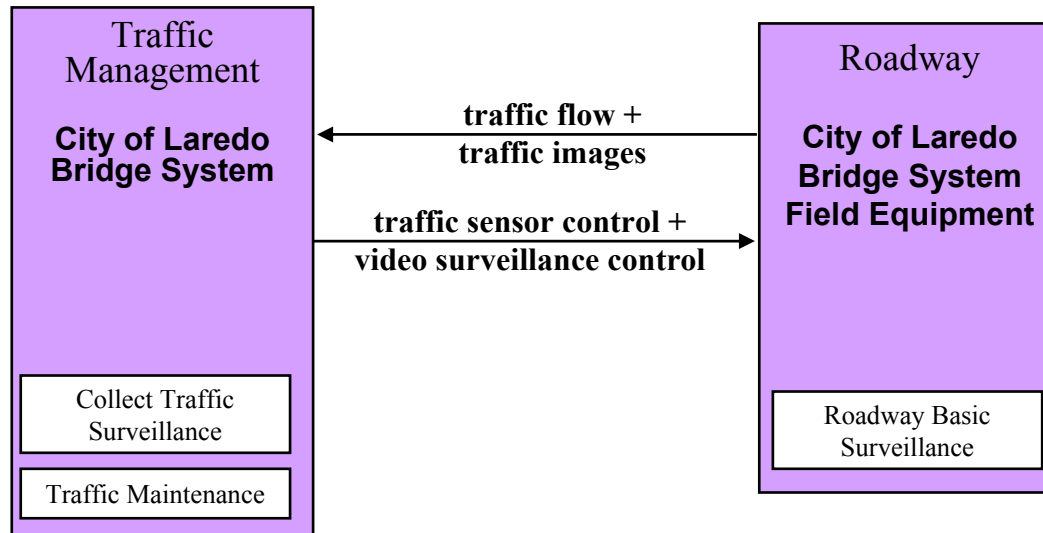
TxDOT Laredo TMC - STRATIS



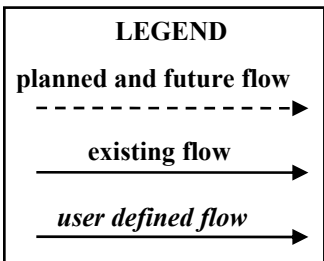
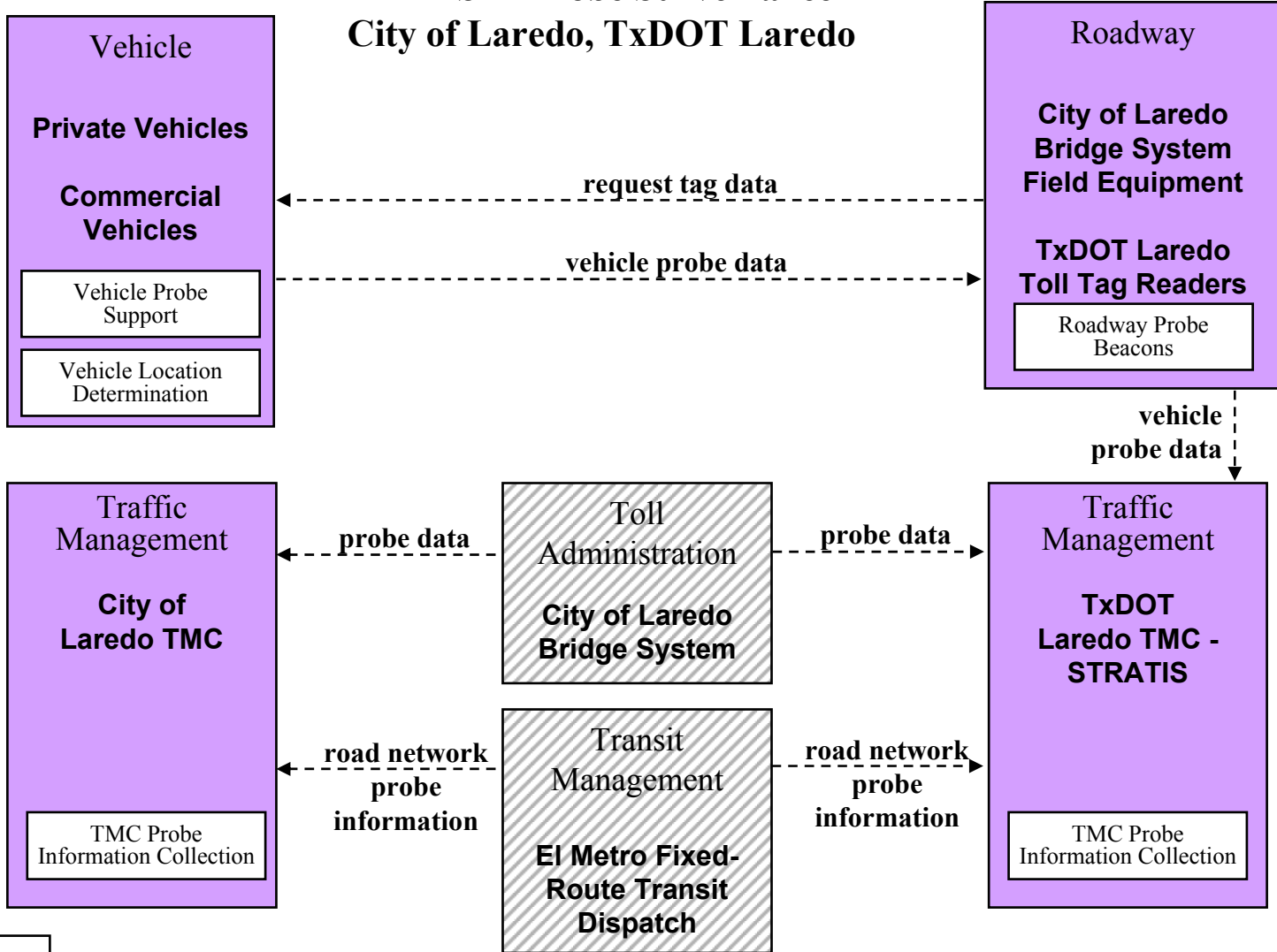
ATMS1 - Network Surveillance City of Laredo TMC



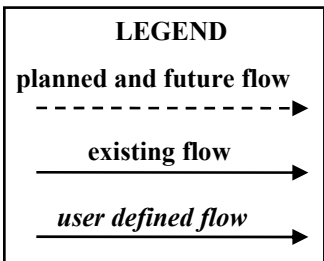
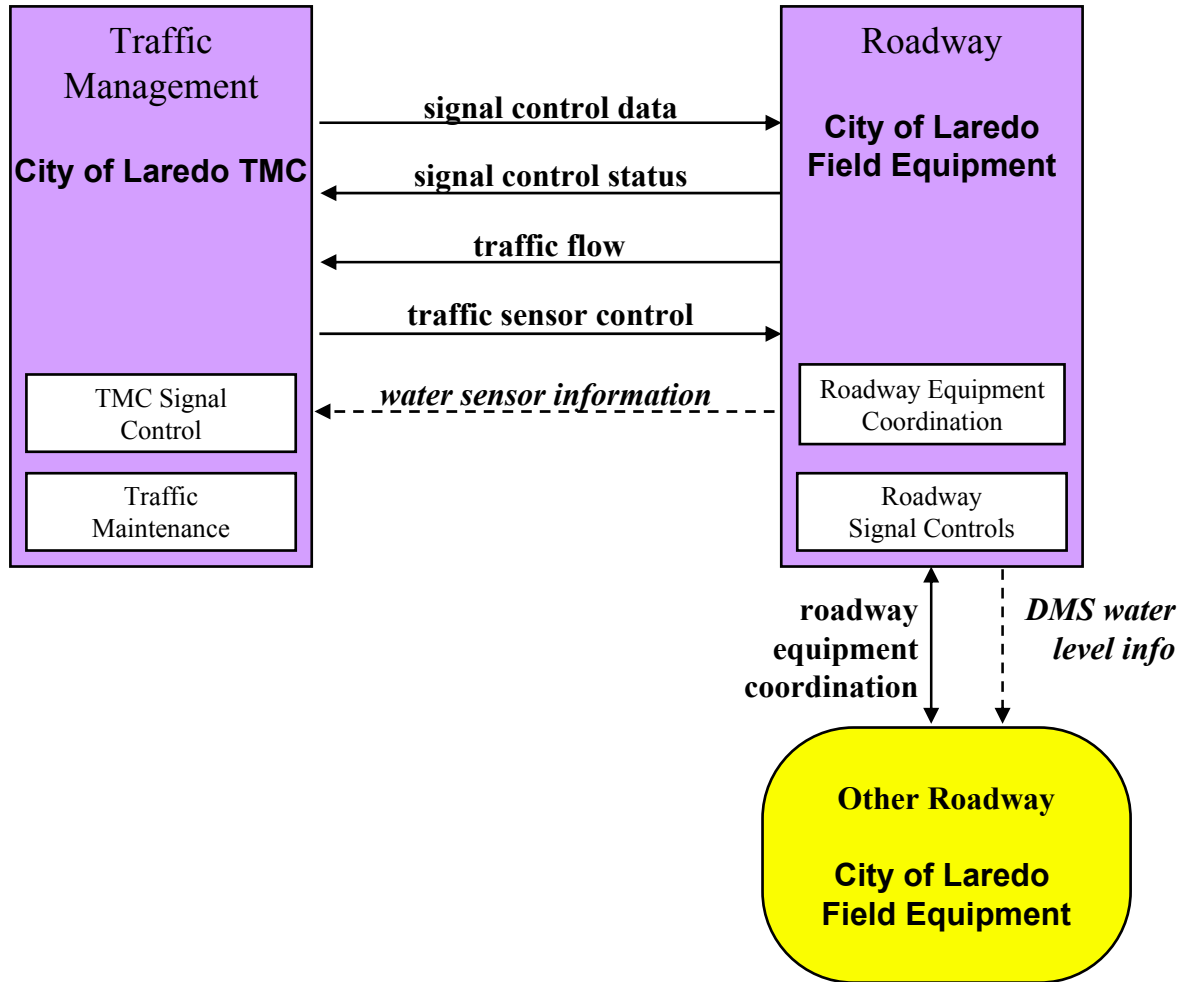
ATMS1 - Network Surveillance City of Laredo Bridge System



