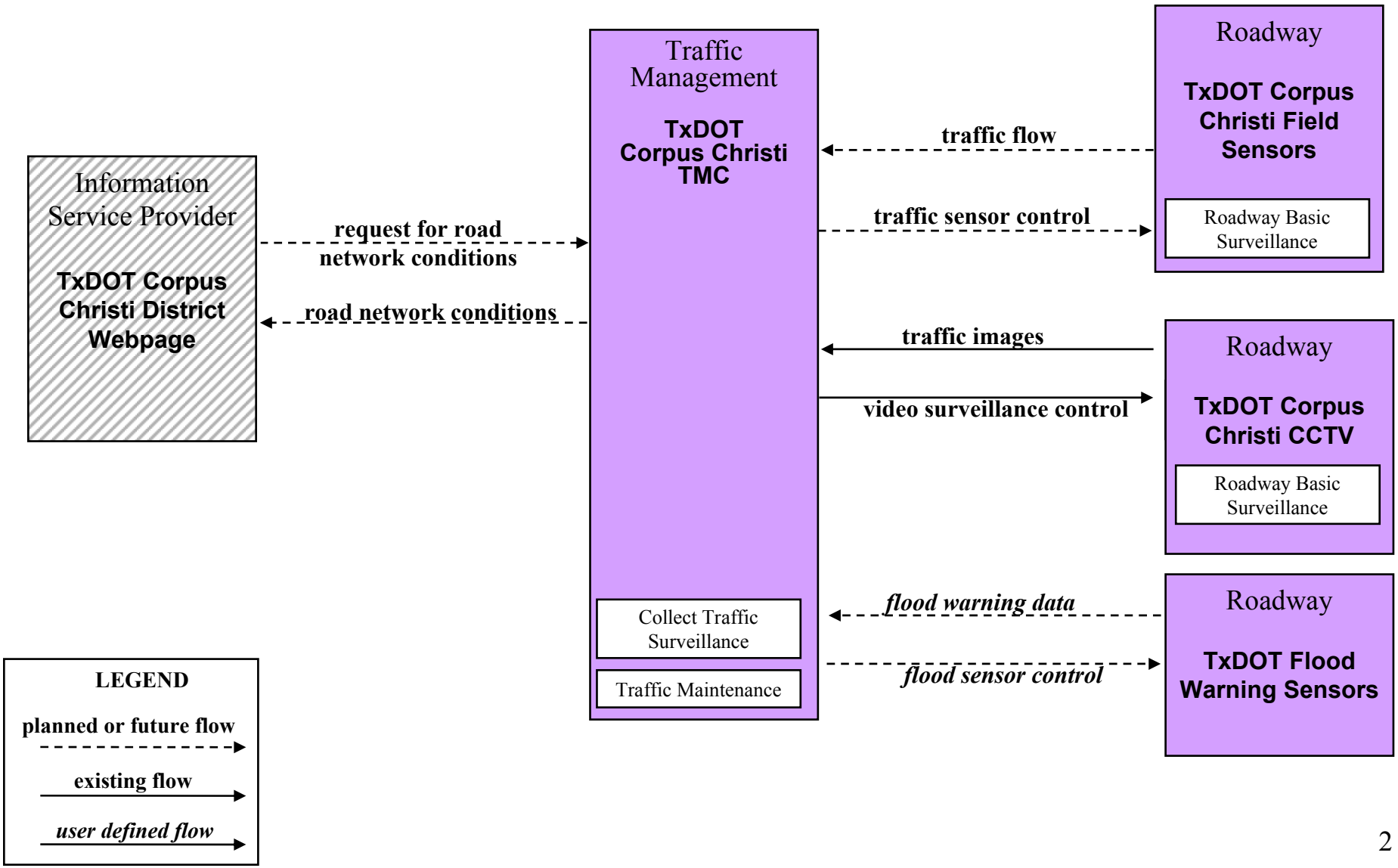
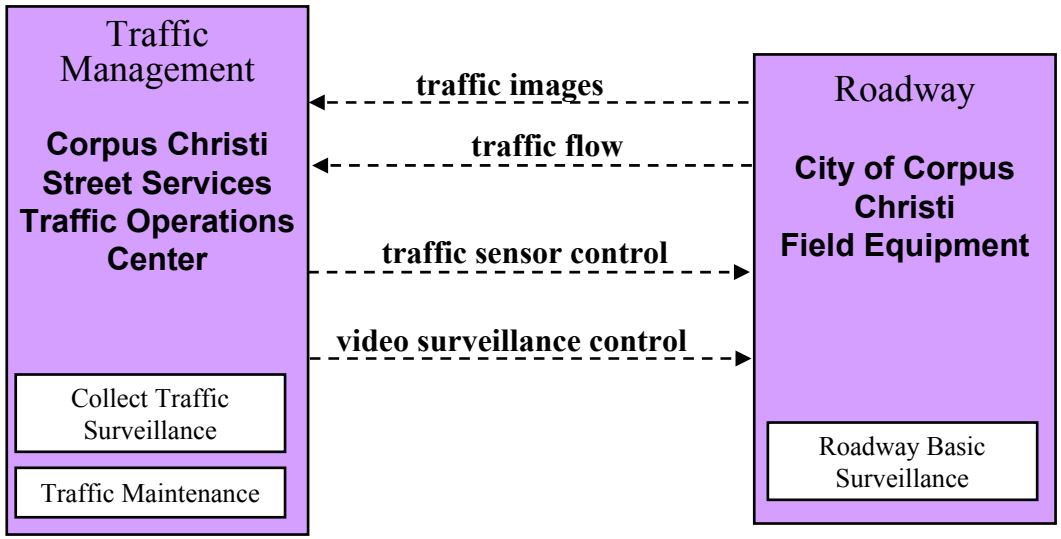
Corpus Christi, TX Regional ITS Architecture Customized Market Package Diagrams

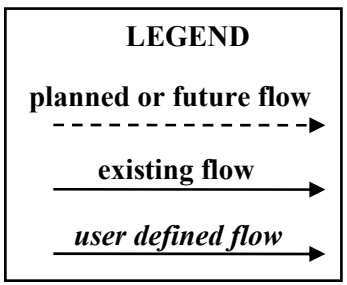
Advanced Traffic Management Systems (ATMS)

