



APPENDIX A – CUSTOMIZED MARKET PACKAGES

APPENDIX A

LIST OF FIGURES

Figure A1 – ATMS01 – Network Surveillance: Cameron County International Bridge Management System.....	A-1
Figure A2 – ATMS01 – Network Surveillance: Brownsville MPO Traffic Management System.....	A-1
Figure A3 – ATMS01 – Network Surveillance: City of Brownsville TMC.....	A-2
Figure A4 – ATMS01 – Network Surveillance: City of Harlingen TMC.....	A-2
Figure A5 – ATMS01 – Network Surveillance: City of McAllen TMC.....	A-3
Figure A6 – ATMS01 – Network Surveillance: City of Pharr TMC.....	A-3
Figure A7 – ATMS01 – Network Surveillance: Hidalgo/Reynosa Bridge Management System.....	A-4
Figure A8 – ATMS01 – Network Surveillance: Pharr/Reynosa Bridge Management System.....	A-4
Figure A9 – ATMS01 – Network Surveillance: Private International Bridge Management Systems.....	A-5
Figure A10 – ATMS01 – Network Surveillance: TxDOT Pharr District TMC.....	A-5
Figure A11 – ATMS01 – Network Surveillance: US Border Patrol Video Surveillance System.....	A-6
Figure A12 – ATMS02 – Probe Surveillance.....	A-6
Figure A13 – ATMS03 – Surface Street Control: Brownsville MPO Traffic Management System.....	A-7
Figure A14 – ATMS03 – Surface Street Control: City of Brownsville TMC.....	A-7
Figure A15 – ATMS03 – Surface Street Control: City of Harlingen TMC.....	A-8
Figure A16 – ATMS03 – Surface Street Control: City of McAllen TMC.....	A-8
Figure A17 – ATMS03 – Surface Street Control: City of Pharr TMC.....	A-9
Figure A18 – ATMS03 – Surface Street Control: TxDOT Pharr District TMC.....	A-9
Figure A19 – ATMS04 – Freeway Control.....	A-10
Figure A20 – ATMS06 – Traffic Information Dissemination: Cameron County International Bridge Management System ..	A-10
Figure A21 – ATMS06 – Traffic Information Dissemination: Hidalgo/Reynosa Bridge Management System.....	A-11
Figure A22 – ATMS06 – Traffic Information Dissemination: Pharr/Reynosa Bridge Management System.....	A-11
Figure A23 – ATMS06 – Traffic Information Dissemination: Private International Bridge Management Systems.....	A-12
Figure A24 – ATMS06 – Traffic Information Dissemination: Brownsville MPO Traffic Management System.....	A-12
Figure A25 – ATMS06 – Traffic Information Dissemination: City of Brownsville TMC.....	A-13
Figure A26 – ATMS06 – Traffic Information Dissemination: City of Harlingen TMC.....	A-13
Figure A27 – ATMS06 – Traffic Information Dissemination: City of McAllen TMC.....	A-14
Figure A28 – ATMS06 – Traffic Information Dissemination: City of Pharr TMC.....	A-14
Figure A29 – ATMS06 – Traffic Information Dissemination: TxDOT Pharr District TMC (1 of 3).....	A-15
Figure A30 – ATMS06 – Traffic Information Dissemination: TxDOT Pharr District TMC (2 of 3).....	A-15
Figure A31 – ATMS06 – Traffic Information Dissemination: TxDOT Pharr District TMC (3 of 3).....	A-16
Figure A32 – ATMS07 – Regional Traffic Information.....	A-16
Figure A33 – ATMS07 – Regional Traffic Control.....	A-17
Figure A34 – ATMS08 – Incident Management: City/County EOC to Bridge Management Systems.....	A-17
Figure A35 – ATMS08 – Incident Management: City/County EOC to Brownsville MPO, City of Brownsville, City of Harlingen, City of McAllen, and City of Pharr TMCs.....	A-18
Figure A36 – ATMS08 – Incident Management: Non-EOC EM to Bridge Management System TM.....	A-18
Figure A37 – ATMS08 – Incident Management: Non-EOC EM to Brownsville MPO Traffic Management System.....	A-19
Figure A38 – ATMS08 – Incident Management: Non-EOC EM to City of Brownsville TMC.....	A-19
Figure A39 – ATMS08 – Incident Management: Non-EOC EM to City of Harlingen TMC.....	A-20
Figure A40 – ATMS08 – Incident Management: Non-EOC EM to City of McAllen TMC.....	A-20
Figure A41 – ATMS08 – Incident Management Non-EOC EM to City of Pharr TMC.....	A-21
Figure A42 – ATMS08 – Incident Management: State EOC, City/County EOC to TxDOT Pharr District TMC.....	A-21
Figure A43 – ATMS08 – Incident Management: Non-EOC EM to TxDOT Pharr District TMC.....	A-22
Figure A44 – ATMS08 – Incident Management: Weather Service.....	A-22
Figure A45 – ATMS08 – Incident Management: Bridge Management Systems – EM to TM Remote Surveillance Control ..	A-23
Figure A46 – ATMS08 – Incident Management: TxDOT Pharr District TMC – EM to TM Remote Surveillance Control ..	A-23
Figure A47 – ATMS08 – Incident Management: Bridge Management Systems to MCM (1 of 2).....	A-24
Figure A48 – ATMS08 – Incident Management: Bridge Management Systems to MCM (2 of 2).....	A-24
Figure A49 – ATMS08 – Incident Management: Brownsville MPO, City of Brownsville, City of Harlingen, City of McAllen, and City of Pharr TMCs to MCM.....	A-25
Figure A50 – ATMS08 – Incident Management: TxDOT Pharr District TMC and US Border Patrol Dispatch to MCM.....	A-25
Figure A51 – ATMS08 – Incident Management: EM to MCM (1 of 2).....	A-26

APPENDIX A

LIST OF FIGURES

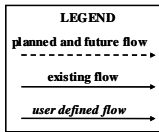
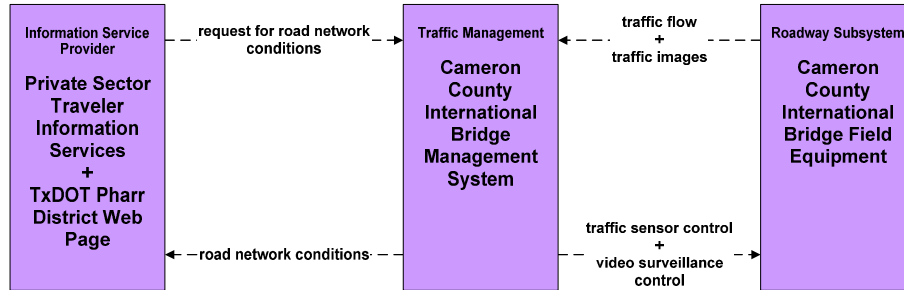
Figure A52 – ATMS08 – Incident Management: EM to MCM (2 of 2)	A-26
Figure A53 – ATMS08 – Incident Management: MCM to MCM	A-27
Figure A54 – ATMS08 – Incident Management: EM to EV (1 of 2).....	A-27
Figure A55 – ATMS08 – Incident Management: EM to EV (2 of 2).....	A-28
Figure A56 – ATMS08 – Incident Management: Flood Monitoring.....	A-28
Figure A57 – ATMS08 – Incident Management: Flood Warning (1 of 2).....	A-29
Figure A58 – ATMS08 – Incident Management: Flood Warning (2 of 2).....	A-29
Figure A59 – ATMS10 – Electronic Toll Collection: City of Pharr and B&M Bridge Electronic Toll Collection System (1 of 2).....	A-30
Figure A60 – ATMS10 – Electronic Toll Collection: City of Pharr and B&M Bridge Electronic Toll Collection System (2 of 2).....	A-30
Figure A61 – ATMS13 – Standard Railroad Crossing: City of Brownsville	A-31
Figure A62 – ATMS13 – Standard Railroad Crossing: City of Harlingen.....	A-31
Figure A63 – ATMS13 – Standard Railroad Crossing: City of McAllen	A-32
Figure A64 – ATMS13 – Standard Railroad Crossing: TxDOT Pharr District TMC	A-32
Figure A65 – ATMS14 – Advanced Railroad Crossing: City of Harlingen.....	A-33
Figure A66 – ATMS15 – Railroad Operations Coordination.....	A-33
Figure A67 – ATMS16 – Parking Facility Management	A-34
Figure A68 – ATMS17 – Regional Parking Management	A-34
Figure A69 – EM1 – Emergency Response Coordination	A-35
Figure A70 – EM1 – Emergency Response Coordination: State EOC to City/County EOC	A-35
Figure A71 – EM1 – Emergency Response Coordination: City/County EOC.....	A-36
Figure A72 – EM2 – Emergency Routing: City/County Police and Fire Vehicles – Brownsville MPO.....	A-36
Figure A73 – EM2 – Emergency Routing: City/County Police and Fire Vehicles – City of Brownsville.....	A-37
Figure A74 – EM2 – Emergency Routing: City/County Police and Fire Vehicles – City of Harlingen.....	A-37
Figure A75 – EM2 – Emergency Routing: City/County Police and Fire Vehicles – City of McAllen	A-38
Figure A76 – EM2 – Emergency Routing: City/County Police and Fire Vehicles – City of Pharr.....	A-38
Figure A77 – EM2 – Emergency Routing: Public/Private EMS Vehicles	A-39
Figure A78 – EM2 – Emergency Routing: Public/Private EMS Vehicles	A-39
Figure A79 – EM2 – Emergency Routing: Public/Private EMS Vehicles	A-40
Figure A80 – EM2 – Emergency Routing: Public/Private EMS Vehicles	A-40
Figure A81 – EM2 – Emergency Routing: Public/Private EMS Vehicles	A-41
Figure A82 – EM2 – Emergency Routing: Public/Private EMS Vehicles	A-41
Figure A83 – MC01 – Maintenance and Construction Vehicle Tracking: TxDOT Pharr District Maintenance Sections.....	A-42
Figure A84 – MC01 – Maintenance and Construction Vehicle Tracking: County Road and Bridge and Municipal Public Works Department.....	A-42
Figure A85 – MC02 – Maintenance and Construction Vehicle Maintenance: TxDOT Pharr District Maintenance Sections ..	A-43
Figure A86 – MC02 – Maintenance and Construction Vehicle Maintenance: County Road and Bridge.....	A-43
Figure A87 – MC02 – Maintenance and Construction Vehicle Maintenance: Municipal Public Works Department Vehicles	A-44
Figure A88 – MC03 – Road Weather Data Collection: TxDOT Pharr District TMC	A-44
Figure A89 – MC04 – Weather Information Processing and Distribution: TxDOT Pharr District TMC	A-45
Figure A90 – MC07 – Roadway Maintenance and Construction: TxDOT Pharr District Maintenance Section (1 of 2).....	A-45
Figure A91 – MC07 – Roadway Maintenance and Construction: TxDOT Pharr District Maintenance Section (2 of 2).....	A-46
Figure A92 – MC07 – Roadway Maintenance and Construction: County Road and Bridge	A-46
Figure A93 – MC07 – Roadway Maintenance and Construction: Municipal Public Works Department	A-47
Figure A94 – MC08 – Workzone Management: County Road and Bridge.....	A-47
Figure A95 – MC08 – Workzone Management: Municipal Public Works Department.....	A-48
Figure A96 – MC08 – Workzone Management: TxDOT Pharr District Maintenance Sections	A-48
Figure A97 – MC08 – Workzone Management: TxDOT Pharr District Maintenance Sections – Work Zone Information Distribution (1 of 2).....	A-49
Figure A98 – MC08 – Workzone Management: TxDOT Pharr District Maintenance Sections – Work Zone Information Distribution (2 of 2).....	A-49
Figure A99 – MC09 – Workzone Safety Monitoring: TxDOT Pharr District Maintenance Sections	A-50

APPENDIX A

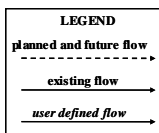
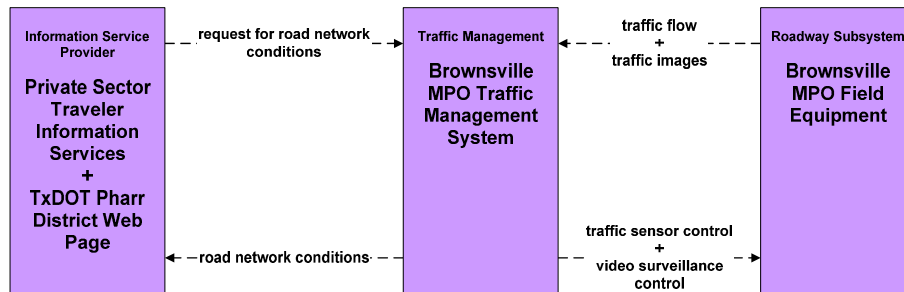
LIST OF FIGURES

Figure A100 – MC09 – Workzone Safety Monitoring: County Road and Bridge	A-50
Figure A101 – MC09 – Workzone Safety Monitoring: Municipal Public Works Department	A-51
Figure A102 – APTS1 – Transit Vehicle Tracking: BUS Transit	A-51
Figure A103 – APTS1 – Transit Vehicle Tracking: Lower RGV Development Council Public Transit	A-52
Figure A104 – APTS1 – Transit Vehicle Tracking: Rainbow Lines and The Wave Transit.....	A-52
Figure A105 – APTS2 – Transit Fixed-Route Operations: BUS Transit	A-53
Figure A106 – APTS2 – Transit Fixed-Route Operations: Lower RGV Development Council Transit.....	A-53
Figure A107 – APTS2 – Transit Fixed-Route Operations: Rainbow Lines Transit	A-54
Figure A108 – APTS2 – Transit Fixed-Route Operations: The Wave Transit.....	A-54
Figure A109 – APTS2 – Transit Fixed-Route Operations: Independent School District.....	A-55
Figure A110 – APTS3 – Demand Response Transit Operations: BUS Transit.....	A-55
Figure A111 – APTS3 – Demand Response Transit Operations: Lower RGV Development Council Transit.....	A-56
Figure A112 – APTS3 – Demand Response Transit Operations: Rainbow Lines Transit	A-56
Figure A113 – APTS4 – Transit Passenger and Fare Payment: BUS Transit	A-57
Figure A114 – APTS4 – Transit Passenger and Fare Payment: Lower RGV Development Council Transit.....	A-57
Figure A115 – APTS4 – Transit Passenger and Fare Payment: Rainbow Lines Transit.....	A-58
Figure A116 – APTS4 – Transit Passenger and Fare Payment: The Wave Transit.....	A-58
Figure A117 – APTS5 – Transit Security: BUS Transit	A-59
Figure A118 – APTS5 – Transit Security: Lower RGV Development Council Transit.....	A-59
Figure A119 – APTS5 – Transit Security: Rainbow Lines Transit	A-60
Figure A120 – APTS5 – Transit Security: The Wave Transit.....	A-60
Figure A121 – APTS8 – Transit Traveler Information: BUS Transit	A-61
Figure A122 – APTS8 – Transit Traveler Information: Lower RGV Development Council Transit.....	A-61
Figure A123 – APTS8 – Transit Traveler Information: Rainbow Lines Transit	A-62
Figure A124 – APTS8 – Transit Traveler Information: The Wave Transit.....	A-62
Figure A125 – CVO01 – Fleet Administration	A-63
Figure A126 – CVO02 – Freight Administration: Commercial Vehicle Operator Systems.....	A-63
Figure A127 – CVO03 – Electronic Clearance	A-64
Figure A128 – CVO04 – CV Administrative Process	A-64
Figure A129 – CVO05 – International Electronic Border Clearance (1 of 2).....	A-65
Figure A130 – CVO05 – International Electronic Border Clearance (2 of 2).....	A-65
Figure A131 – CVO06 – Weigh-In-Motion: TxDOT/Brownsville Navigation District Overweight Corridor System.....	A-66
Figure A132 – CVO10 – HAZMAT Management: Commercial Vehicle HAZMAT.....	A-66
Figure A133 – CVO10 – HAZMAT Management: Rail HAZMAT	A-67
Figure A134 – ATIS1 – Broadcast Traveler Information: TxDOT Pharr District Webpage and TxDOT 511.....	A-67
Figure A135 – ATIS1 – Broadcast Traveler Information: TxDOT Pharr District Highway Conditions Reporting System	A-68
Figure A136 – ATIS1 – Broadcast Traveler Information: Private Sector Traveler Information Services/Wait Times at Bridges.....	A-68
Figure A137 – ATIS5 – ISP Based Route Guidance: TxDOT Motor Carrier Routing Information	A-69
Figure A138 – ATIS8 – Dynamic Ride Sharing: Regional Park-n-Ride.....	A-69
Figure A139 – AD1 – ITS Data Mart: BUS Transit Planning System	A-70
Figure A140 – AD1 – ITS Data Mart: Lower RGV Transit Planning System	A-70
Figure A141 – AD1 – ITS Data Mart: Rainbow Lines Transit Planning System.....	A-71
Figure A142 – AD1 – ITS Data Mart: The Wave Transit Planning System	A-71
Figure A143 – AD1 – ITS Data Mart: Hidalgo County Congestion Management System (1 of 2).....	A-72
Figure A144 – AD1 – ITS Data Mart: Hidalgo County Pavement Management System (2 of 2).....	A-72
Figure A145 – AD1 – ITS Data Mart: TxDOT Pharr District Pavement Management System.....	A-73
Figure A146 – AD1 – ITS Data Mart: Cameron County Congestion Management System	A-73
Figure A147 – AD1 – ITS Data Mart: TxDOT Pharr District Transportation Operational Data Archive.....	A-74
Figure A148 – AD1 – ITS Data Mart: TxDOT/International Bridges Corridor System	A-74
Figure A149 – AD1 – ITS Data Mart: TxDOT/DPS Pharr District Transportation Operational Data Archive	A-75
Figure A150 – AD3 – Virtual Archive: Lower RGV MPOs Transportation Data Archival System (1 of 2).....	A-75
Figure A151 – AD3 – Virtual Archive: Lower RGV MPOs Transportation Data Archival System (2 of 2).....	A-76

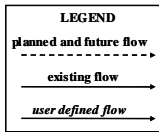
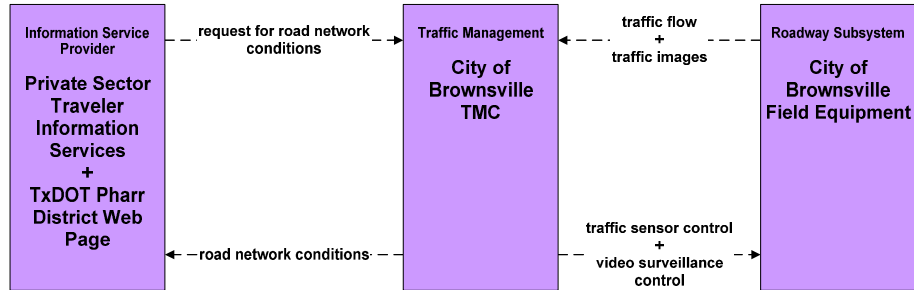
**Figure A1 – ATMS01 – Network Surveillance:
Cameron County International Bridge Management System**



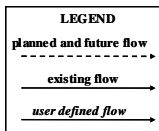
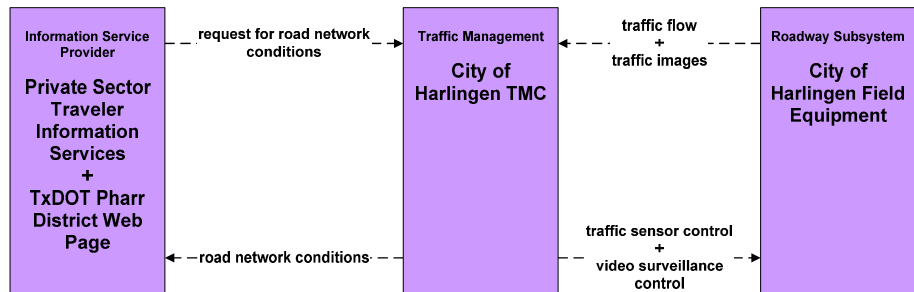
**Figure A2 – ATMS01 – Network Surveillance:
Brownsville MPO Traffic Management System**



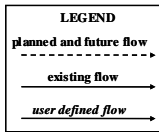
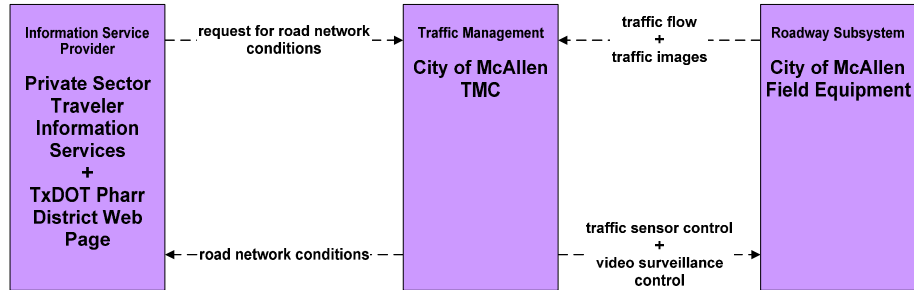
**Figure A3 – ATMS01 – Network Surveillance:
City of Brownsville TMC**



**Figure A4 – ATMS01 – Network Surveillance:
City of Harlingen TMC**



**Figure A5 – ATMS01 – Network Surveillance:
City of McAllen TMC**



**Figure A6 – ATMS01 – Network Surveillance:
City of Pharr TMC**

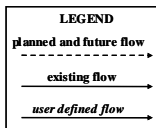
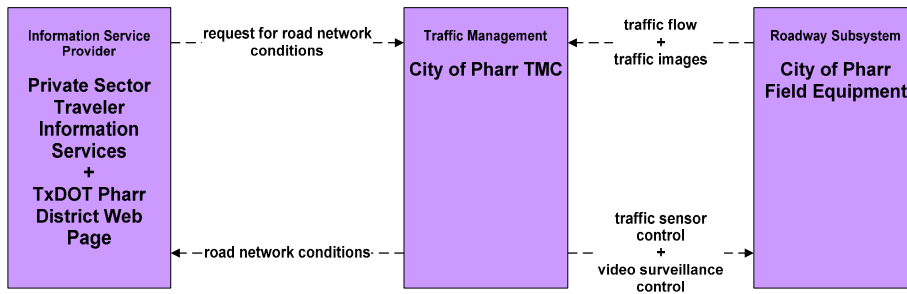


Figure A7 – ATMS01 – Network Surveillance: Hidalgo/Reynosa Bridge Management System

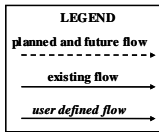
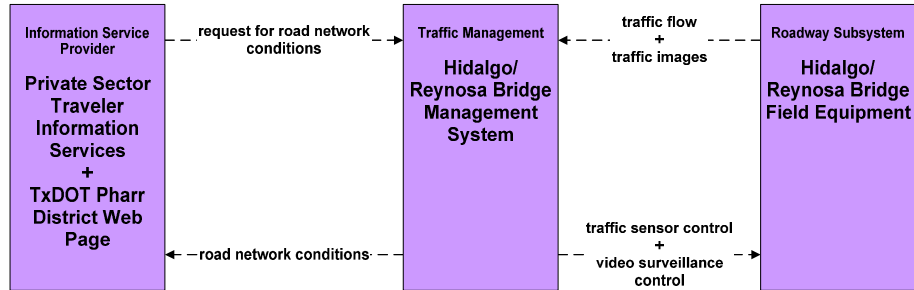
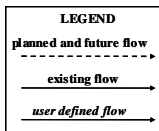
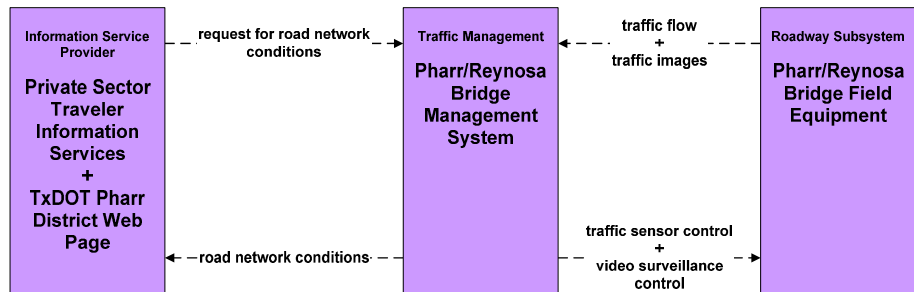
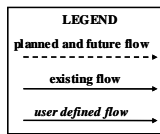
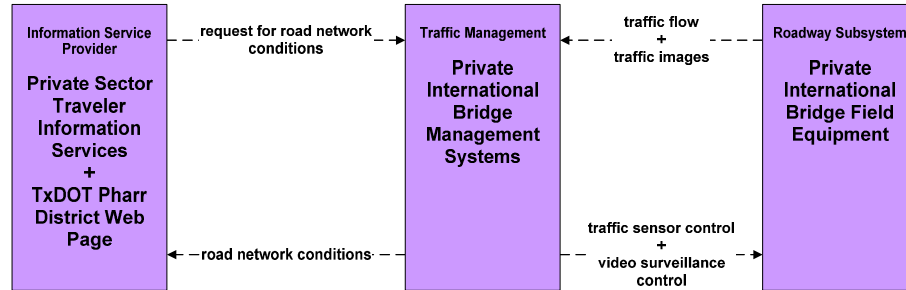


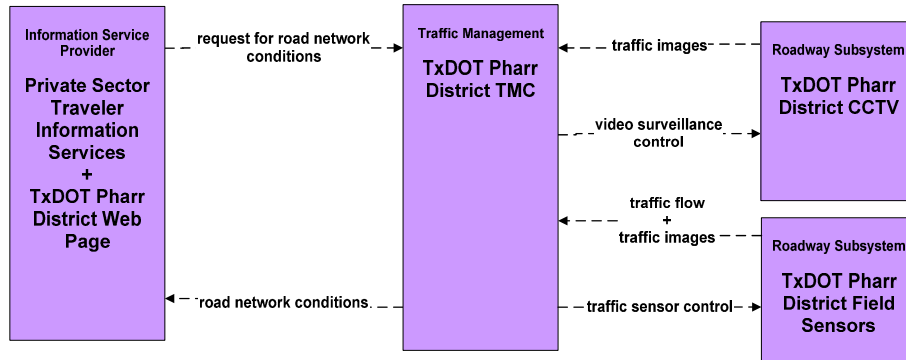
Figure A8 – ATMS01 – Network Surveillance: Pharr/Reynosa Bridge Management System



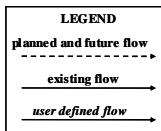
**Figure A9 – ATMS01 – Network Surveillance:
Private International Bridge Management Systems**



**Figure A10 – ATMS01 – Network Surveillance:
TxDOT Pharr District TMC**



Field Sensors includes VIVDS which can provide video.



**Figure A11 – ATMS01 – Network Surveillance:
US Border Patrol Video Surveillance System**

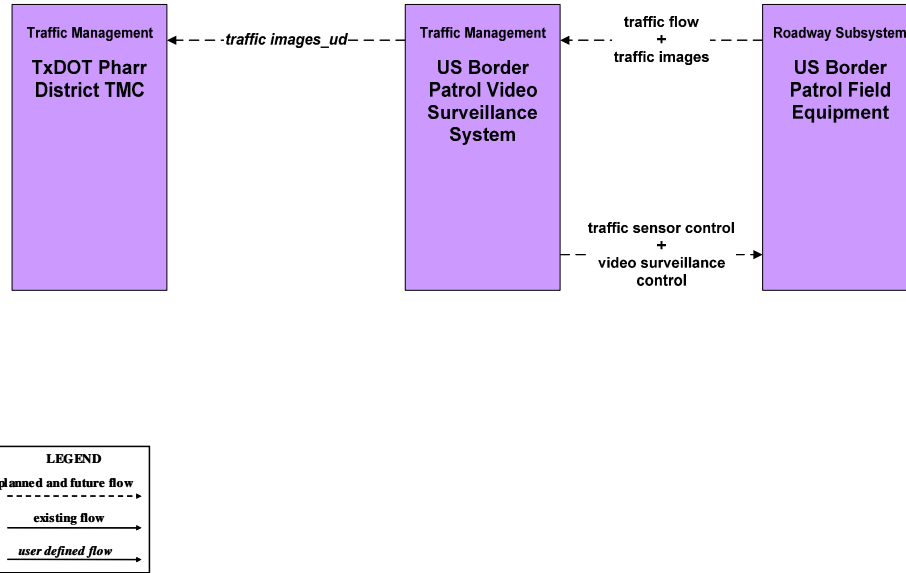
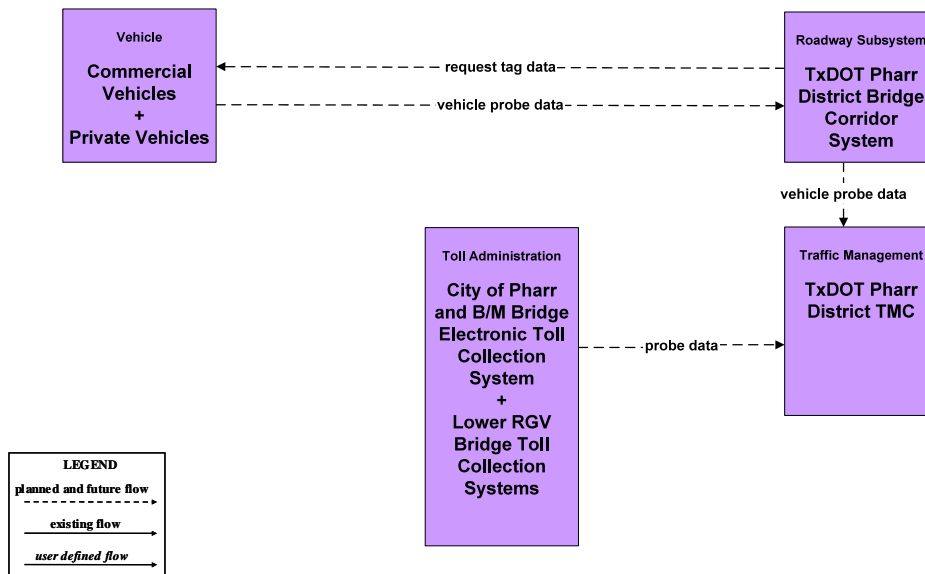
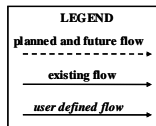
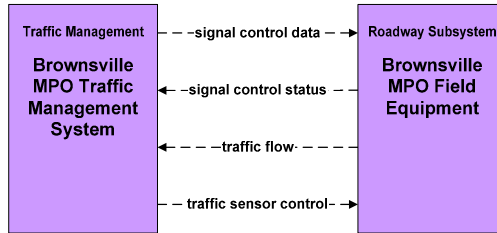


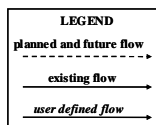
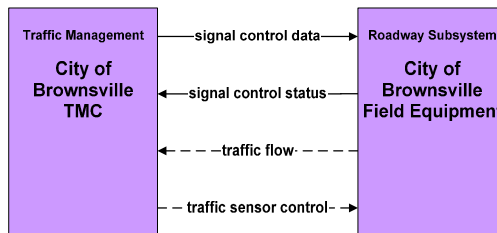
Figure A12 – ATMS02 – Probe Surveillance



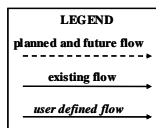
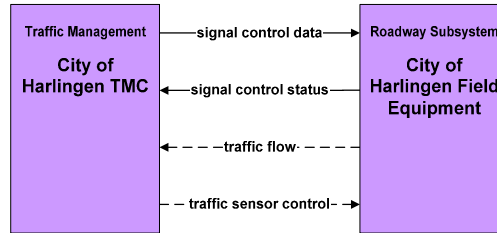
**Figure A13 – ATMS03 – Surface Street Control:
Brownsville MPO Traffic Management System**



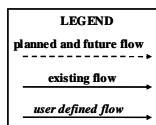
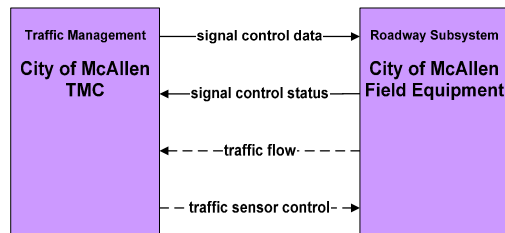
**Figure A14 – ATMS03 – Surface Street Control:
City of Brownsville TMC**



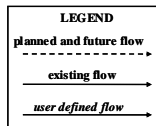
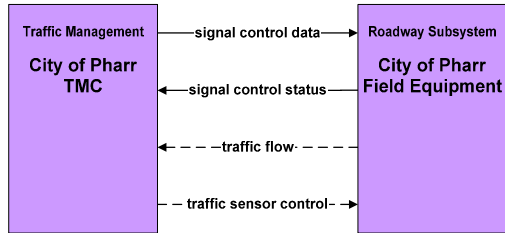
**Figure A15 – ATMS03 – Surface Street Control:
City of Harlingen TMC**



**Figure A16 – ATMS03 – Surface Street Control:
City of McAllen TMC**



**Figure A17 – ATMS03 – Surface Street Control:
City of Pharr TMC**



**Figure A18 – ATMS03 – Surface Street Control:
TxDOT Pharr District TMC**

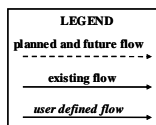
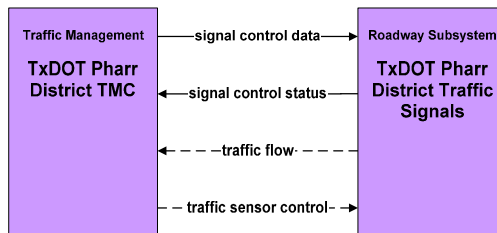


Figure A19 – ATMS04 – Freeway Control

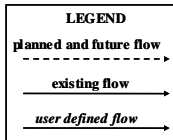
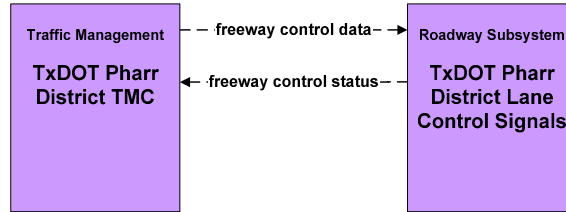


Figure A20 – ATMS06 – Traffic Information Dissemination: Cameron County International Bridge Management System