ATMS2 - Probe Surveillance City of Laredo, TxDOT Laredo

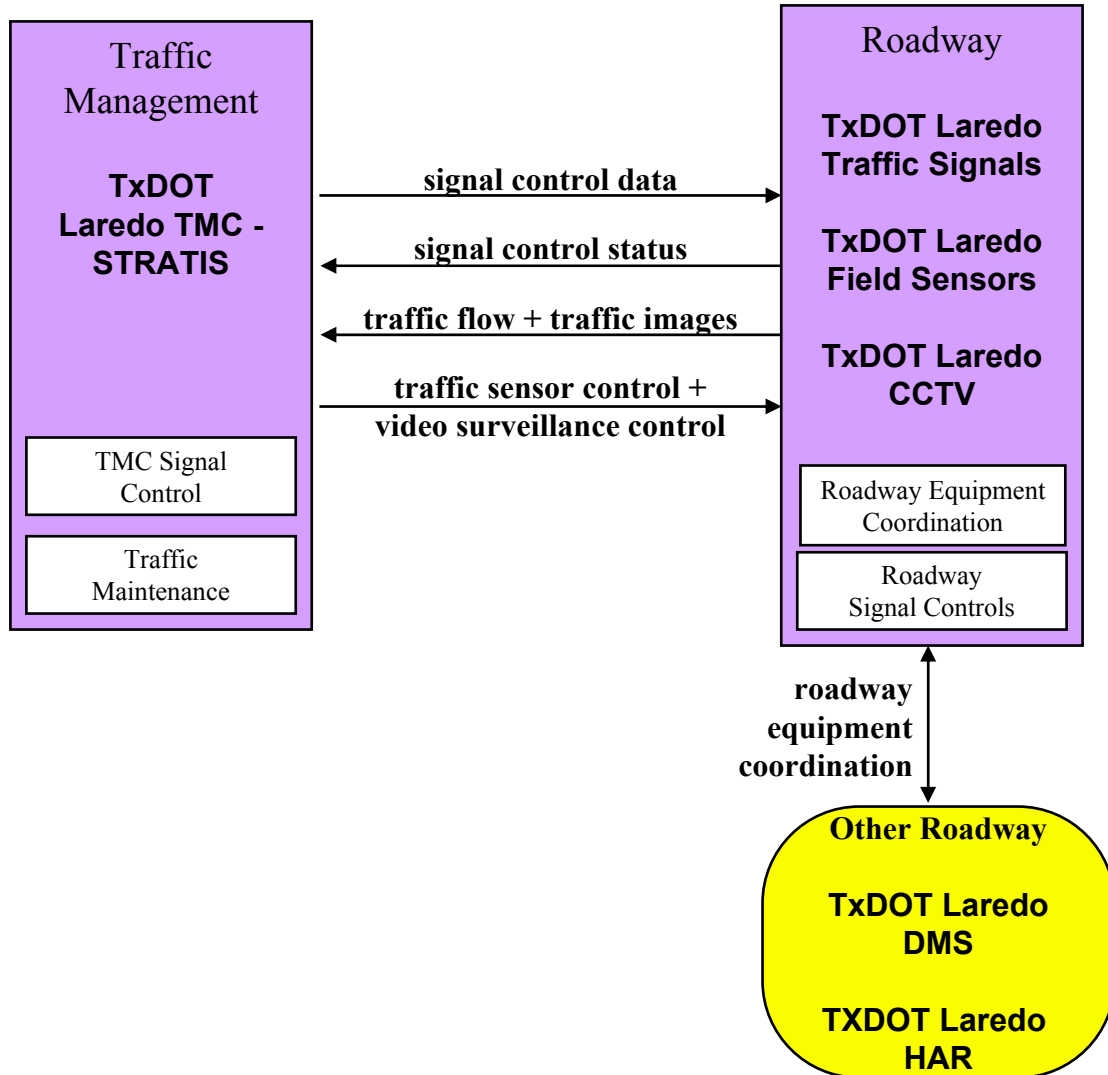


ATMS3 – Surface Street Control City of Laredo TMC



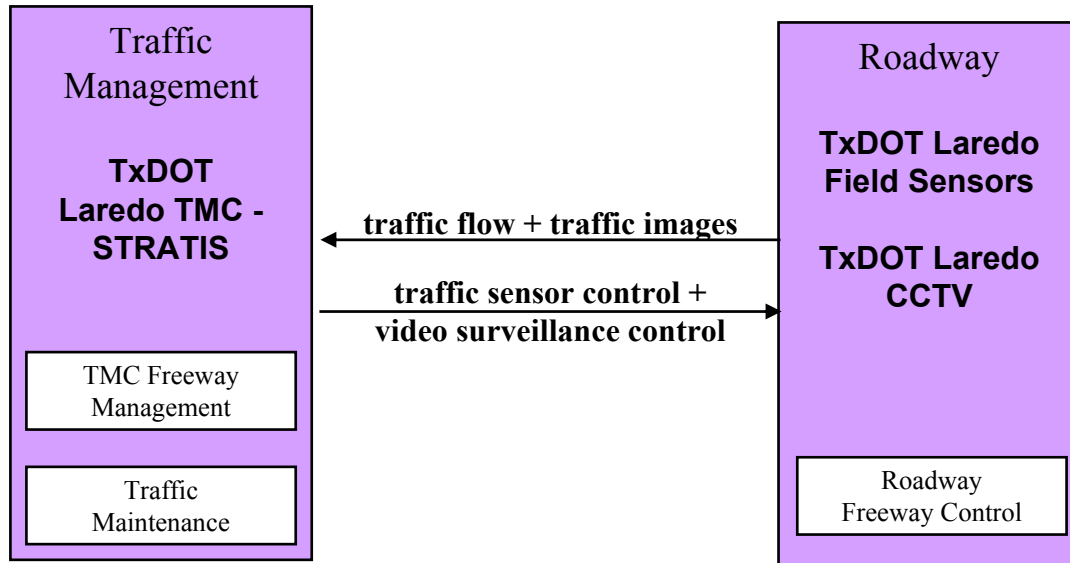
ATMS3 – Surface Street Control

TxDOT Laredo TMC - STRATIS



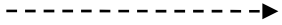
ATMS4 – Freeway Control

TxDOT Laredo TMC-STRATIS

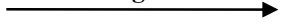


LEGEND

planned and future flow



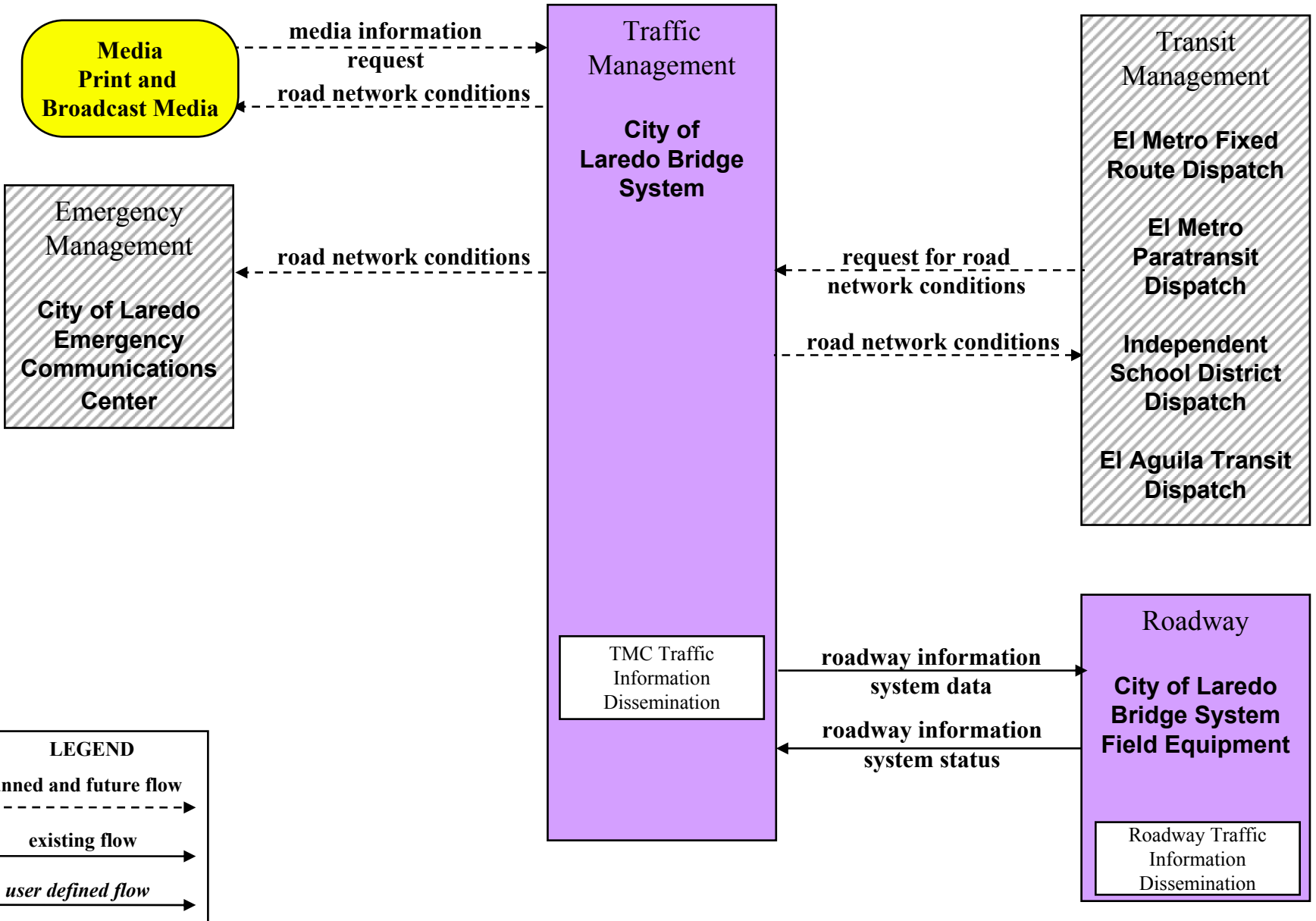
existing flow



user defined flow

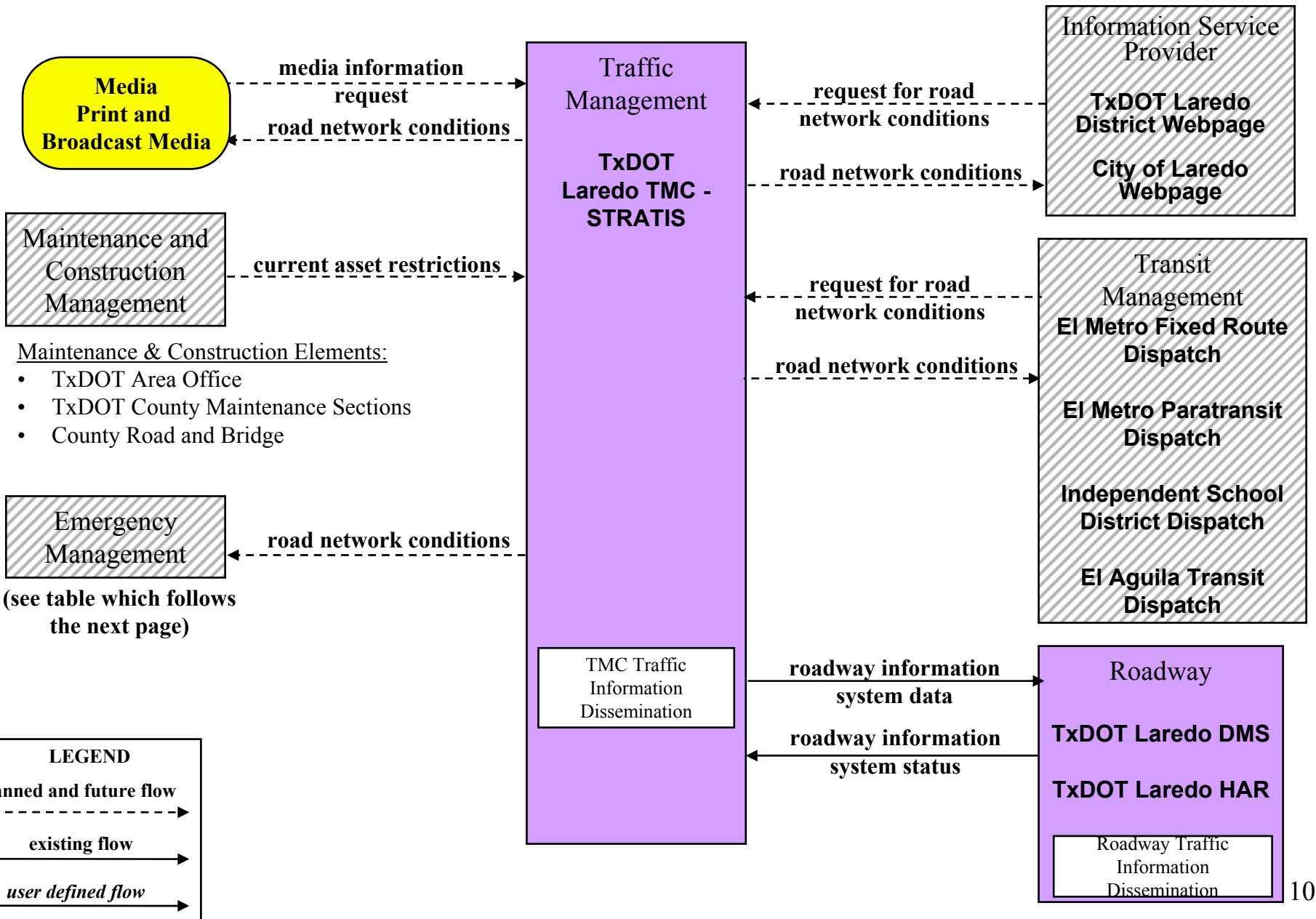


ATMS6 – Traffic Information Dissemination City of Laredo Bridge System



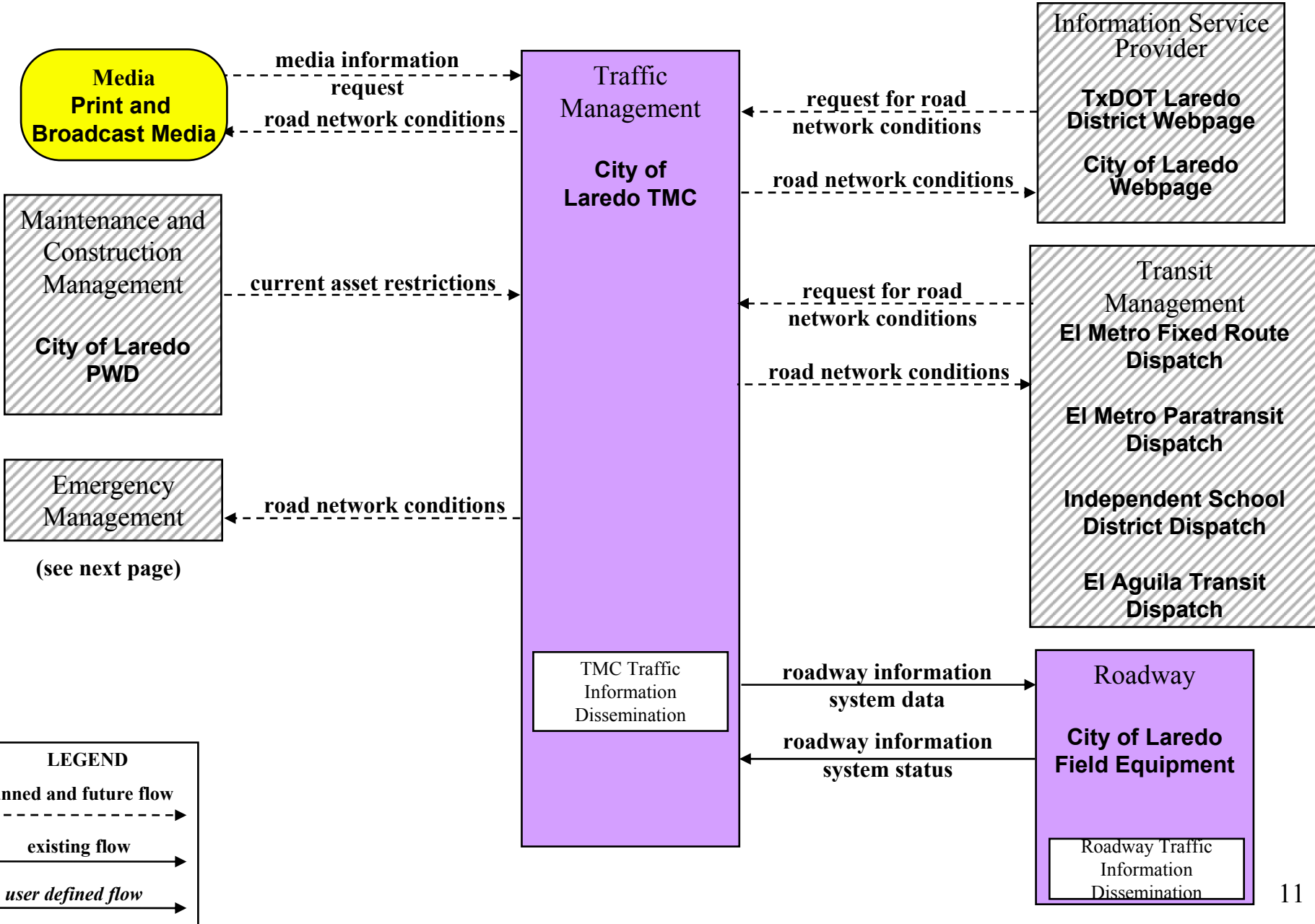
ATMS6 – Traffic Information Dissemination

TxDOT Laredo TMC - STRATIS



ATMS6 – Traffic Information Dissemination

City of Laredo TMC



ATMS6 – Traffic Information Dissemination
TxDOT Laredo TMC-STRATIS and City of Laredo TMC (TM to EM)

	City of Laredo TMC	TxDOT Laredo TMC
ARCHITECTURE FLOW →	road network conditions	road network conditions
Emergency Management Center		
City of Laredo Airport PD	√	√
City of Laredo/Webb County EOC	√	√
City of Laredo Emergency Communications Center	√	√
City/County Public Safety Dispatch	√	√
DPS Communications Service	√	√
DPS Regional Disaster Communications Committee	√	√
Private Ambulance Dispatch Center	√	√
Private Tow/Wrecker Dispatch	√	√
Private Vehicle Emergency Systems	√	√
State EOC	√	√
US Border Patrol Dispatch Center	√	√
US Customs Dispatch Center		√