ATMS1 - Network Surveillance
TxDOT Corpus Christi TMC

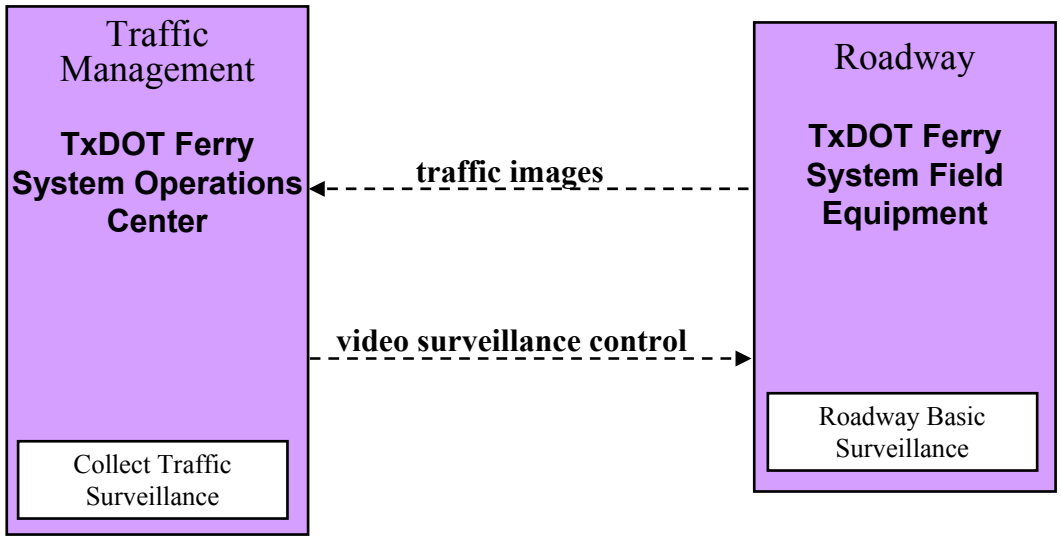


ATMS1 - Network Surveillance
City of Corpus Christi Street Services TOC





ATMS1 - Network Surveillance
TxDOT Ferry System Operations Center



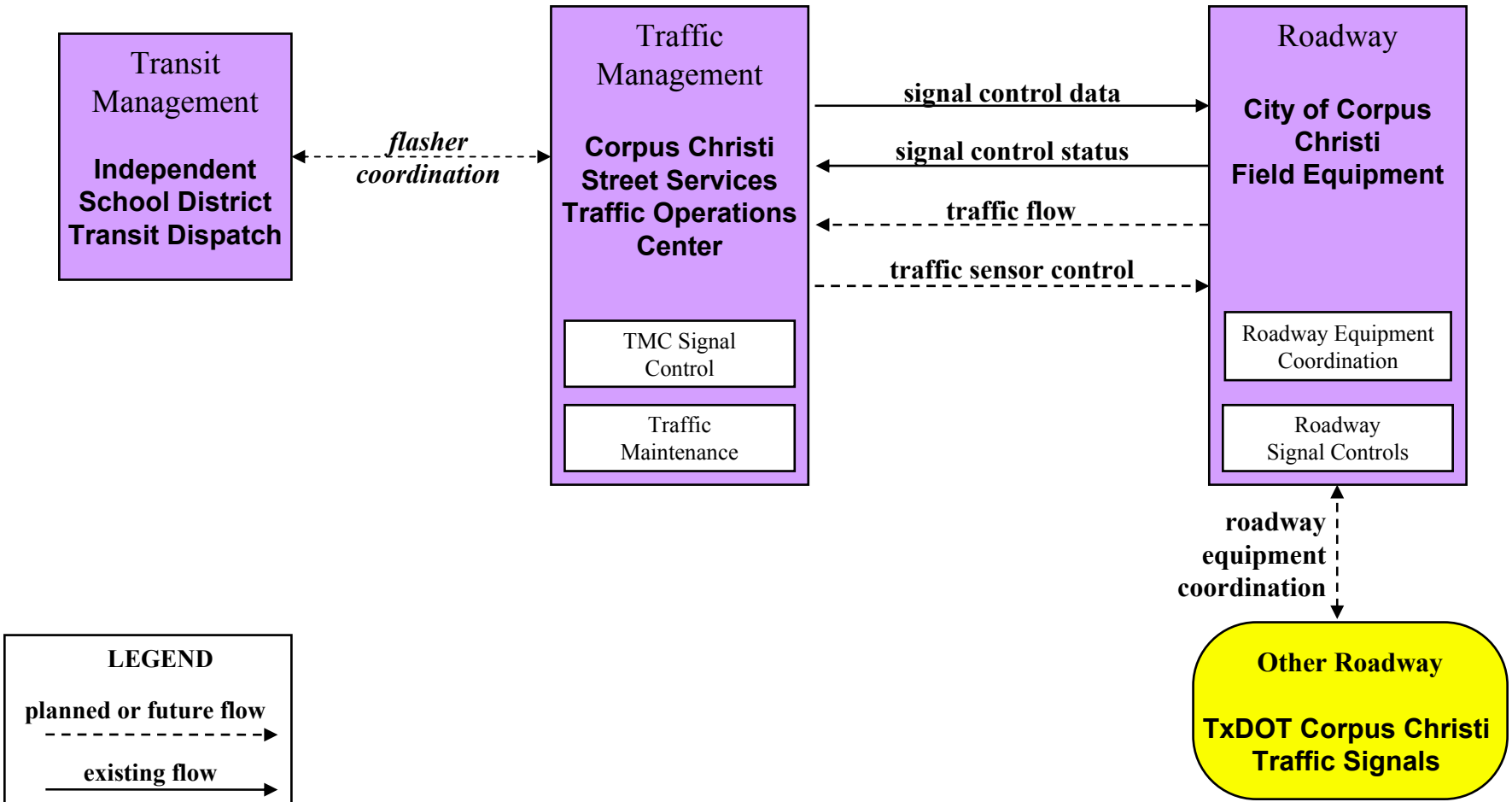
LEGEND

planned or future flow

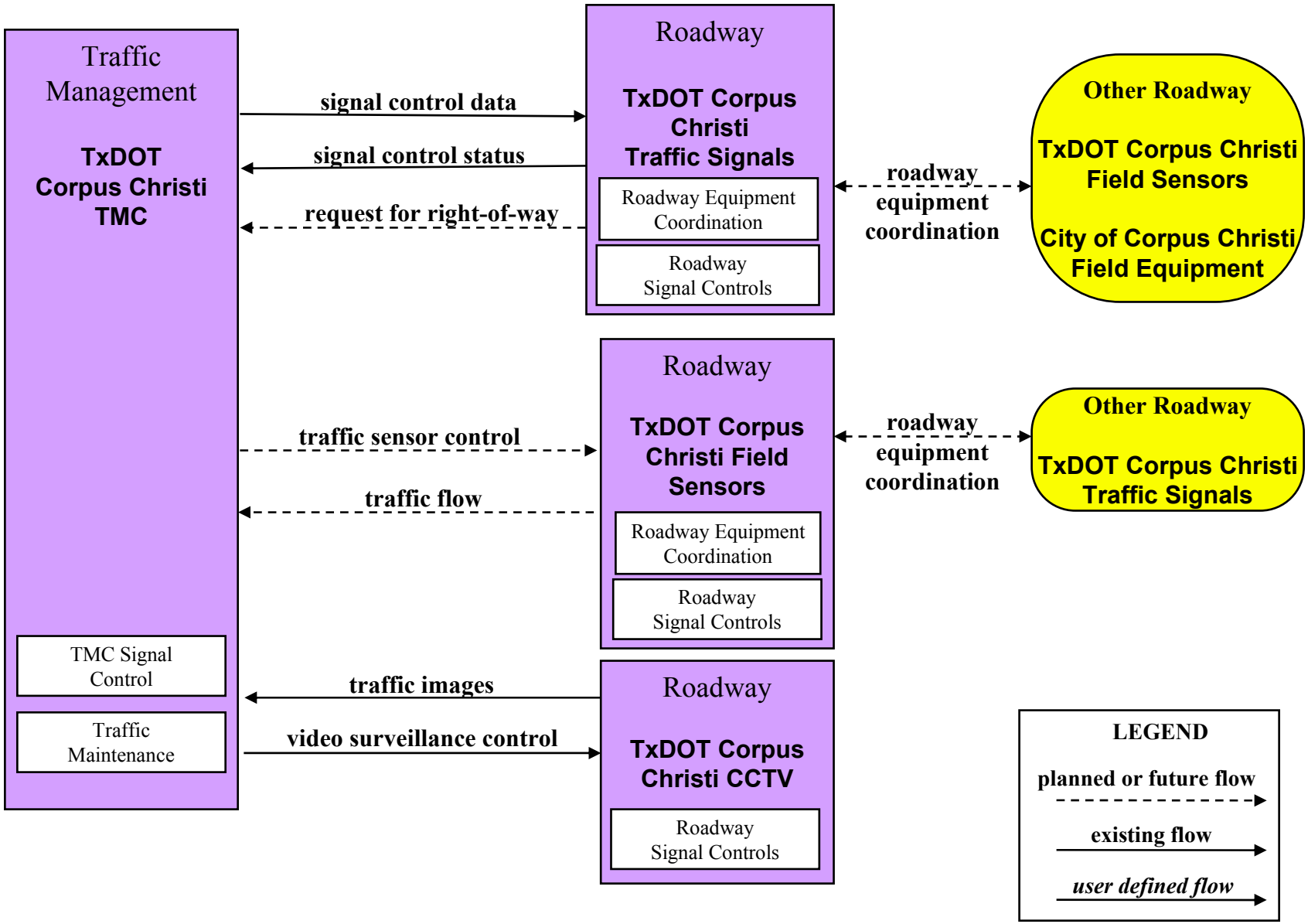
existing flow

user defined flow

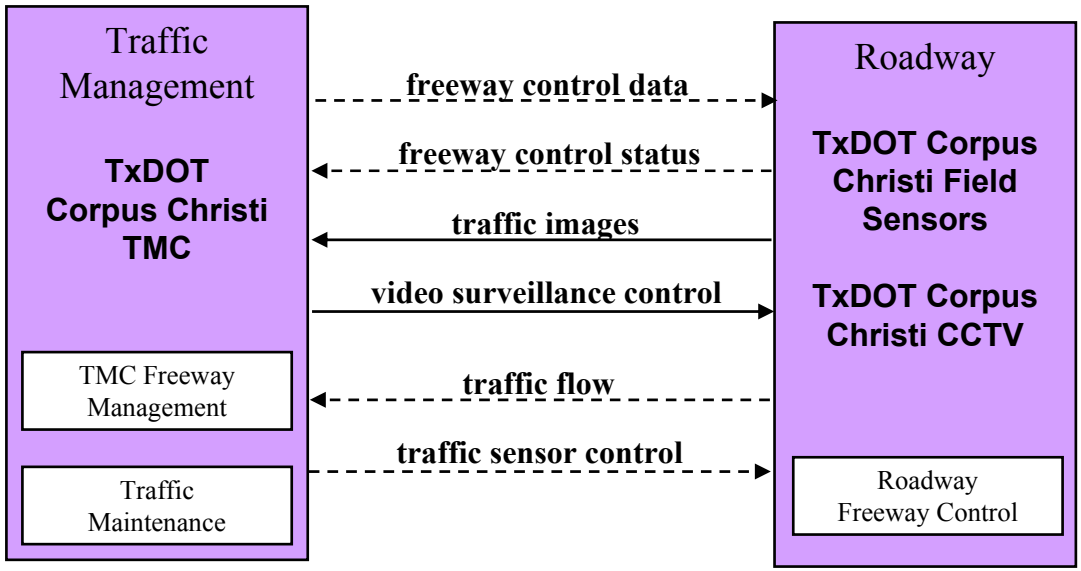
ATMS3 – Surface Street Control
City of Corpus Christi Street Services TOC