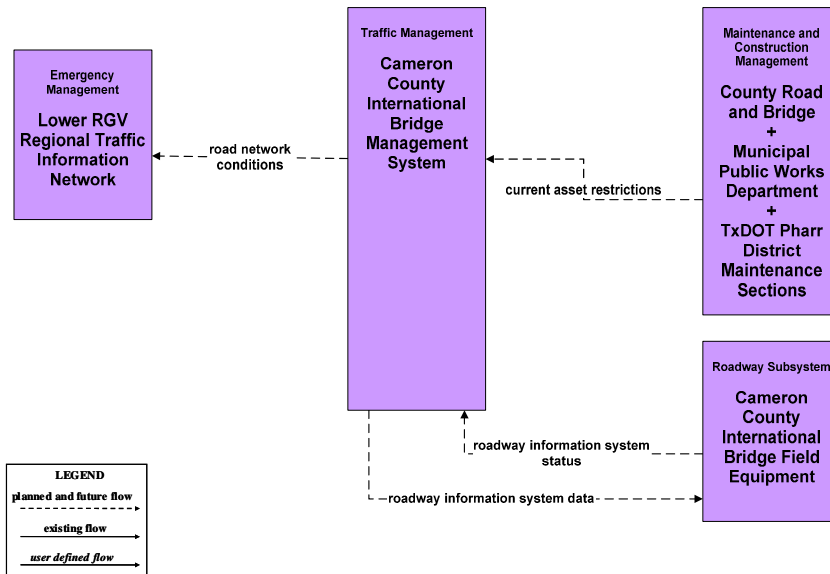


Figure A21 – ATMS06 – Traffic Information Dissemination: Hidalgo/Reynosa Bridge Management System

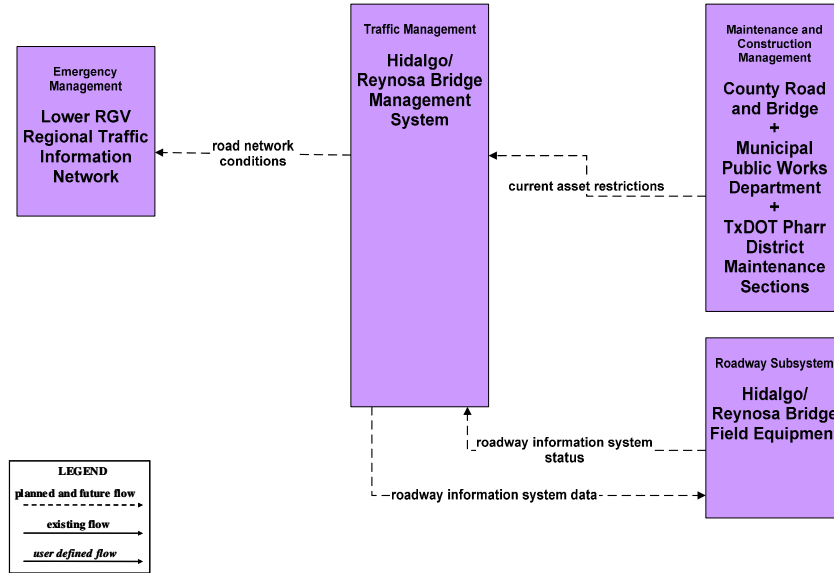


Figure A22 – ATMS06 – Traffic Information Dissemination: Pharr/Reynosa Bridge Management System

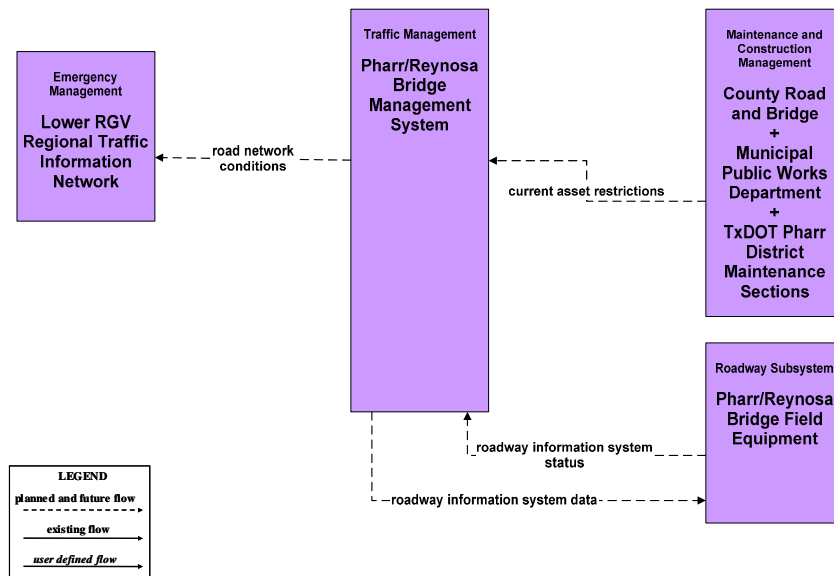


Figure A23 – ATMS06 – Traffic Information Dissemination: Private International Bridge Management Systems

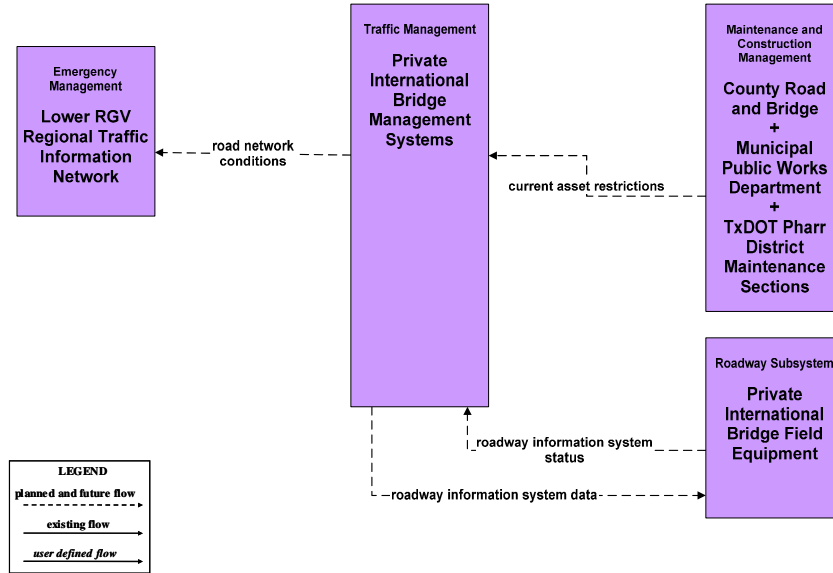
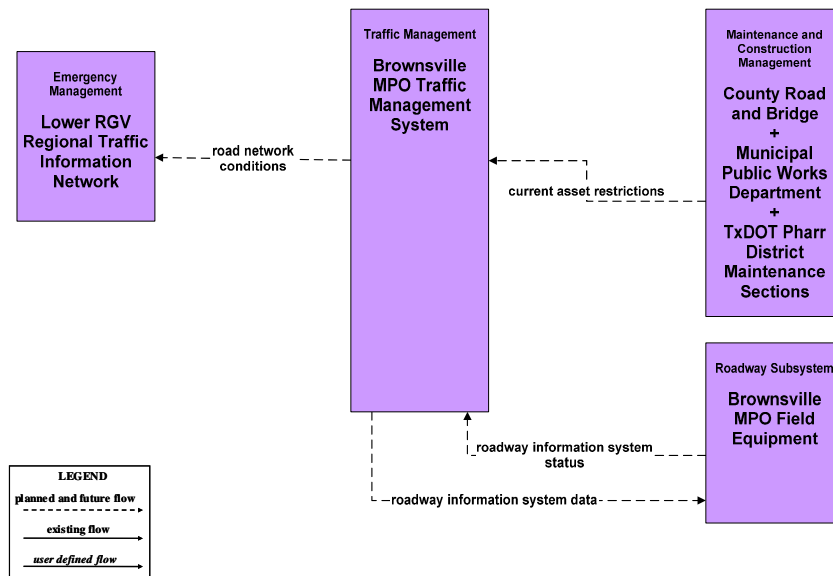
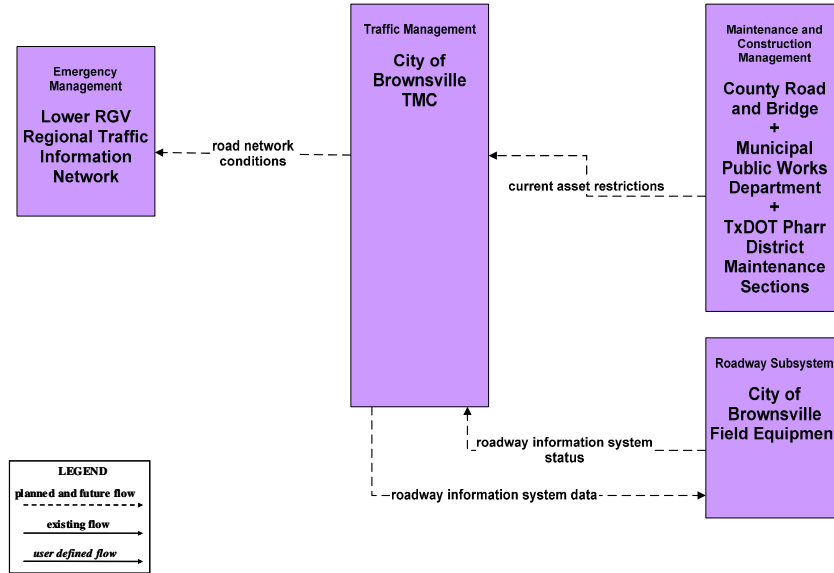


Figure A24 – ATMS06 – Traffic Information Dissemination: Brownsville MPO Traffic Management System



**Figure A25 – ATMS06 – Traffic Information Dissemination:
City of Brownsville TMC**



**Figure A26 – ATMS06 – Traffic Information Dissemination:
City of Harlingen TMC**

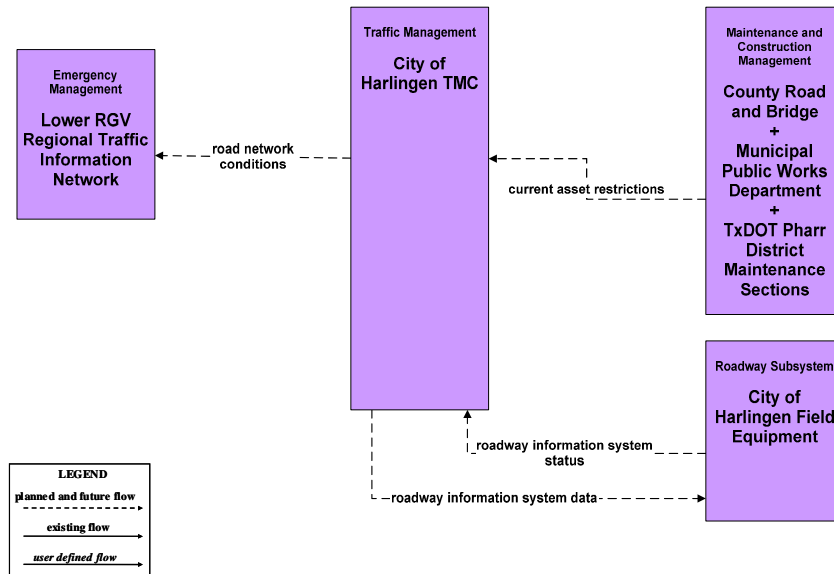


Figure A27 – ATMS06 – Traffic Information Dissemination: City of McAllen TMC

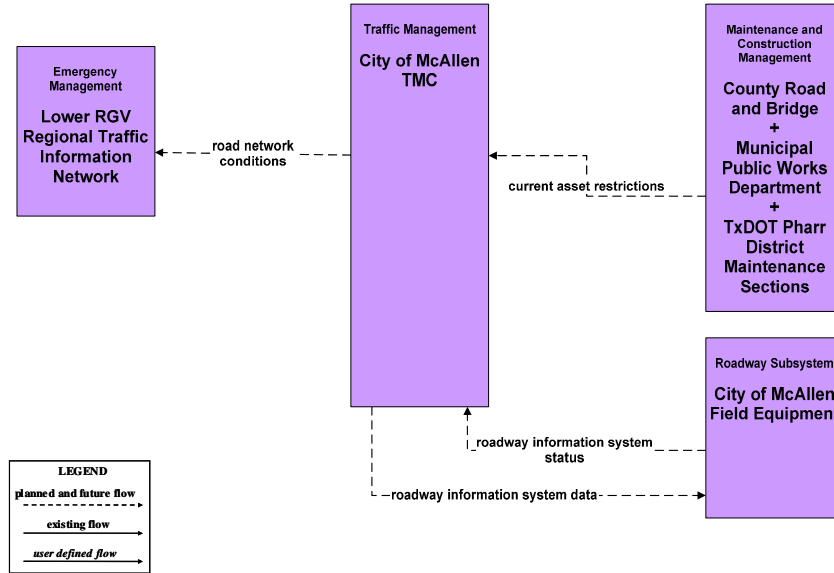


Figure A28 – ATMS06 – Traffic Information Dissemination: City of Pharr TMC

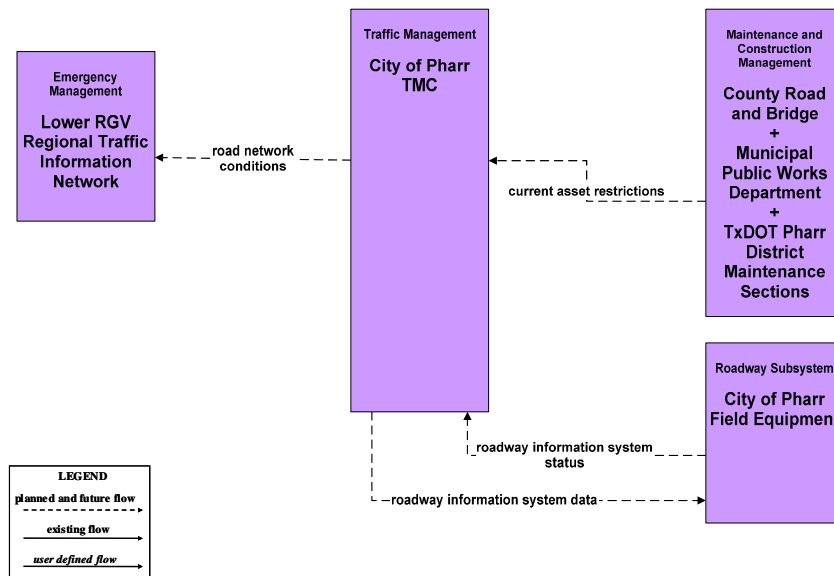


Figure A29 – ATMS06 – Traffic Information Dissemination: TxDOT Pharr District TMC (1 of 3)

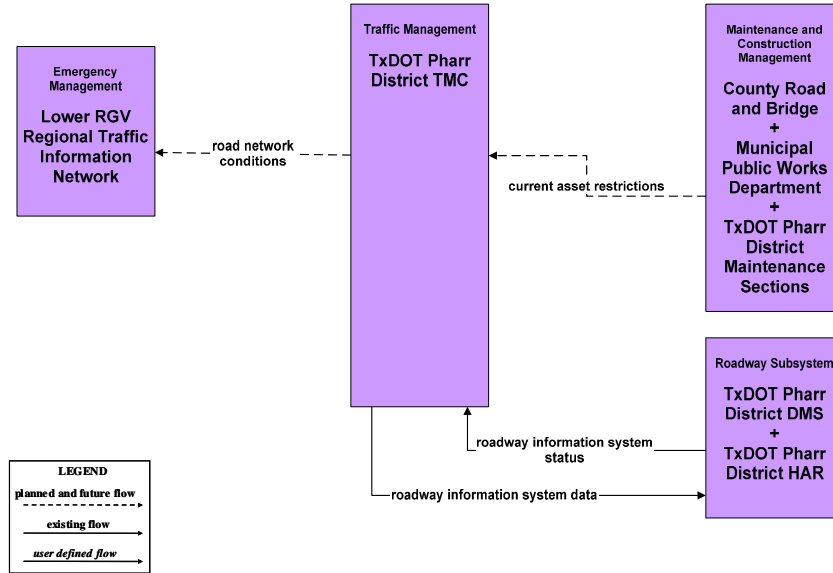


Figure A30 – ATMS06 – Traffic Information Dissemination: TxDOT Pharr District TMC (2 of 3)

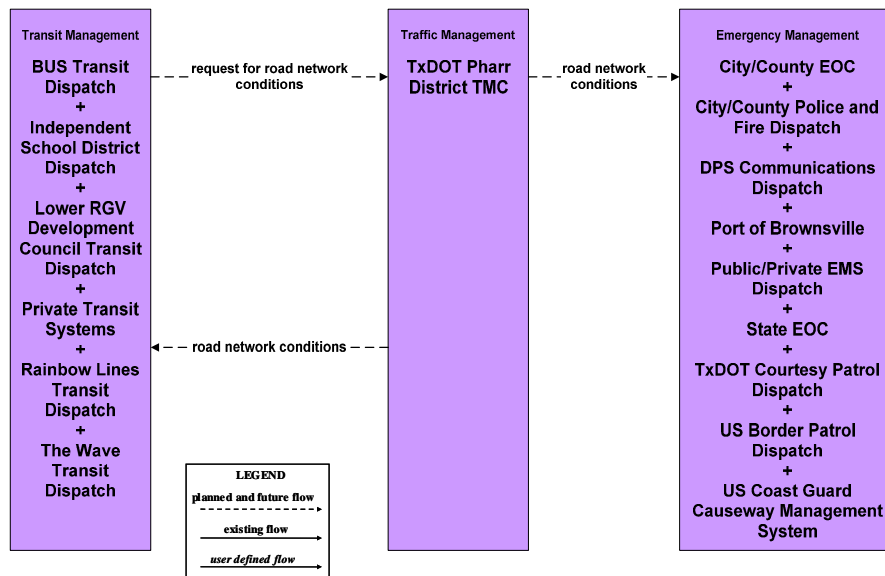


Figure A31 – ATMS06 – Traffic Information Dissemination: TxDOT Pharr District TMC (3 of 3)

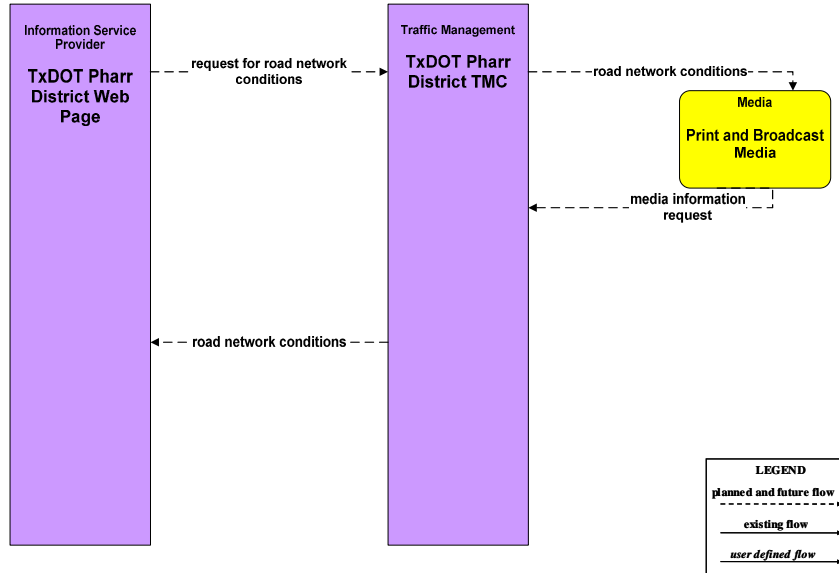


Figure A32 – ATMS07 – Regional Traffic Information

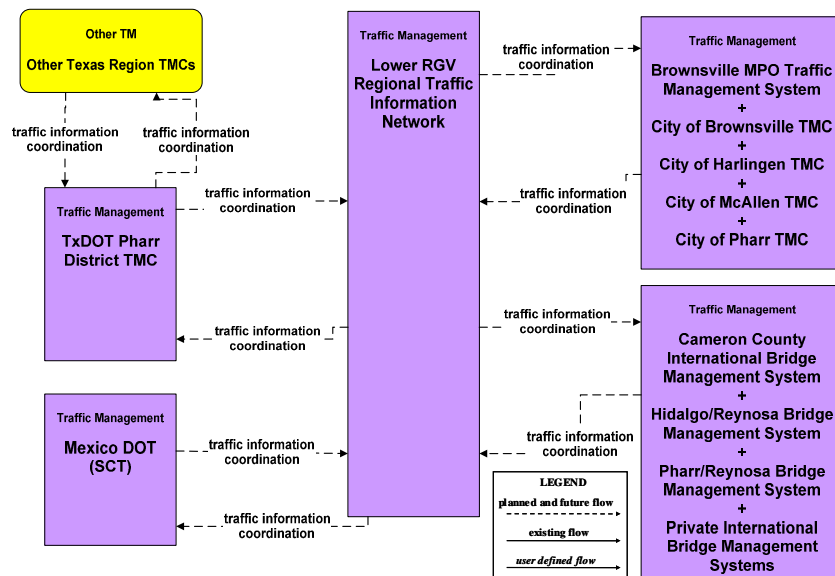


Figure A33 – ATMS07 – Regional Traffic Control

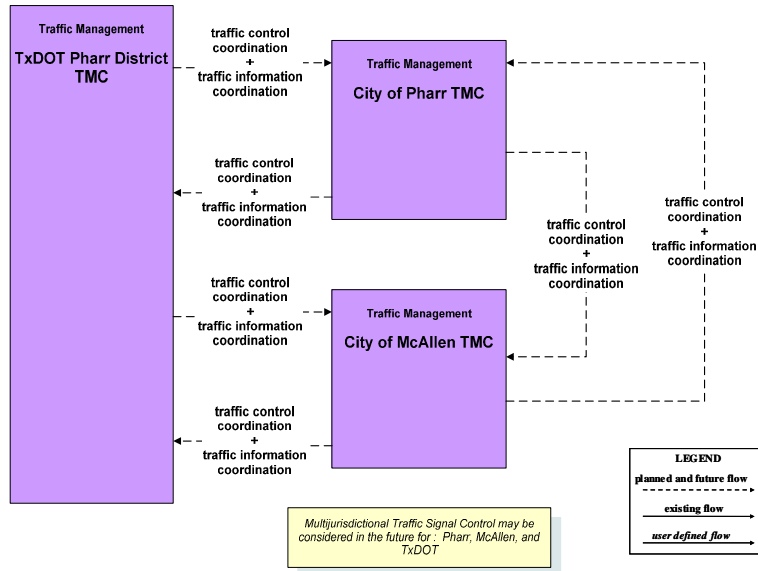


Figure A34 – ATMS08 – Incident Management: City/County EOC to Bridge Management Systems

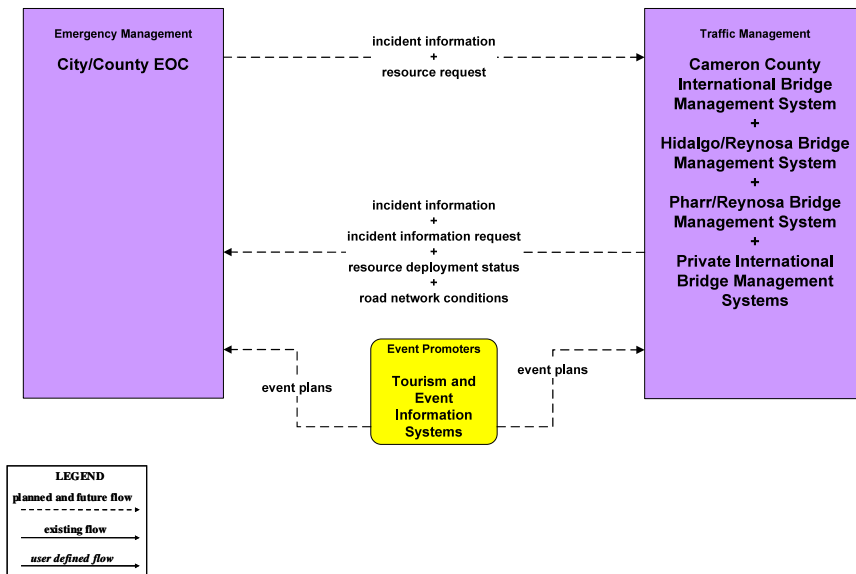


Figure A35 – ATMS08 – Incident Management: City/County EOC to Brownsville MPO, City of Brownsville, City of Harlingen, City of McAllen, and City of Pharr TMCs

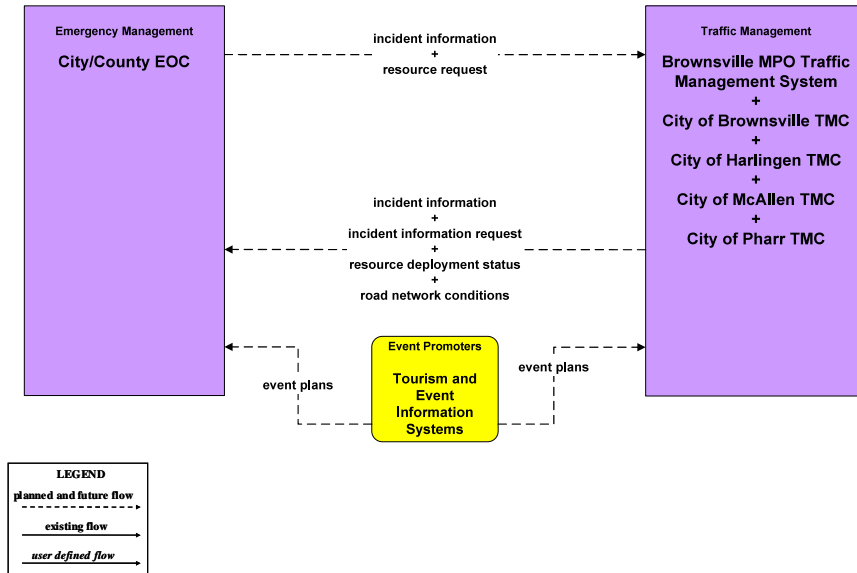
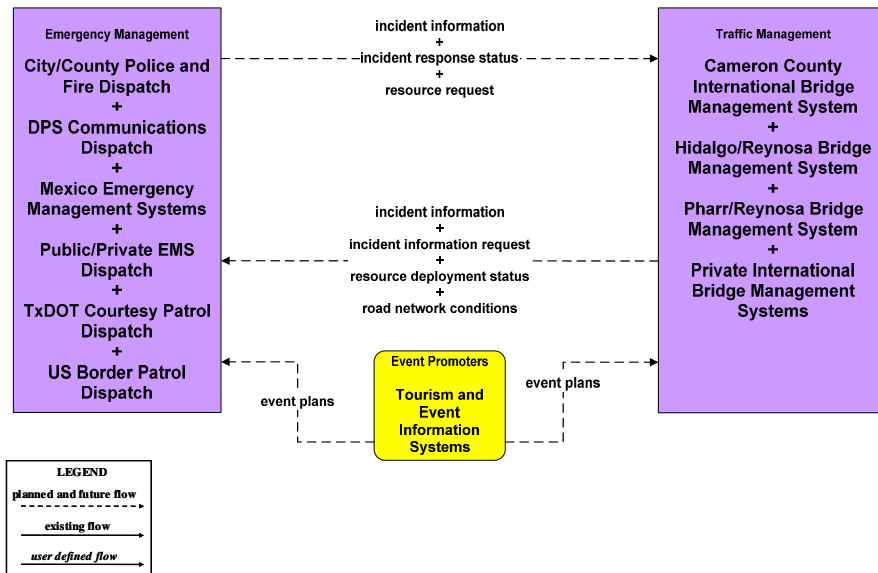
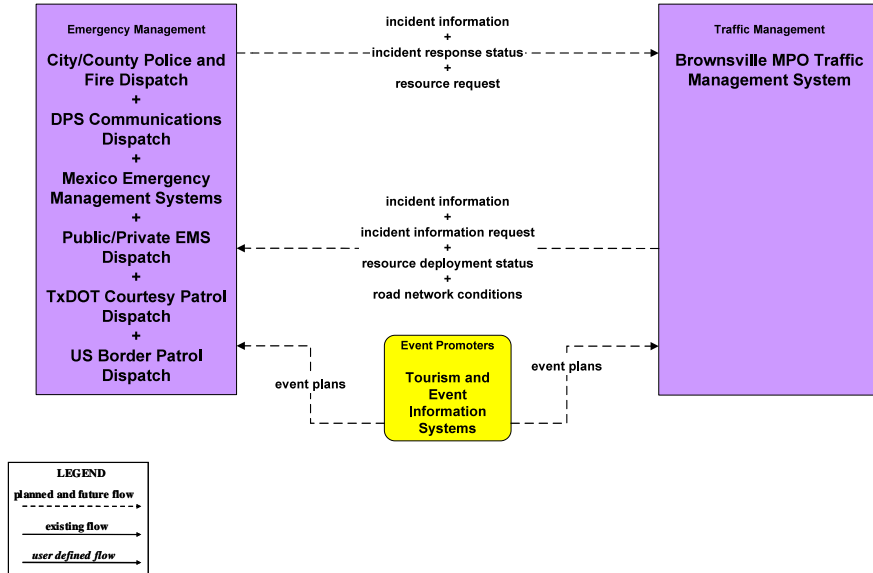


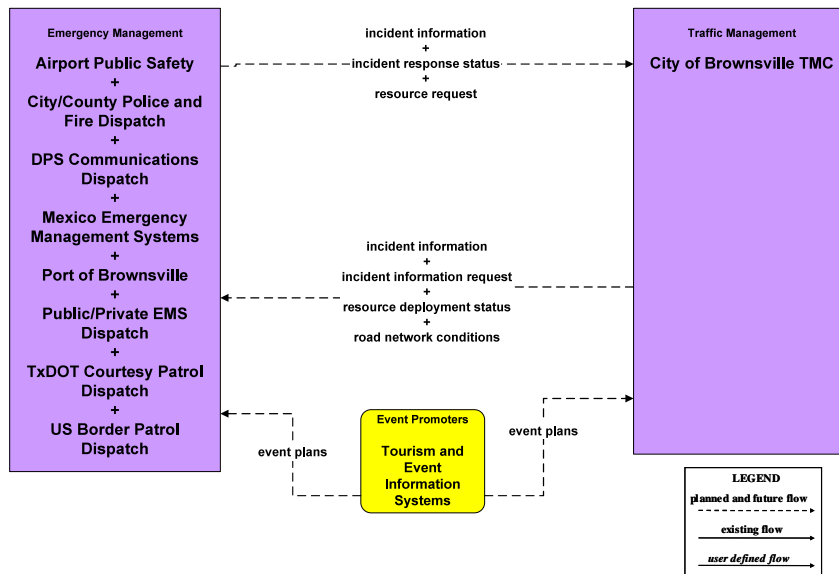
Figure A36 – ATMS08 – Incident Management: Non-EOC EM to Bridge Management System TM



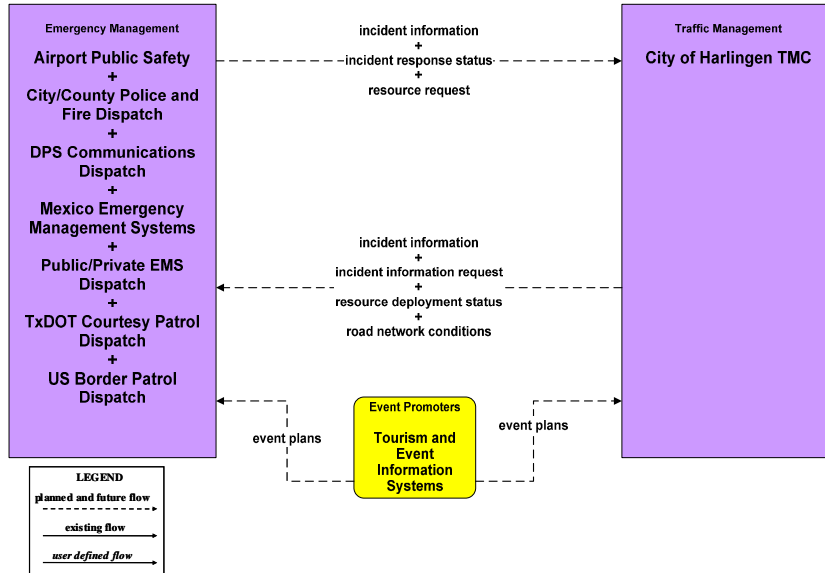
**Figure A37 – ATMS08 – Incident Management:
Non-EOC EM to Brownsville MPO Traffic Management System**



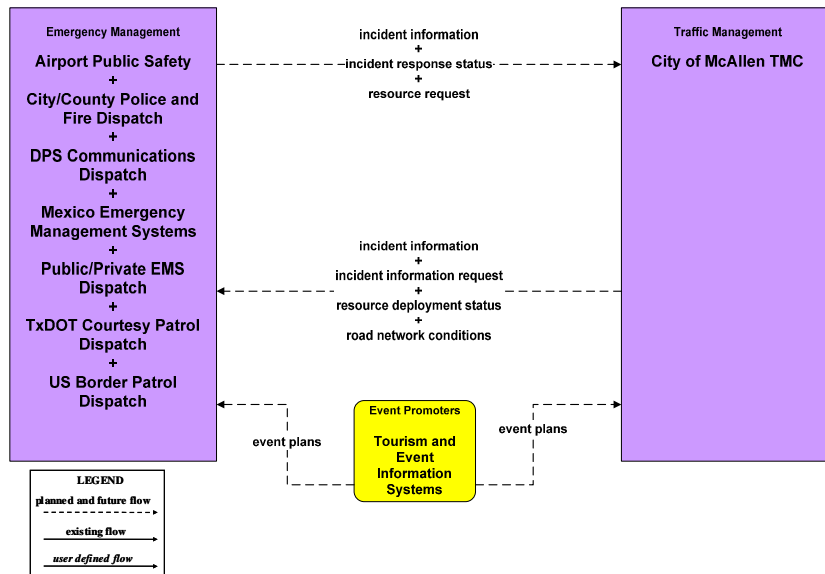
**Figure A38 – ATMS08 – Incident Management:
Non-EOC EM to City of Brownsville TMC**