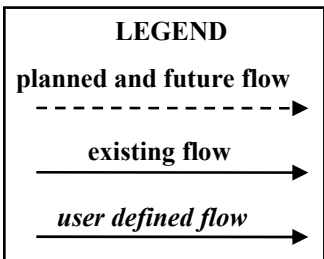
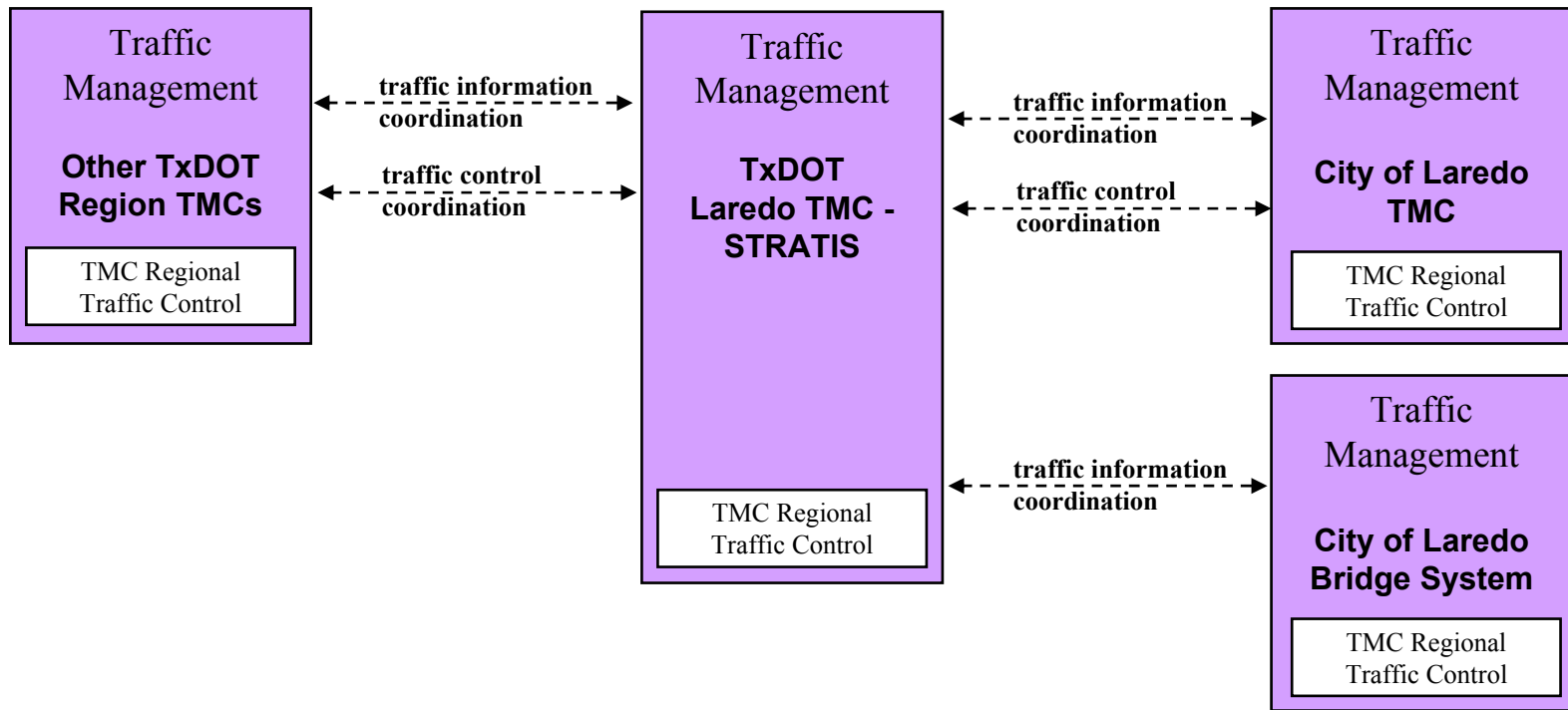
LEGEND

planned and future flow
 ----->

existing flow
 _____>

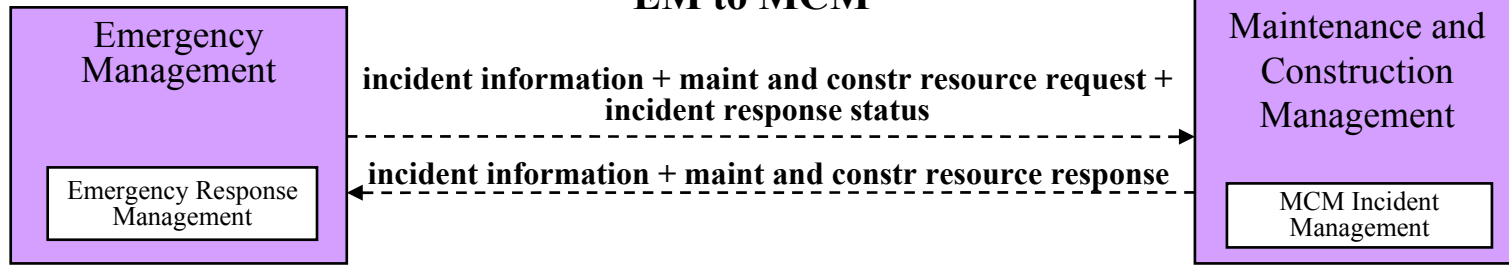
user defined flow
 _____>

ATMS7 – Regional Traffic Control



ATMS8 – Incident Management System

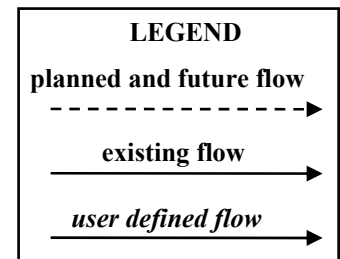
EM to MCM



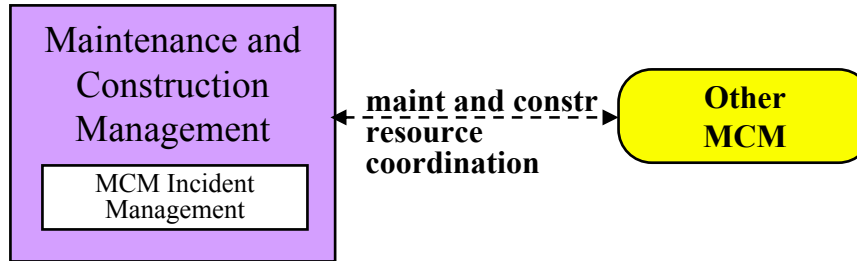
Emergency Management Center	MCM
City of Laredo Airport PD	
City of Laredo/Webb County EOC	1, 3, 4
City of Laredo Emergency Communications Center	1, 3, 4
City/County Public Safety Dispatch	3
DPS Communications Service	
DPS Regional Disaster Communications Committee	
Private Ambulance Dispatch Center	
Private Tow/Wrecker Dispatch	
Private Vehicle Emergency Systems	
State EOC	1
US Border Patrol Dispatch Center	
US Customs Dispatch Center	

Maintenance and Construction Management (MCM)
1. TxDOT Area Office
2. TxDOT County Maintenance Sections
3. County Road and Bridge
4. City of Laredo PWD

Requests for TxDOT County Maintenance Section go through the TxDOT Area Office.



ATMS8 – Incident Management System (MCM to Other MCM)



Maintenance and Construction Management Centers	TxDOT Area Office	TxDOT County Maint Sections	County Road and Bridge	City of Laredo PWD
TxDOT Area Office	---	√	√	√
TxDOT County Maintenance Sections	√	---	√	√
County Road and Bridge	√	√	---	√
City of Laredo PWD	√	√	√	---