ATMS3 – Surface Street Control
TxDOT Corpus Christi TMC



ATMS4 – Freeway Control
TxDOT Corpus Christi TMC



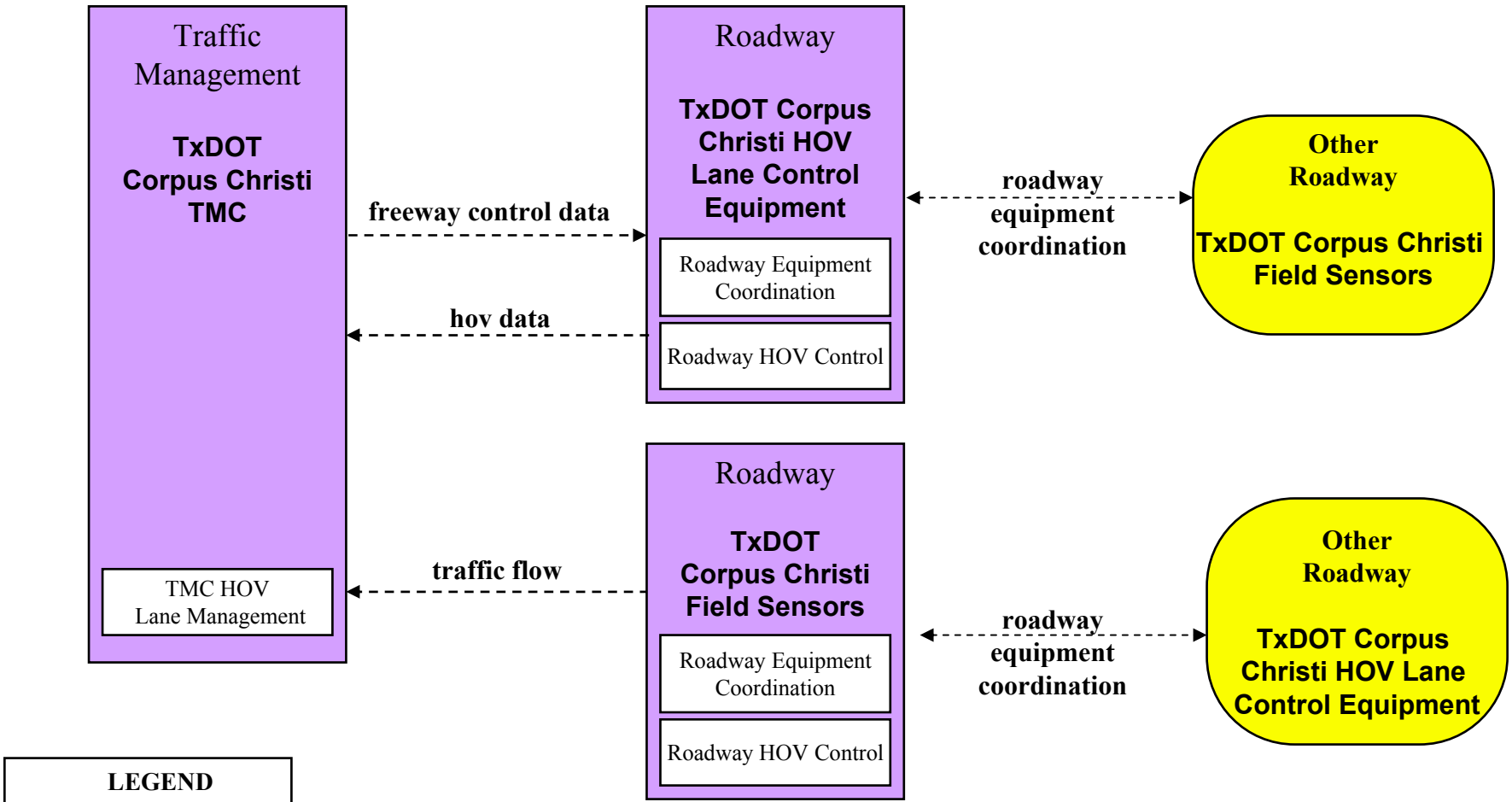
LEGEND

planned or future flow

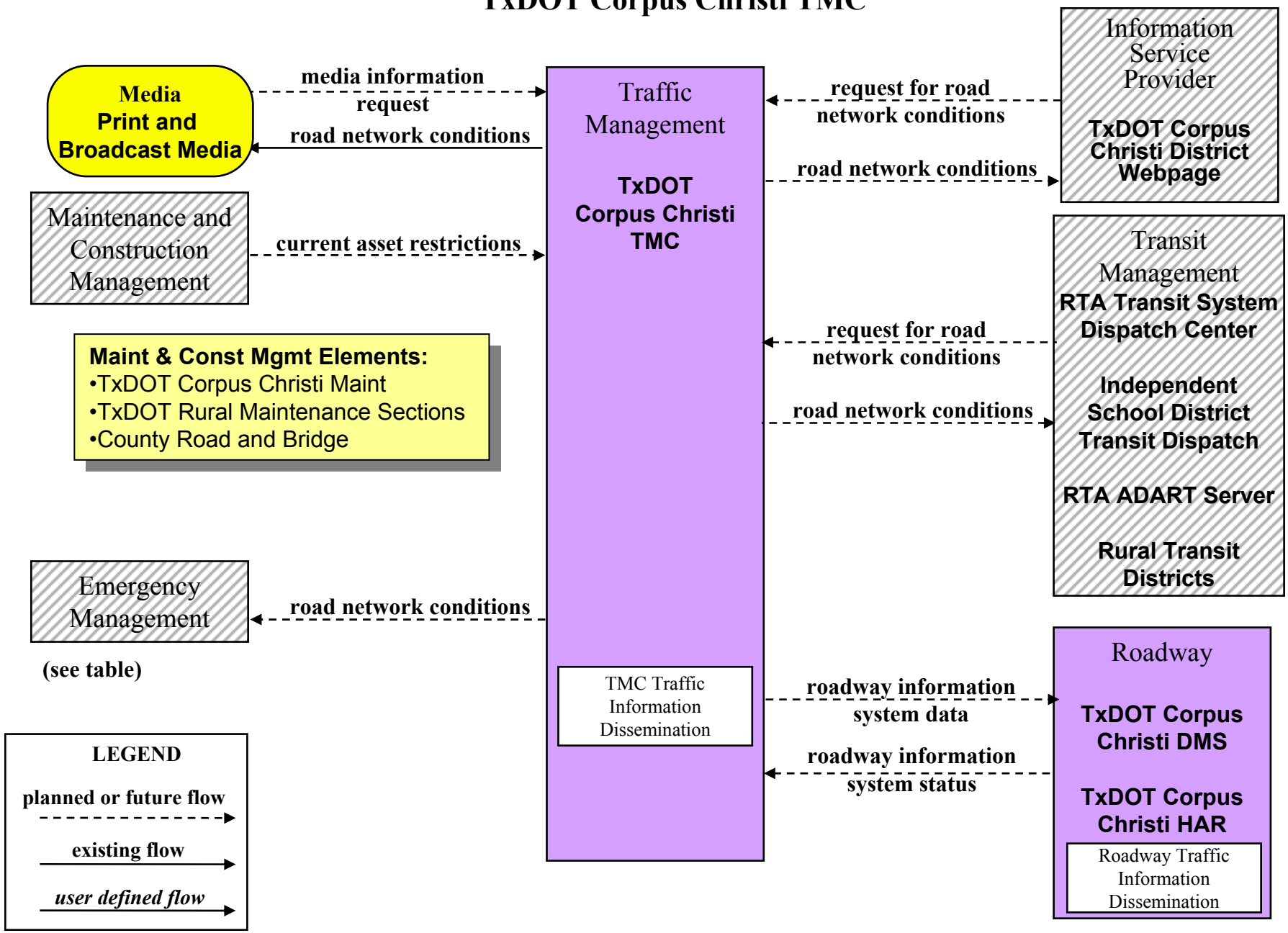
existing flow

user defined flow

ATMS5 - HOV Lane Management
TxDOT Corpus Christi TMC



ATMS6 – Traffic Information Dissemination
TxDOT Corpus Christi TMC



ATMS6 – Traffic Information Dissemination
TxDOT Corpus Christi TMC (TM to EM)

ARCHITECTURE FLOW →	road network conditions
Emergency Management Center	
City/County EOC	√
City/County Public Safety Dispatch	√
Coast Guard Marine Safety Office	
Corpus Christi Emergency Operations Center	√
Corpus Christi Police Department MetroComm Dispatch	√
DPS Communications Service	√
Naval Air Station Security Office	√
Naval Station Ingleside Operations Center	√
POCCA Harbor Masters Office	√
Private Ambulance Dispatch Center	
Private Tow/Wrecker Dispatch	
Private Vehicle Emergency Systems	
Refinery Terminal Fire Company Dispatch	√
State EOC	√
TxDOT Corpus Christi Emergency Control Center	√

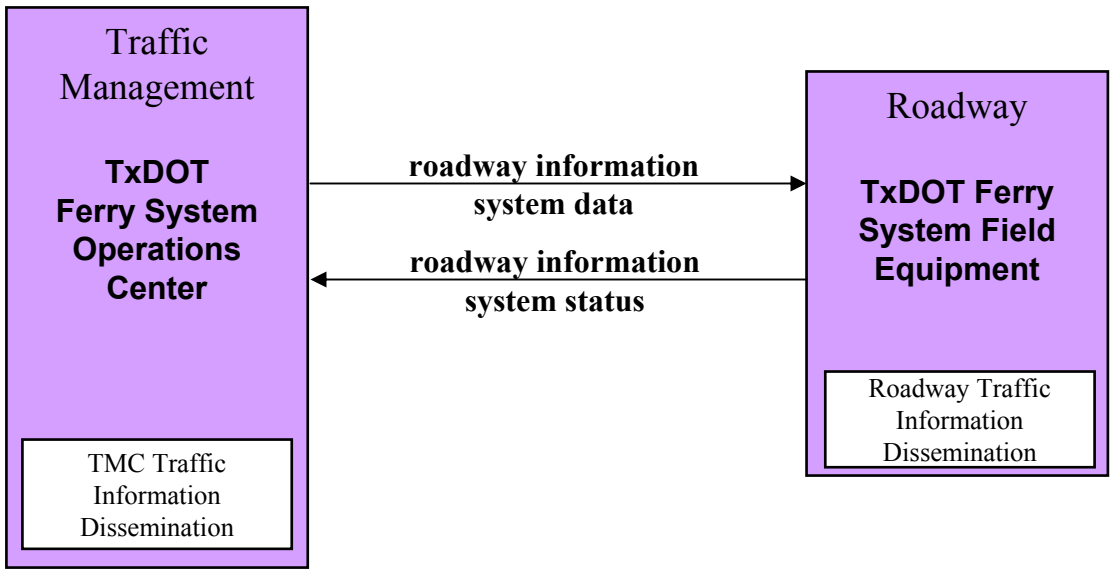
LEGEND

planned or future flow - - - - - - - - - - - - →

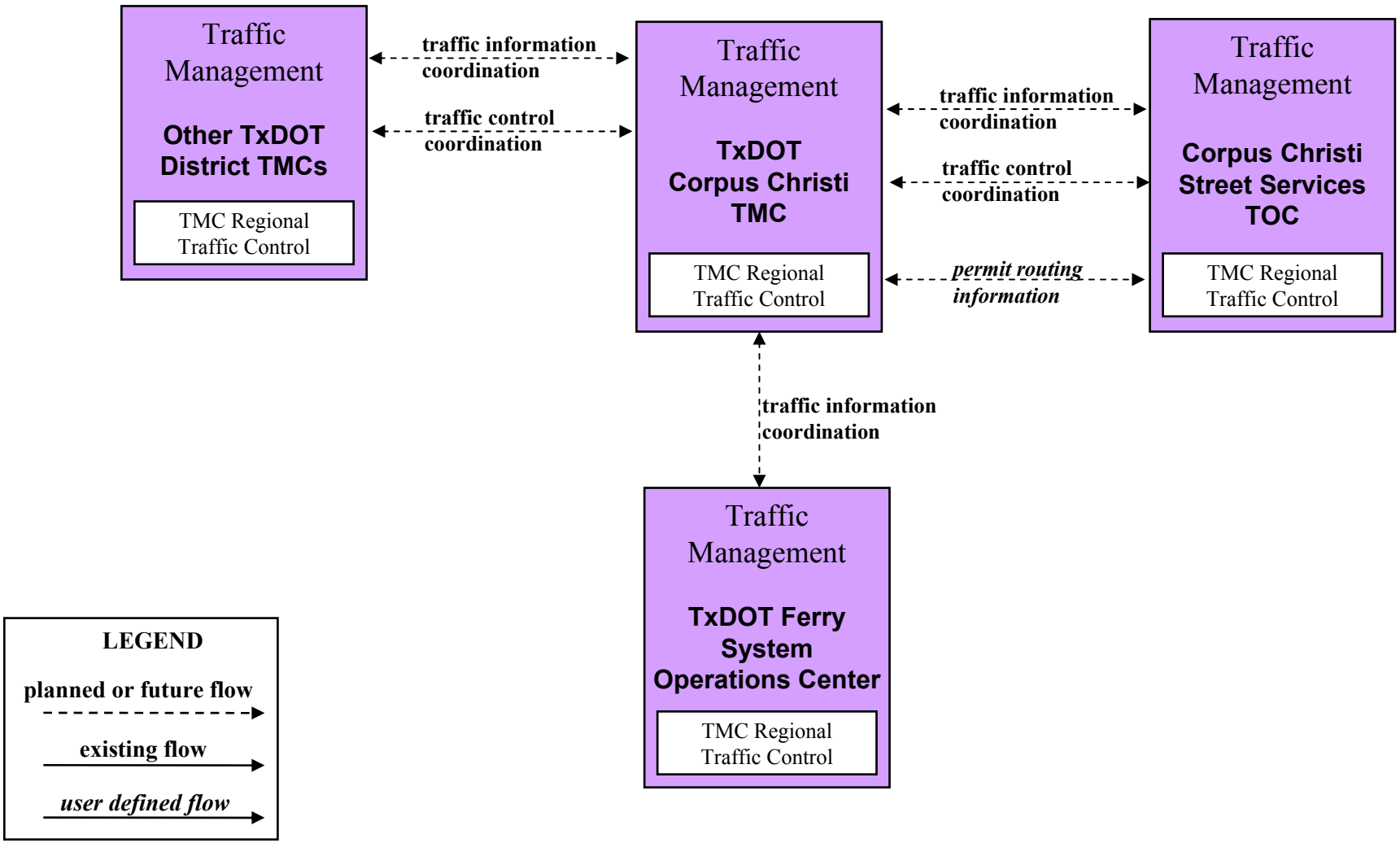
existing flow ——————→

user defined flow ——————→

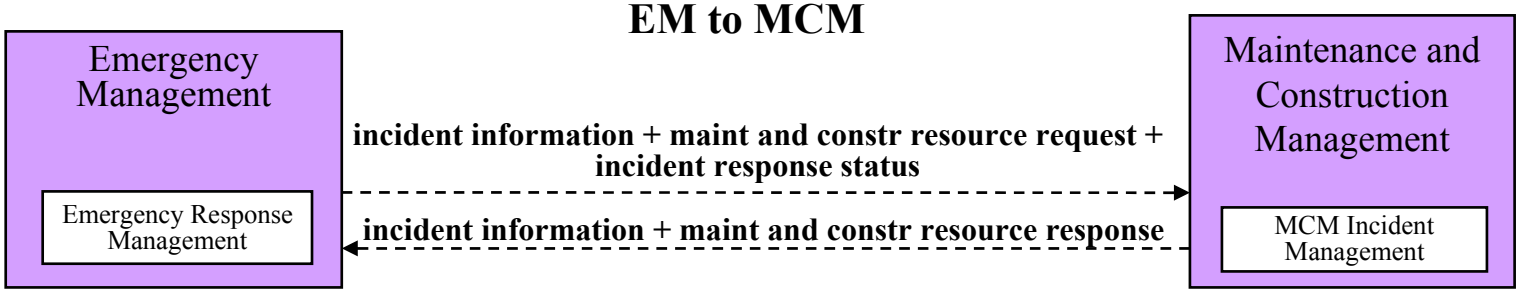
ATMS6 – Traffic Information Dissemination
TxDOT Ferry System Operations Center