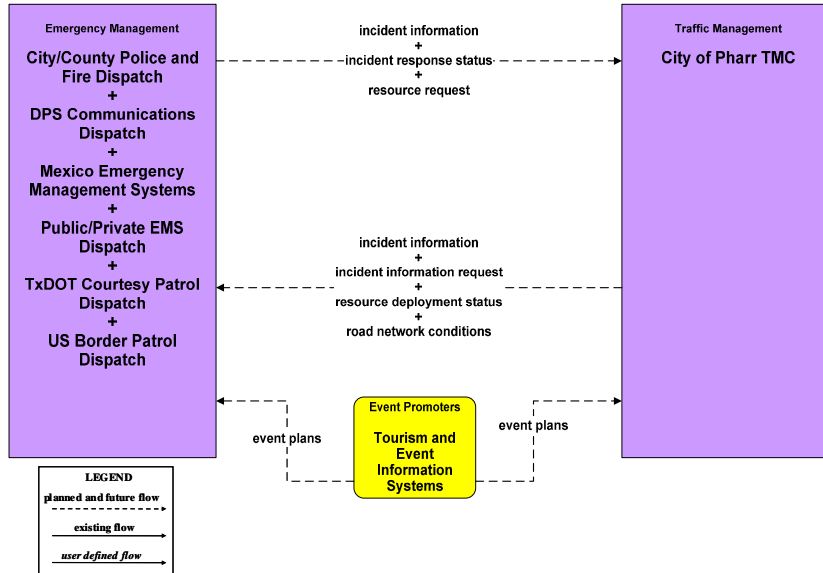
**Figure A39 – ATMS08 – Incident Management:
Non-EOC EM to City of Harlingen TMC**



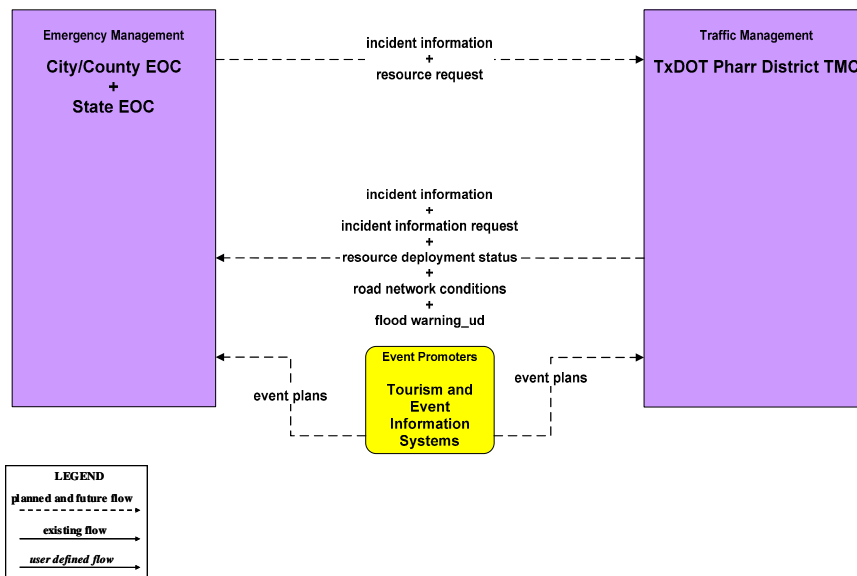
**Figure A40 – ATMS08 – Incident Management:
Non-EOC EM to City of McAllen TMC**



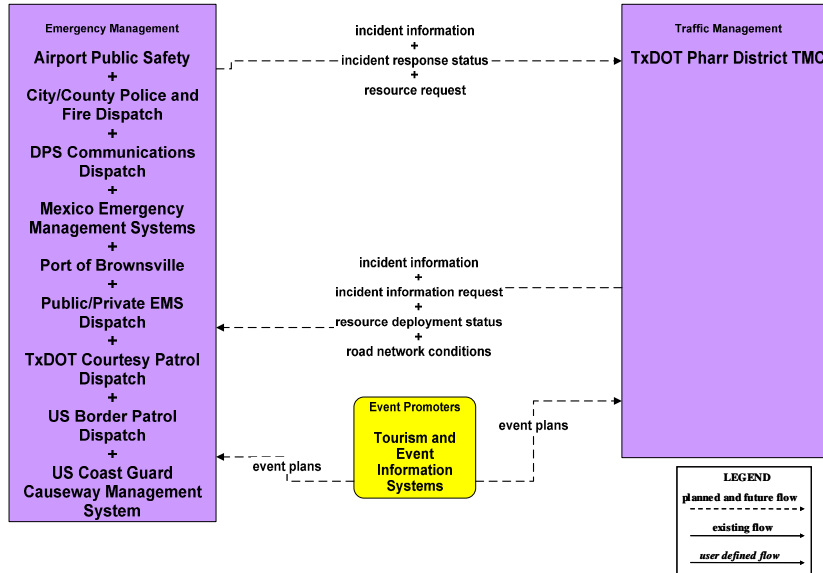
**Figure A41 – ATMS08 – Incident Management
Non-EOC EM to City of Pharr TMC**



**Figure A42 – ATMS08 – Incident Management:
State EOC, City/County EOC to TxDOT Pharr District TMC**



**Figure A43 – ATMS08 – Incident Management:
Non-EOC EM to TxDOT Pharr District TMC**



**Figure A44 – ATMS08 – Incident Management:
Weather Service**

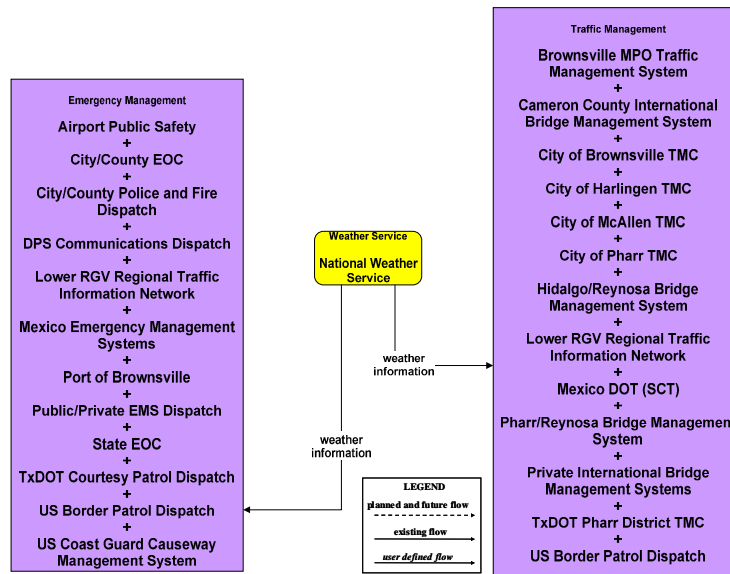


Figure A45 – ATMS08 – Incident Management: Bridge Management Systems – EM to TM Remote Surveillance Control

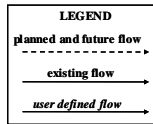
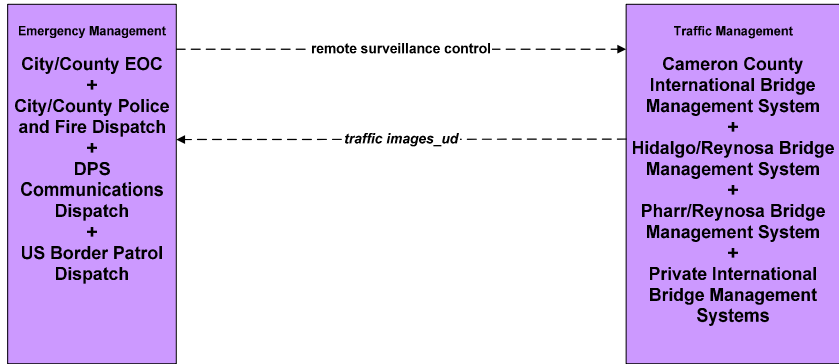


Figure A46 – ATMS08 – Incident Management: TxDOT Pharr District TMC – EM to TM Remote Surveillance Control

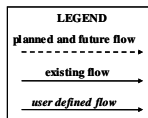
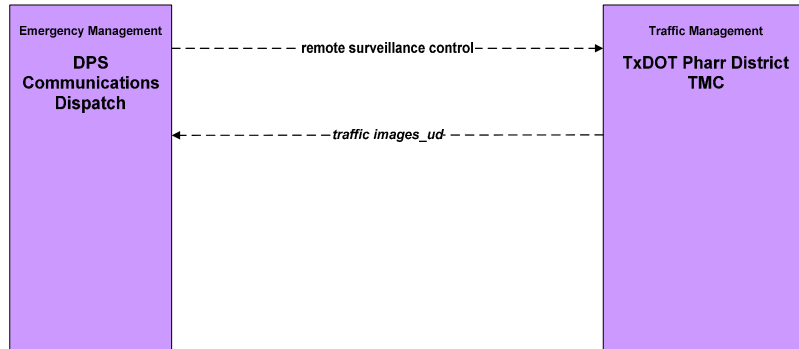


Figure A47 – ATMS08 – Incident Management: Bridge Management Systems to MCM (1 of 2)

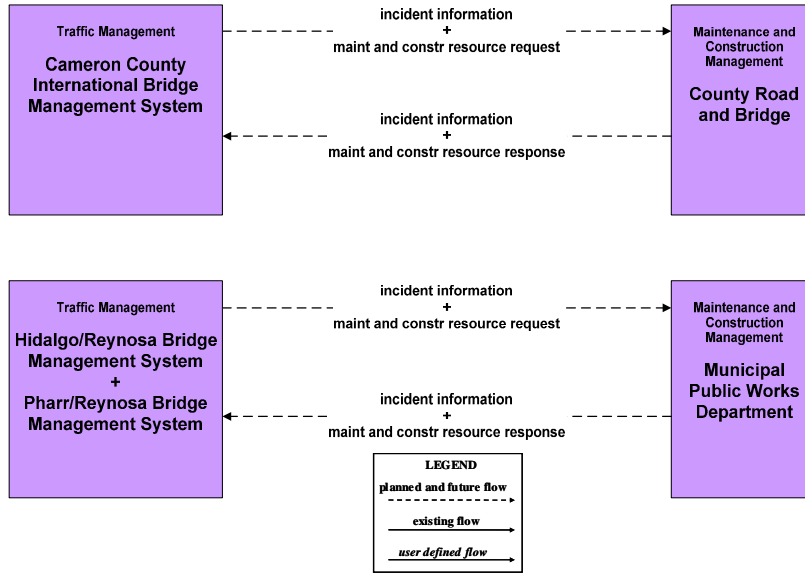
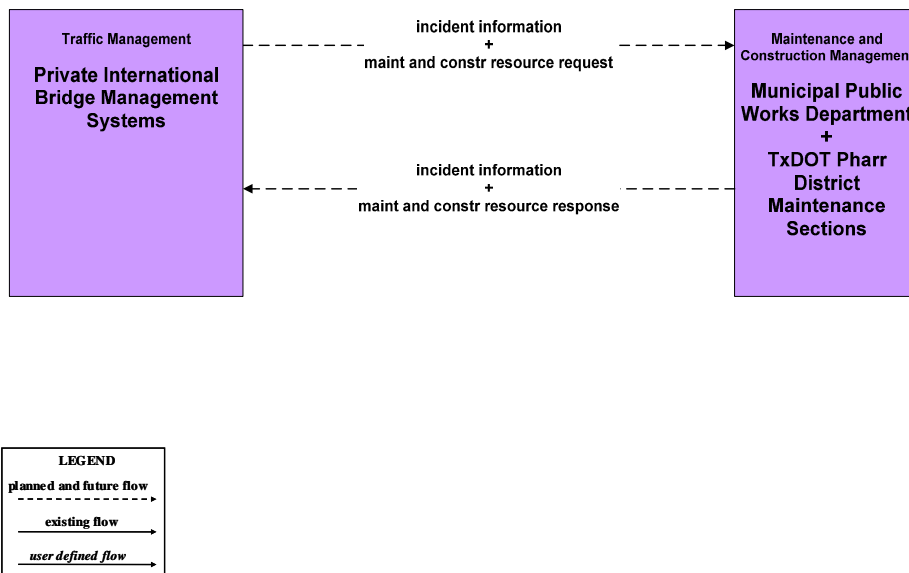
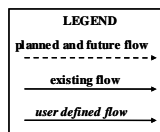
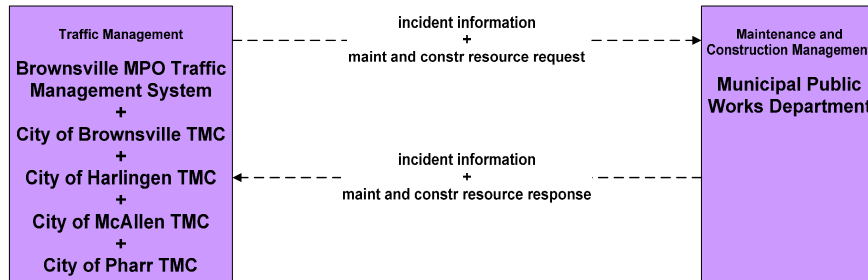


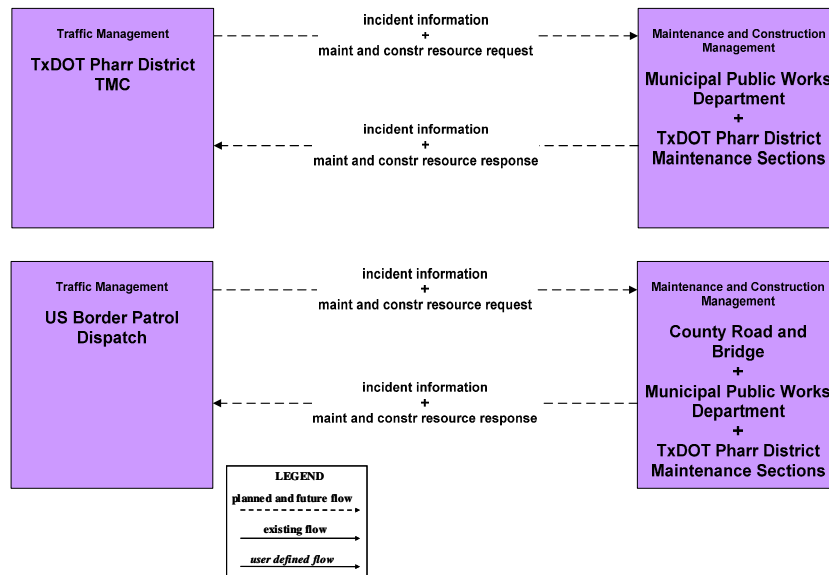
Figure A48 – ATMS08 – Incident Management: Bridge Management Systems to MCM (2 of 2)



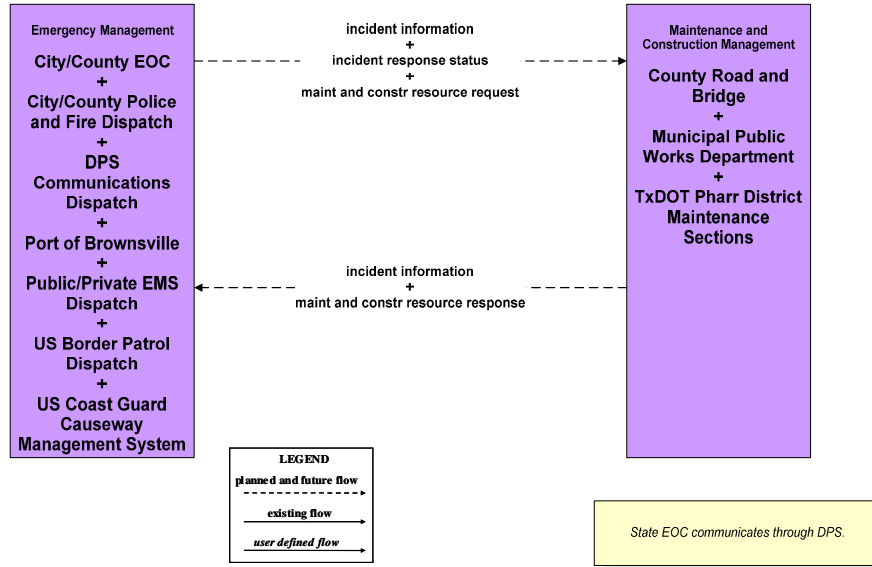
**Figure A49 – ATMS08 – Incident Management:
Brownsville MPO, City of Brownsville, City of Harlingen, City of McAllen, and City of Pharr
TMCs to MCM**



**Figure A50 – ATMS08 – Incident Management:
TxDOT Pharr District TMC and US Border Patrol Dispatch to MCM**



**Figure A51 – ATMS08 – Incident Management:
EM to MCM (1 of 2)**



**Figure A52 – ATMS08 – Incident Management:
EM to MCM (2 of 2)**

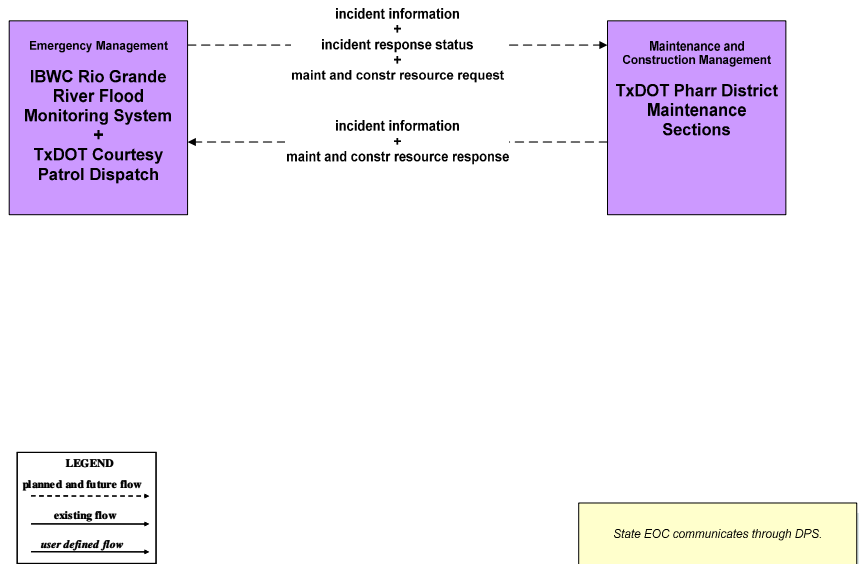


Figure A53 – ATMS08 – Incident Management: MCM to MCM

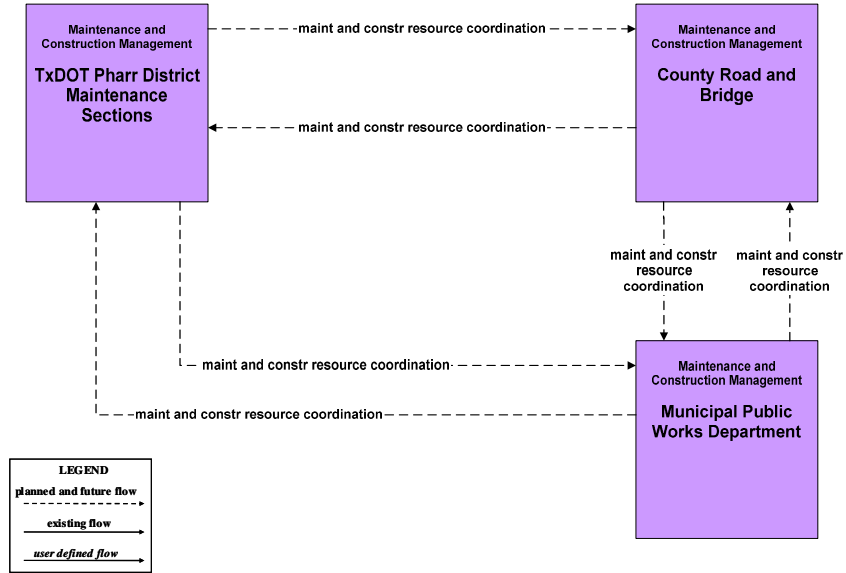


Figure A54 – ATMS08 – Incident Management: EM to EV (1 of 2)

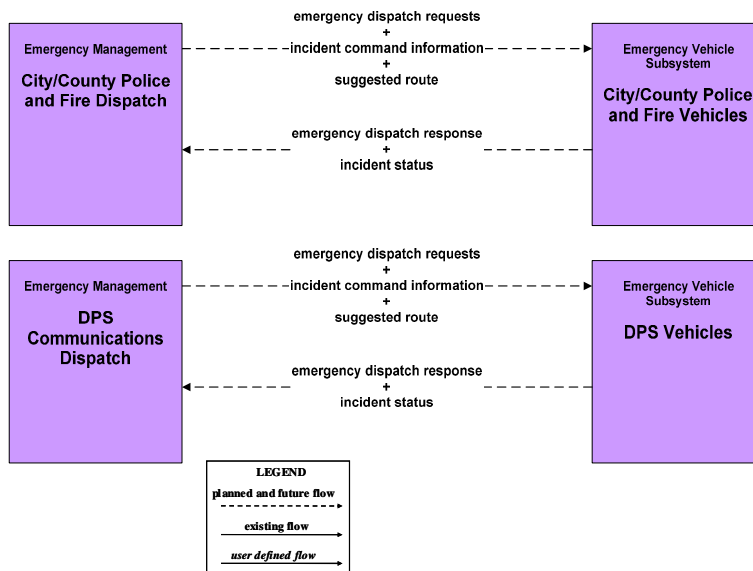


Figure A55 – ATMS08 – Incident Management:
EM to EV (2 of 2)

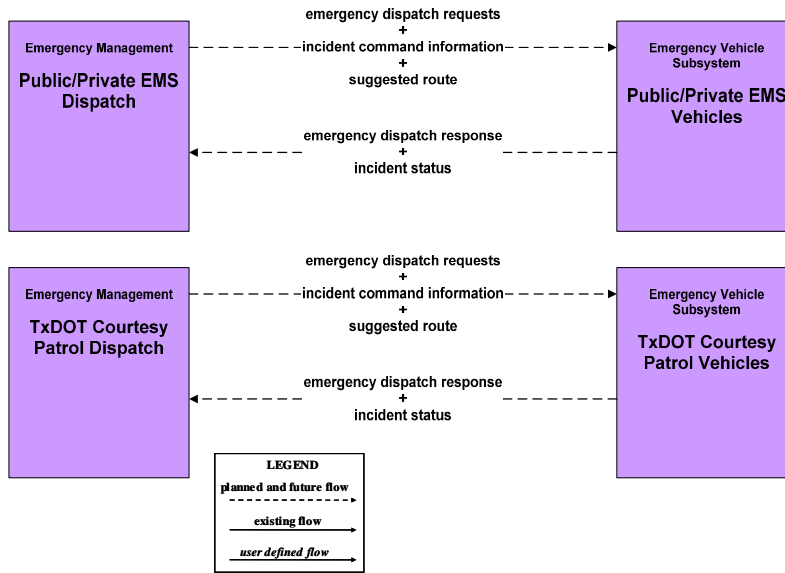


Figure A56 – ATMS08 – Incident Management:
Flood Monitoring

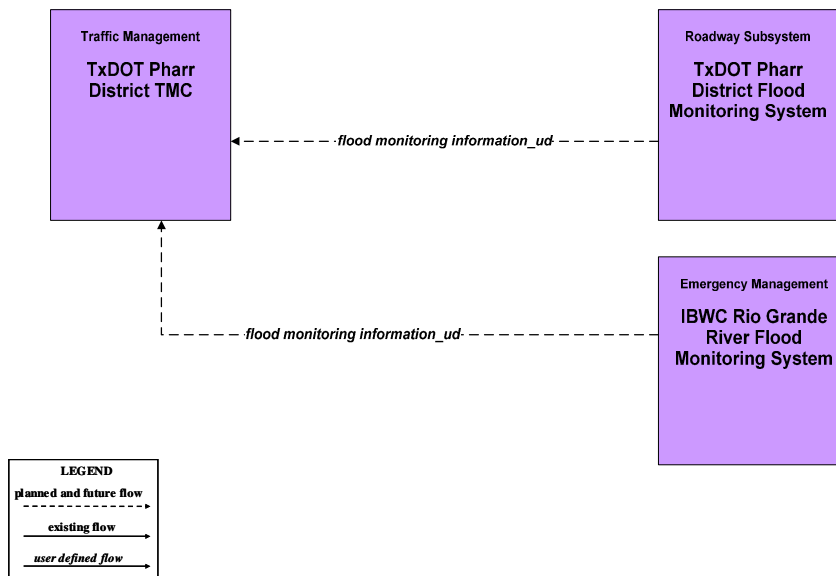


Figure A57 – ATMS08 – Incident Management: Flood Warning (1 of 2)

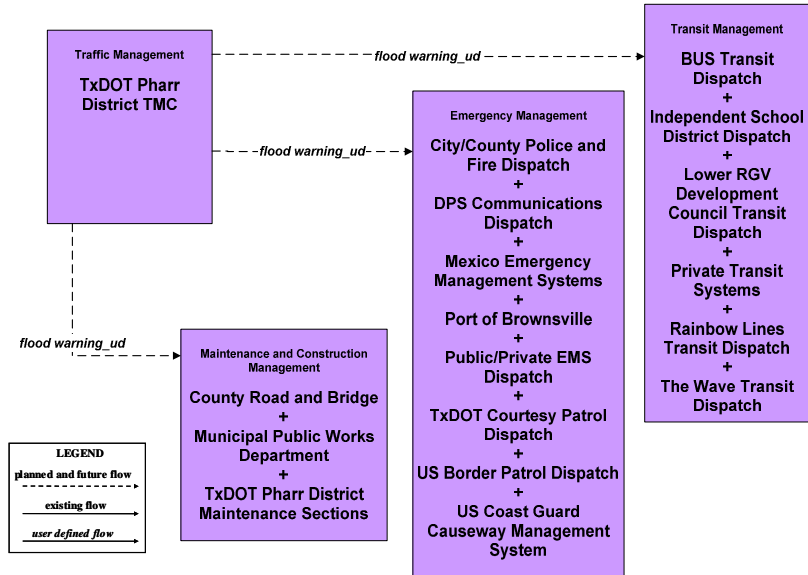
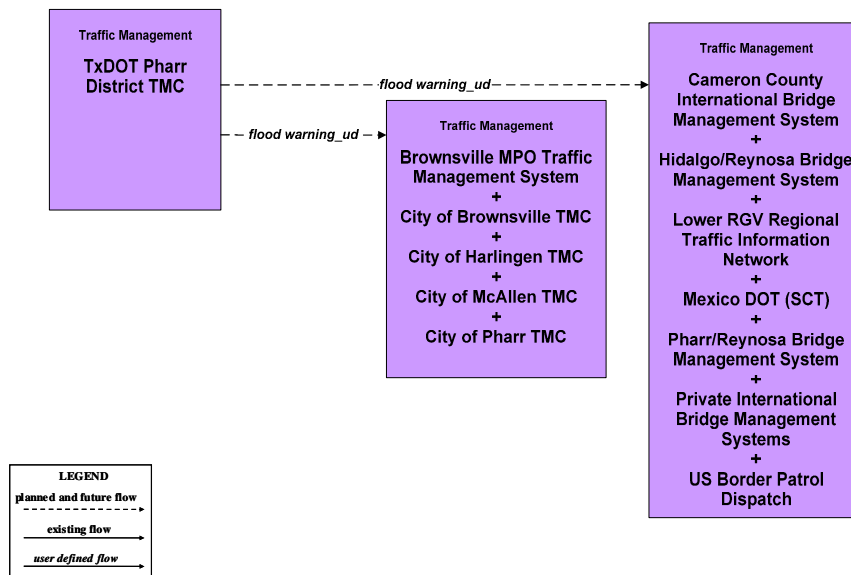
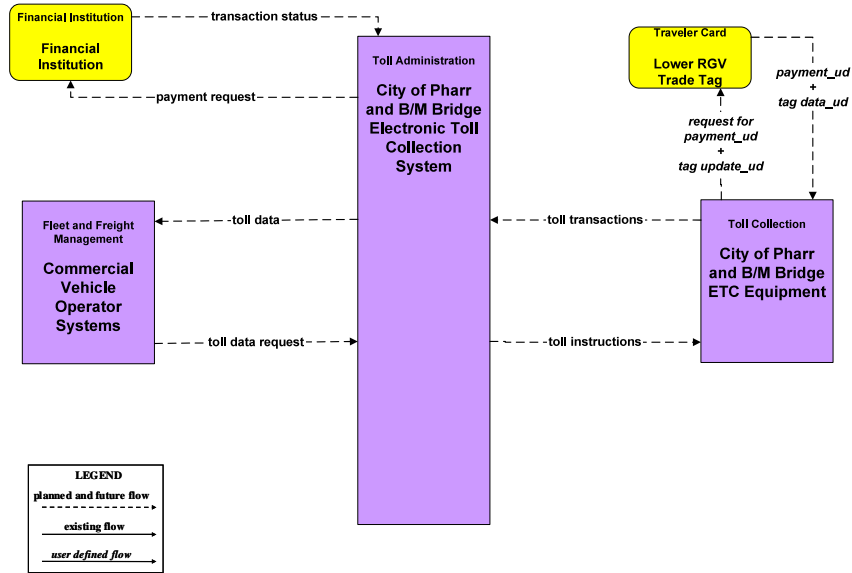


Figure A58 – ATMS08 – Incident Management: Flood Warning (2 of 2)



**Figure A59 – ATMS10 – Electronic Toll Collection:
City of Pharr and B&M Bridge Electronic Toll Collection System (1 of 2)**



**Figure A60 – ATMS10 – Electronic Toll Collection:
City of Pharr and B&M Bridge Electronic Toll Collection System (2 of 2)**

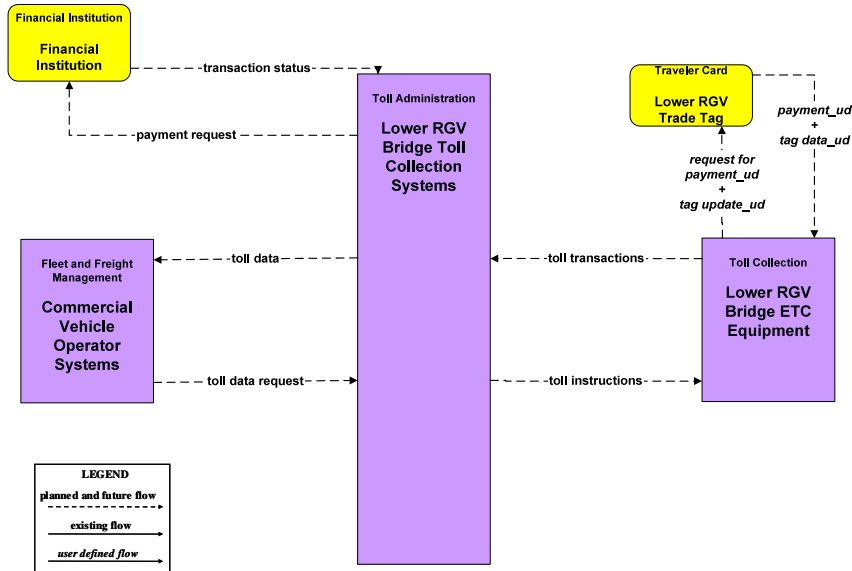


Figure A61 – ATMS13 – Standard Railroad Crossing: City of Brownsville

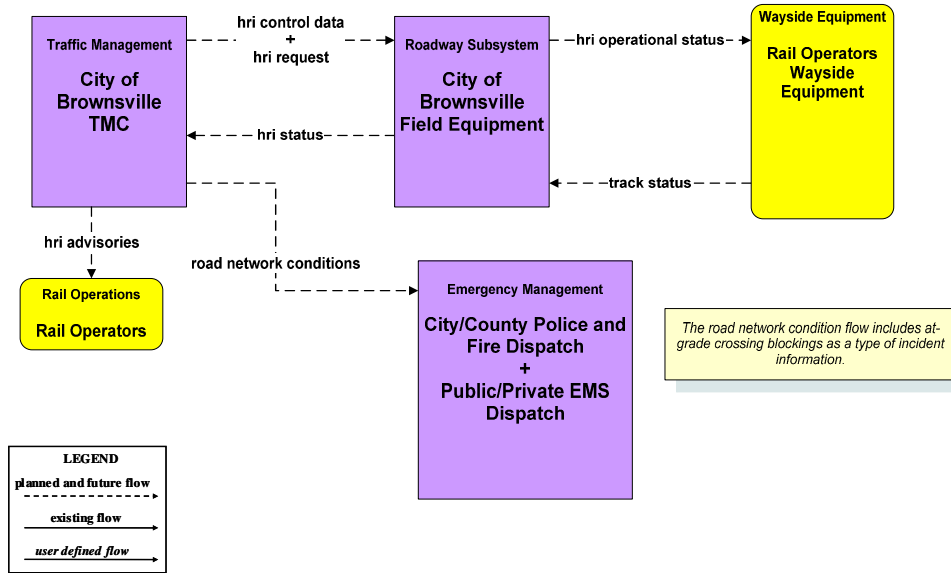
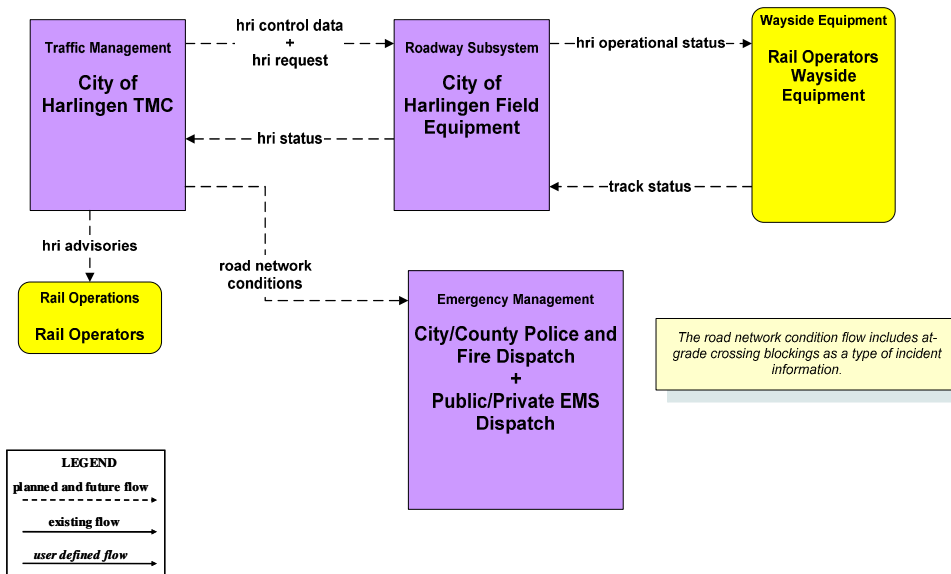
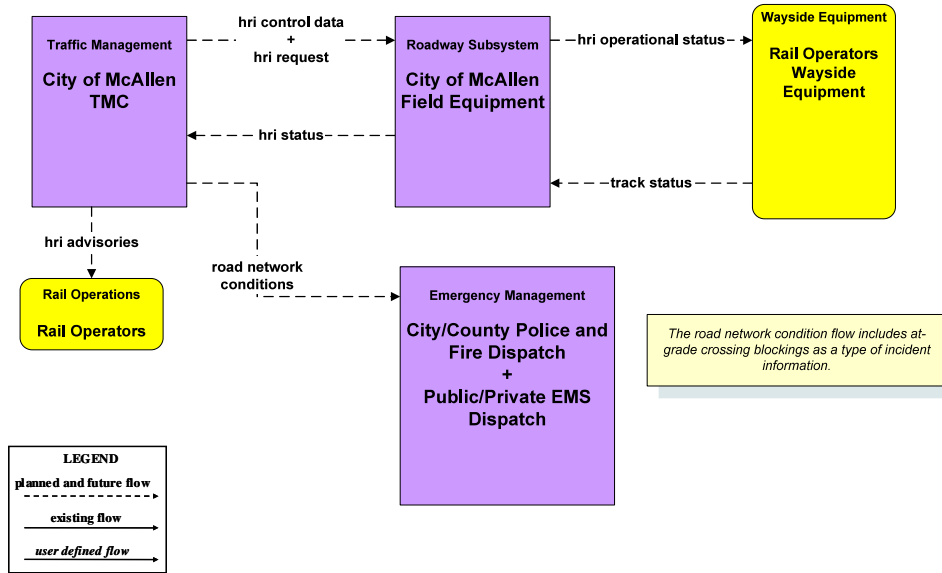