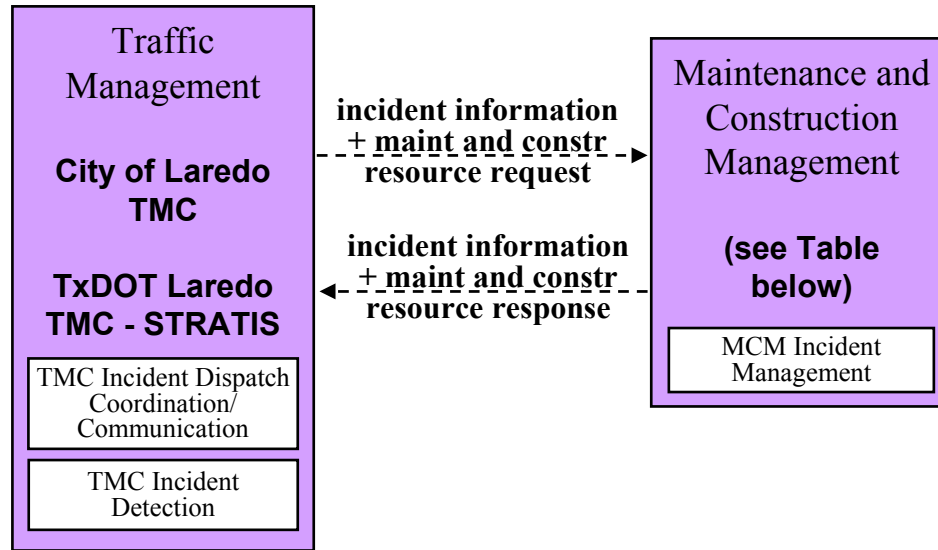
LEGEND

planned and future flow

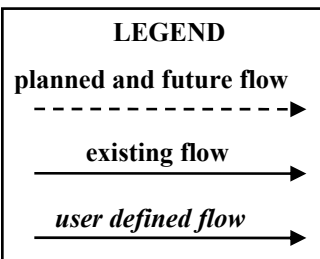
existing flow

user defined flow

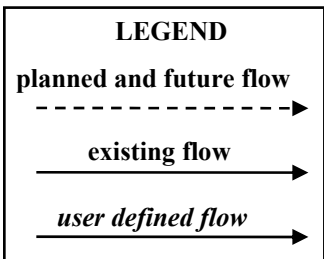
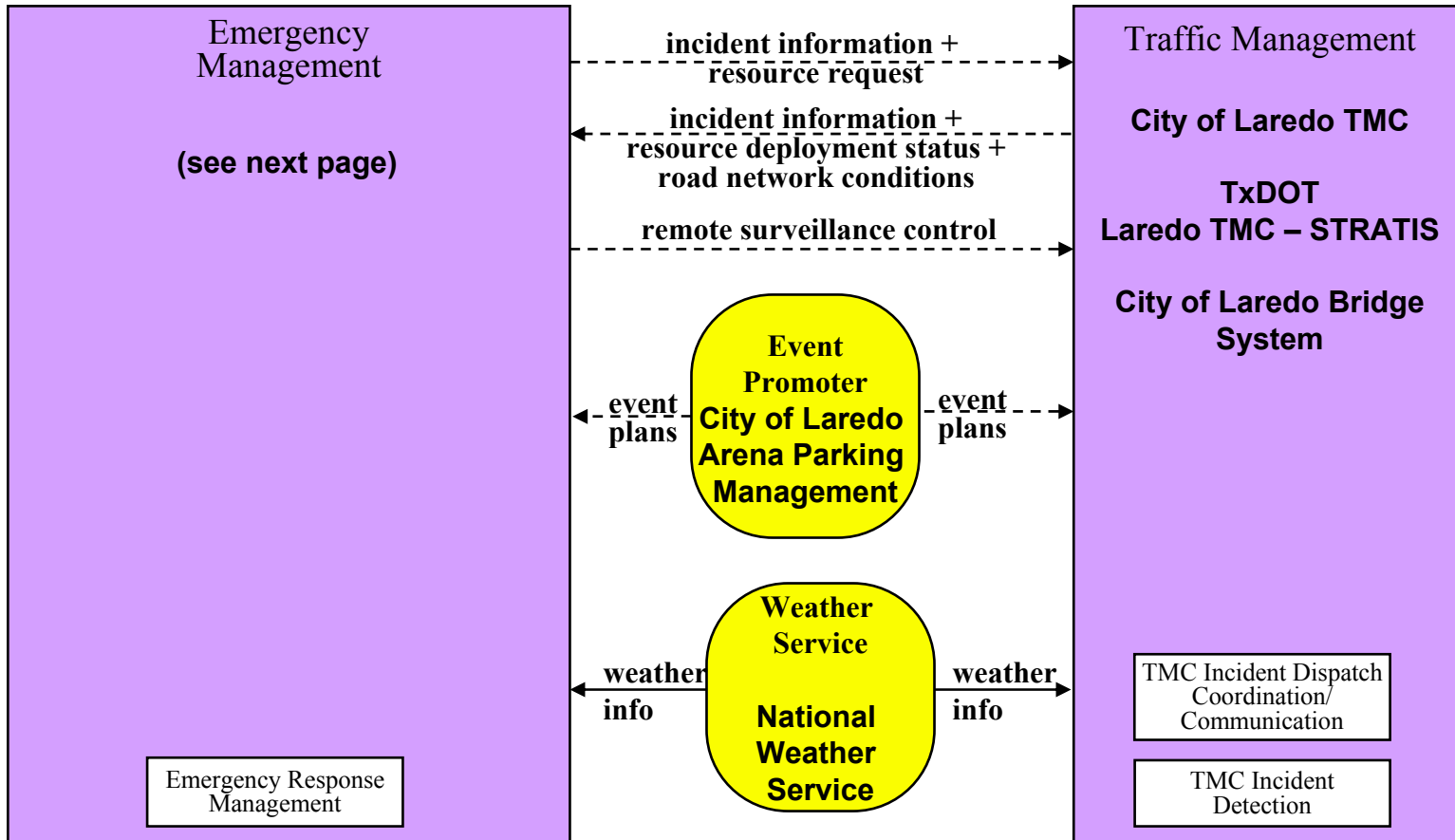
ATMS8 – Incident Management System (TM to MCM)



ARCHITECTURE FLOW →	City of Laredo TMC		TxDOT Laredo TMC	
	incident information	maint and constr resource request + resource response	incident information	maint and constr resource request + resource response
Maintenance and Construction Mgmt Center				
TxDOT Area Office		√	√	√
TxDOT County Maintenance Sections			√	√
County Road and Bridge		√		
City of Laredo PWD	√	√		



ATMS8 – Incident Management System (EM to TM – 1 of 5)



ATMS8 – Incident Management System (EM to TM – 2 of 5)

ARCHITECTURE FLOW →	City of Laredo TMC			TxDOT Laredo TMC		
	incl. info + road netw. conditions	resource request + resource depl. status	remote surveillance control	incl. info + road netw. conditions	resource request + resource depl. status	remote surveillance control
Emergency Management Center						
City of Laredo Airport PD	√			√		
City of Laredo/Webb County EOC	√		√	√		√
City of Laredo Emergency Communications Center	√	√	√	√	√	√
City/County Public Safety Dispatch	√			√		
DPS Communications Service	√			√		
DPS Regional Disaster Communications Committee	√			√		
Private Tow/Wrecker Dispatch	√			√		
Private Vehicle Emergency Systems				√		
State EOC	√	√			√	
US Border Patrol Dispatch Center				√		
US Customs Dispatch Center				√		

ATMS8 – Incident Management System (EM to TM – 3 of 5)

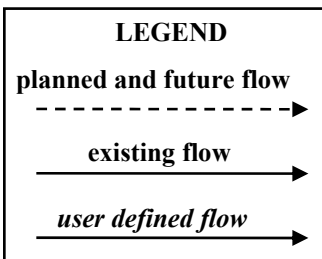
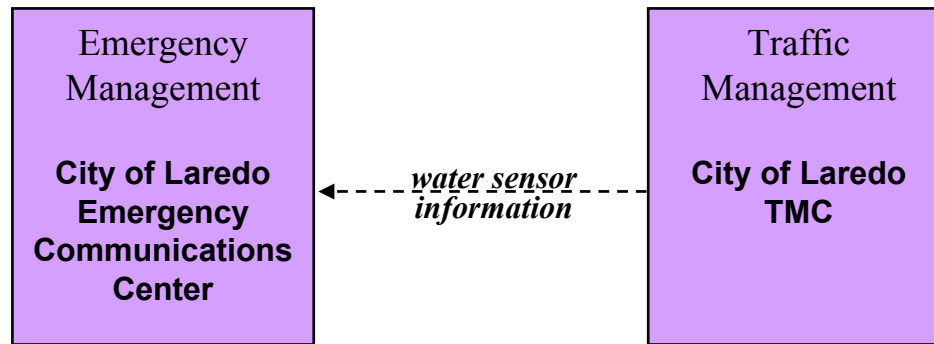
	City of Laredo Bridge System		
ARCHITECTURE FLOW →	incl. info + road netw. conditions	resource request+ resource depl. status	remote surveillance control
Emergency Management Center			
City of Laredo Airport PD			
City of Laredo/Webb County EOC			
City of Laredo Emergency Communications Center	√	√	√
City/County Public Safety Dispatch			
DPS Communications Service			
DPS Regional Disaster Communications Committee			
Private Tow/Wrecker Dispatch			
Private Vehicle Emergency Systems			
State EOC			
US Border Patrol Dispatch Center			
US Customs Dispatch Center			

City of Laredo Bridge System communicates with other EMs via City of Laredo Emergency Communications Center.

ATMS8 – Incident Management System (EM to TM – 4 of 5)