ATMS7 – Regional Traffic Coordination/ Control



ATMS8 – Incident Management System
EM to MCM



Emergency Management Center	MCM
City/County EOC	2,5
City/County Public Safety Dispatch	2,5
Coast Guard Marine Safety Office	
Corpus Christi Emergency Operations Center	1
Corpus Christi Police Department MetroComm Dispatch	1,4
DPS Communications Service	2,3,4,5
Naval Air Station Security Office	
Naval Station Ingleside Operations Center	
POCCA Harbor Masters Office	
Private Ambulance Dispatch Center	
Private Tow/Wrecker Dispatch	
Private Vehicle Emergency Systems	
Refinery Terminal Fire Company Dispatch	
State EOC	
TxDOT Corpus Christi Emergency Control Center	

Maintenance and Construction Management (MCM)
1. Corpus Christi Street Services Maint & Ops
2. County Road and Bridge
3. Other TxDOT District Maintenance Sections
4. TxDOT Corpus Christi Maintenance Section
5. TxDOT Rural Maint Sections

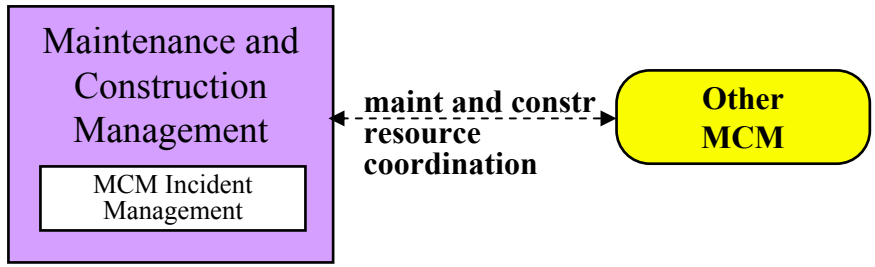
LEGEND

planned or future flow

existing flow

user defined flow

ATMS8 – Incident Management System (MCMS to Other MCM)



Maintenance and Construction Management Centers	Corpus Christi Street Services Maint and Ops	County Road and Bridge	Other TxDOT District Maint Sections	TxDOT Rural Maint Sections	TxDOT Corpus Christi Maint Sections
Corpus Christi Street Services Maint and Ops	-				√
County Road and Bridge		-	√	√	
Other TxDOT District Maint Sections		√	-	√	
TxDOT Rural Maintenance Sections		√	√	-	√
TxDOT Corpus Christi Maint Section	√			√	-

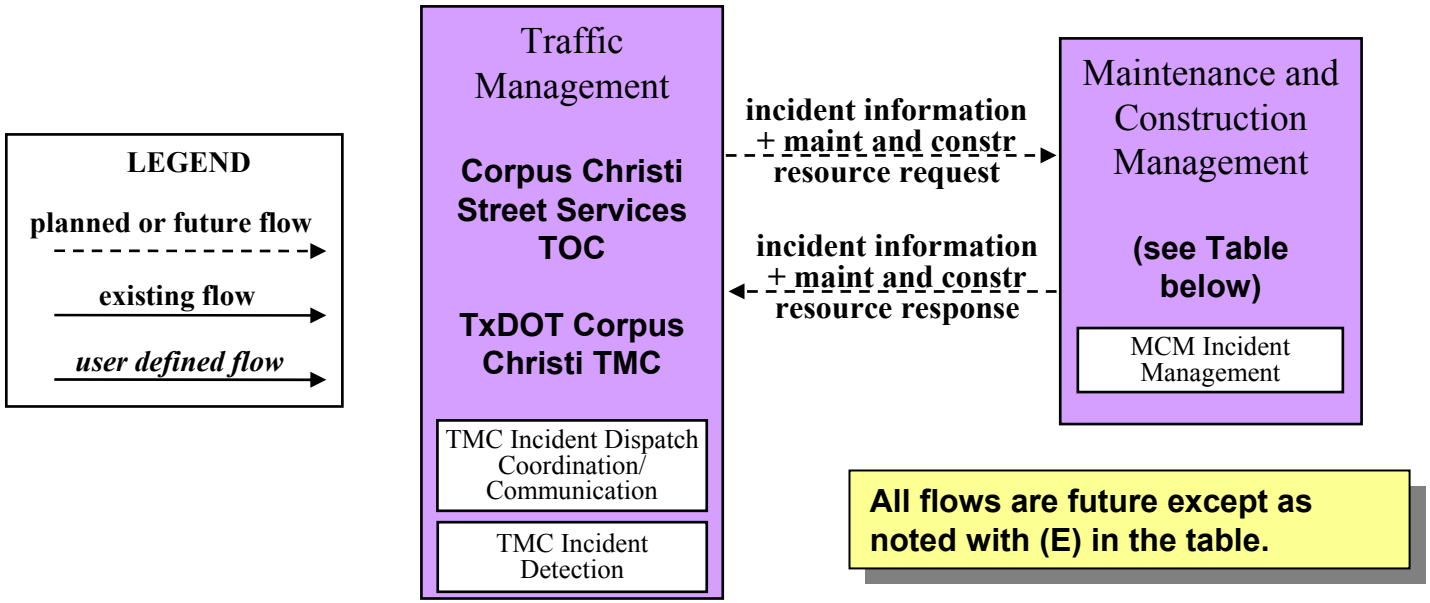
LEGEND

planned or future flow

existing flow

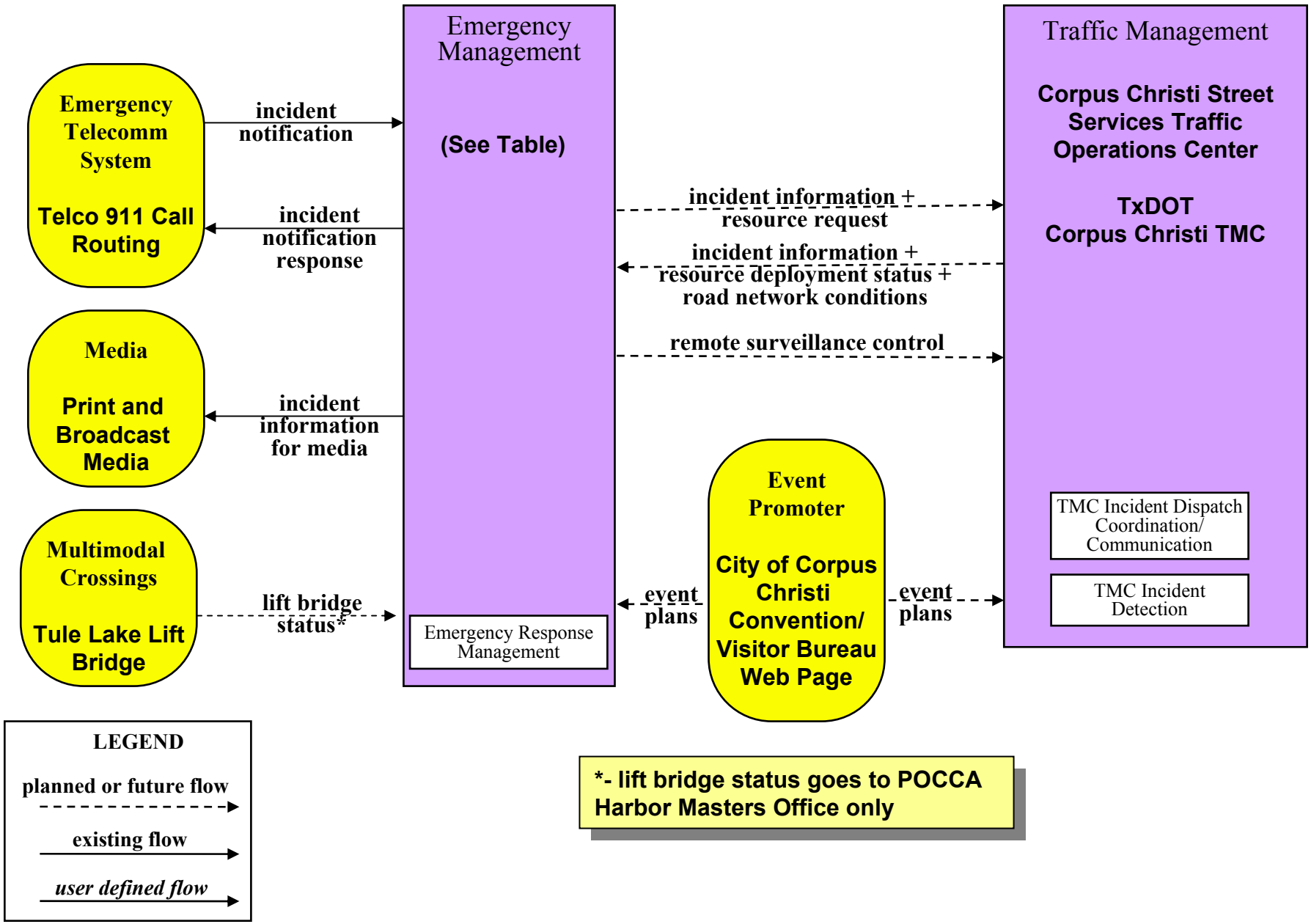
user defined flow

ATMS8 – Incident Management System (TM to MCM)



	Corpus Christi Street Services TOC		TxDOT Corpus Christi TMC	
ARCHITECTURE FLOW →	**incident information**	**maint and constr resource request + resource response**	**incident information**	**maint and constr resource request + resource response**
Maintenance and Construction Mgmt Center				
Corpus Christi Street Services Maint and Ops	√ (E)	√(E)		
County Road and Bridge			√	
Other TxDOT District Maint Sections				
TxDOT Rural Maintenance Sections			√	√
TxDOT Corpus Christi Maint Section			√	√