Figure A62 – ATMS13 – Standard Railroad Crossing: City of Harlingen



**Figure A63 – ATMS13 – Standard Railroad Crossing:
City of McAllen**



**Figure A64 – ATMS13 – Standard Railroad Crossing:
TxDOT Pharr District TMC**

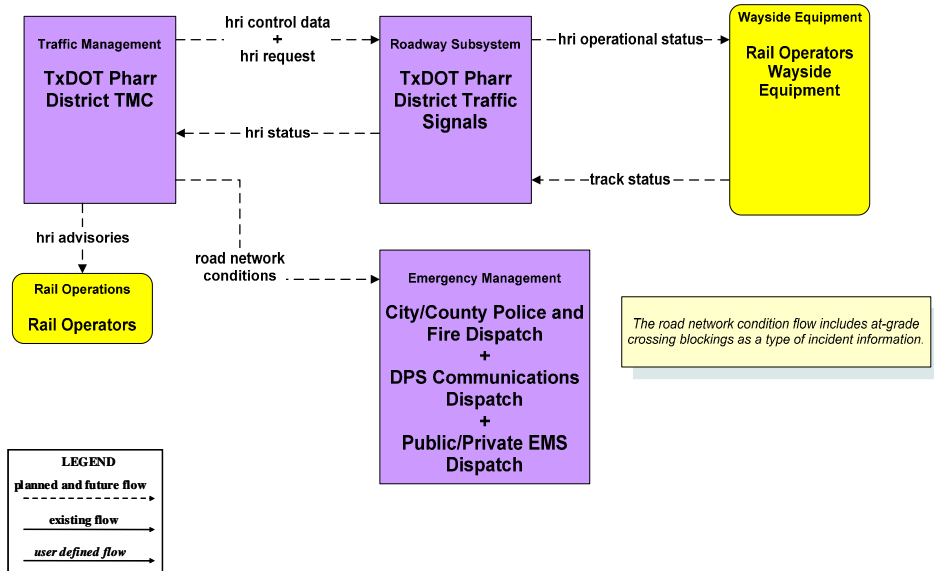


Figure A65 – ATMS14 – Advanced Railroad Crossing: City of Harlingen

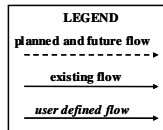
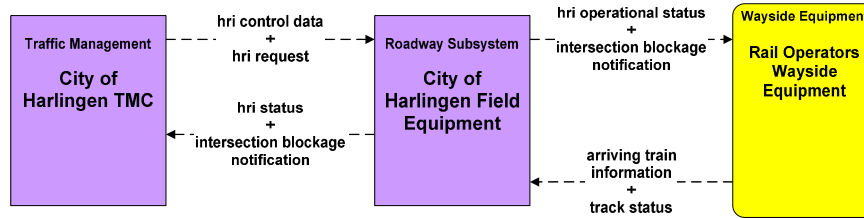


Figure A66 – ATMS15 – Railroad Operations Coordination

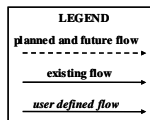
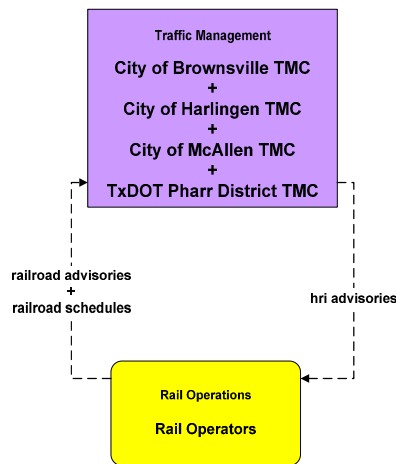


Figure A67 – ATMS16 – Parking Facility Management

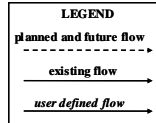
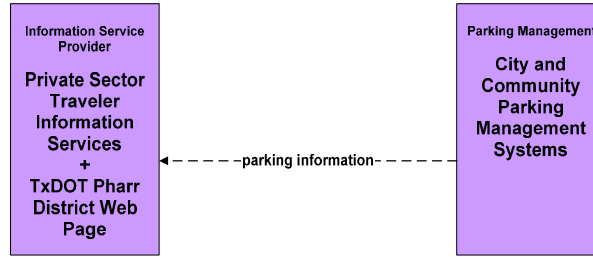


Figure A68 – ATMS17 – Regional Parking Management

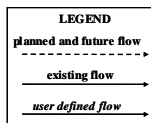


Figure A69 – EM1 – Emergency Response Coordination

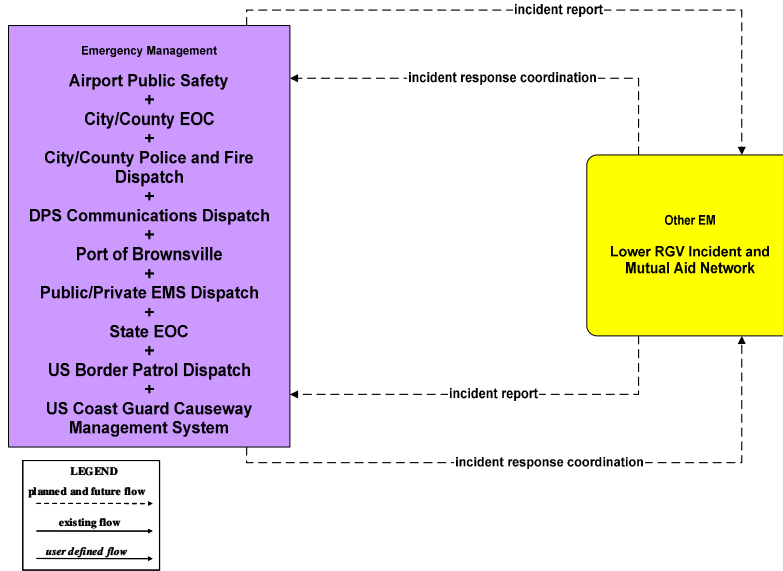


Figure A70 – EM1 – Emergency Response Coordination: State EOC to City/County EOC

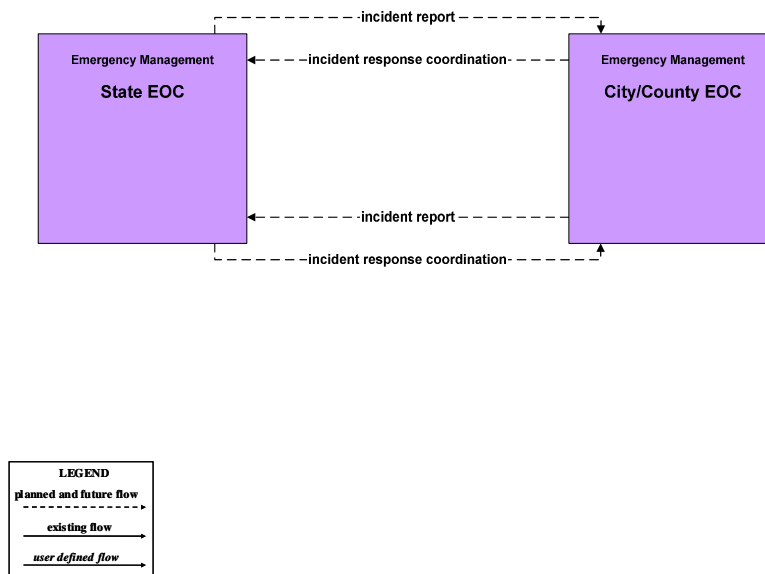


Figure A71 – EM1 – Emergency Response Coordination: City/County EOC

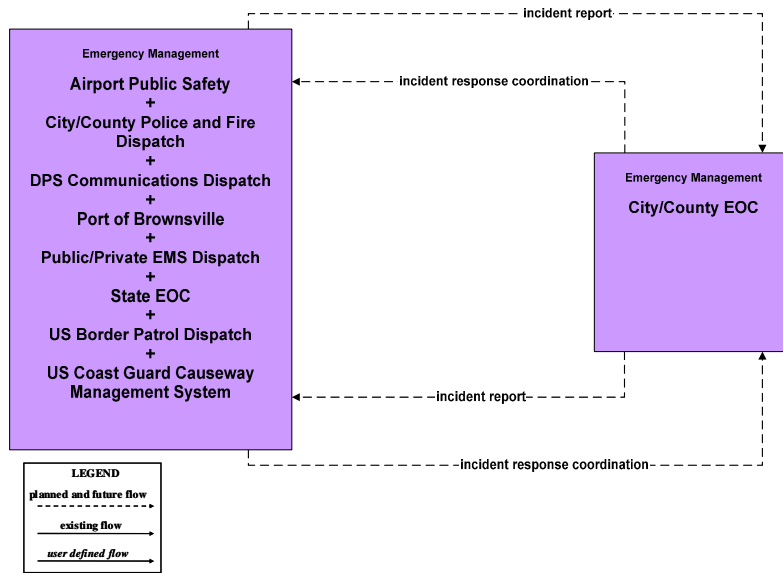
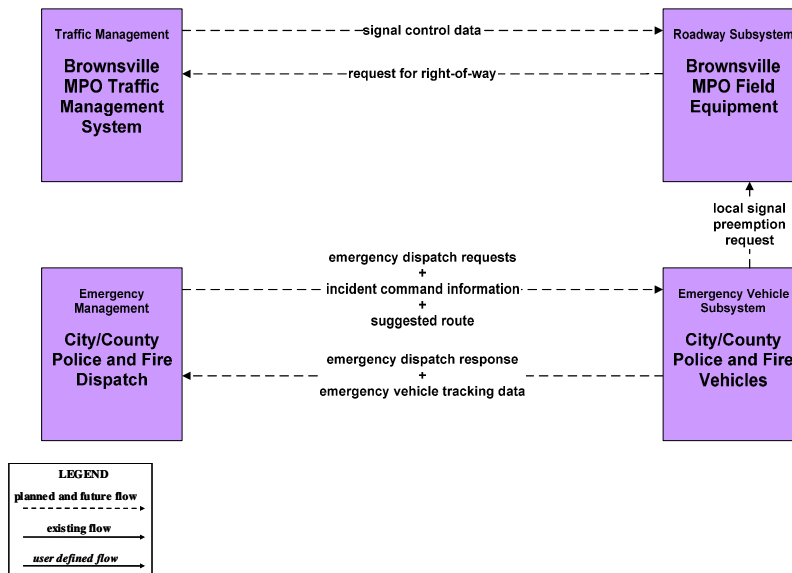
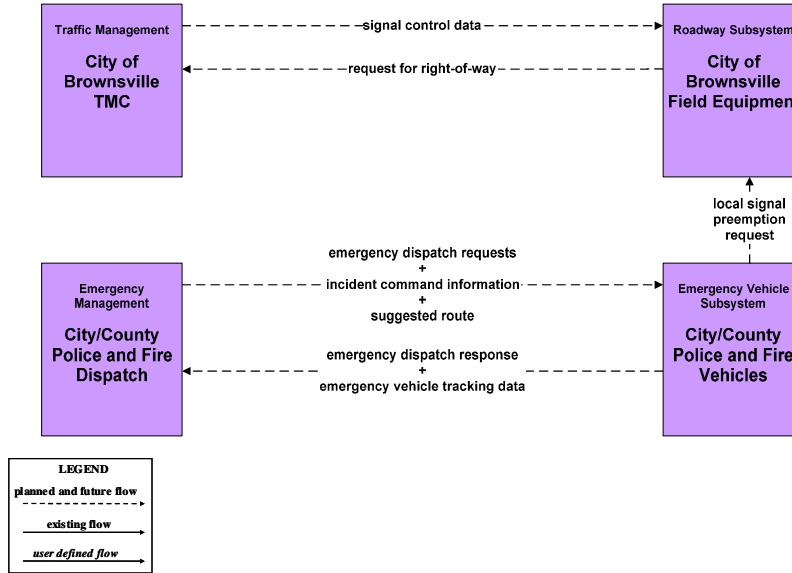


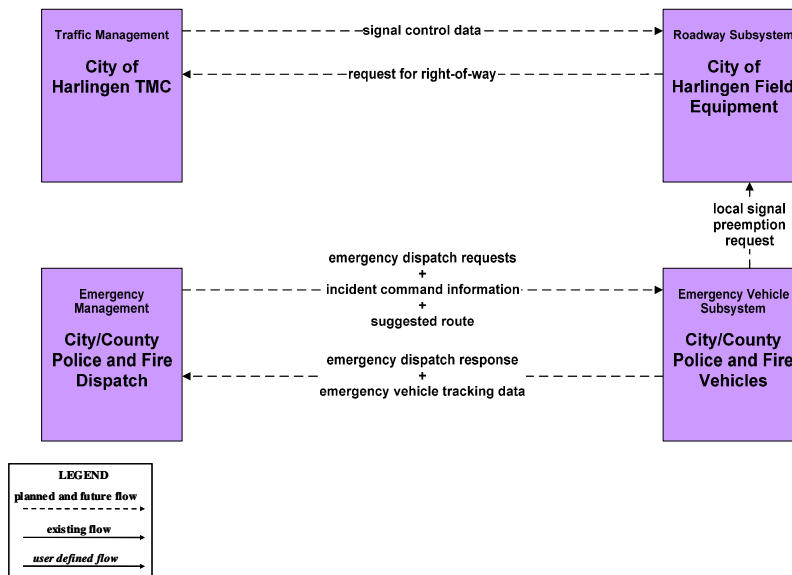
Figure A72 – EM2 – Emergency Routing: City/County Police and Fire Vehicles – Brownsville MPO



**Figure A73 – EM2 – Emergency Routing:
City/County Police and Fire Vehicles – City of Brownsville**



**Figure A74 – EM2 – Emergency Routing:
City/County Police and Fire Vehicles – City of Harlingen**



**Figure A75 – EM2 – Emergency Routing:
City/County Police and Fire Vehicles – City of McAllen**



**Figure A76 – EM2 – Emergency Routing:
City/County Police and Fire Vehicles – City of Pharr**

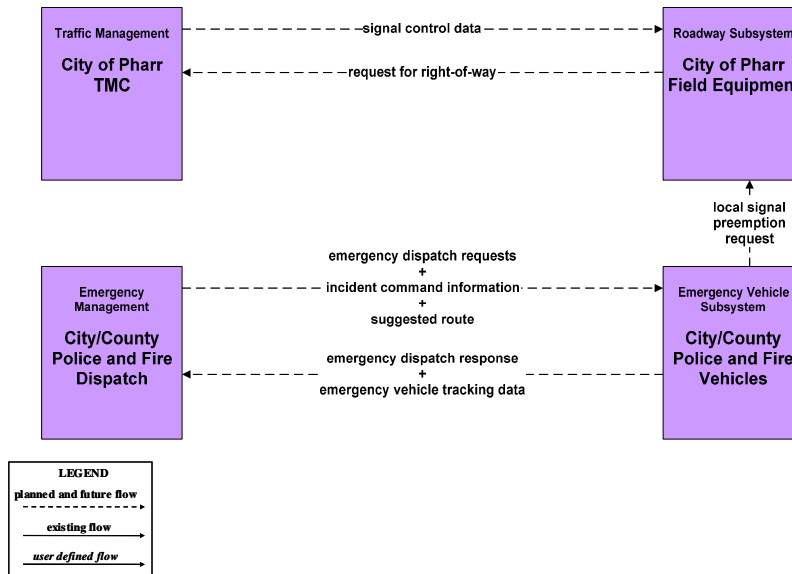


Figure A77 – EM2 – Emergency Routing: Public/Private EMS Vehicles

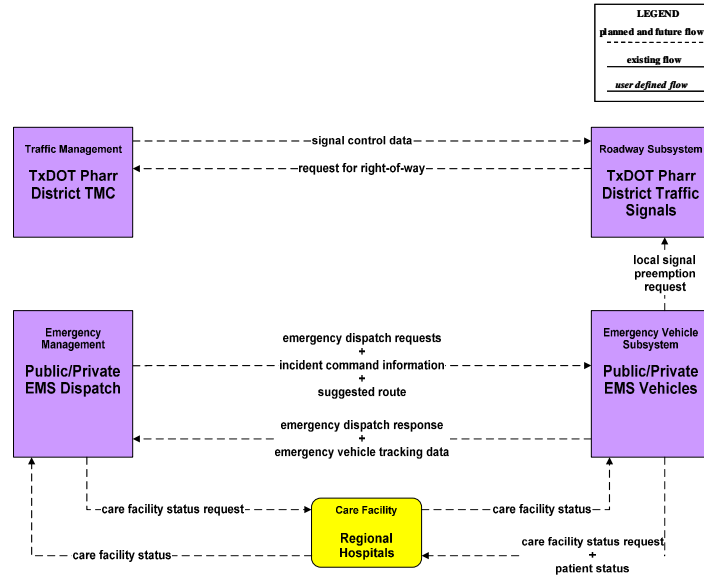


Figure A78 – EM2 – Emergency Routing: Public/Private EMS Vehicles

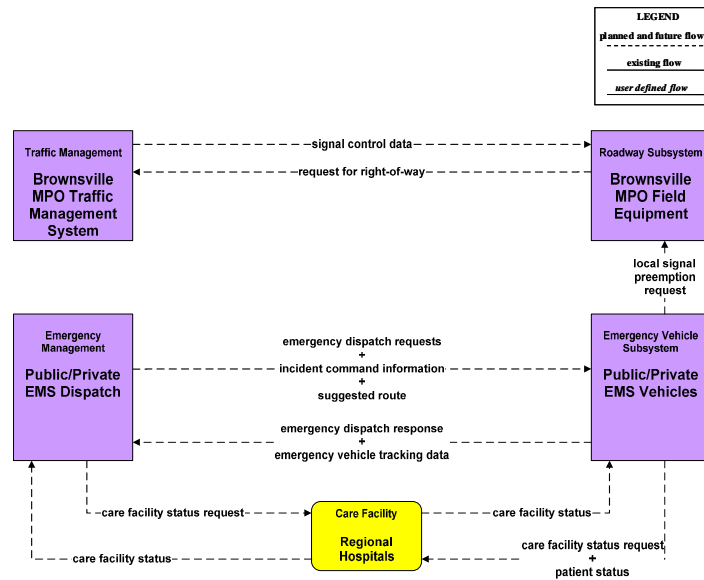


Figure A79 – EM2 – Emergency Routing: Public/Private EMS Vehicles

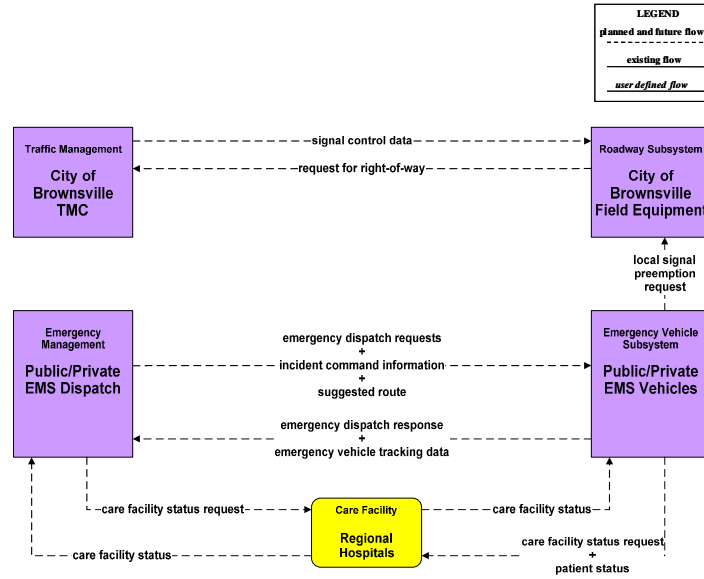


Figure A80 – EM2 – Emergency Routing: Public/Private EMS Vehicles

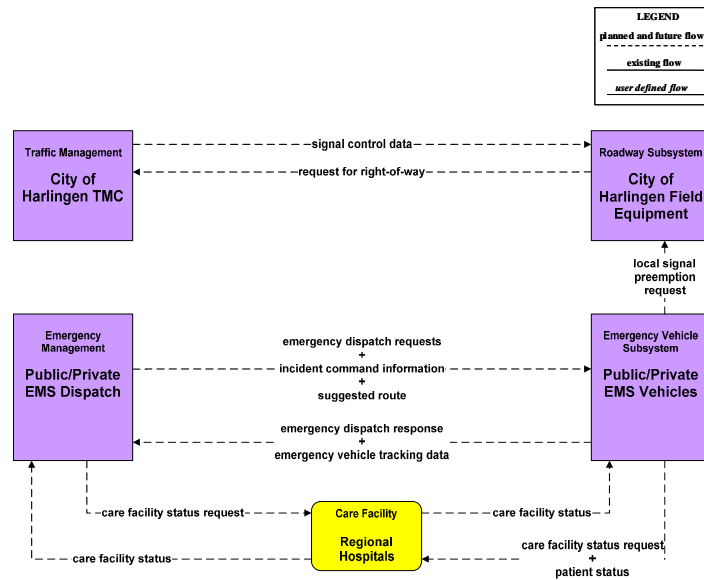


Figure A81 – EM2 – Emergency Routing: Public/Private EMS Vehicles

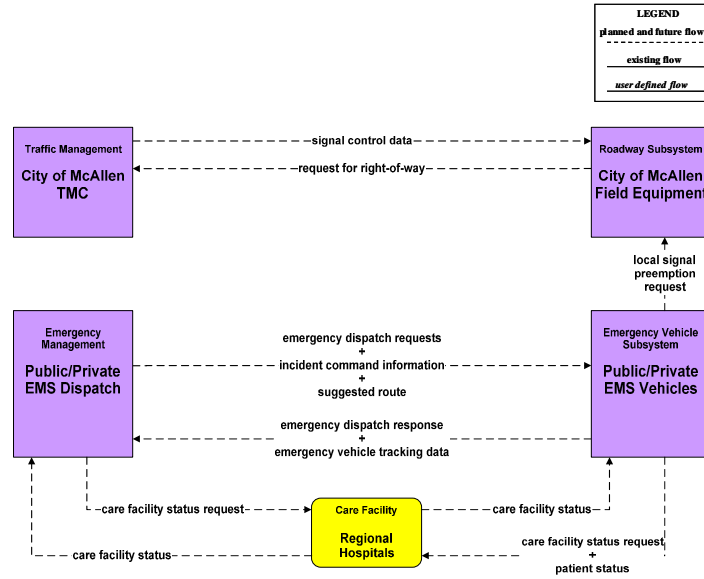


Figure A82 – EM2 – Emergency Routing: Public/Private EMS Vehicles

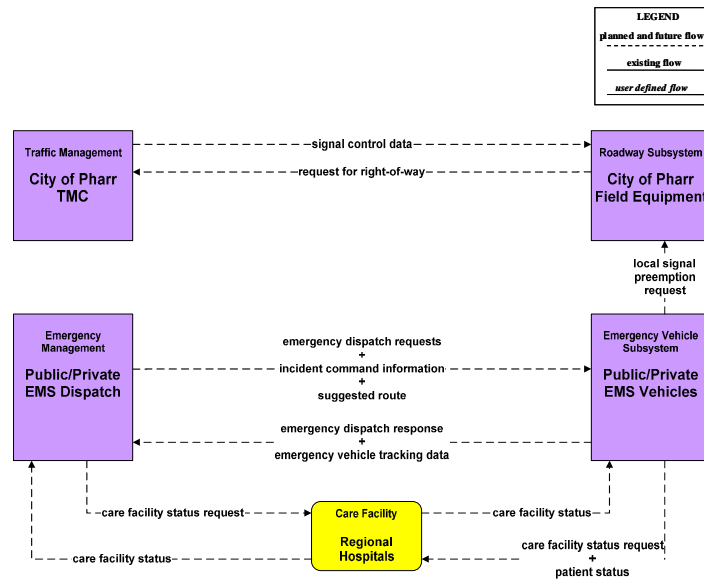


Figure A83 – MC01 – Maintenance and Construction Vehicle Tracking: TxDOT Pharr District Maintenance Sections

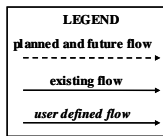
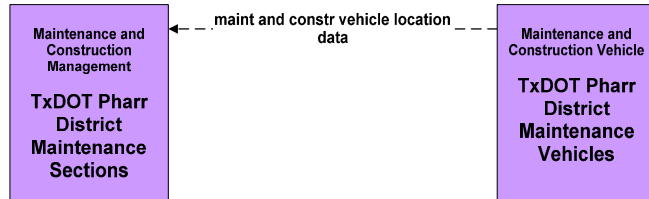


Figure A84 – MC01 – Maintenance and Construction Vehicle Tracking: County Road and Bridge and Municipal Public Works Department

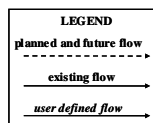
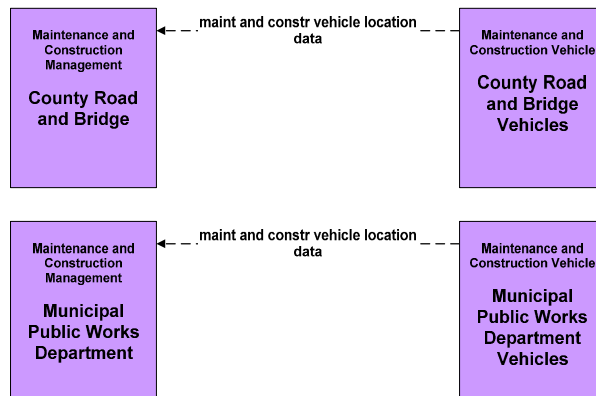


Figure A85 – MC02 – Maintenance and Construction Vehicle Maintenance: TxDOT Pharr District Maintenance Sections

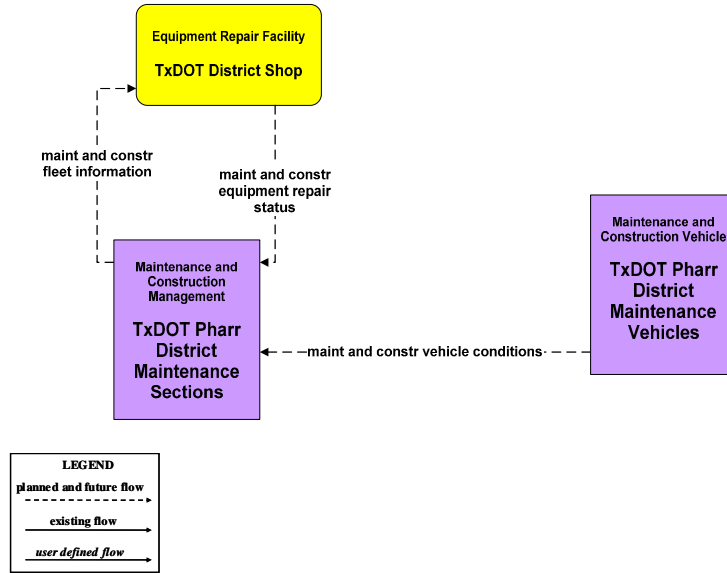


Figure A86 – MC02 – Maintenance and Construction Vehicle Maintenance: County Road and Bridge

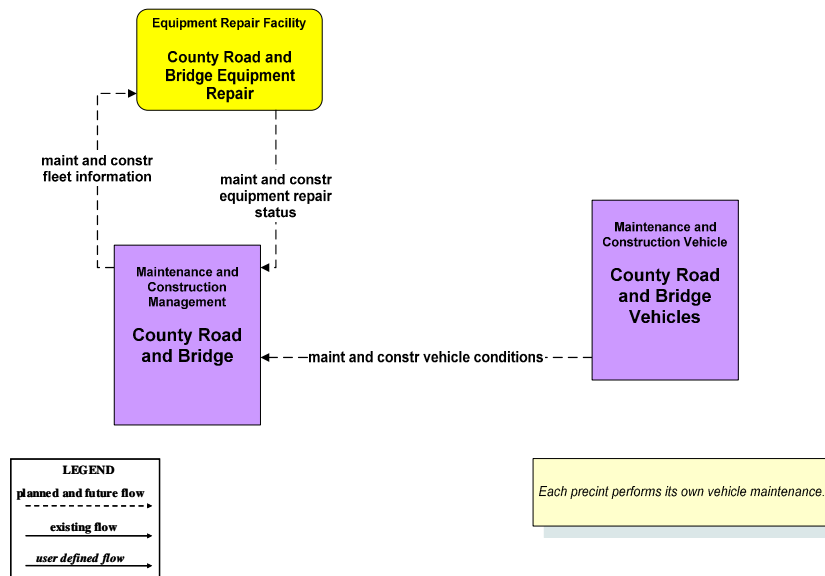


Figure A87 – MC02 – Maintenance and Construction Vehicle Maintenance: Municipal Public Works Department Vehicles

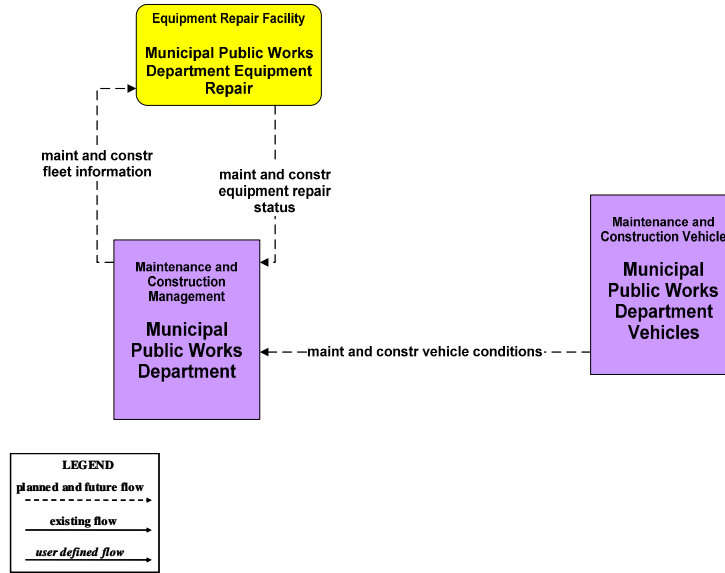
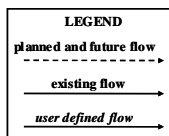
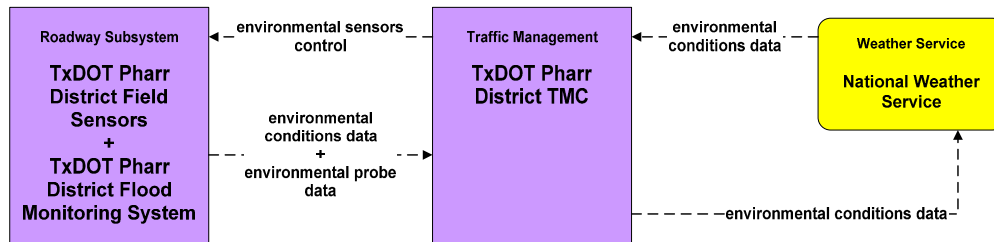
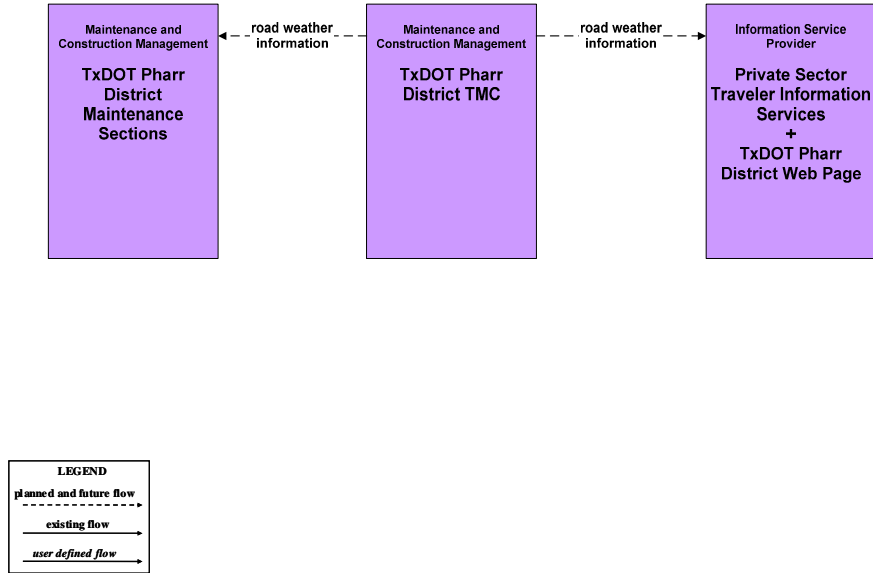