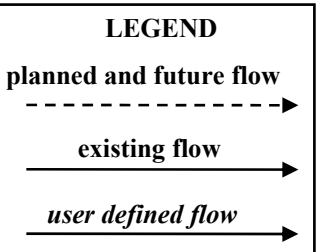
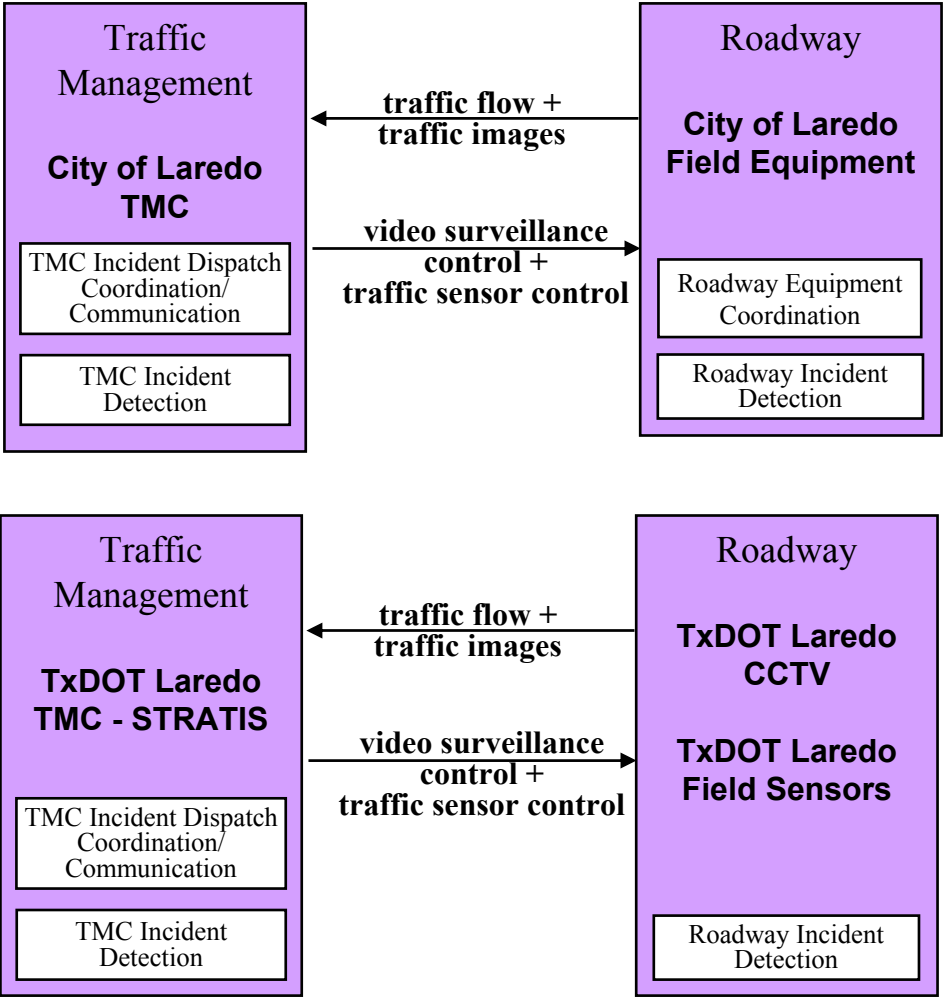
TERMINATOR →	City of Laredo Arena	National Weather Service
ARCHITECTURE FLOW →	event plans	weather info
Emergency Management Center		
City of Laredo Airport PD	√	√
City of Laredo Emergency Communications Center	√	√
City of Laredo/Webb County EOC	√	√
City/County Public Safety Dispatch	√	√
DPS Communications Service	√	√
DPS Regional Disaster Communications Committee		
Private Tow/Wrecker Dispatch		
Private Vehicle Emergency Systems		
State EOC		
US Border Patrol Dispatch Center		√
US Customs Dispatch Center		√
Traffic Management Center		
City of Laredo TMC	√	√
TxDOT Laredo TMC-STRATIS	√	√
City of Laredo Bridge System	√	√

ATMS8 – Incident Management System (EM to TM – 5 of 5)
City of Laredo TMC to City of Laredo Emergency Communications Center
Water Sensor Monitoring

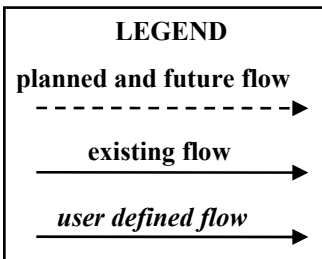
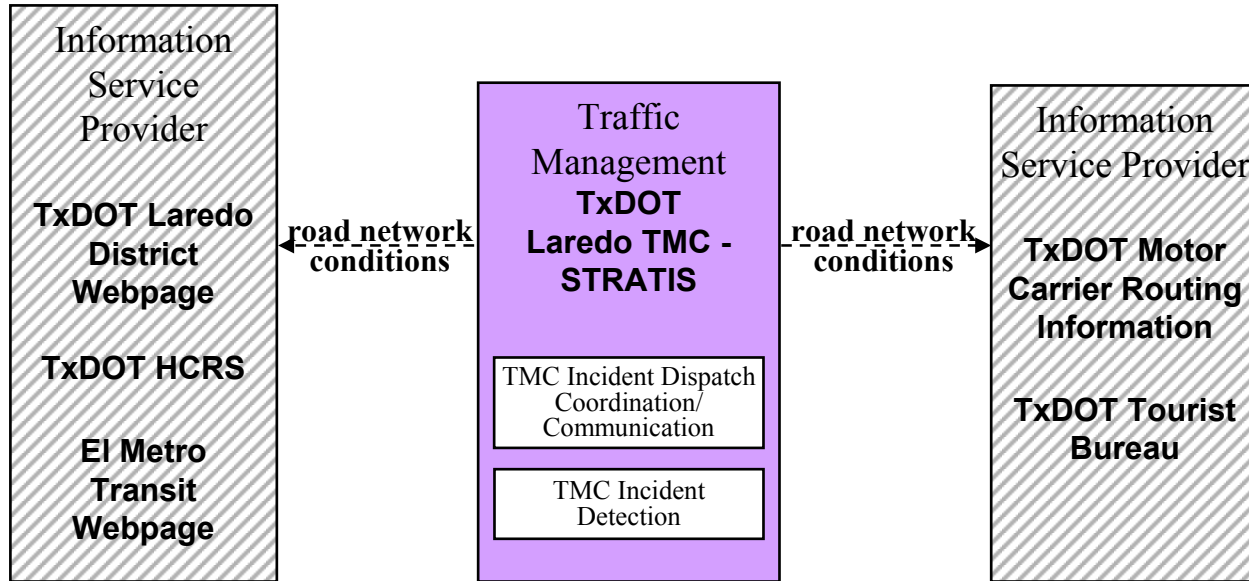


ATMS8 – Incident Management System

City of Laredo TMC/ TxDOT TMC Roadside Element Interface

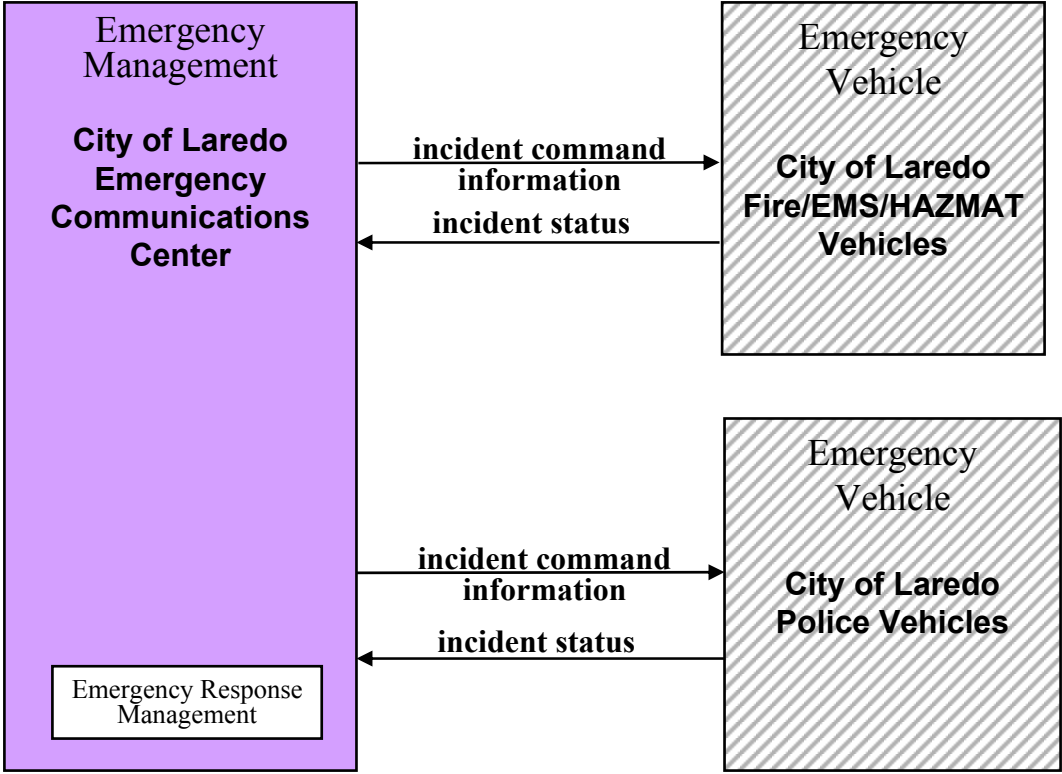


ATMS8 – Incident Management System (TM to ISP) TxDOT Laredo TMC-STRATIS



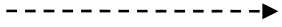
ATMS8 – Incident Management System

(EM to EV) City of Laredo Emergency Communications Center

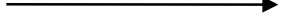


LEGEND

planned and future flow



existing flow

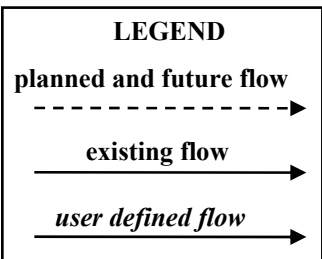
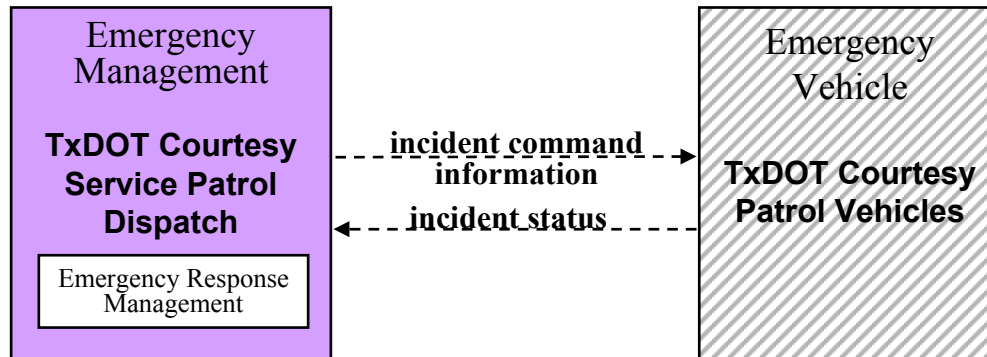
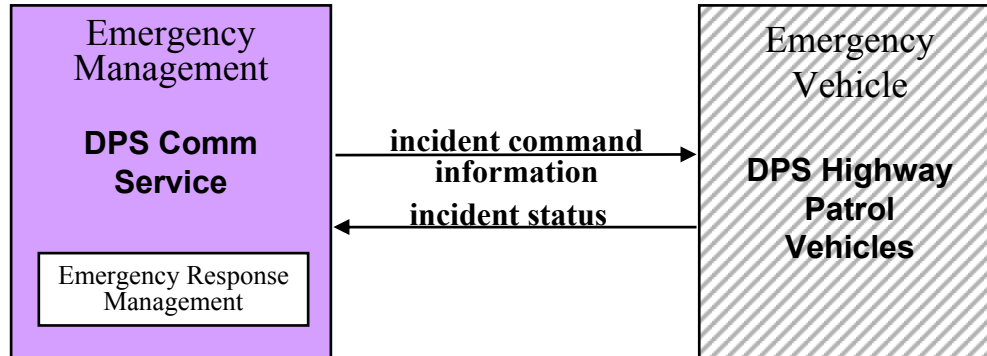