ATMS8 – Incident Management System
(EM to TM – 1 of 3)



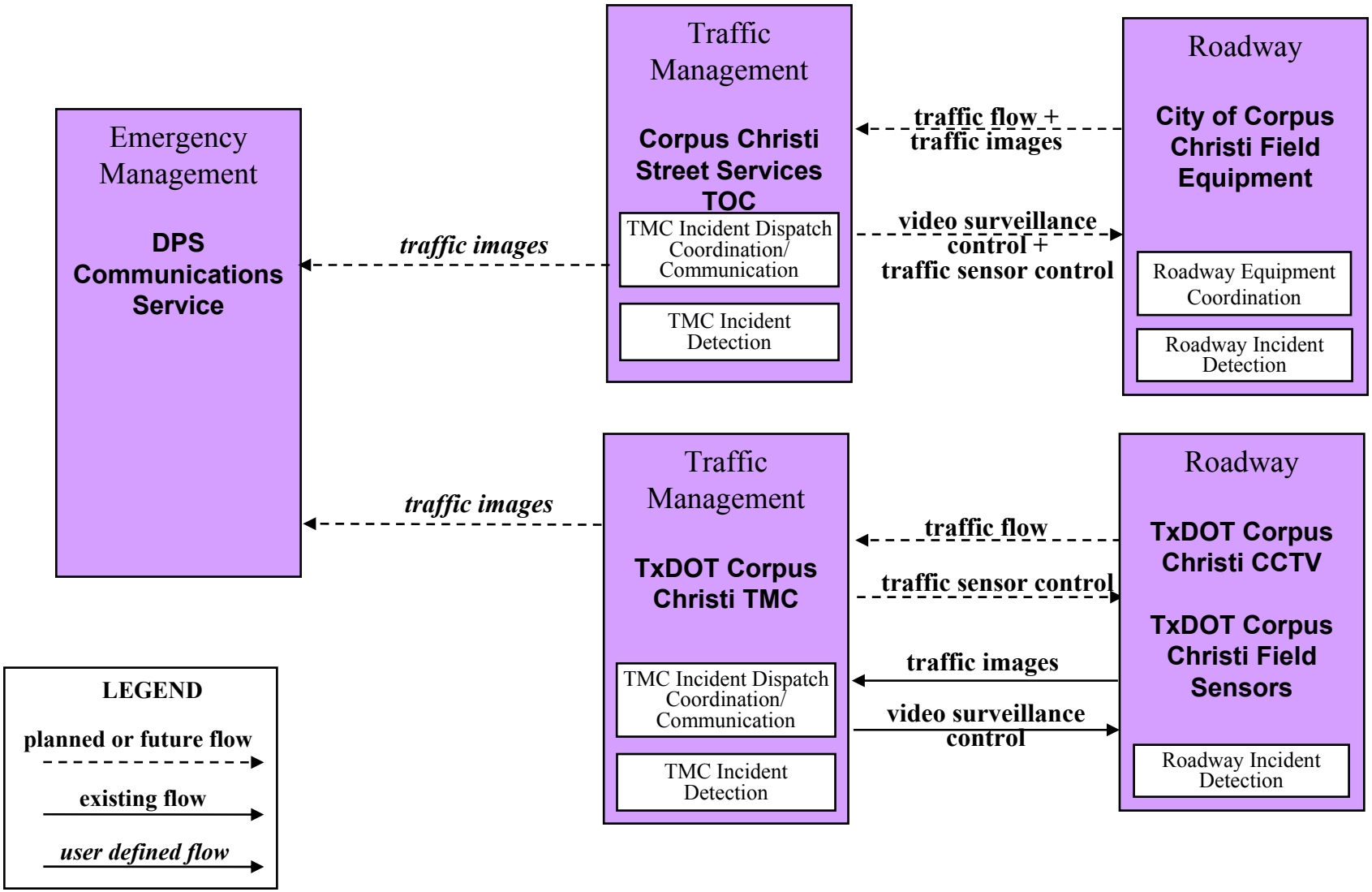
ATMS8 – Incident Management System
(EM to TM – 2 of 3)

	Corpus Christi Street Serv TOC			TxDOT Corpus Christi TMC		
ARCHITECTURE FLOW →	**incd. info + road netw. conditions**	**resource request + resource depl. status**	**remote surveillance control (F)**	**incident info + road netw. conditions**	**resource request + resource depl. status**	**remote surveillance control (F)**
Emergency Management Center						
City/County EOC				√		
City/County Public Safety Dispatch				√		
Coast Guard Marine Safety Office/ Coast Guard Operations Office (*-incident info only)	√*			√*		
Corpus Christi Emergency Operations Center	√	√	√	√	√	√
Corpus Christi Police Dept MetroComm Dispatch	√	√	√	√	√	√
DPS Communications Service	√			√	√	
Naval Air Station Security Office	√			√		
Naval Station Ingleside Operations Center				√		
POCCA Harbor Masters Office	√			√		
Private Ambulance Dispatch Center						
Private Tow/Wrecker Dispatch						
Private Vehicle Emergency Systems				√		
Refinery Terminal Fire Company Dispatch	√			√		
State EOC				√	√	√
TxDOT Corpus Christi Emergency Control Center				√		

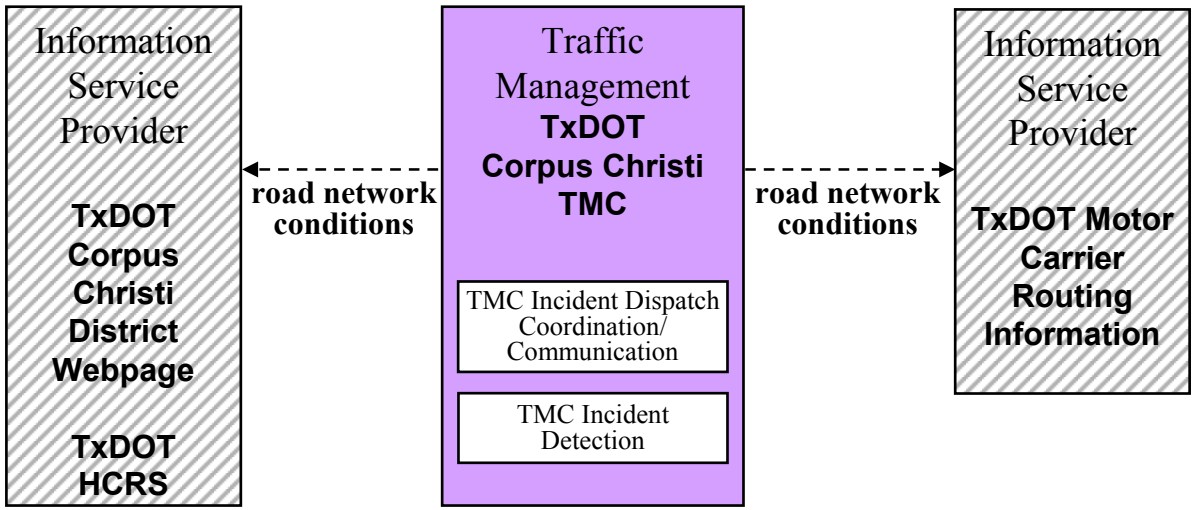
ATMS8 – Incident Management System (EM to TM – 3 of 3)

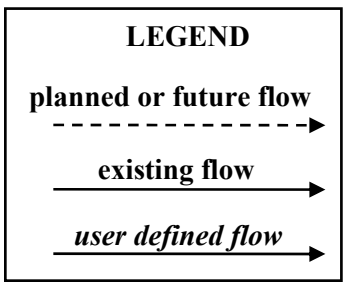
TERMINATOR →	City of Corpus Christi Convention/ Visitor Bureau Web Page	Telco 911 Call Routing	Print and Broadcast Media
ARCHITECTURE FLOW →	event plans	incident notification/ response	incident information for media
Emergency Management Center			
City/County EOC			
City/County Public Safety Dispatch	√	√	
Coast Guard Marine Safety Office			
Corpus Christi Emergency Operations Center			√
Corpus Christi Police Department MetroComm Dispatch	√	√	
DPS Communications Service	√	√	
Naval Air Station Security Office			
Naval Station Ingleside Operations Center			
POCCA Harbor Master Office	√		
Private Ambulance Dispatch Center			
Private Tow/Wrecker Dispatch			
Private Vehicle Emergency Systems			
Refinery Terminal Fire Company Dispatch			
State EOC			
TxDOT Corpus Christi Emergency Control Center			
Traffic Management Center			
Corpus Christi Street Services TOC	√		
TxDOT Corpus Christi TMC	√		

ATMS8 – Incident Management System
City of Corpus Christi/ TxDOT TMC Roadside Element Interface