Figure A88 – MC03 – Road Weather Data Collection: TxDOT Pharr District TMC



**Figure A89 – MC04 – Weather Information Processing and Distribution:
TxDOT Pharr District TMC**



**Figure A90 – MC07 – Roadway Maintenance and Construction:
TxDOT Pharr District Maintenance Section (1 of 2)**

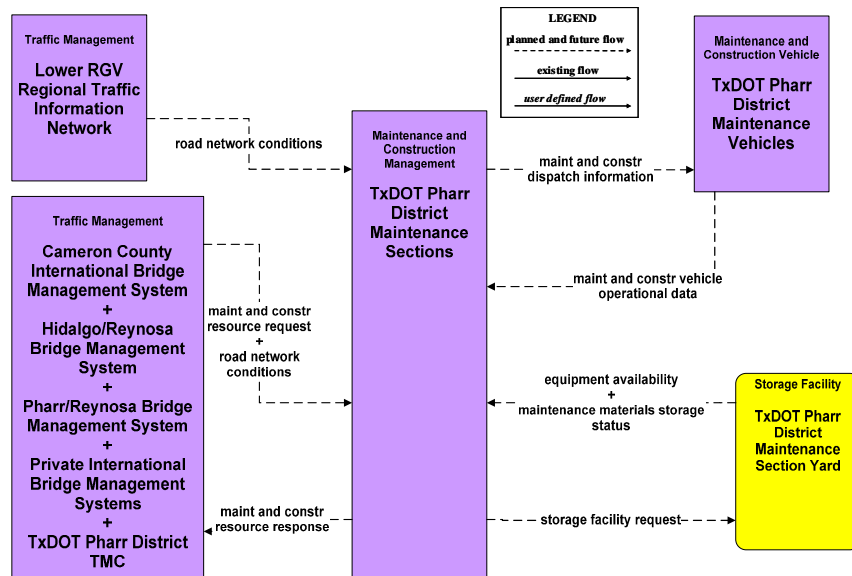


Figure A91 – MC07 – Roadway Maintenance and Construction: TxDOT Pharr District Maintenance Section (2 of 2)

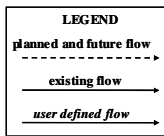
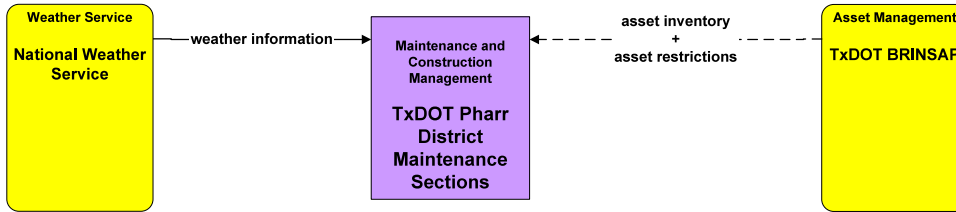


Figure A92 – MC07 – Roadway Maintenance and Construction: County Road and Bridge

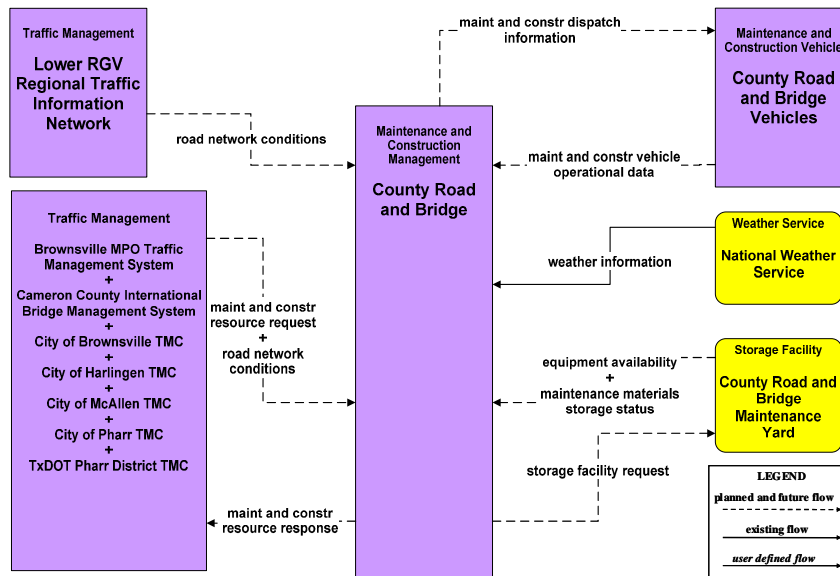


Figure A93 – MC07 – Roadway Maintenance and Construction: Municipal Public Works Department

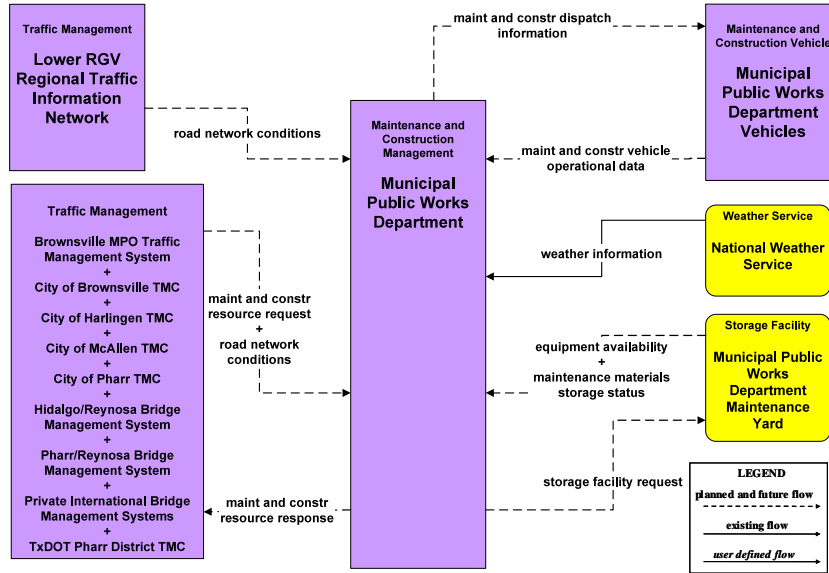


Figure A94 – MC08 – Workzone Management: County Road and Bridge

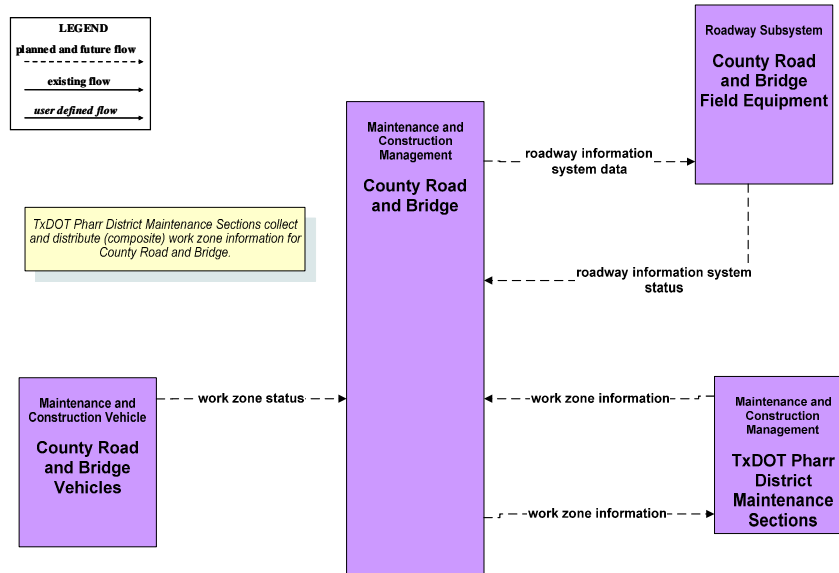


Figure A95 – MC08 – Workzone Management: Municipal Public Works Department

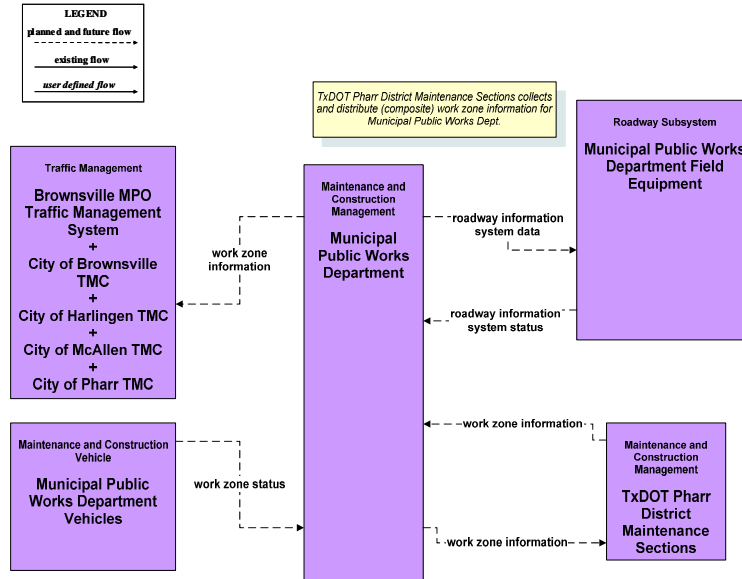
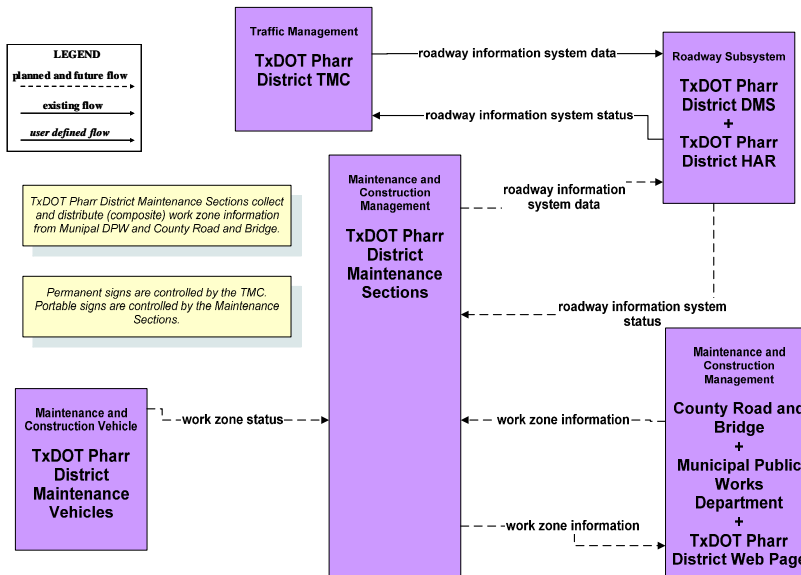
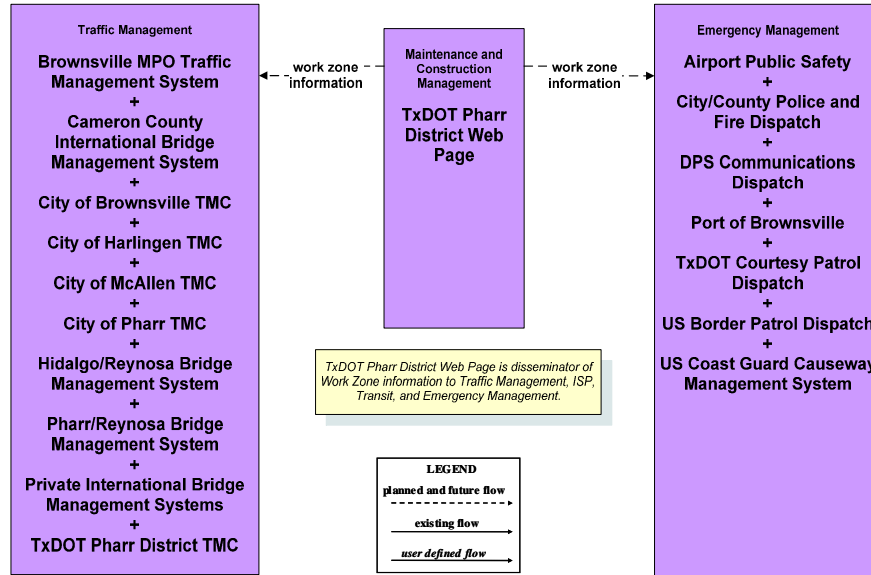


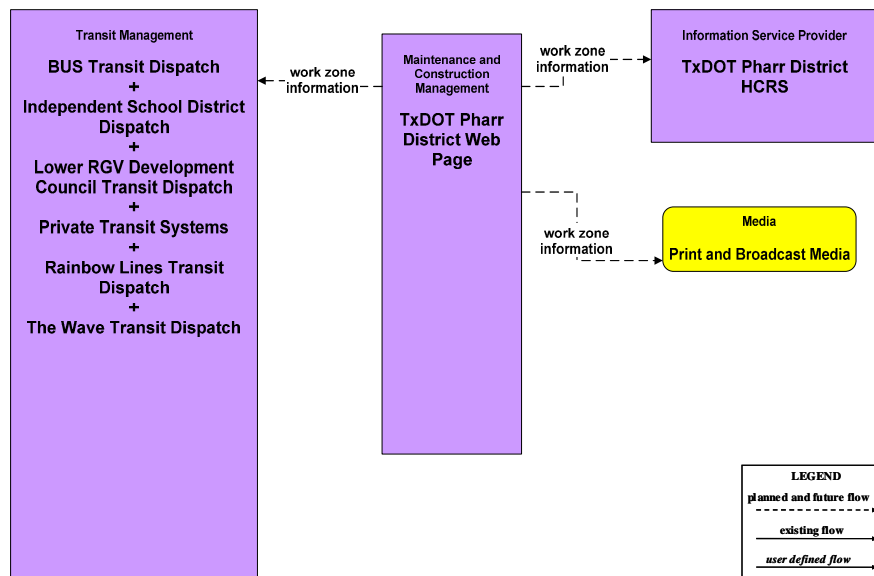
Figure A96 – MC08 – Workzone Management: TxDOT Pharr District Maintenance Sections



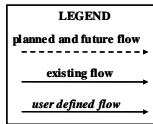
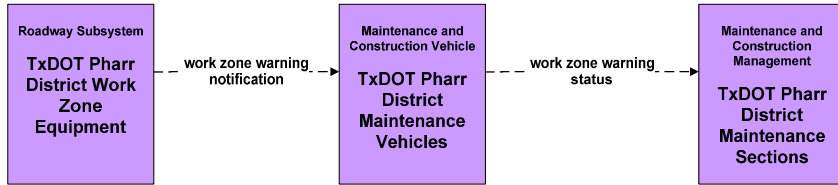
**Figure A97 – MC08 – Workzone Management:
TxDOT Pharr District Maintenance Sections – Work Zone Information Distribution (1 of 2)**



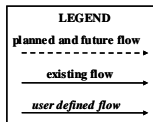
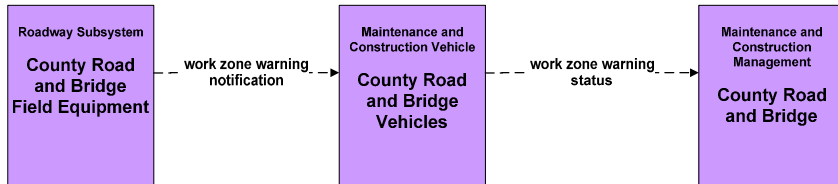
**Figure A98 – MC08 – Workzone Management:
TxDOT Pharr District Maintenance Sections – Work Zone Information Distribution (2 of 2)**



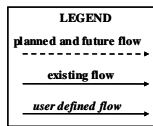
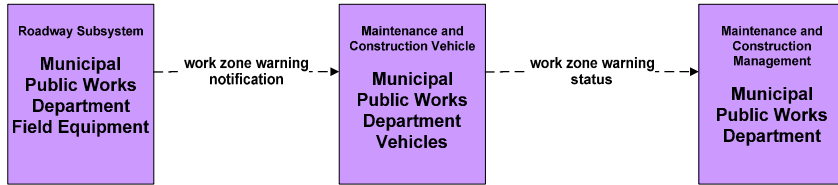
**Figure A99 – MC09 – Workzone Safety Monitoring:
TxDOT Pharr District Maintenance Sections**



**Figure A100 – MC09 – Workzone Safety Monitoring:
County Road and Bridge**



**Figure A101 – MC09 – Workzone Safety Monitoring:
Municipal Public Works Department**



**Figure A102 – APTS1 – Transit Vehicle Tracking:
BUS Transit**

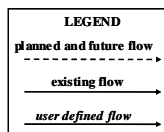


Figure A103 – APTS1 – Transit Vehicle Tracking: Lower RGV Development Council Public Transit

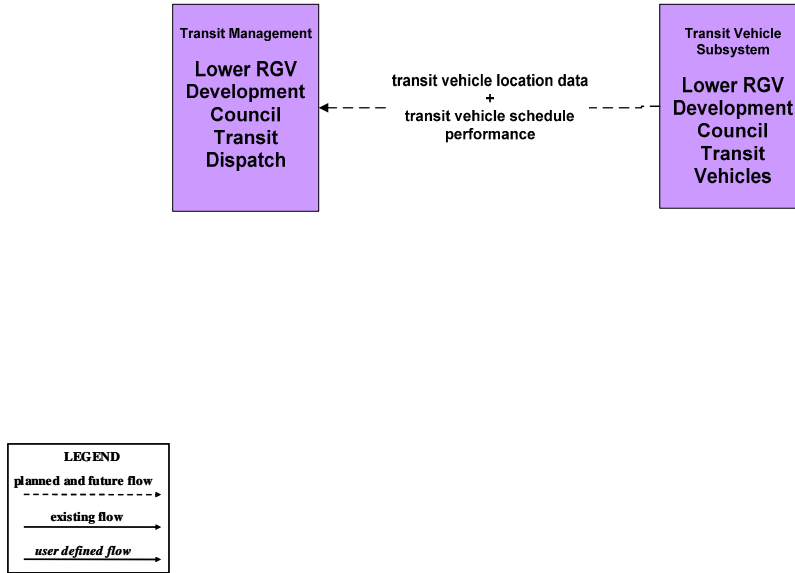
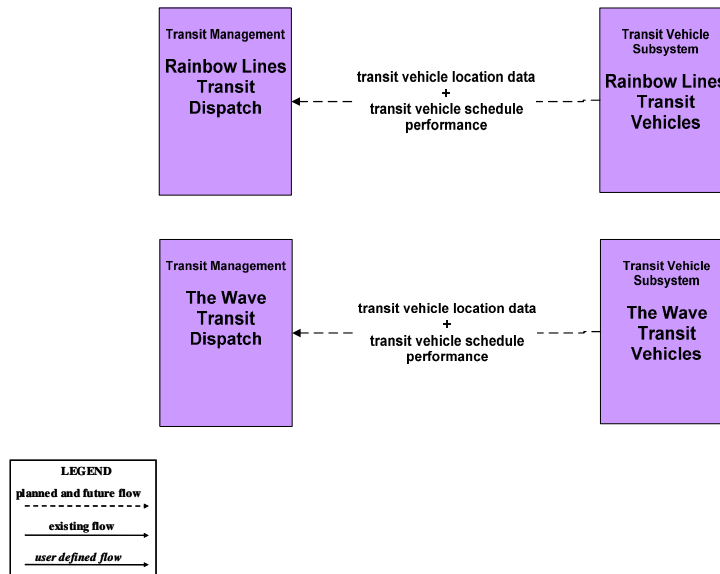
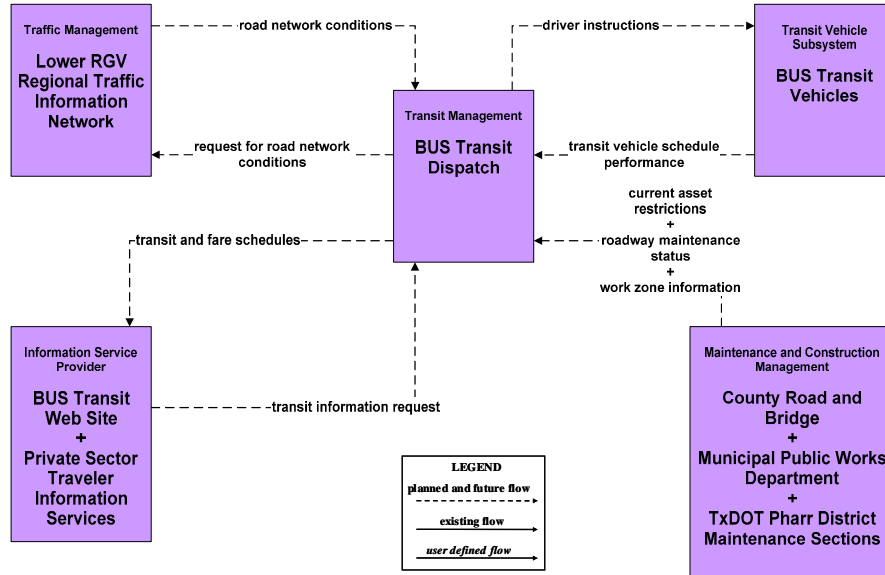


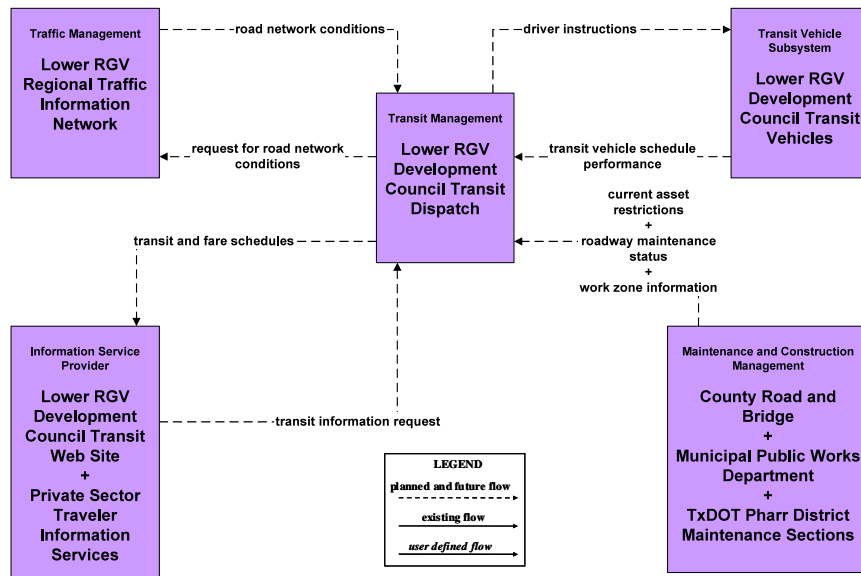
Figure A104 – APTS1 – Transit Vehicle Tracking: Rainbow Lines and The Wave Transit



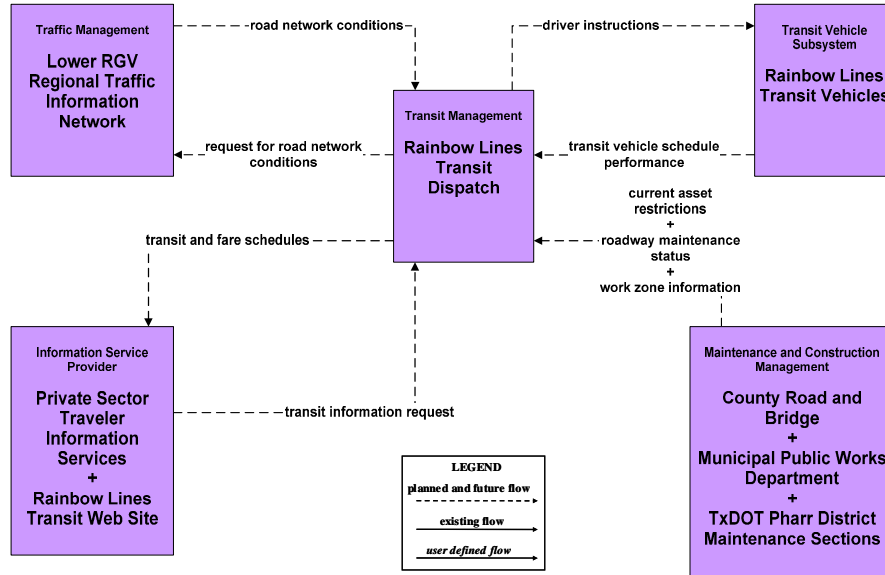
**Figure A105 – APTS2 – Transit Fixed-Route Operations:
BUS Transit**



**Figure A106 – APTS2 – Transit Fixed-Route Operations:
Lower RGV Development Council Transit**



**Figure A107 – APTS2 – Transit Fixed-Route Operations:
Rainbow Lines Transit**



**Figure A108 – APTS2 – Transit Fixed-Route Operations:
The Wave Transit**

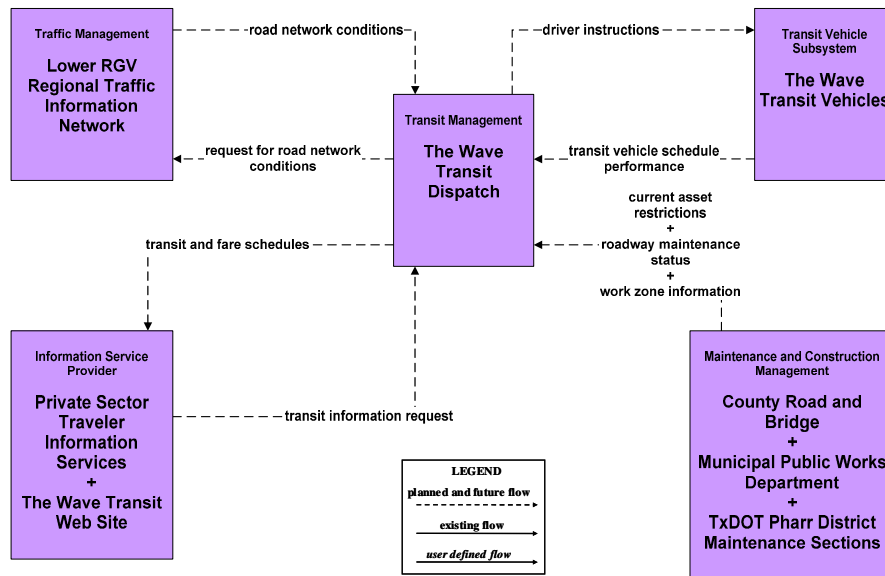


Figure A109 – APTS2 – Transit Fixed-Route Operations: Independent School District

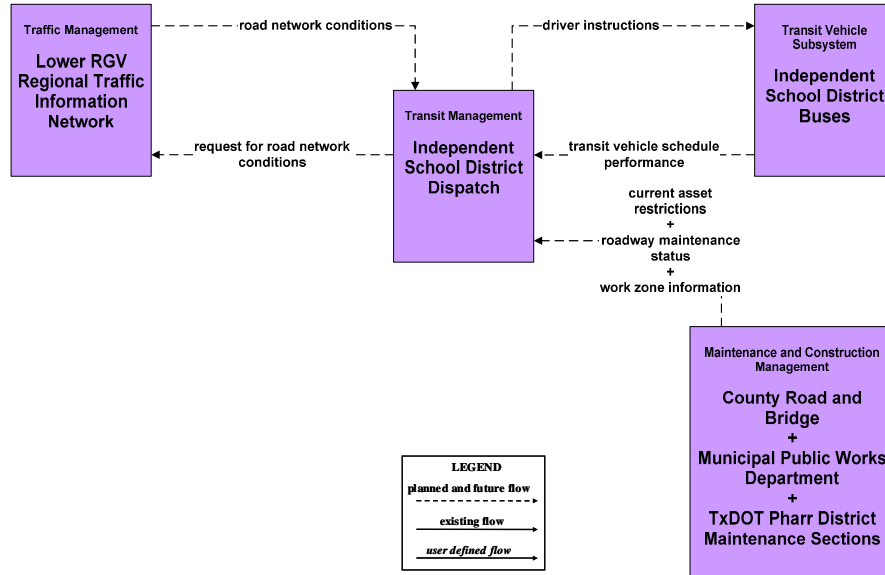


Figure A110 – APTS3 – Demand Response Transit Operations: BUS Transit

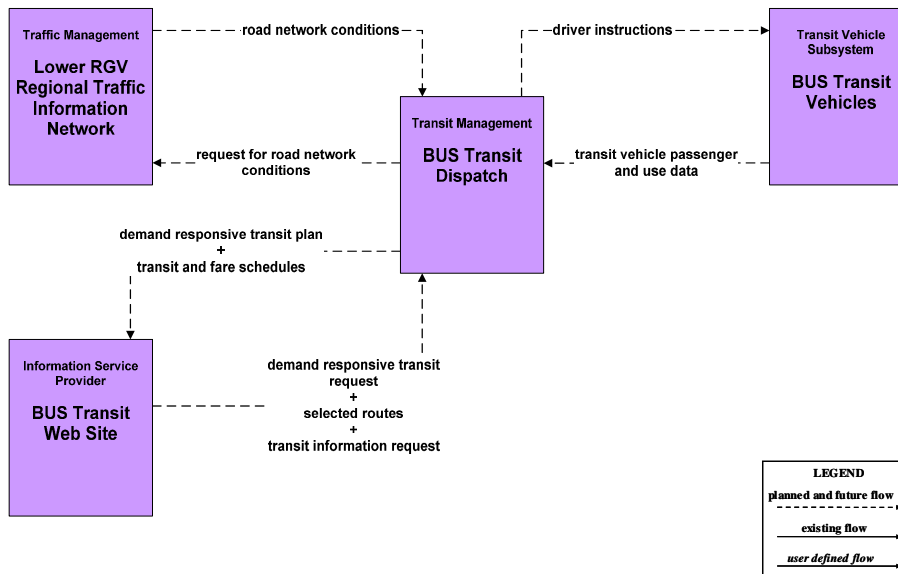


Figure A111 – APTS3 – Demand Response Transit Operations: Lower RGV Development Council Transit

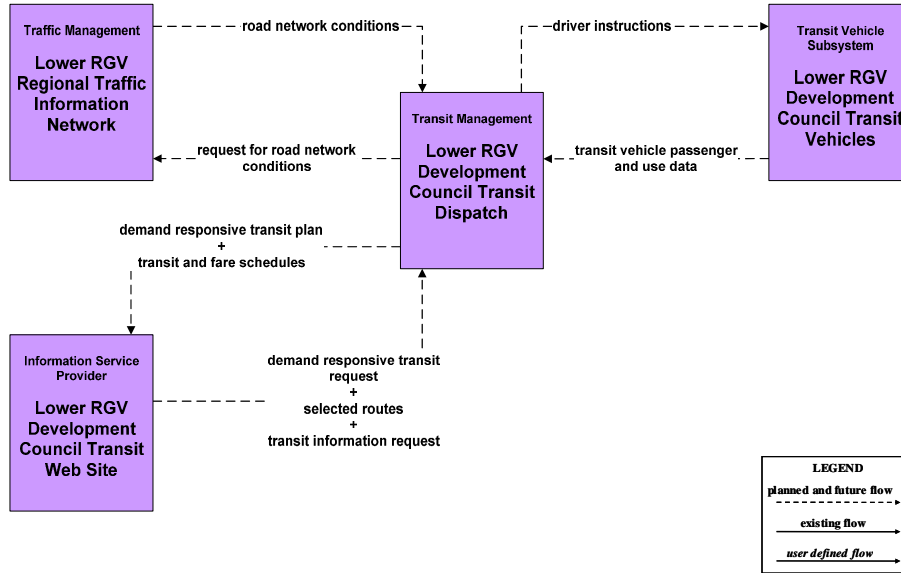


Figure A112 – APTS3 – Demand Response Transit Operations: Rainbow Lines Transit

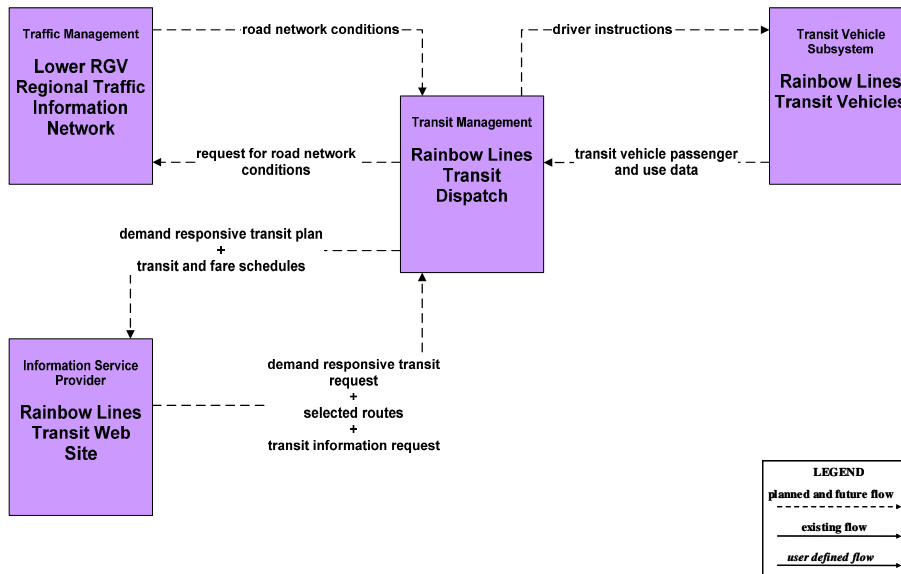


Figure A113 – APTS4 – Transit Passenger and Fare Payment: BUS Transit

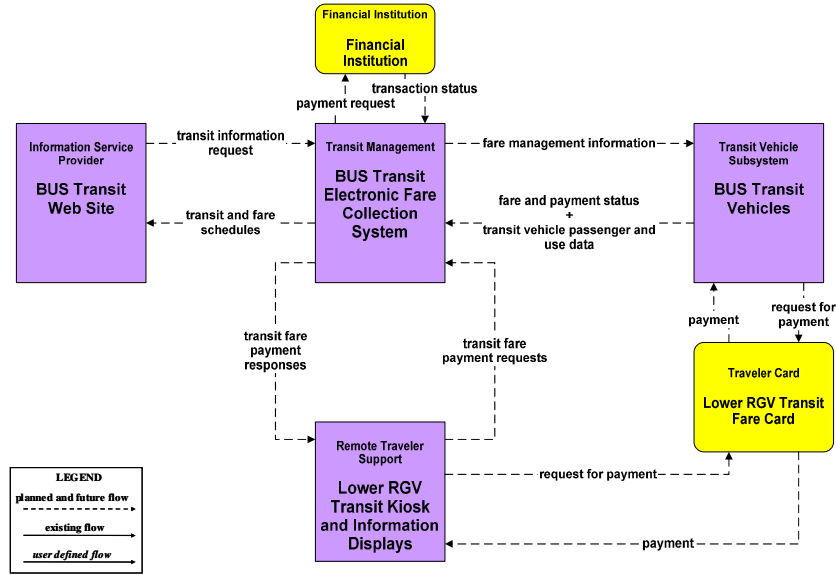


Figure A114 – APTS4 – Transit Passenger and Fare Payment: Lower RGV Development Council Transit