user defined flow

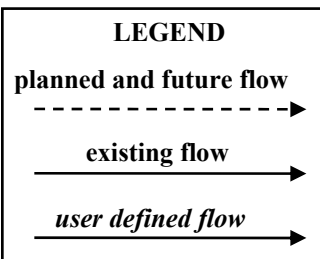
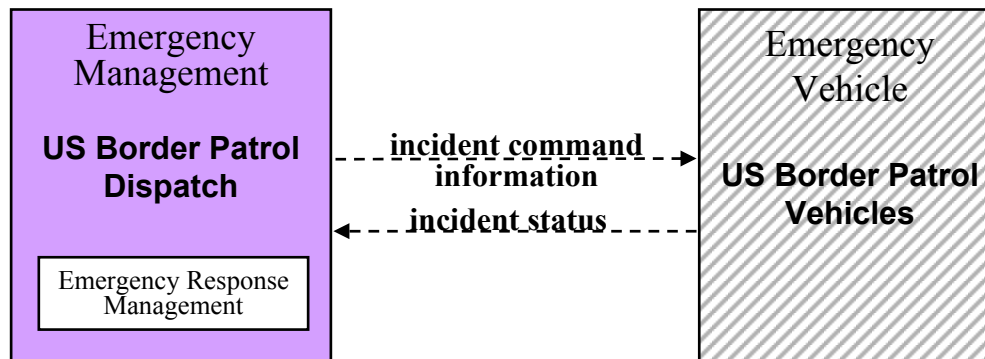
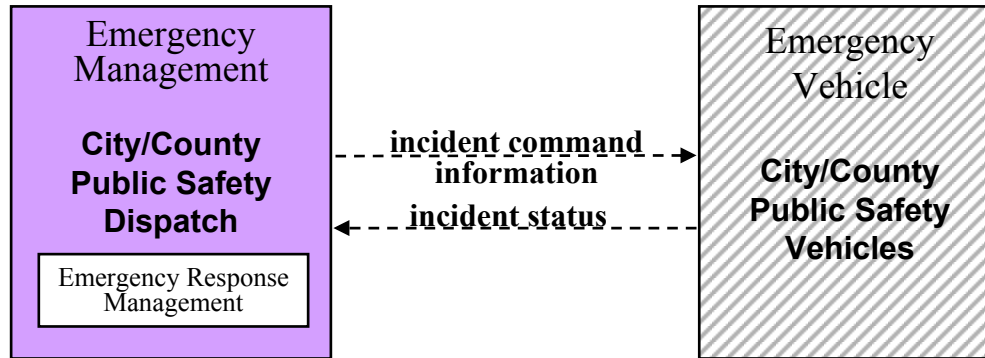


ATMS8 – Incident Management System

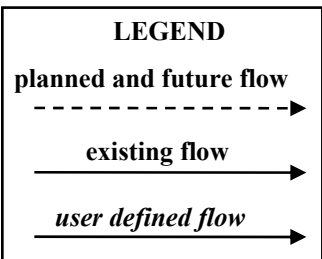
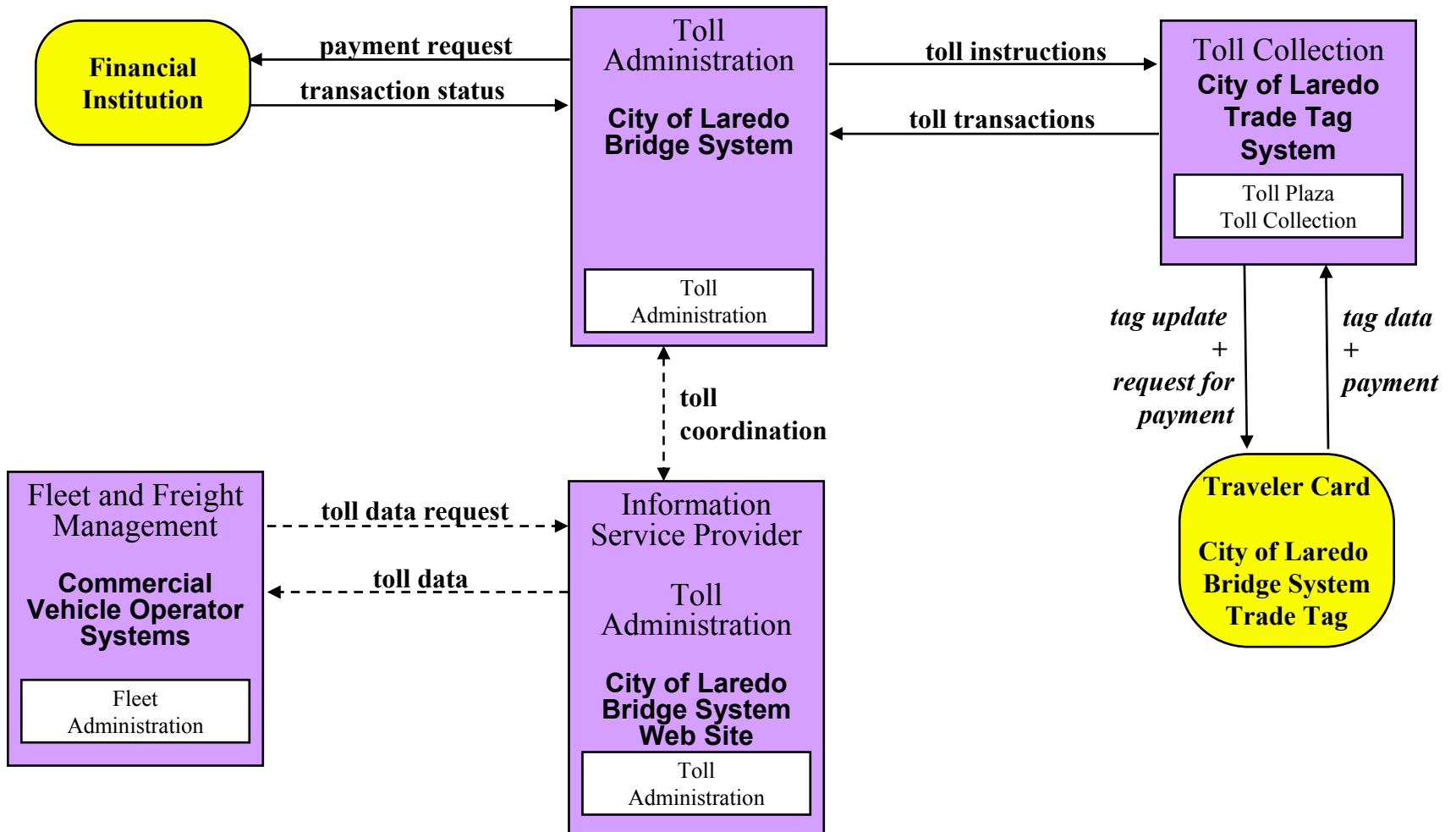
(EM to EV) DPS Comm Dispatch, TxDOT Courtesy Patrol