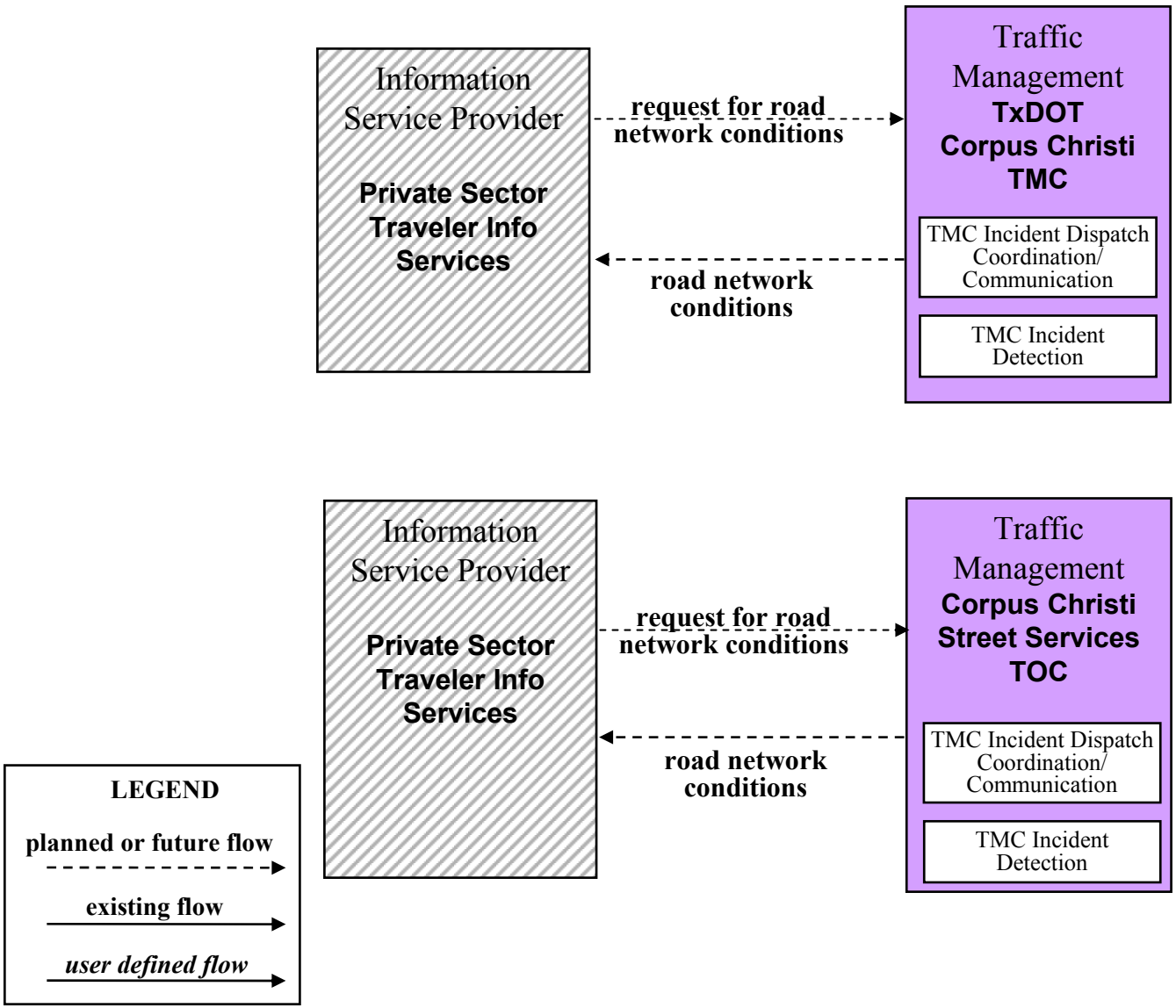


ATMS8 – Incident Management System
(TM to ISP) TxDOT Corpus Christi TMC

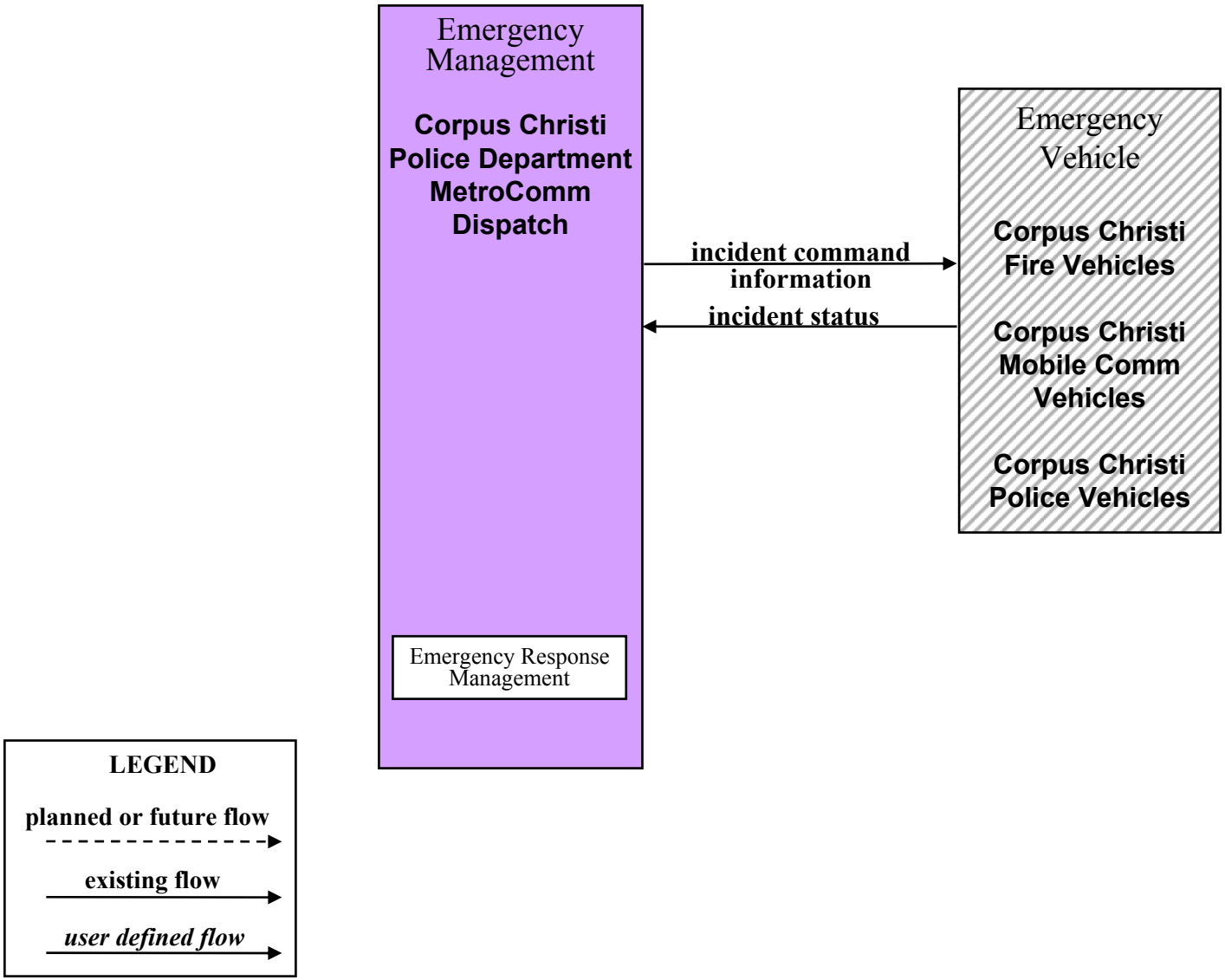




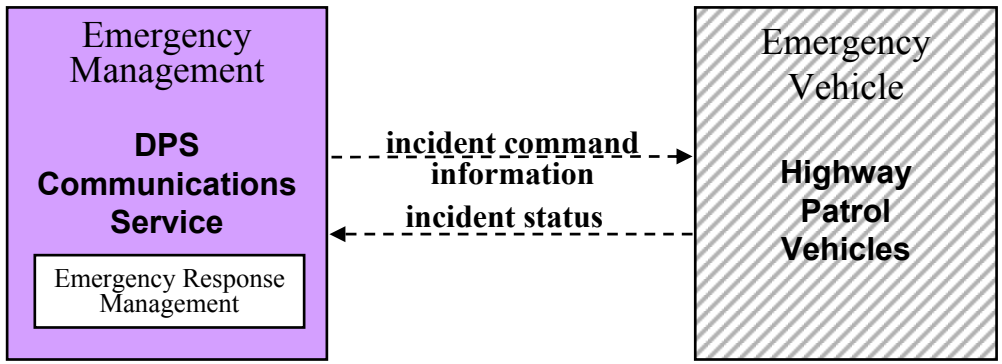
ATMS8 – Incident Management System
(TM to ISP) TxDOT Corpus Christi TMC, Corpus Christi Street Services TOC

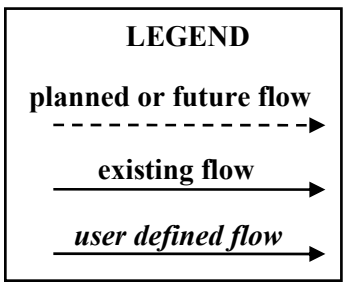


ATMS8 – Incident Management System
(EM to EV) Corpus Christi Police Department MetroComm Dispatch

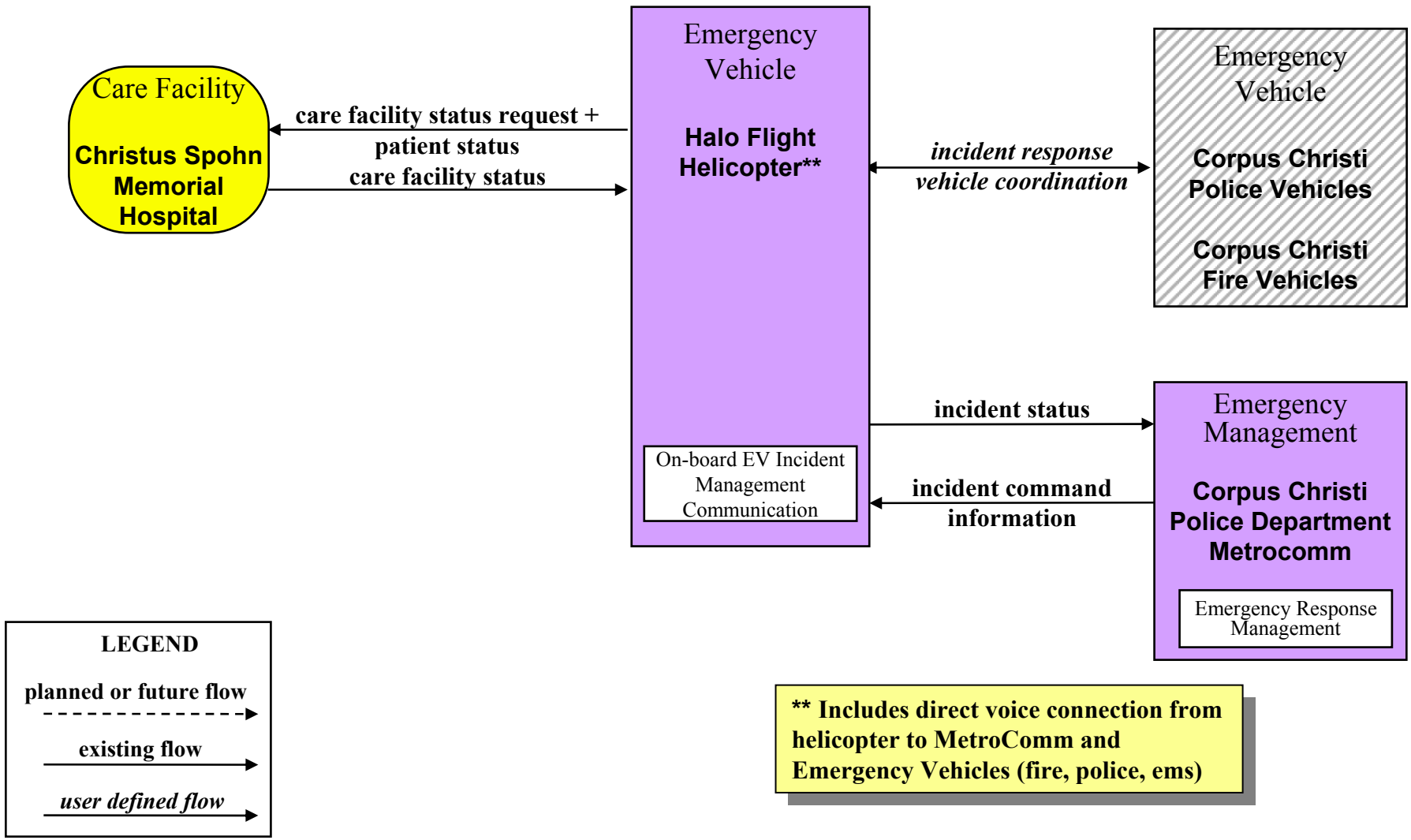


ATMS8 – Incident Management System
(EM to EV) DPS Comm Dispatch, Halo Flight Emergency Response Helicopter