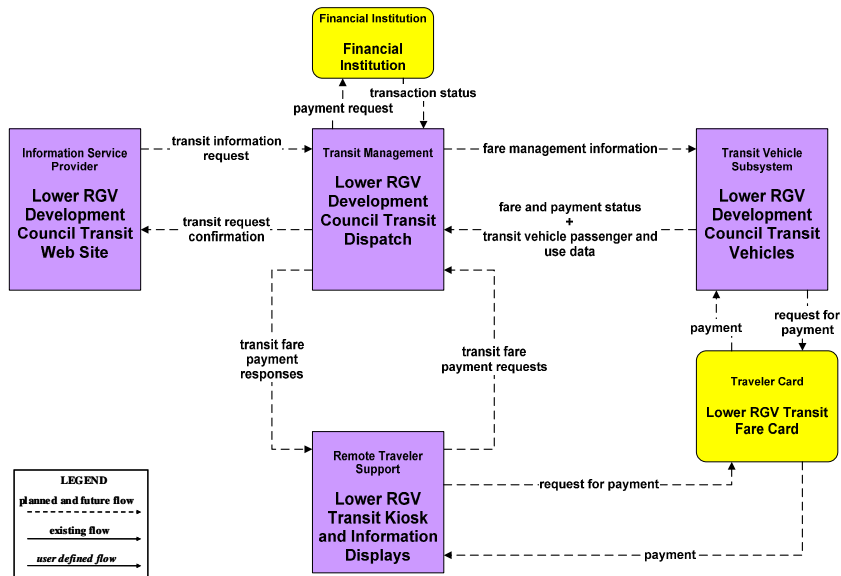


Figure A115 – APTS4 – Transit Passenger and Fare Payment: Rainbow Lines Transit

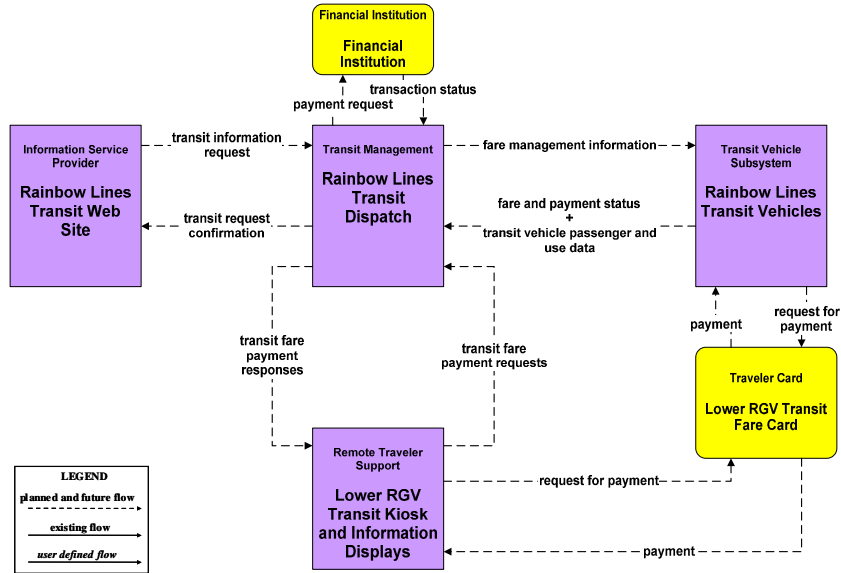


Figure A116 – APTS4 – Transit Passenger and Fare Payment: The Wave Transit

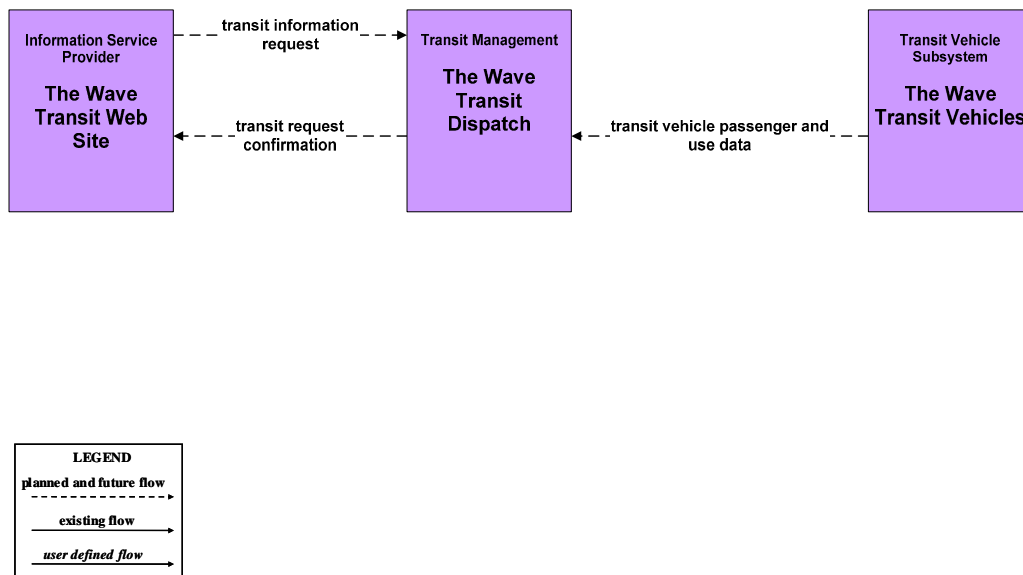


Figure A117 – APTS5 – Transit Security: BUS Transit

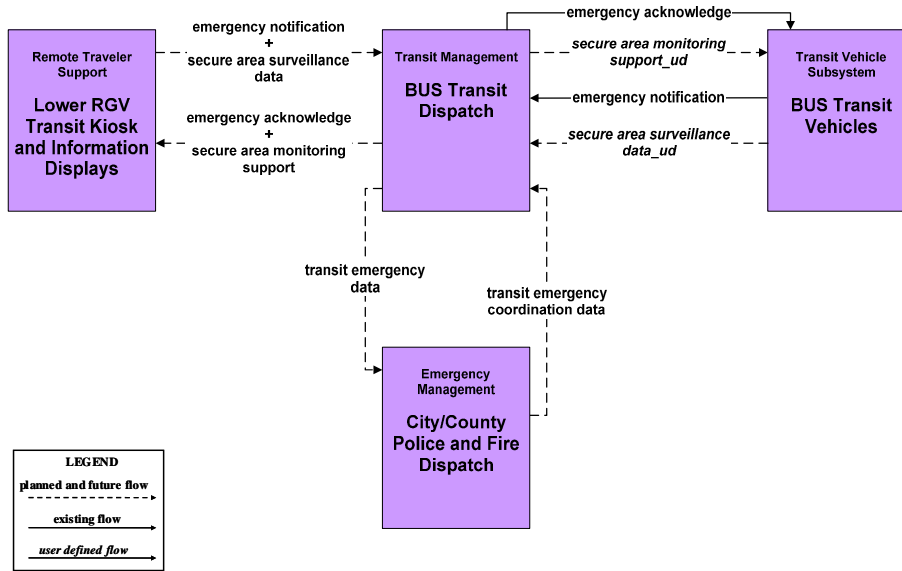


Figure A118 – APTS5 – Transit Security: Lower RGV Development Council Transit

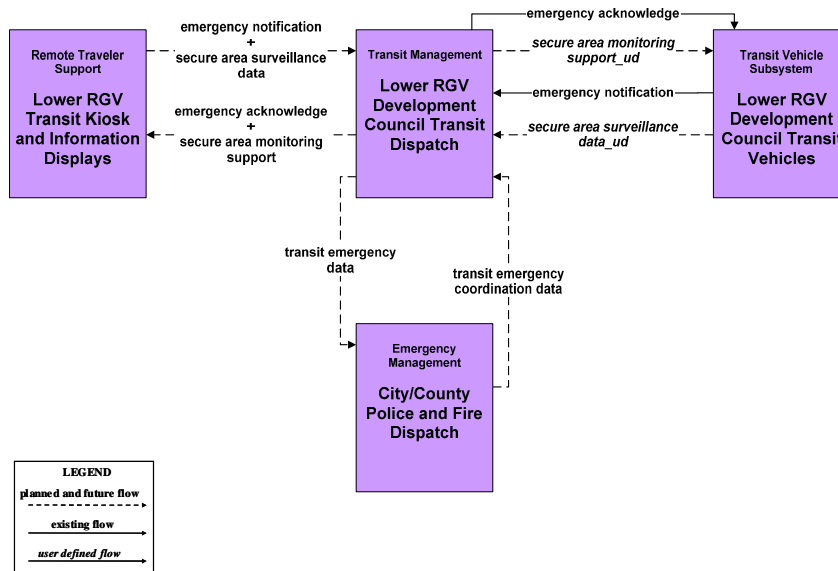


Figure A119 – APTS5 – Transit Security: Rainbow Lines Transit

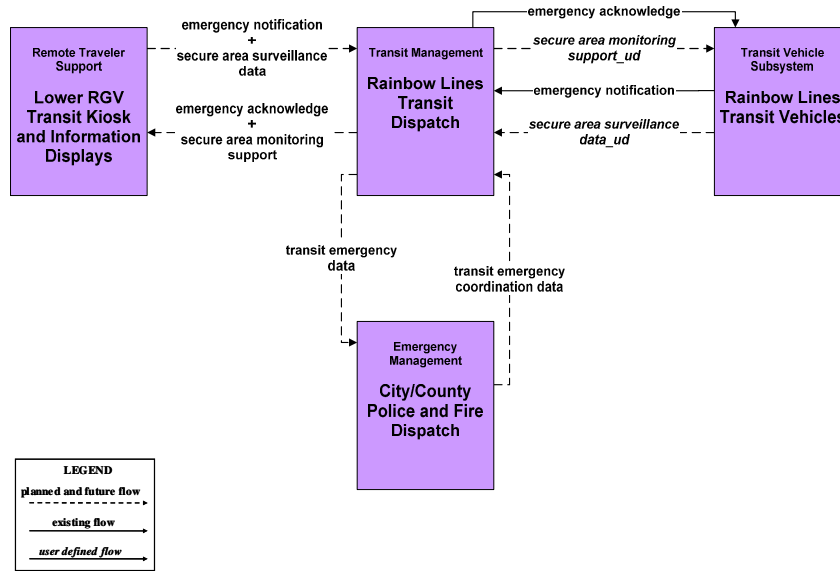


Figure A120 – APTS5 – Transit Security: The Wave Transit

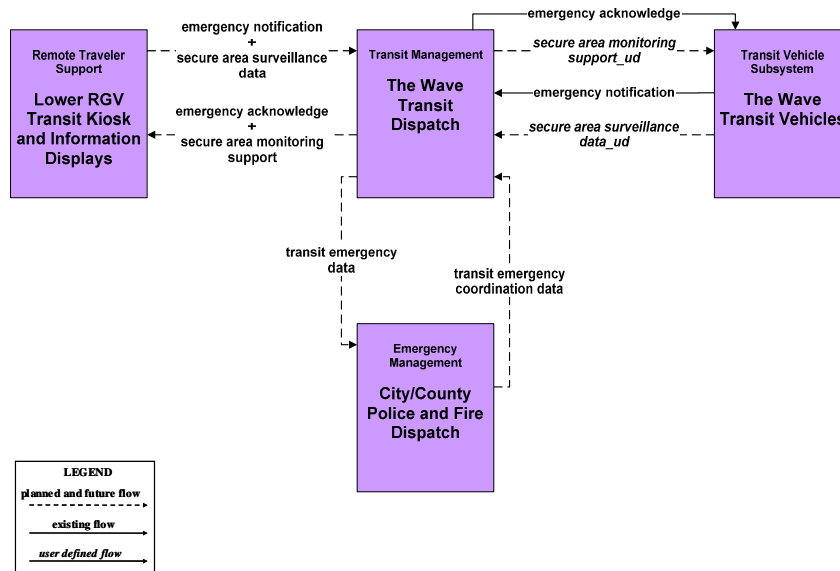


Figure A121 – APTS8 – Transit Traveler Information: BUS Transit

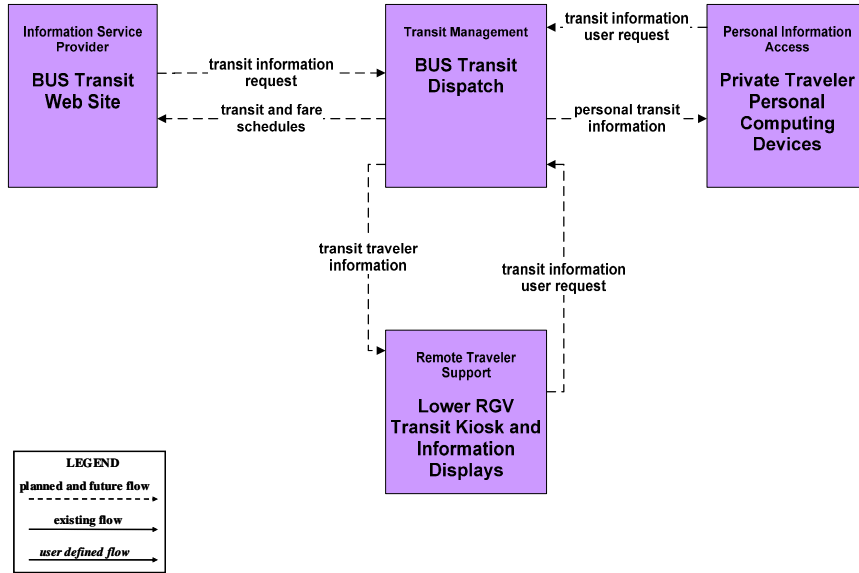


Figure A122 – APTS8 – Transit Traveler Information: Lower RGV Development Council Transit

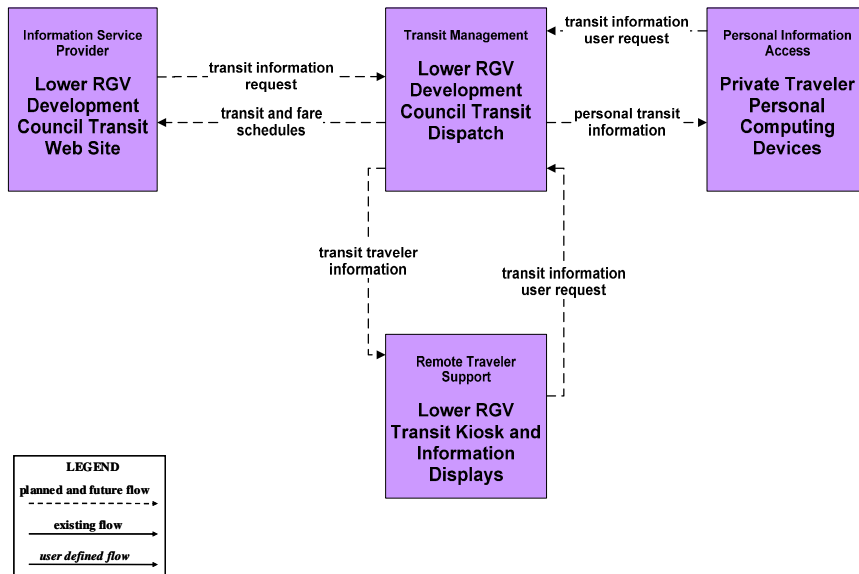


Figure A123 – APTS8 – Transit Traveler Information: Rainbow Lines Transit

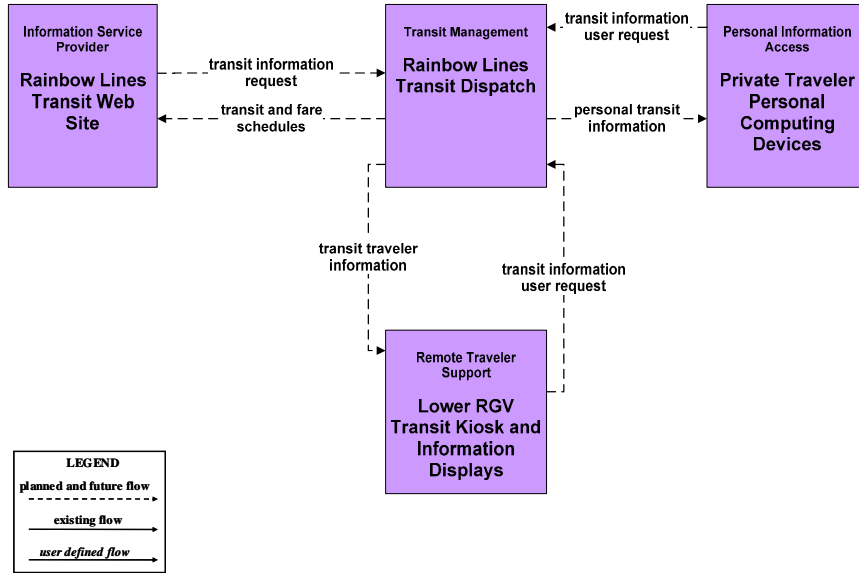


Figure A124 – APTS8 – Transit Traveler Information: The Wave Transit

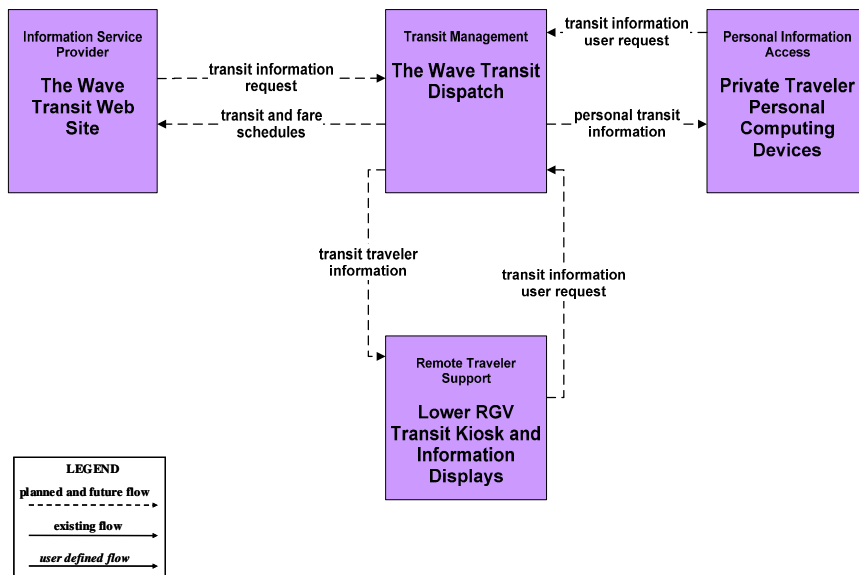


Figure A125 – CVO01 – Fleet Administration

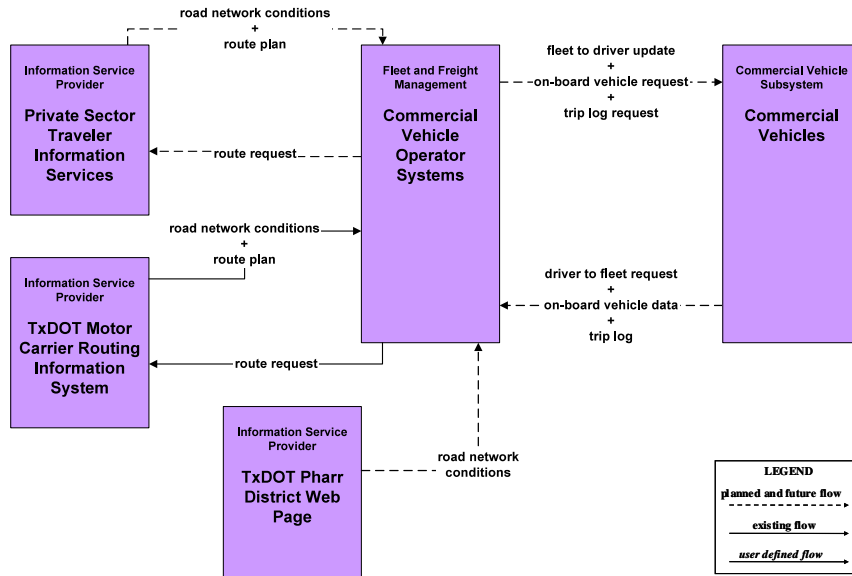


Figure A126 – CVO02 – Freight Administration: Commercial Vehicle Operator Systems

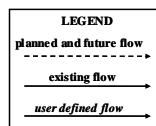
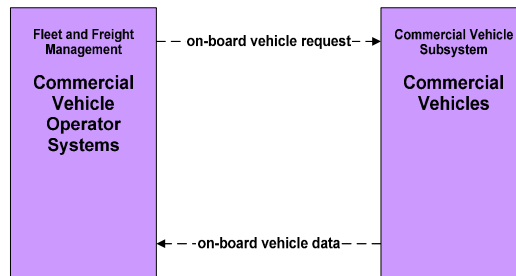


Figure A127 – CVO03 – Electronic Clearance

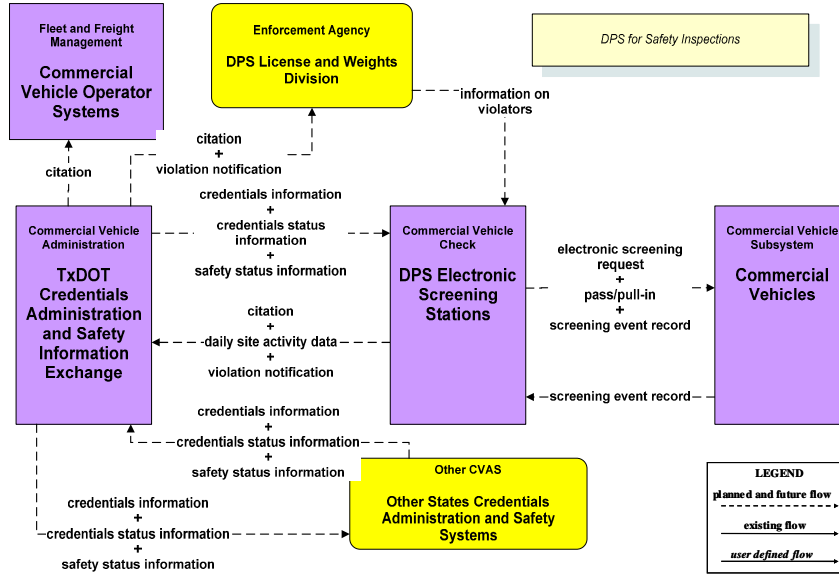


Figure A128 – CVO04 – CV Administrative Process

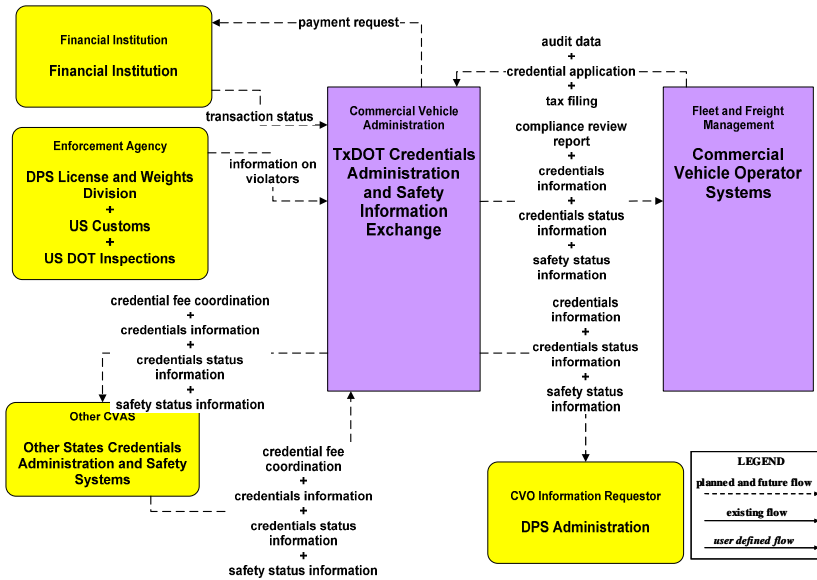


Figure A129 – CVO05 – International Electronic Border Clearance (1 of 2)

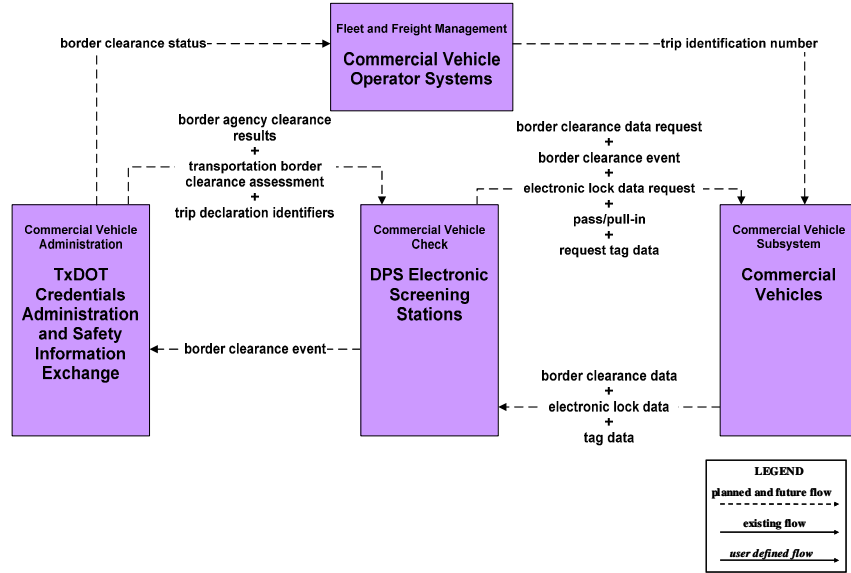


Figure A130 – CVO05 – International Electronic Border Clearance (2 of 2)

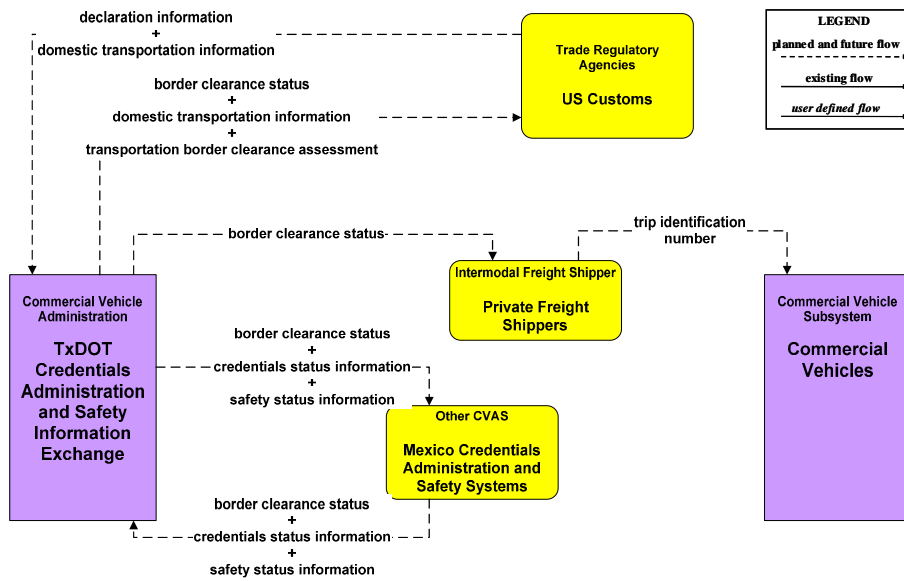


Figure A131 – CVO06 – Weigh-In-Motion: TxDOT/Brownsville Navigation District Overweight Corridor System

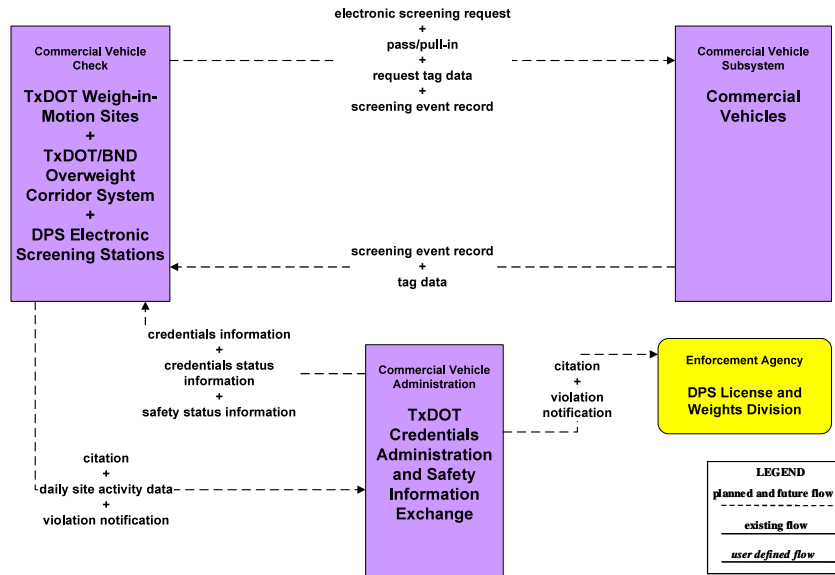


Figure A132 – CVO10 – HAZMAT Management: Commercial Vehicle HAZMAT

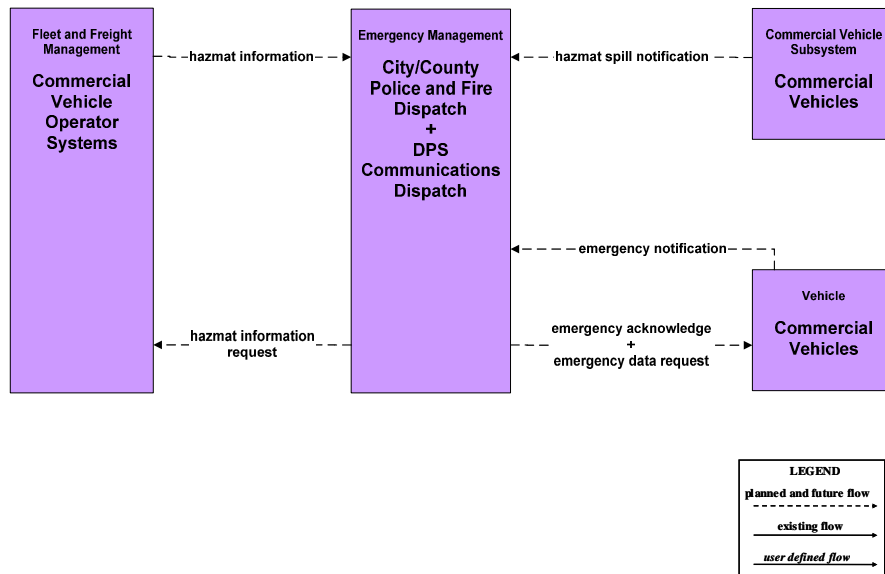


Figure A133 – CVO10 – HAZMAT Management: Rail HAZMAT

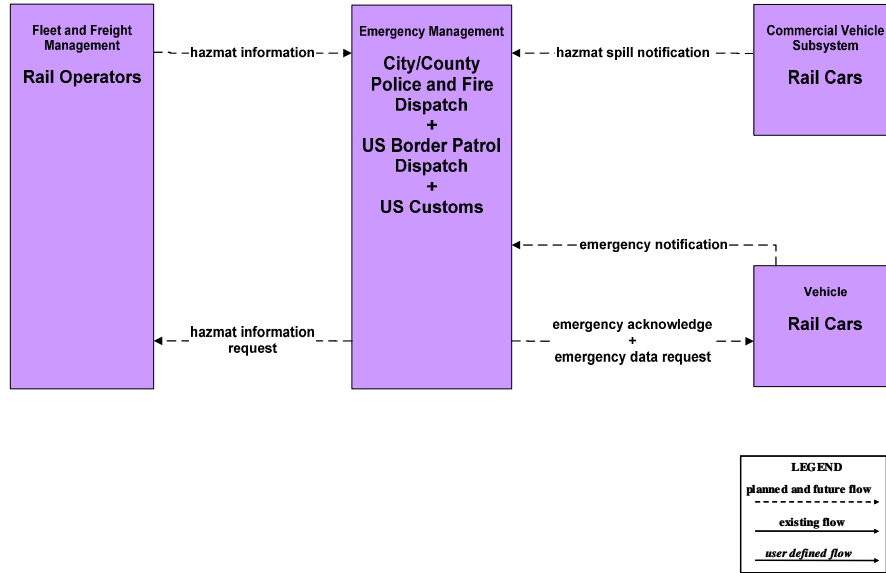


Figure A134 – ATIS1 – Broadcast Traveler Information: TxDOT Pharr District Webpage and TxDOT 511

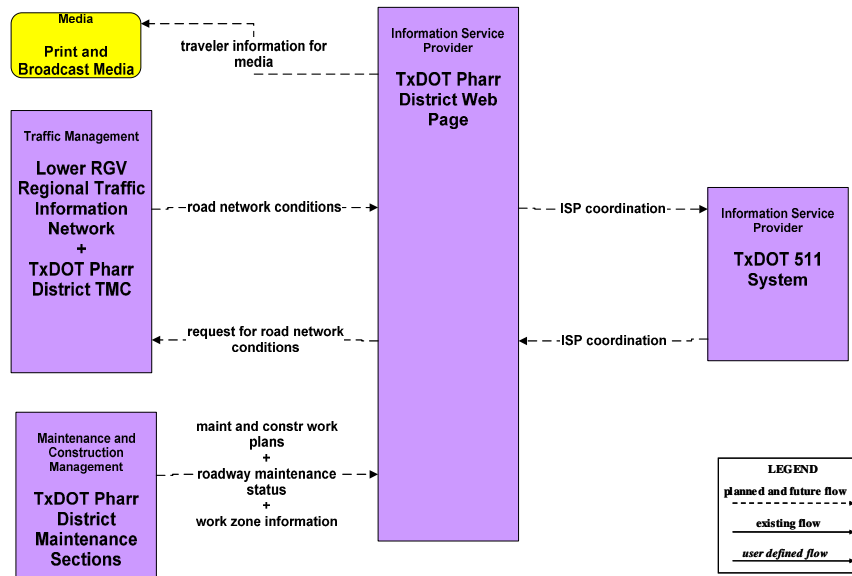


Figure A135 – ATIS1 – Broadcast Traveler Information: TxDOT Pharr District Highway Conditions Reporting System