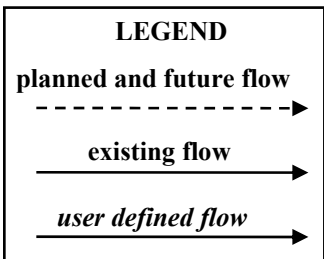
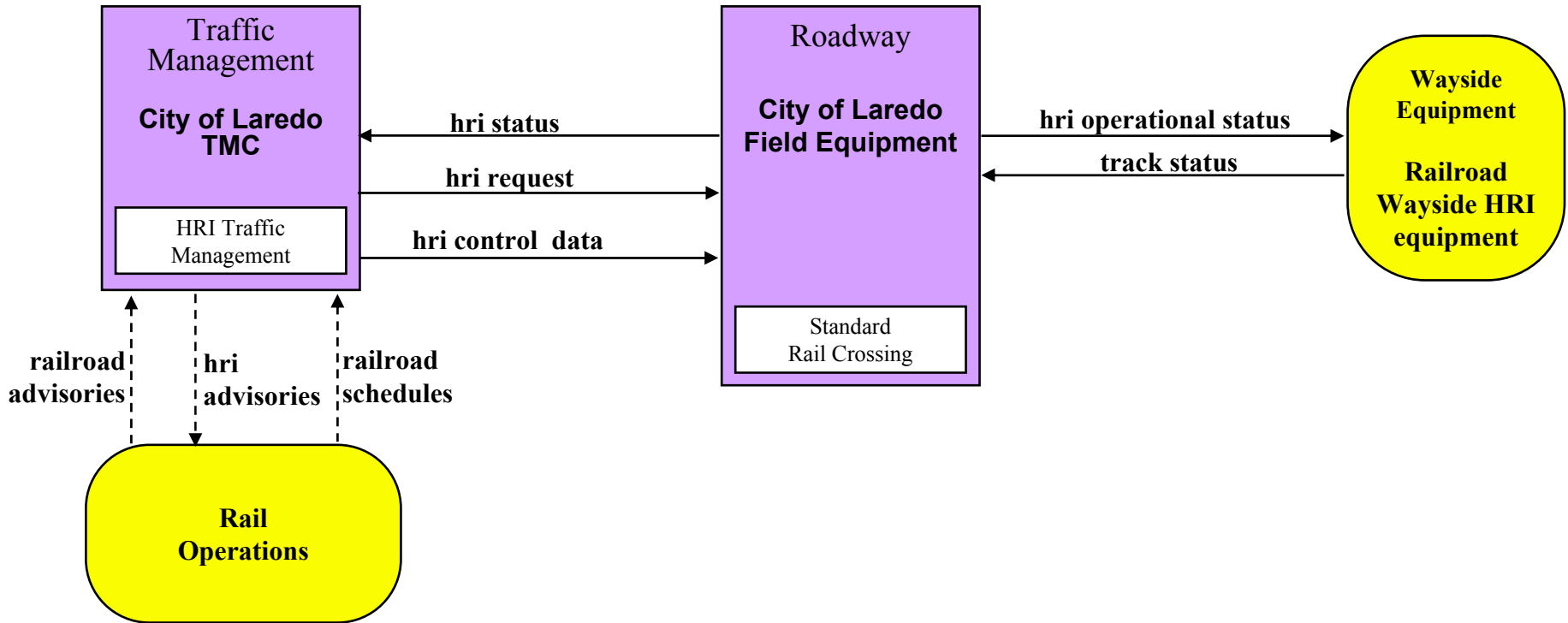
ATMS8 – Incident Management System (EM to EV) City/County Public Safety, US Border Patrol



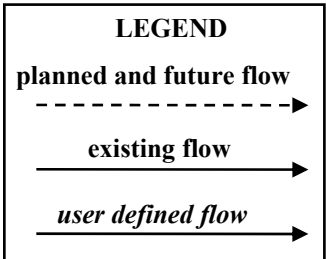
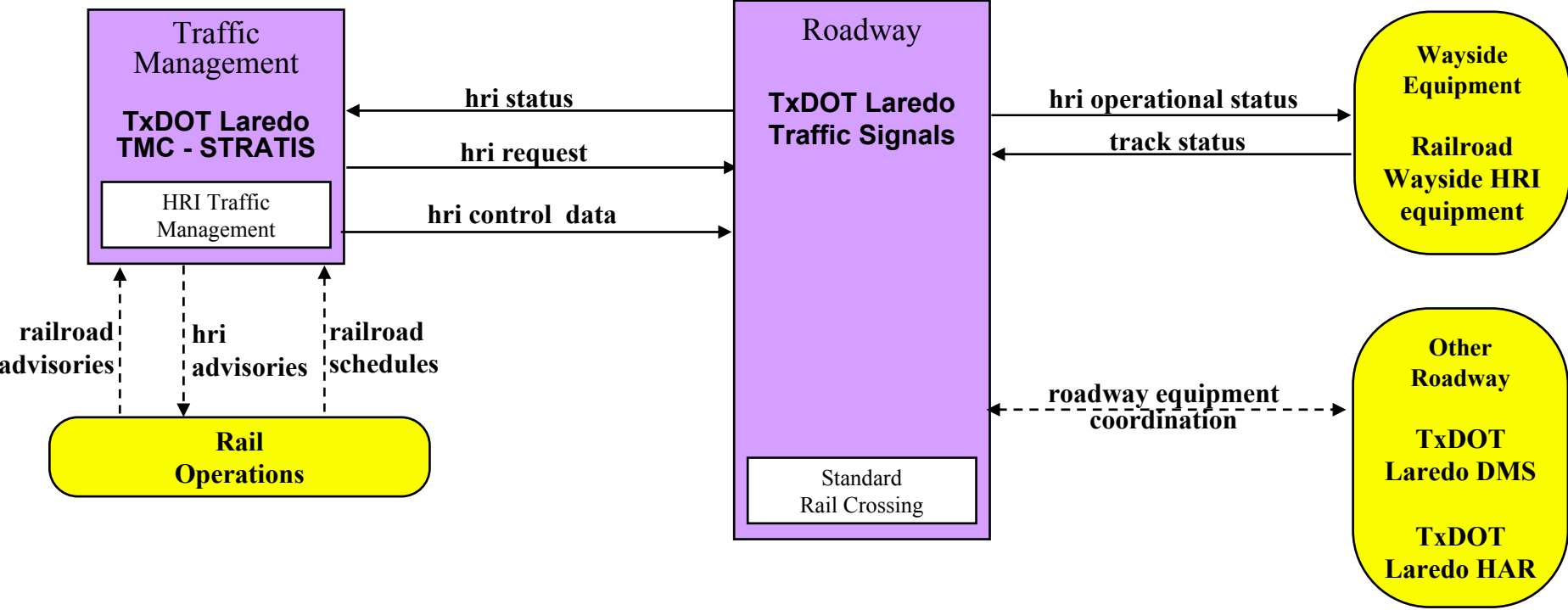
ATMS10 - Electronic Toll Collection



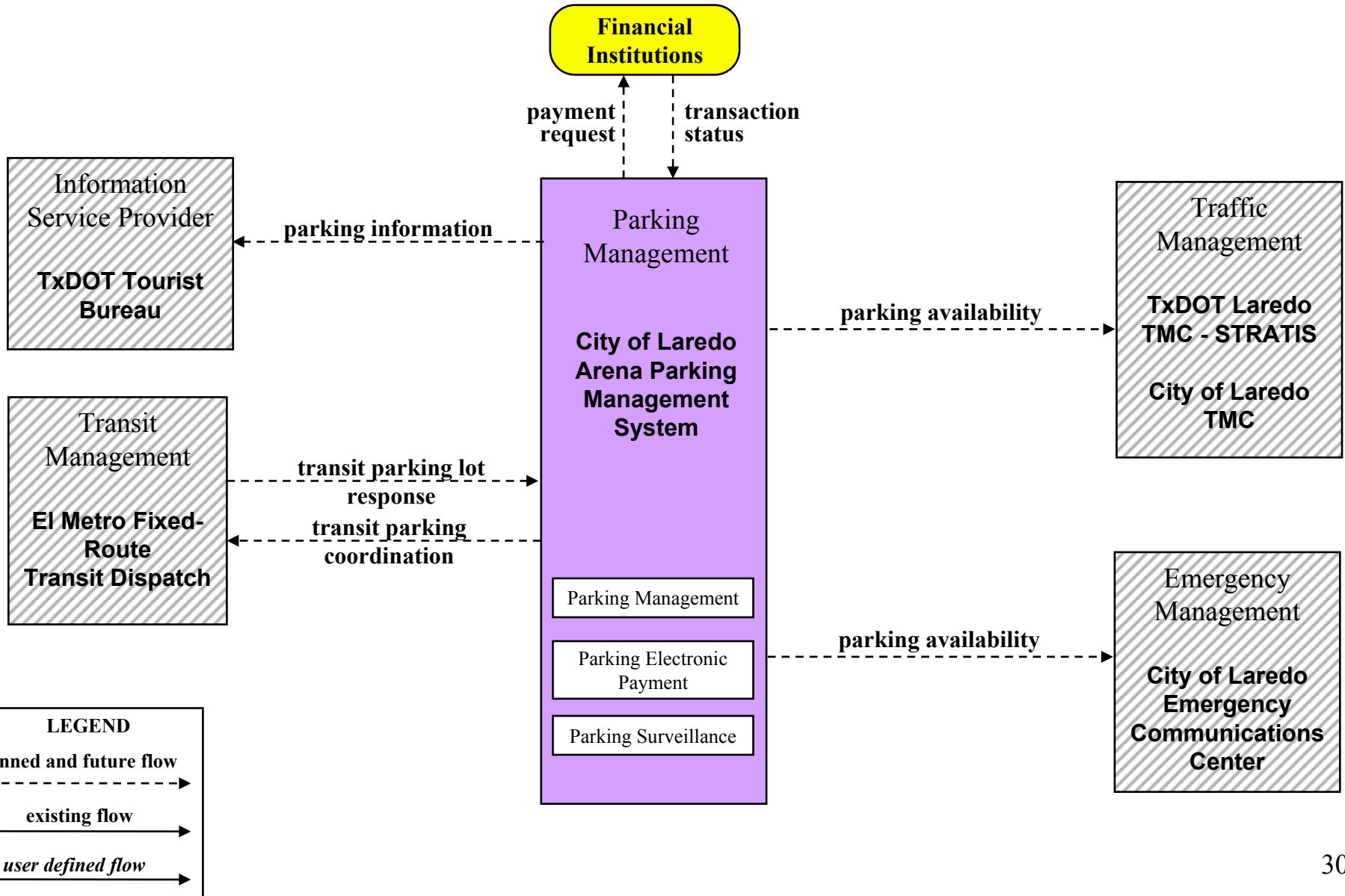
ATMS13/ATMS15 - Standard Railroad Grade Crossing / Railroad Operations Coord City of Laredo



ATMS13/ATMS 15 - Standard Railroad Grade Crossing/ Railroad Operations Coord TxDOT Laredo TMC- STRATIS



ATMS16/17 – Parking Facility Management/ Regional Parking Mgmt City of Laredo Arena Parking System



ATMS16/17 – Parking Facility Management/ Regional Parking Mgmt