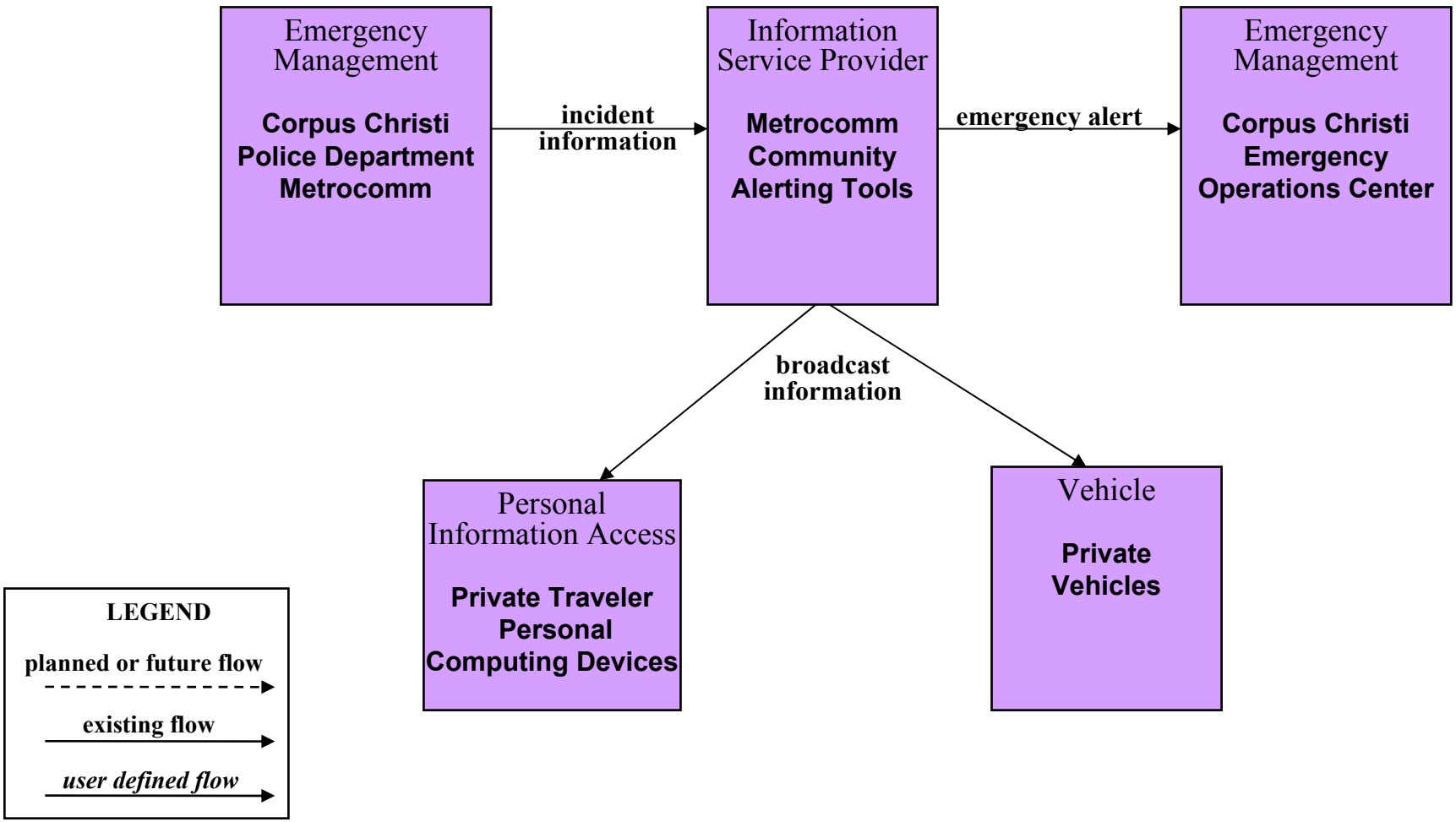




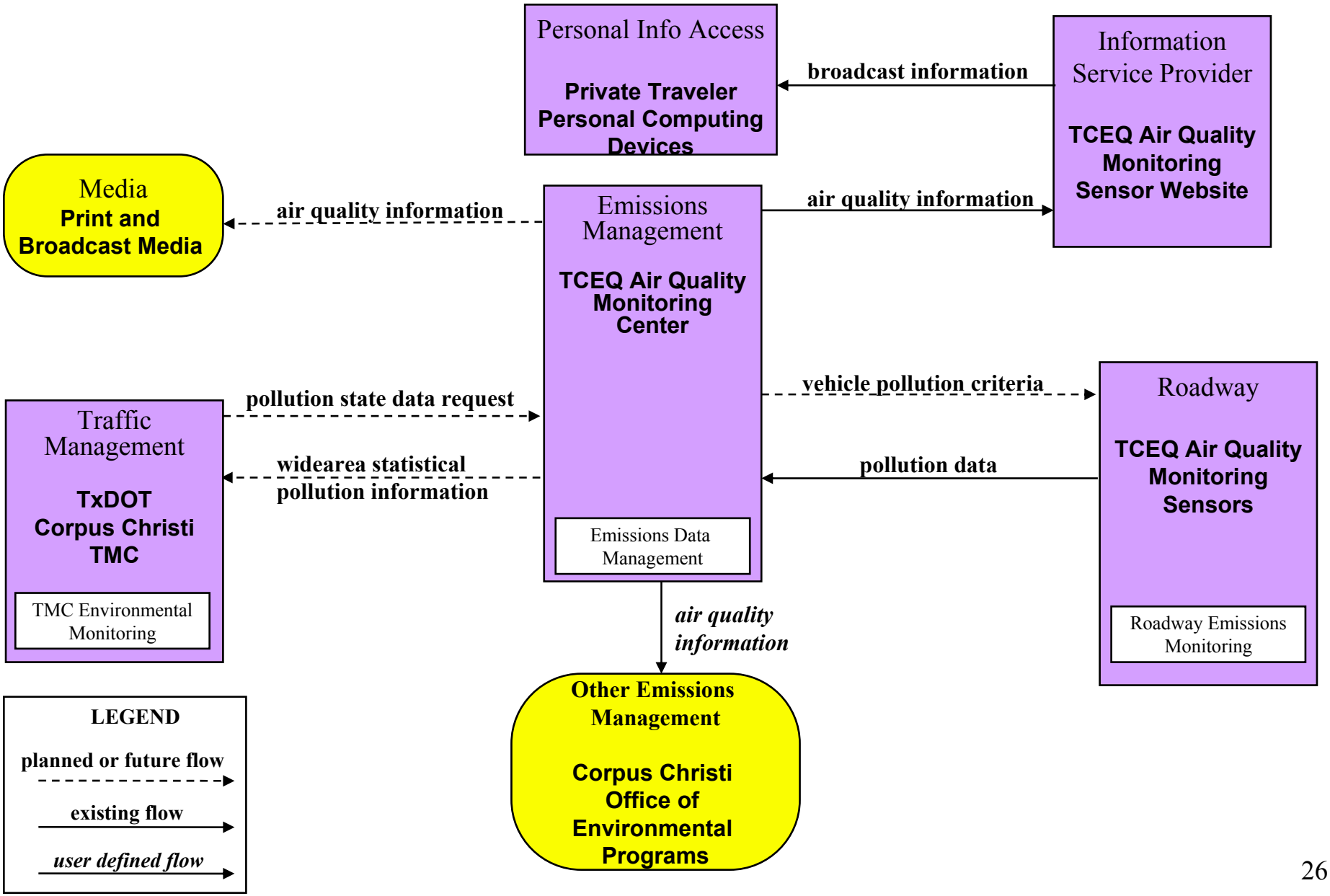
ATMS8 – Incident Management System
(EM to EV) Halo Flight Emergency Response Helicopter



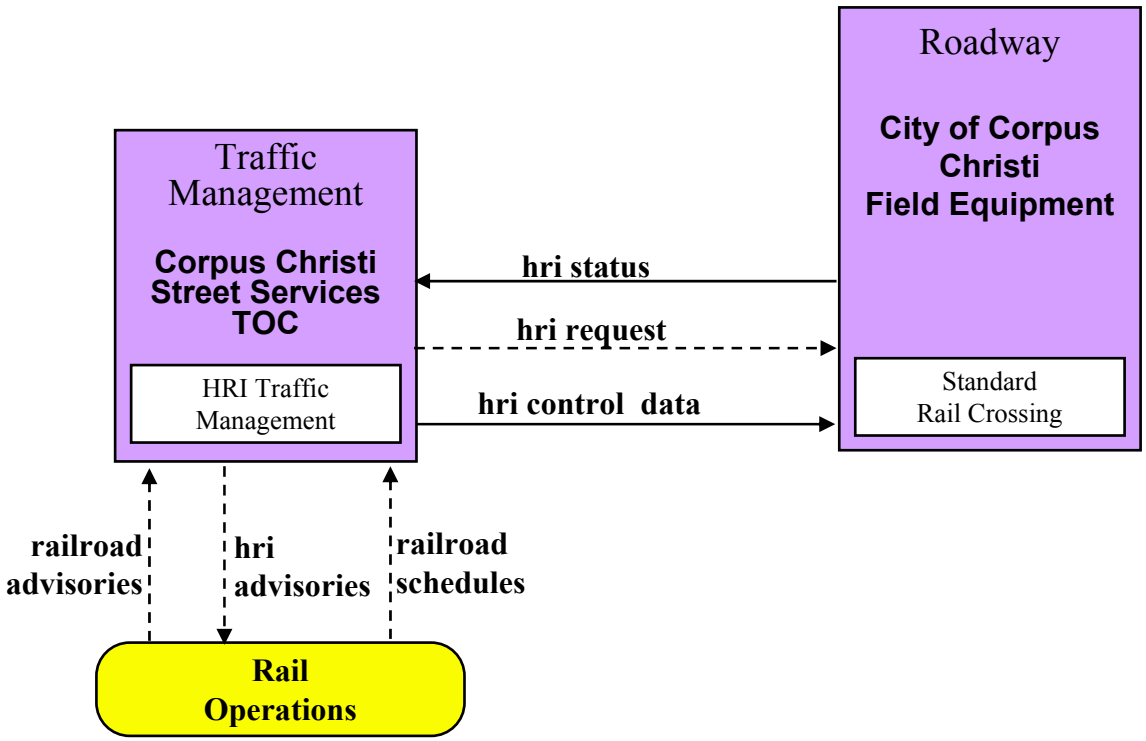
ATMS8 – Incident Management System
Metrocomm Community Alerting Tools