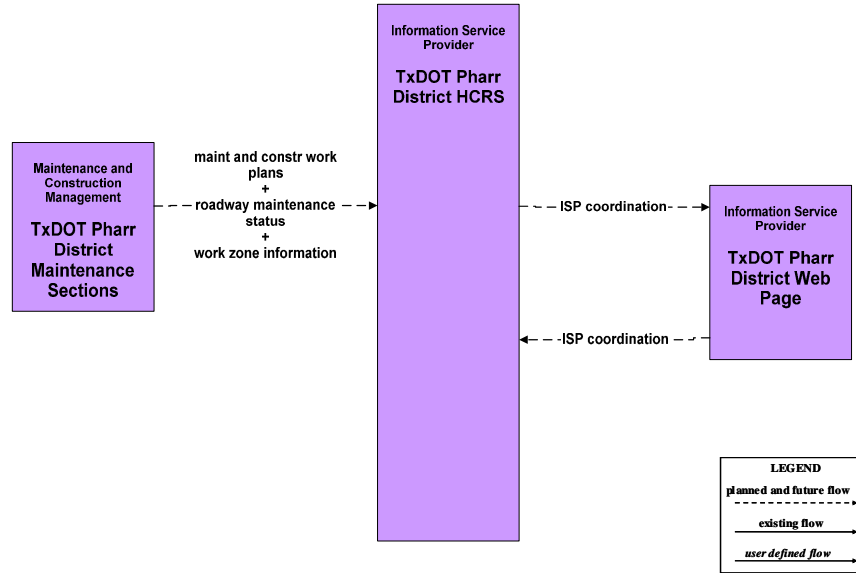


Figure A136 – ATIS1 – Broadcast Traveler Information: Private Sector Traveler Information Services/Wait Times at Bridges

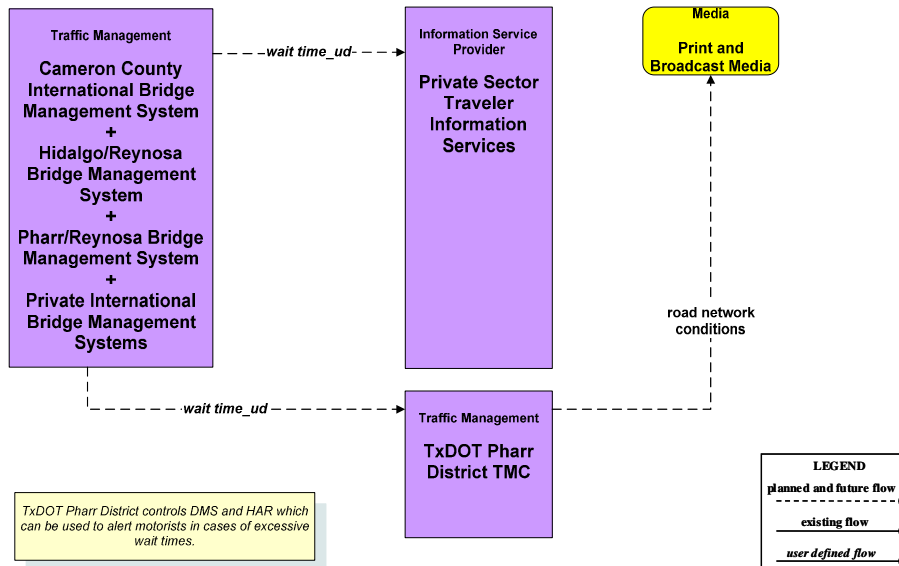


Figure A137 – ATIS5 – ISP Based Route Guidance: TxDOT Motor Carrier Routing Information

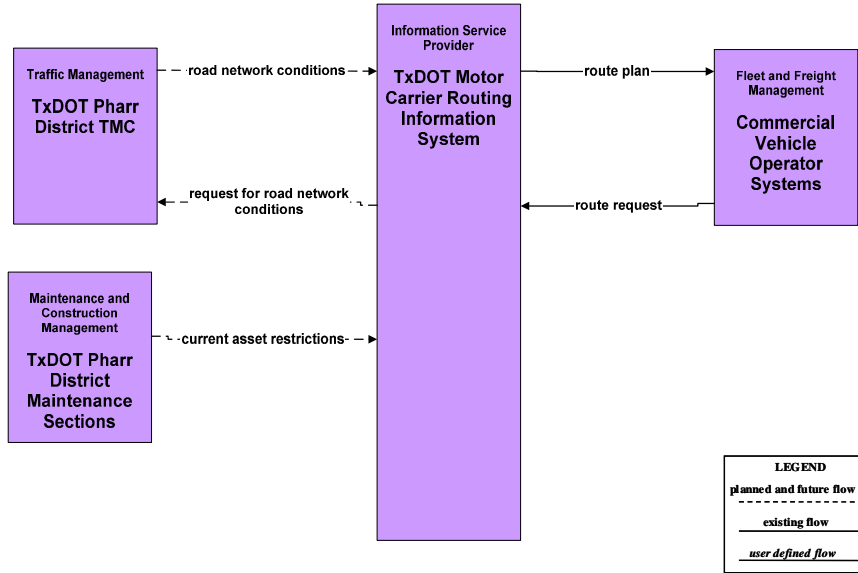
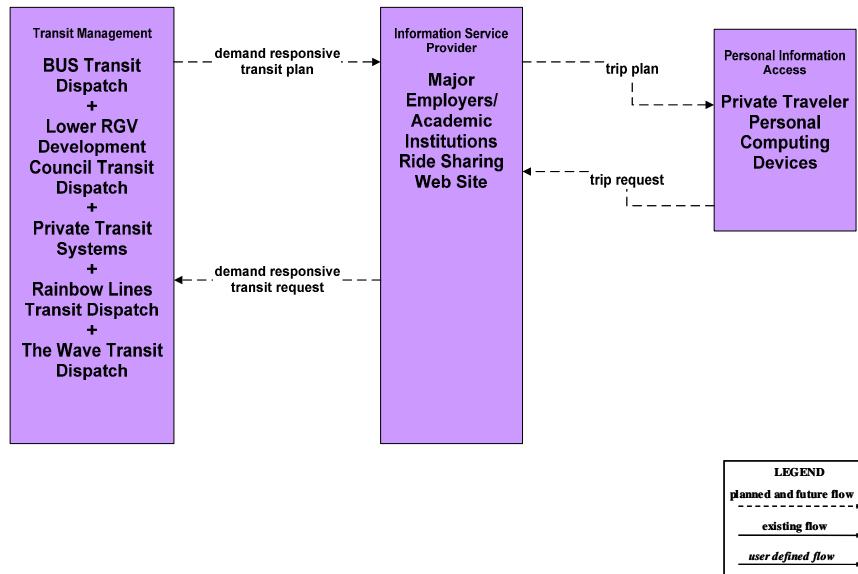
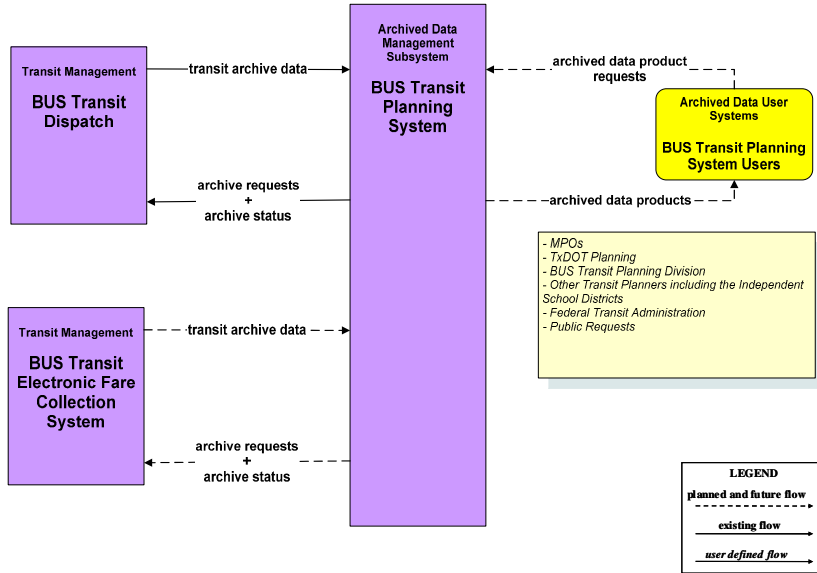


Figure A138 – ATIS8 – Dynamic Ride Sharing: Regional Park-n-Ride



**Figure A139 – AD1 – ITS Data Mart:
BUS Transit Planning System**



**Figure A140 – AD1 – ITS Data Mart:
Lower RGV Transit Planning System**

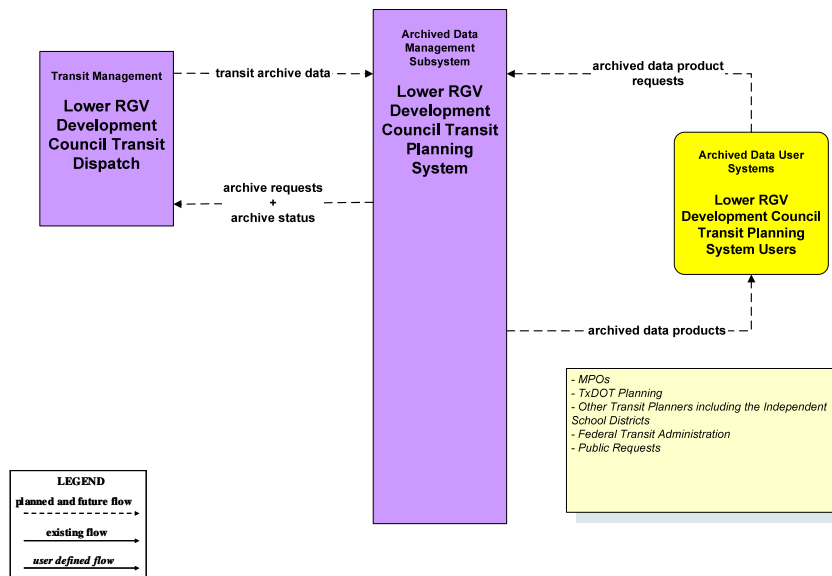


Figure A141 – AD1 – ITS Data Mart: Rainbow Lines Transit Planning System

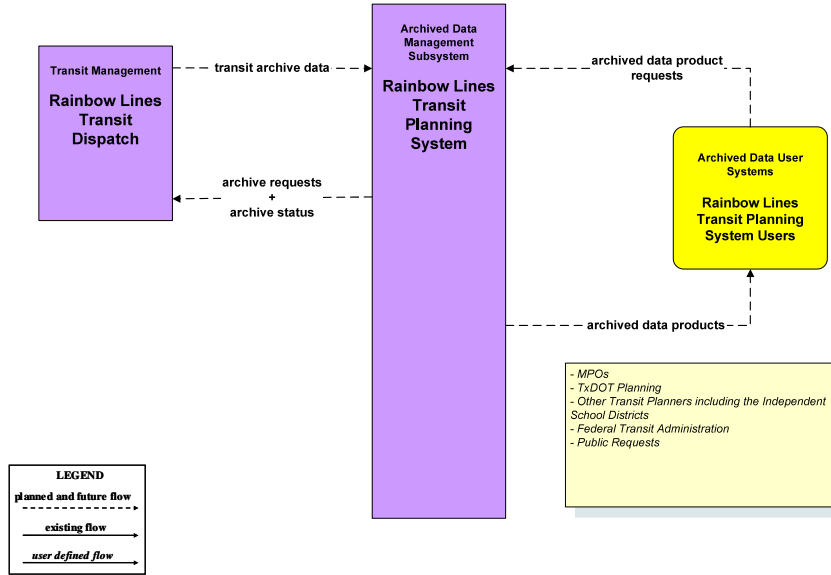
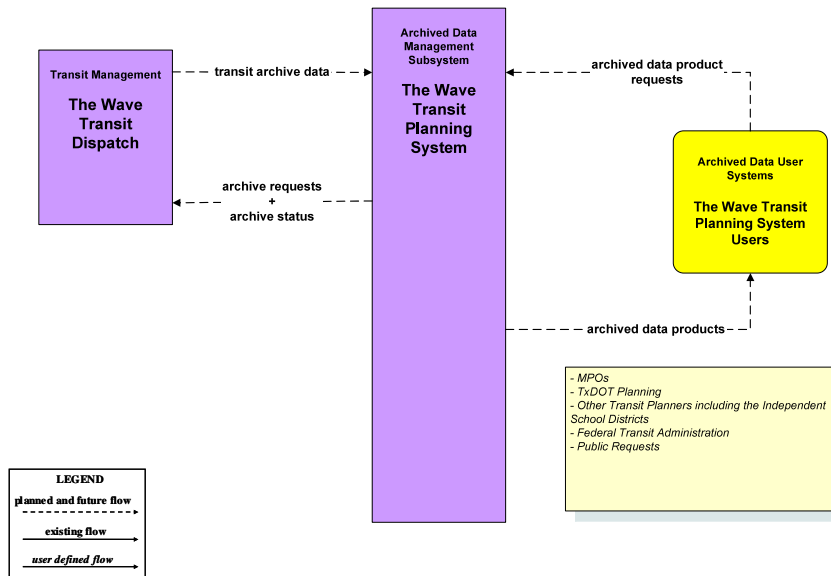
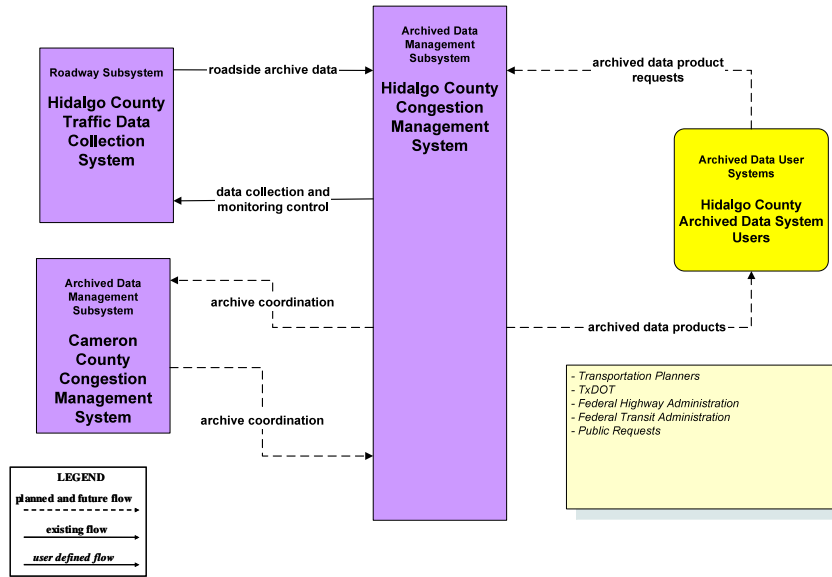


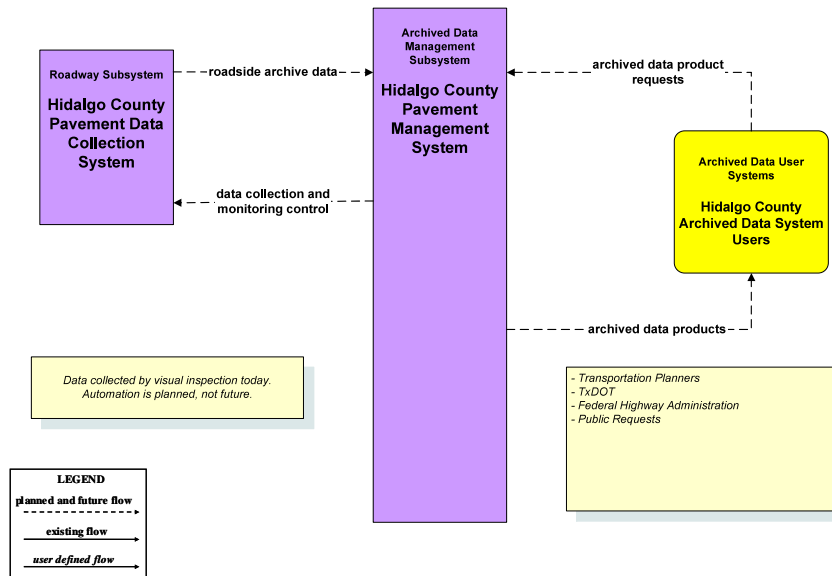
Figure A142 – AD1 – ITS Data Mart: The Wave Transit Planning System



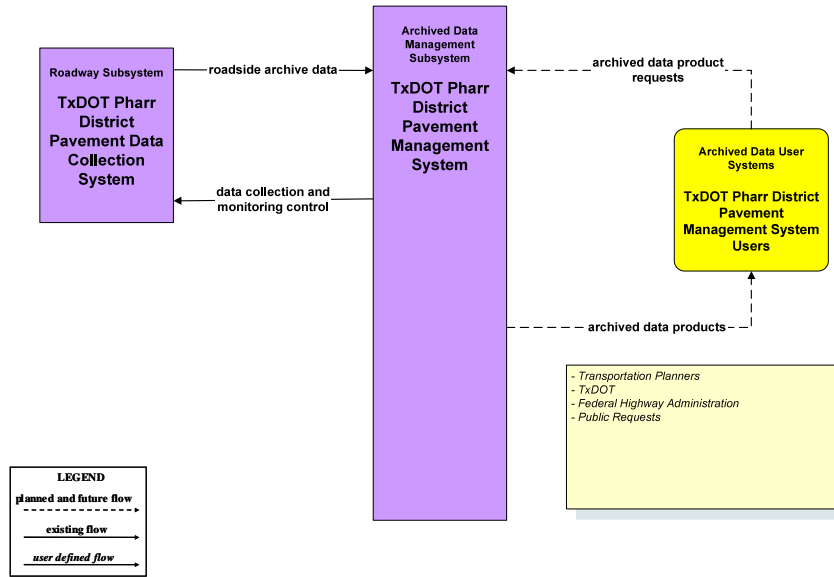
**Figure A143 – AD1 – ITS Data Mart:
Hidalgo County Congestion Management System (1 of 2)**



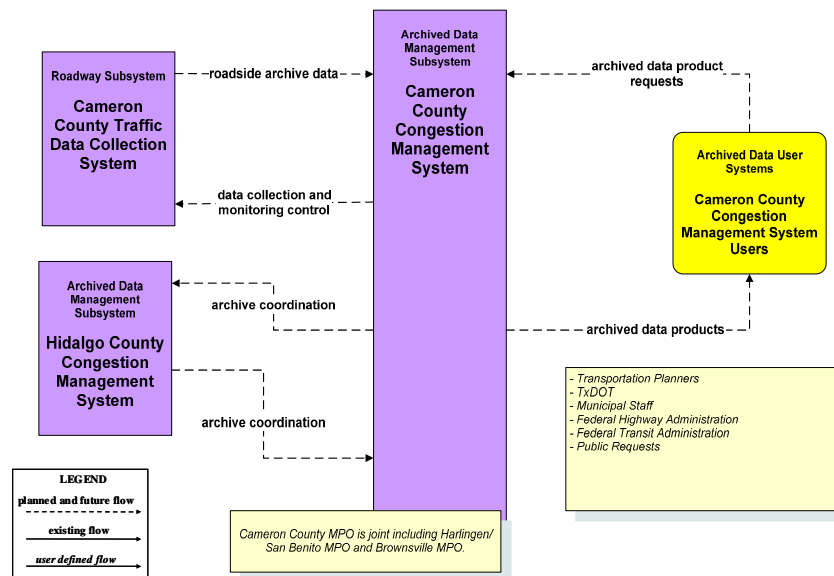
**Figure A144 – AD1 – ITS Data Mart:
Hidalgo County Pavement Management System (2 of 2)**



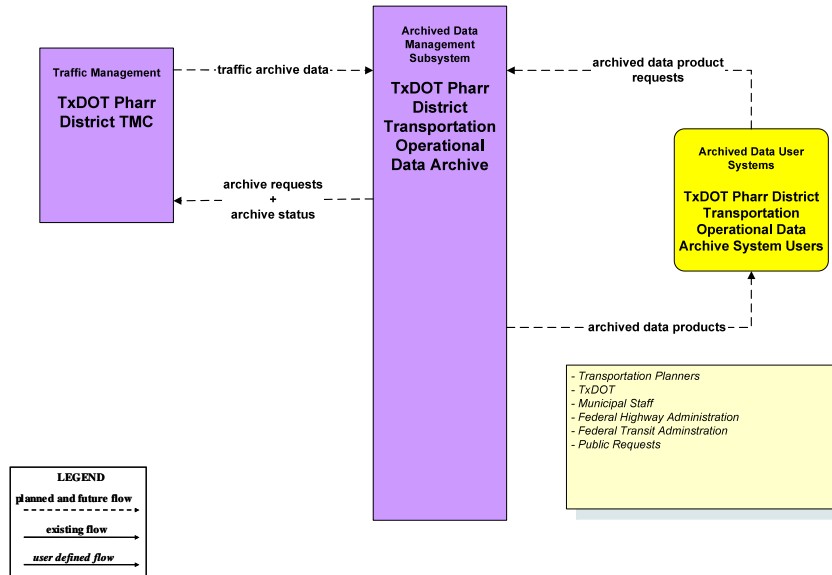
**Figure A145 – AD1 – ITS Data Mart:
TxDOT Pharr District Pavement Management System**



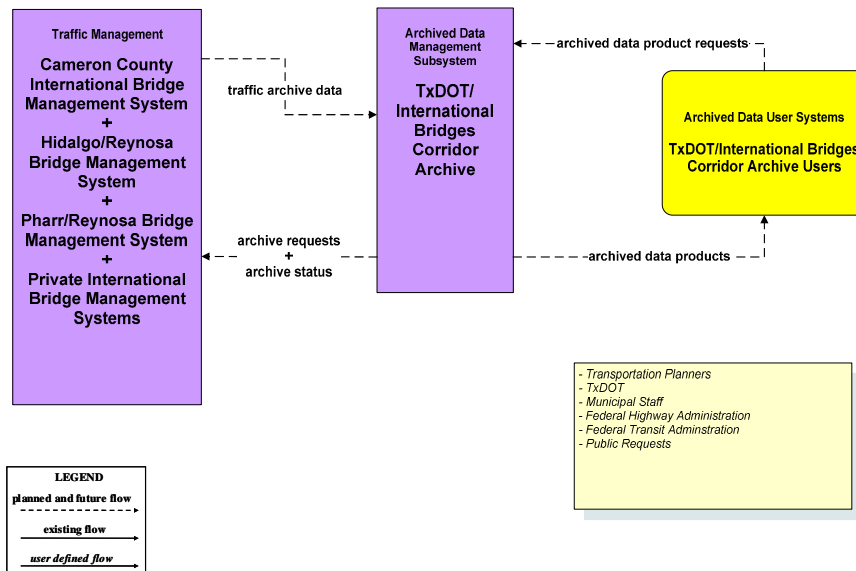
**Figure A146 – AD1 – ITS Data Mart:
Cameron County Congestion Management System**



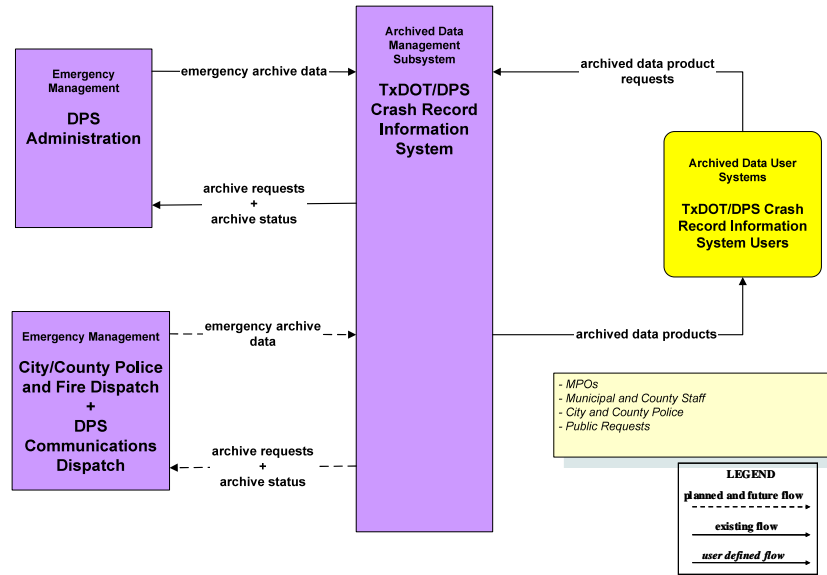
**Figure A147 – AD1 – ITS Data Mart:
TxDOT Pharr District Transportation Operational Data Archive**



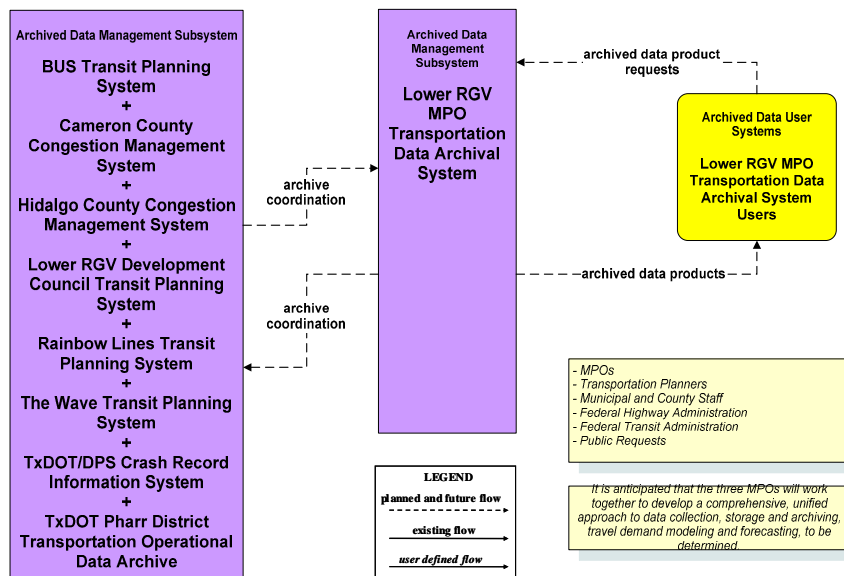
**Figure A148 – AD1 – ITS Data Mart:
TxDOT/International Bridges Corridor System**



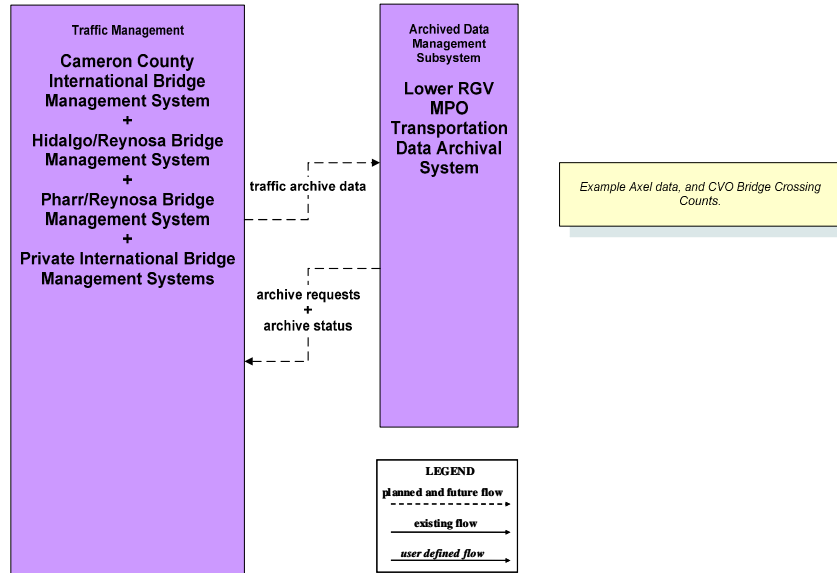
**Figure A149 – AD1 – ITS Data Mart:
TxDOT/DPS Pharr District Transportation Operational Data Archive**



**Figure A150 – AD3 – Virtual Archive:
Lower RGV MPOs Transportation Data Archival System (1 of 2)**



**Figure A151 – AD3 – Virtual Archive:
Lower RGV MPOs Transportation Data Archival System (2 of 2)**



APPENDIX B – INTERFACE DIAGRAMS

APPENDIX B

LIST OF FIGURES

Figure B1 – Airport Public Safety Interfaces.....	B-1
Figure B2 – Brownsville MPO Field Equipment Interfaces.....	B-2
Figure B3 – Brownsville MPO Traffic Management System Interfaces.....	B-3
Figure B4 – BUS Transit Dispatch Interfaces.....	B-4
Figure B5 – BUS Transit Electronic Fare Collection System Interfaces.....	B-5
Figure B6 – BUS Transit Planning System Interfaces.....	B-6
Figure B7 – BUS Transit Planning System Users Interfaces.....	B-7
Figure B8 – BUS Transit Vehicles Interfaces.....	B-8
Figure B9 – BUS Transit Web Site Interfaces.....	B-9
Figure B10 – Cameron County Congestion Management System Interfaces.....	B-10
Figure B11 – Cameron County Congestion Management System Users Interfaces.....	B-11
Figure B12 – Cameron County International Bridge Field Equipment Interfaces.....	B-12
Figure B13 – Cameron County International Bridge Management System Interfaces.....	B-13
Figure B14 – Cameron County Traffic Data Collection System Interfaces.....	B-14
Figure B15 – City and Community Parking Management Systems Interfaces.....	B-15
Figure B16 – City of Brownsville Field Equipment Interfaces.....	B-16
Figure B17 – City of Brownsville TMC Interfaces.....	B-17
Figure B18 – City of Harlingen Field Equipment Interfaces.....	B-18
Figure B19 – City of Harlingen TMC Interfaces.....	B-19
Figure B20 – City of McAllen Field Equipment Interfaces.....	B-20
Figure B21 – City of McAllen TMC Interfaces.....	B-21
Figure B22 – City of Pharr and B/M Bridge Electronic Toll Collection System Interfaces.....	B-22
Figure B23 – City of Pharr and B/M Bridge ETC Equipment Interfaces.....	B-23
Figure B24 – City of Pharr Field Equipment Interfaces.....	B-24
Figure B25 – City of Pharr TMC Interfaces.....	B-25
Figure B26 – City/County EOC Interfaces.....	B-26
Figure B27 – City/County Police and Fire Dispatch Interfaces.....	B-27
Figure B28 – City/County Police and Fire Vehicles Interfaces.....	B-28
Figure B29 – Commercial Vehicle Operator Systems Interfaces.....	B-29
Figure B30 – Commercial Vehicles Interfaces.....	B-30
Figure B31 – County Road and Bridge Interfaces.....	B-31
Figure B32 – County Road and Bridge Equipment Repair Interfaces.....	B-32
Figure B33 – County Road and Bridge Field Equipment Interfaces.....	B-33
Figure B34 – County Road and Bridge Maintenance Yard Interfaces.....	B-34
Figure B35 – County Road and Bridge Vehicles Interfaces.....	B-35
Figure B36 – DPS Administration Interfaces.....	B-36
Figure B37 – DPS Communications Dispatch Interfaces.....	B-37
Figure B38 – DPS Electronic Screening Stations Interfaces.....	B-38
Figure B39 – DPS License and Weights Division Interfaces.....	B-39
Figure B40 – DPS Vehicles Interfaces.....	B-40
Figure B41 – Financial Institution Interfaces.....	B-41
Figure B42 – Hidalgo County Archived Data System Users Interfaces.....	B-42
Figure B43 – Hidalgo County Congestion Management System Interfaces.....	B-43
Figure B44 – Hidalgo County Pavement Data Collection System Interfaces.....	B-44
Figure B45 – Hidalgo County Pavement Management System Interfaces.....	B-45
Figure B46 – Hidalgo County Traffic Data Collection System Interfaces.....	B-46
Figure B47 – Hidalgo/Reynosa Bridge Field Equipment Interfaces.....	B-47
Figure B48 – Hidalgo/Reynosa Bridge Management System Interfaces.....	B-48
Figure B49 – IBWC Rio Grande River Flood Monitoring System Interfaces.....	B-49
Figure B50 – Independent School District Buses Interfaces.....	B-50

APPENDIX B

LIST OF FIGURES

Figure B51 – Independent School District Dispatch Interfaces.....	B-51
Figure B52 – Lower RGV Bridge ETC Equipment Interfaces.....	B-52
Figure B53 – Lower RGV Bridge Toll Collection Systems Interfaces.....	B-53
Figure B54 – Lower RGV Development Council Transit Dispatch Interfaces.....	B-54
Figure B55 – Lower RGV Development Council Transit Planning System Interfaces.....	B-55
Figure B56 – Lower RGV Development Council Transit Planning System Users Interfaces.....	B-56
Figure B57 – Lower RGV Development Council Transit Vehicles Interfaces.....	B-57
Figure B58 – Lower RGV Development Council Transit Web Site Interfaces.....	B-58
Figure B59 – Lower RGV Incident and Mutual Aid Network Interfaces.....	B-59
Figure B60 – Lower RGV MPO Transportation Data Archival System Interfaces.....	B-60
Figure B61 – Lower RGV MPO Transportation Data Archival System Users Interfaces.....	B-61
Figure B62 – Lower RGV Regional Traffic Information Network Interfaces.....	B-62
Figure B63 – Lower RGV Trade Tag Interfaces.....	B-63
Figure B64 – Lower RGV Transit Fare Card Interfaces.....	B-64
Figure B65 – Lower RGV Transit Kiosk and Information Displays Interfaces.....	B-65
Figure B66 – Major Employers/Academic Institutions Ride Sharing Web Site Interfaces.....	B-66
Figure B67 – Mexico Credentials Administration and Safety Systems Interfaces.....	B-67
Figure B68 – Mexico DOT (SCT) Interfaces.....	B-68
Figure B69 – Mexico Emergency Management Systems Interfaces.....	B-69
Figure B70 – Municipal Public Works Department Interfaces.....	B-70
Figure B71 – Municipal Public Works Department Equipment Repair Interfaces.....	B-71
Figure B72 – Municipal Public Works Department Field Equipment Interfaces.....	B-72
Figure B73 – Municipal Public Works Department Maintenance Yard Interfaces.....	B-73
Figure B74 – Municipal Public Works Department Vehicles Interfaces.....	B-74
Figure B75 – National Weather Service Interfaces.....	B-75
Figure B76 – Other States Credentials Administration and Safety Systems Interfaces.....	B-76
Figure B77 – Other Texas Region TMCs Interfaces.....	B-77
Figure B78 – Pharr/Reynosa Bridge Field Equipment Interfaces.....	B-78
Figure B79 – Pharr/Reynosa Bridge Management System Interfaces.....	B-79
Figure B80 – Port of Brownsville Interfaces.....	B-80
Figure B81 – Print and Broadcast Media Interfaces.....	B-81
Figure B82 – Private Freight Shippers Interfaces.....	B-82
Figure B83 – Private International Bridge Field Equipment Interfaces.....	B-83
Figure B84 – Private International Bridge Management Systems Interfaces.....	B-84
Figure B85 – Private Sector Traveler Information Services Interfaces.....	B-85
Figure B86 – Private Transit Systems Interfaces.....	B-86
Figure B87 – Private Traveler Personal Computing Devices Interfaces.....	B-87
Figure B88 – Private Vehicles Interfaces.....	B-88
Figure B89 – Public/Private EMS Dispatch Interfaces.....	B-89
Figure B90 – Public/Private EMS Vehicles Interfaces.....	B-90
Figure B91 – Rail Cars Interfaces.....	B-91
Figure B92 – Rail Operators Interfaces.....	B-92
Figure B93 – Rail Operators Wayside Equipment Interfaces.....	B-93
Figure B94 – Rainbow Lines Transit Dispatch Interfaces.....	B-94
Figure B95 – Rainbow Lines Transit Planning System Interfaces.....	B-95
Figure B96 – Rainbow Lines Transit Planning System Users Interfaces.....	B-96
Figure B97 – Rainbow Lines Transit Vehicles Interfaces.....	B-97
Figure B98 – Rainbow Lines Transit Web Site Interfaces.....	B-98
Figure B99 – Regional Hospitals Interfaces.....	B-99
Figure B100 – State EOC Interfaces.....	B-100