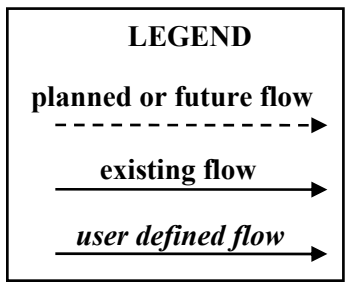


ATMS11 - Emissions Monitoring and Management

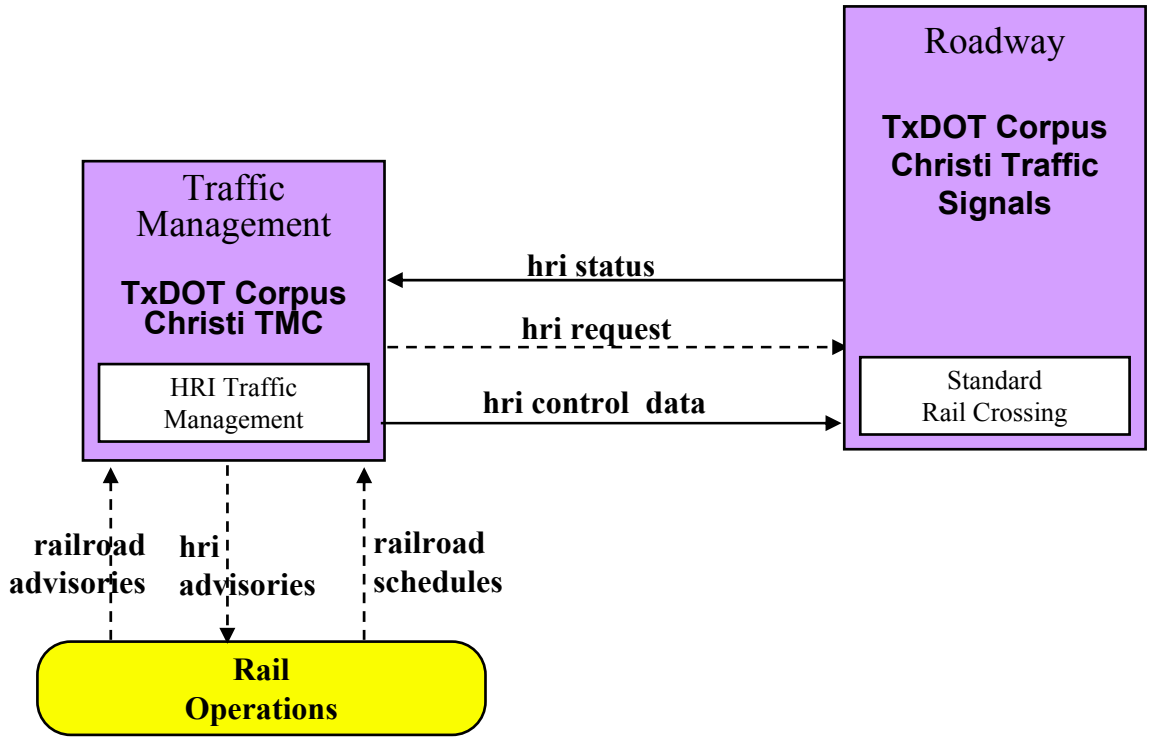


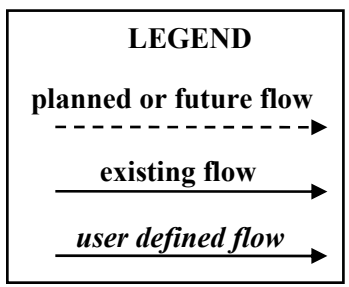
ATMS13/ATMS15 - Standard Railroad Grade Crossing / Railroad Operations Coord
City of Corpus Christi



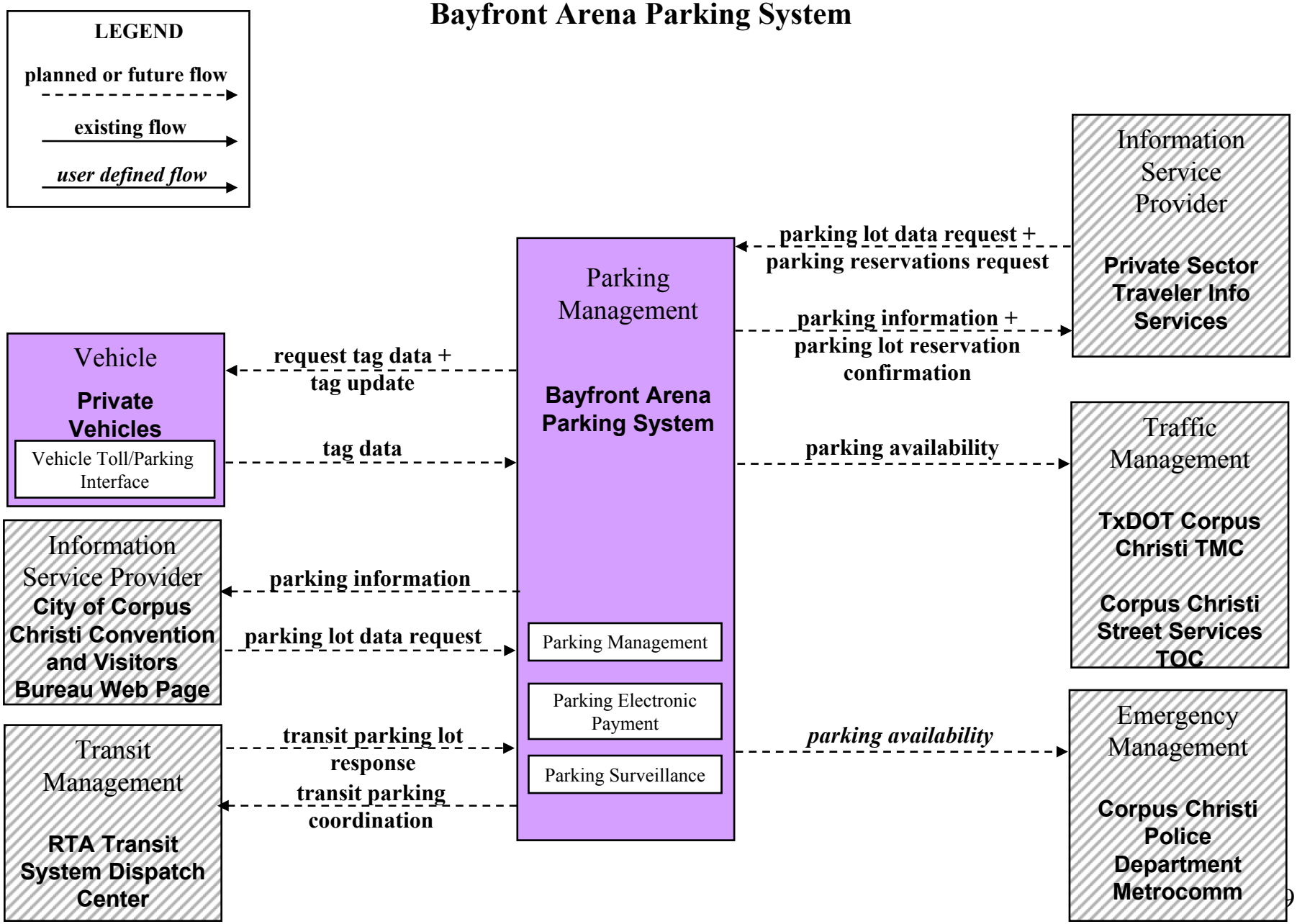
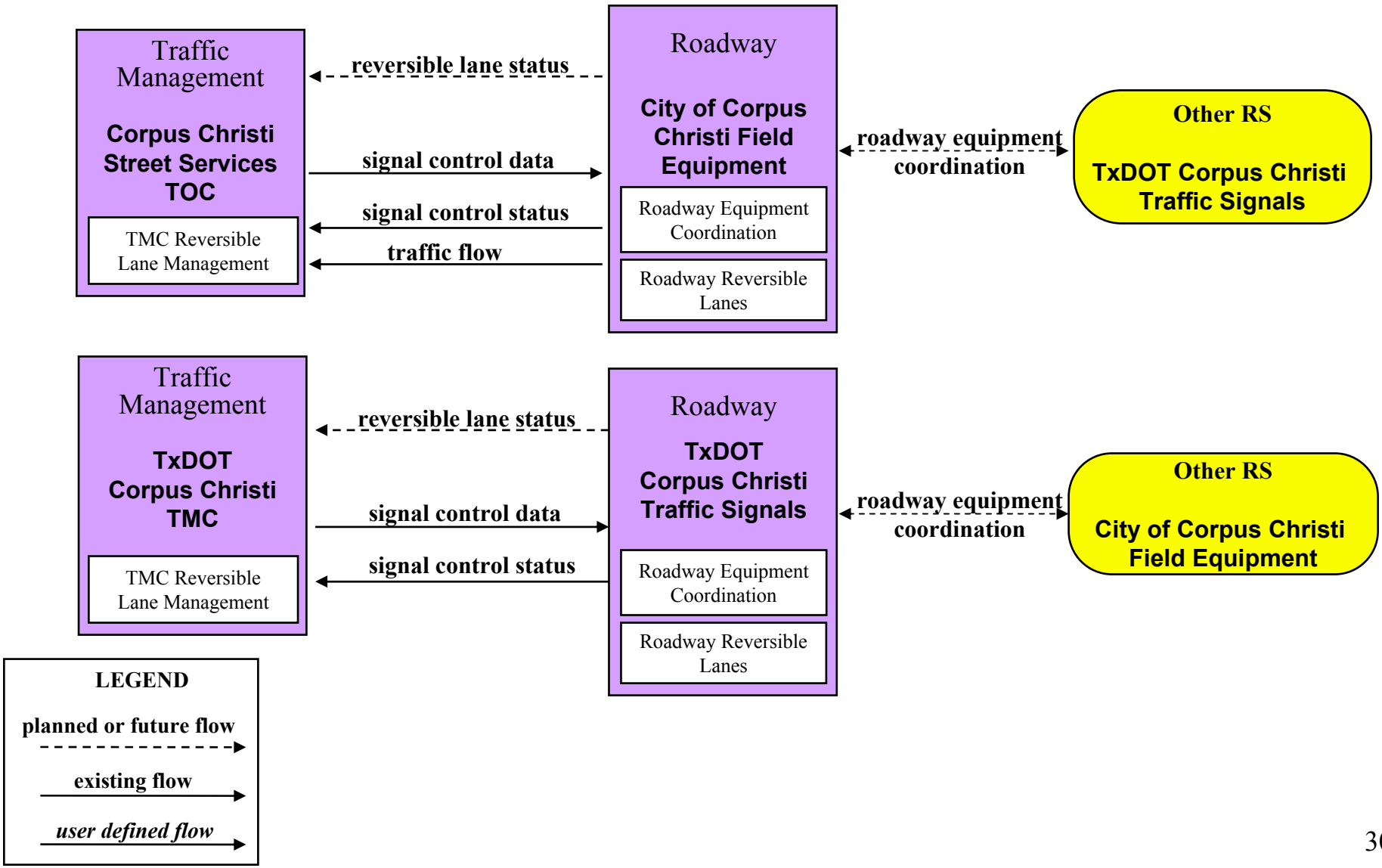


ATMS13/ATMS 15 - Standard Railroad Grade Crossing/ Railroad Operations Coord
TxDOT Corpus Christi TMC





ATMS16/17 – Parking Facility Management/ Regional Parking Mgmt
Bayfront Arena Parking System



ATMS18 - Reversible Lane Management
TxDOT Corpus Christi, City of Corpus Christi Street Services