APPENDIX B

LIST OF FIGURES

Figure B101 – The Wave Transit Dispatch Interfaces.....	B-101
Figure B102 – The Wave Transit Planning System Interfaces.....	B-102
Figure B103 – The Wave Transit Planning System Users Interfaces.....	B-103
Figure B104 – The Wave Transit Vehicles Interfaces.....	B-104
Figure B105 – The Wave Transit Web Site Interfaces.....	B-105
Figure B106 – Tourism and Event Information Systems Interfaces.....	B-106
Figure B107 – TxDOT 511 System Interfaces.....	B-107
Figure B108 – TxDOT BRINSAP Interfaces.....	B-108
Figure B109 – TxDOT Courtesy Patrol Dispatch Interfaces.....	B-109
Figure B110 – TxDOT Courtesy Patrol Vehicles Interfaces.....	B-110
Figure B111 – TxDOT Credentials Administration and Safety Information Exchange Interfaces.....	B-111
Figure B112 – TxDOT District Shop Interfaces.....	B-112
Figure B113 – TxDOT Motor Carrier Routing Information System Interfaces.....	B-113
Figure B114 – TxDOT Pharr District Bridge Corridor System Interfaces.....	B-114
Figure B115 – TxDOT Pharr District CCTV Interfaces.....	B-115
Figure B116 – TxDOT Pharr District DMS Interfaces.....	B-116
Figure B117 – TxDOT Pharr District Field Sensors Interfaces.....	B-117
Figure B118 – TxDOT Pharr District Flood Monitoring System Interfaces.....	B-118
Figure B119 – TxDOT Pharr District HAR Interfaces.....	B-119
Figure B120 – TxDOT Pharr District HCRS Interfaces.....	B-120
Figure B121 – TxDOT Pharr District Lane Control Signals Interfaces.....	B-121
Figure B122 – TxDOT Pharr District Maintenance Section Yard Interfaces.....	B-122
Figure B123 – TxDOT Pharr District Maintenance Sections Interfaces.....	B-123
Figure B124 – TxDOT Pharr District Maintenance Vehicles Interfaces.....	B-124
Figure B125 – TxDOT Pharr District Pavement Data Collection System Interfaces.....	B-125
Figure B126 – TxDOT Pharr District Pavement Management System Interfaces.....	B-126
Figure B127 – TxDOT Pharr District Pavement Management System Users Interfaces.....	B-127
Figure B128 – TxDOT Pharr District TMC Interfaces.....	B-128
Figure B129 – TxDOT Pharr District Traffic Signals Interfaces.....	B-129
Figure B130 – TxDOT Pharr District Transportation Operational Data Archive Interfaces.....	B-130
Figure B131 – TxDOT Pharr District Transportation Operational Data Archive System Users Interfaces.....	B-131
Figure B132 – TxDOT Pharr District Web Page Interfaces.....	B-132
Figure B133 – TxDOT Pharr District Work Zone Equipment Interfaces.....	B-133
Figure B134 – TxDOT Weigh-in-Motion Sites Interfaces.....	B-134
Figure B135 – TxDOT/BND Overweight Corridor System Interfaces.....	B-135
Figure B136 – TxDOT/DPS Crash Record Information System Interfaces.....	B-136
Figure B137 – TxDOT/DPS Crash Record Information System Users Interfaces.....	B-137
Figure B138 – TxDOT/International Bridges Corridor Archive Interfaces.....	B-138
Figure B139 – TxDOT/International Bridges Corridor Archive Users Interfaces.....	B-139
Figure B140 – US Border Patrol Dispatch Interfaces.....	B-140
Figure B141 – US Border Patrol Field Equipment Interfaces.....	B-141
Figure B142 – US Border Patrol Video Surveillance System Interfaces.....	B-142
Figure B143 – US Coast Guard Causeway Management System Interfaces.....	B-143
Figure B144 – US Customs Interfaces.....	B-144
Figure B145 – USDOT Inspections Interfaces.....	B-145

Figure B1 – Airport Public Safety Interfaces

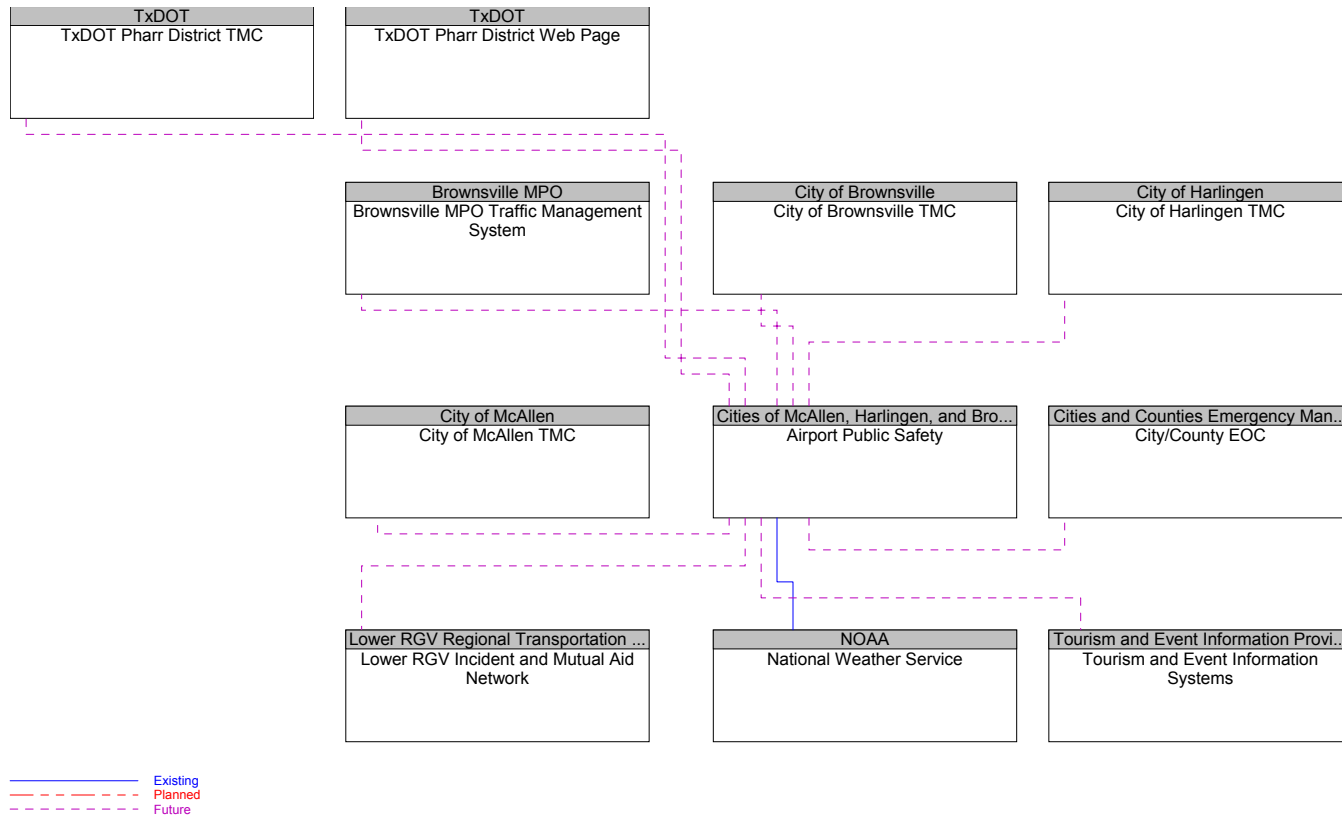


Figure B2 – Brownsville MPO Field Equipment Interfaces

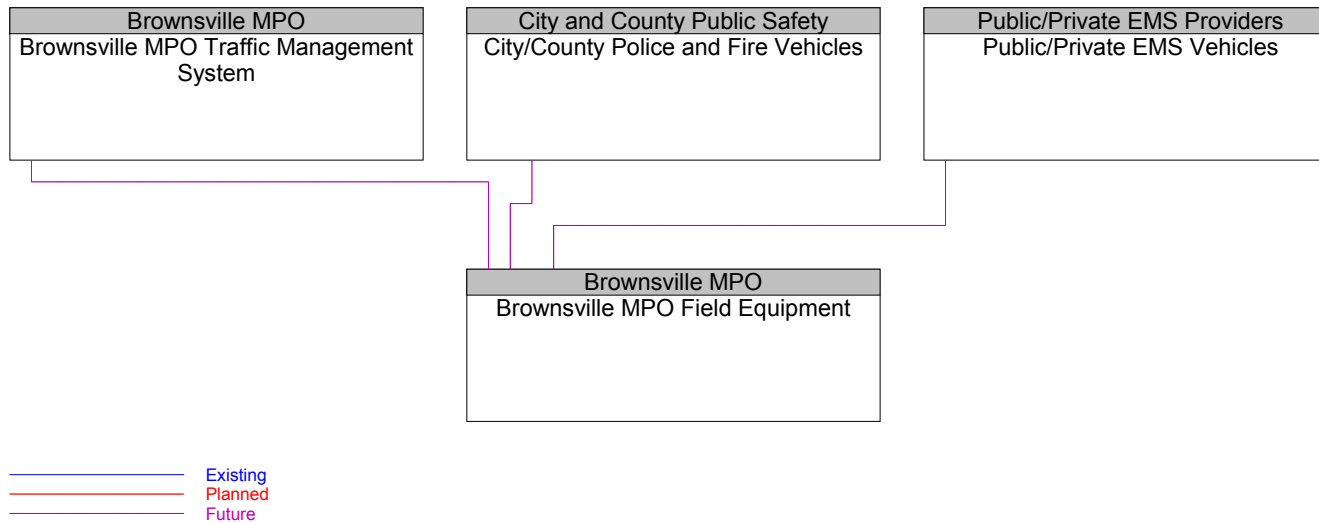


Figure B3 – Brownsville MPO Traffic Management System Interfaces

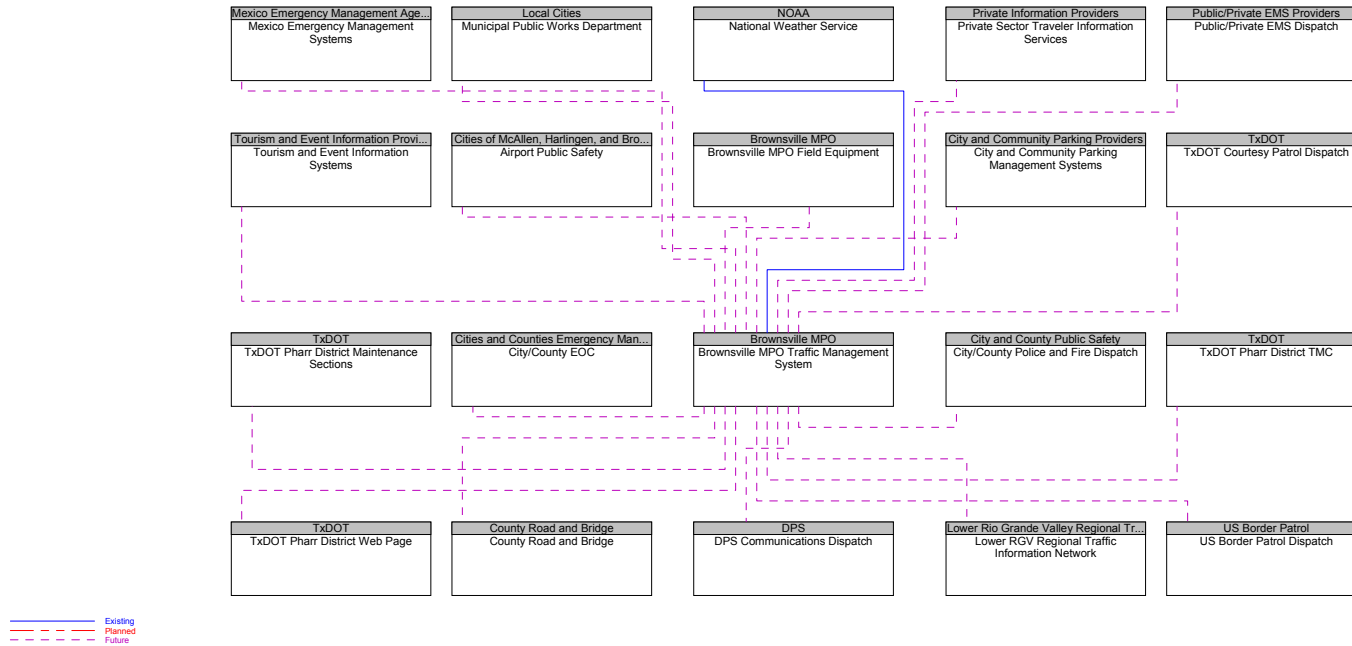


Figure B4 – BUS Transit Dispatch Interfaces

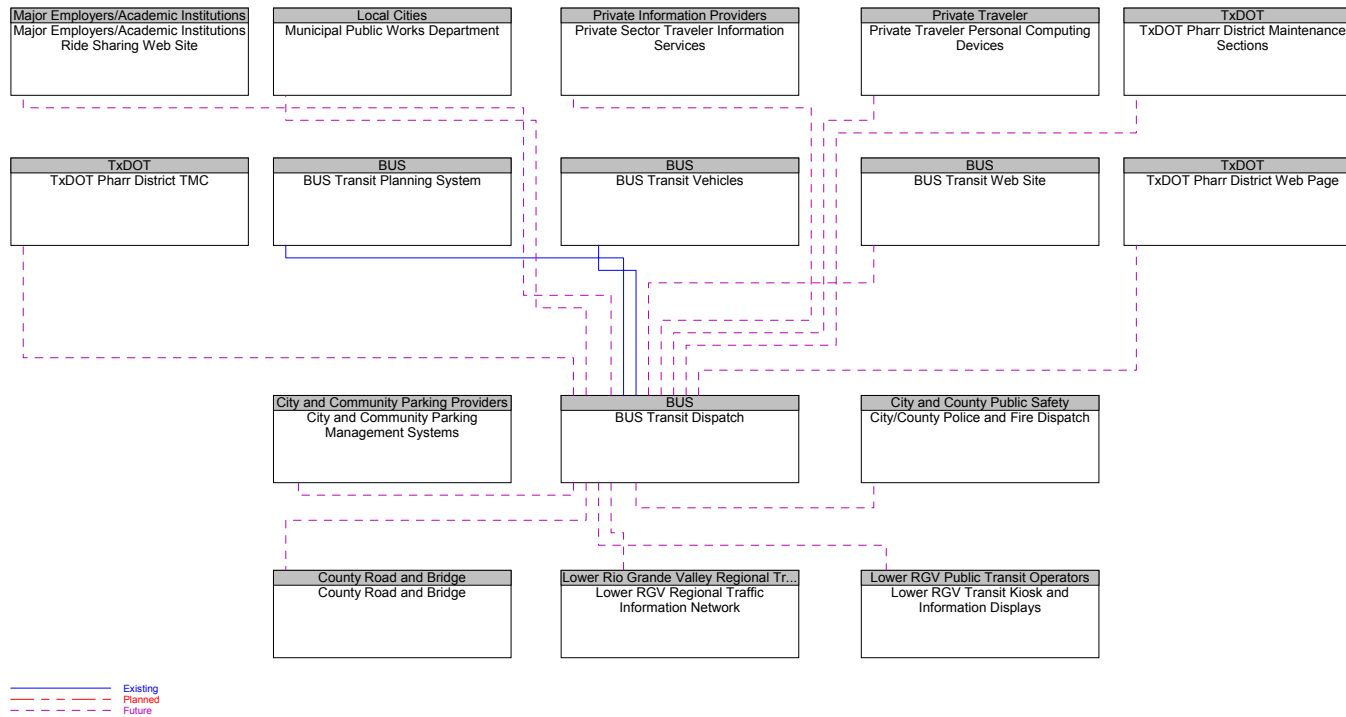


Figure B5 – BUS Transit Electronic Fare Collection System Interfaces

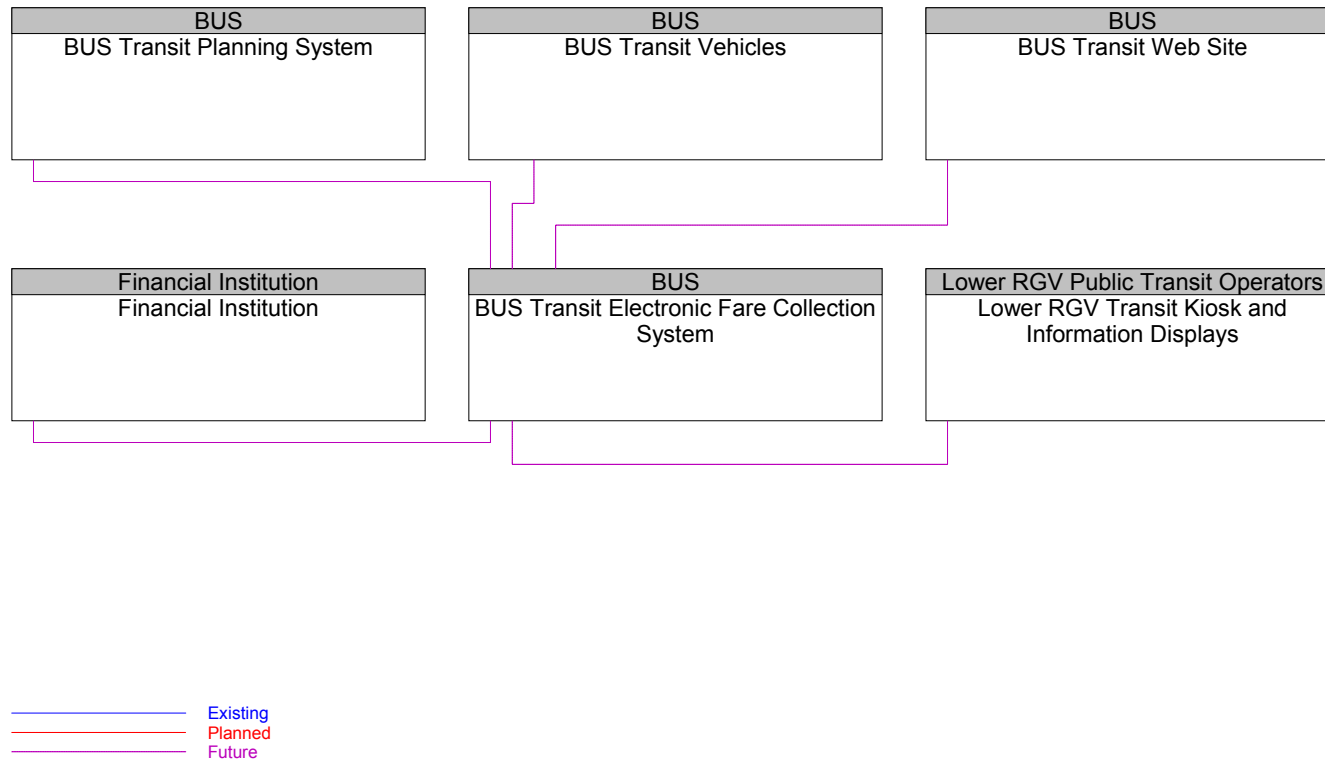


Figure B6 – BUS Transit Planning System Interfaces

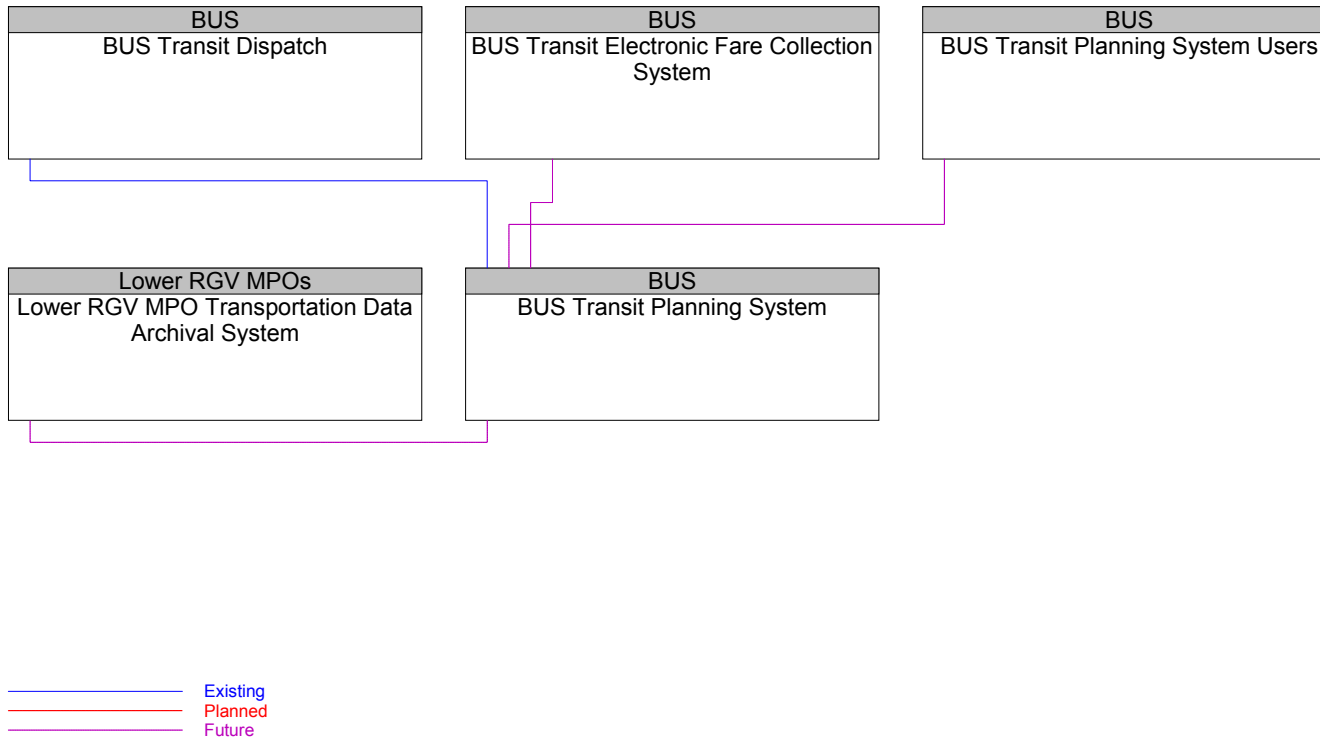


Figure B7 – BUS Transit Planning System Users Interfaces

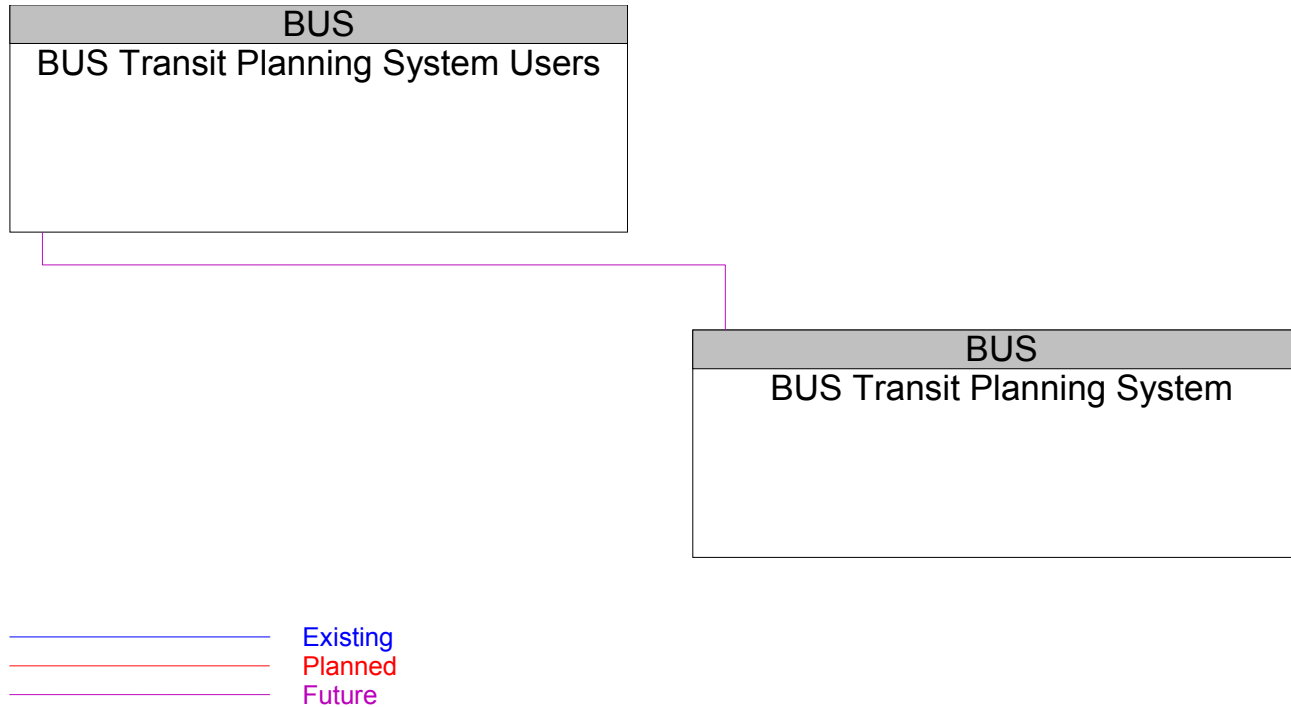


Figure B8 – BUS Transit Vehicles Interfaces

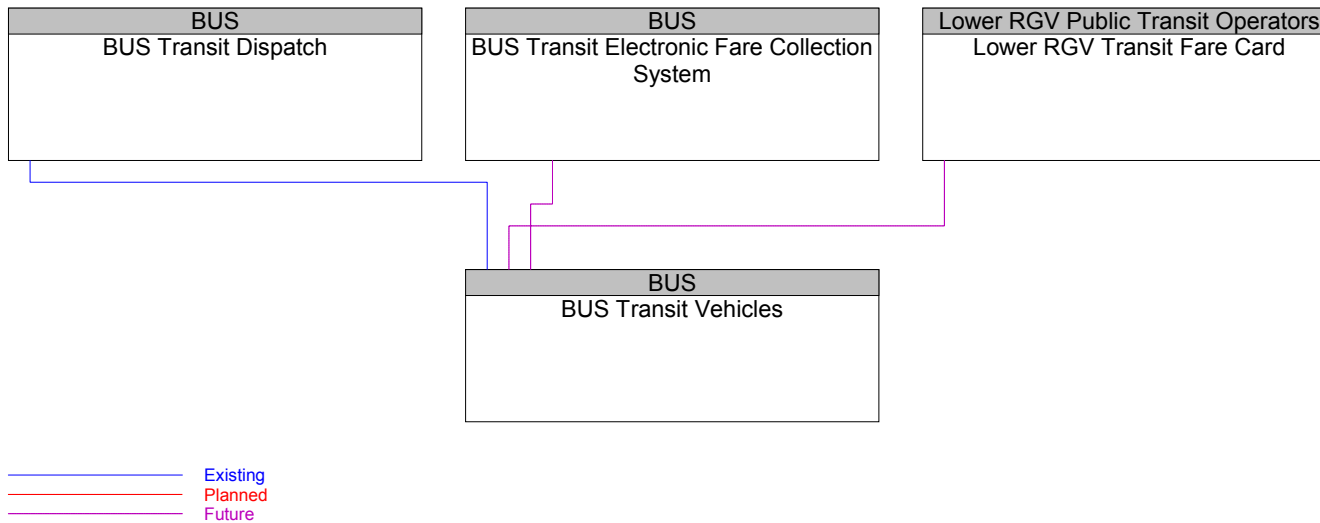


Figure B9 – BUS Transit Web Site Interfaces

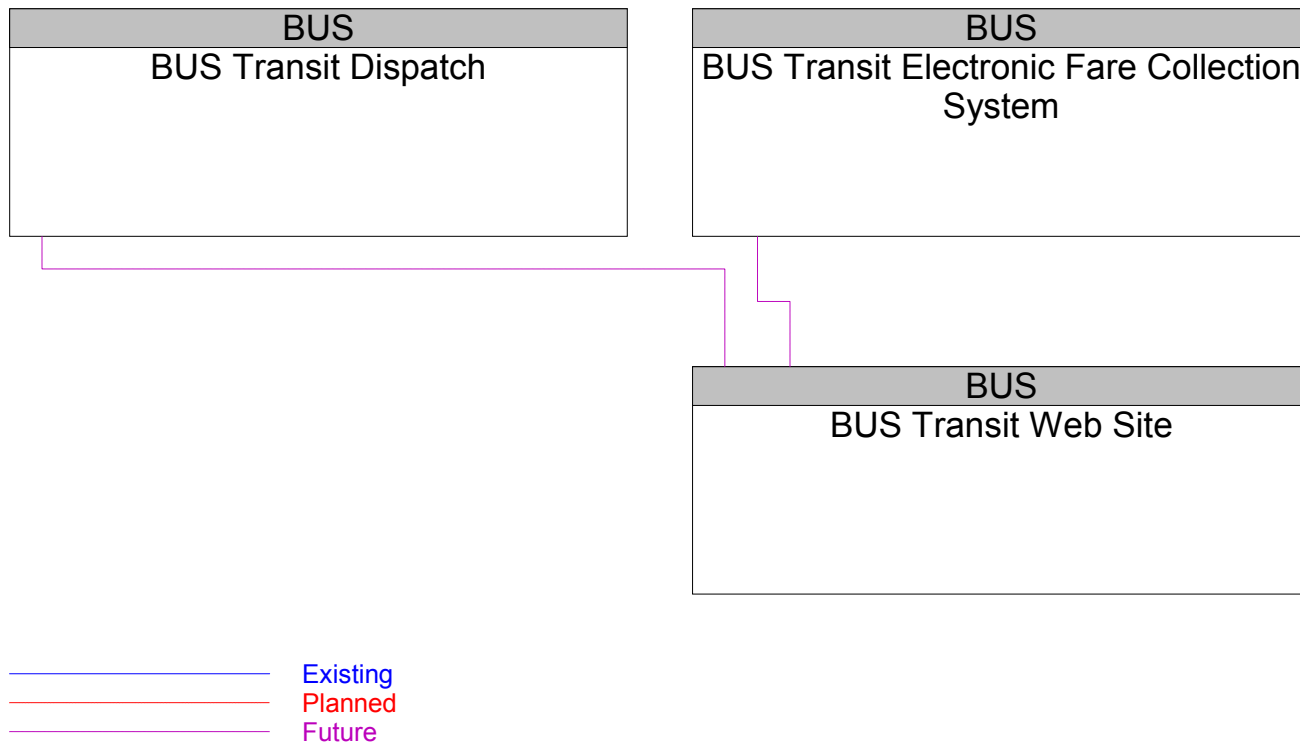


Figure B10 – Cameron County Congestion Management System Interfaces

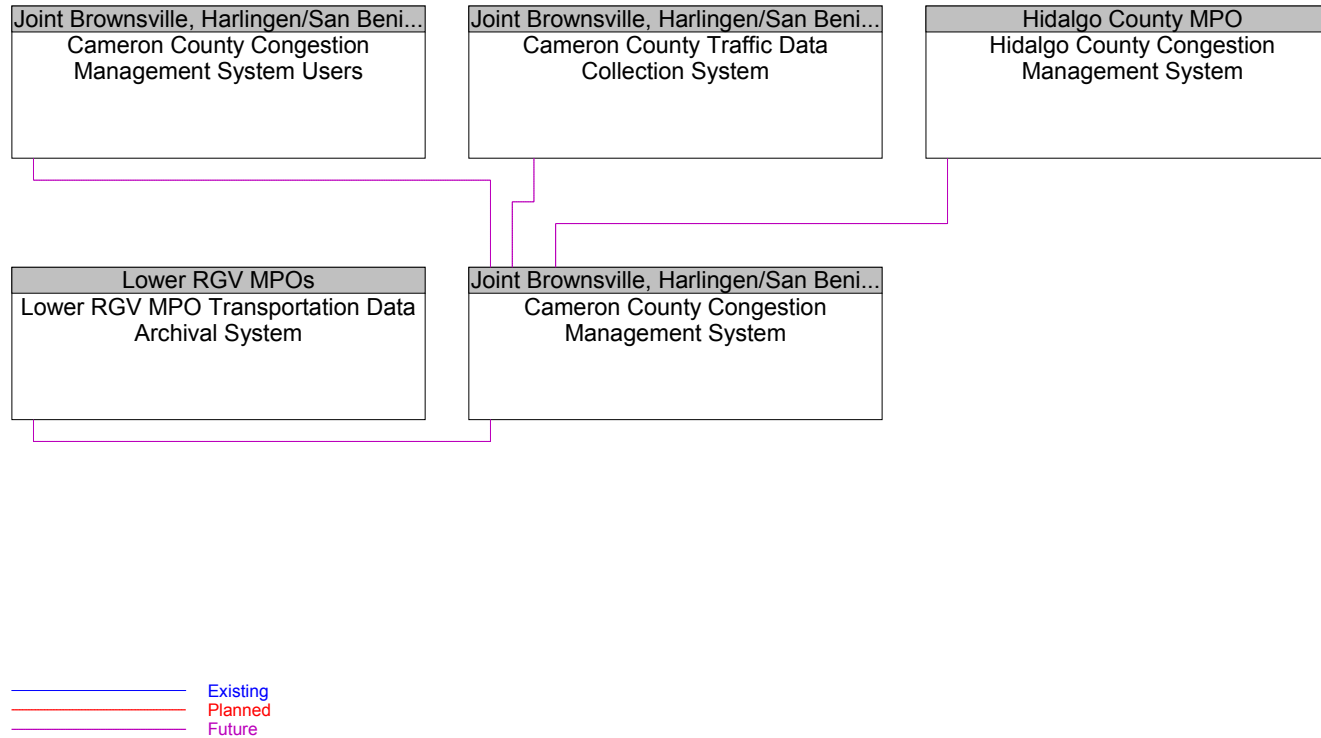


Figure B11 – Cameron County Congestion Management System Users Interfaces

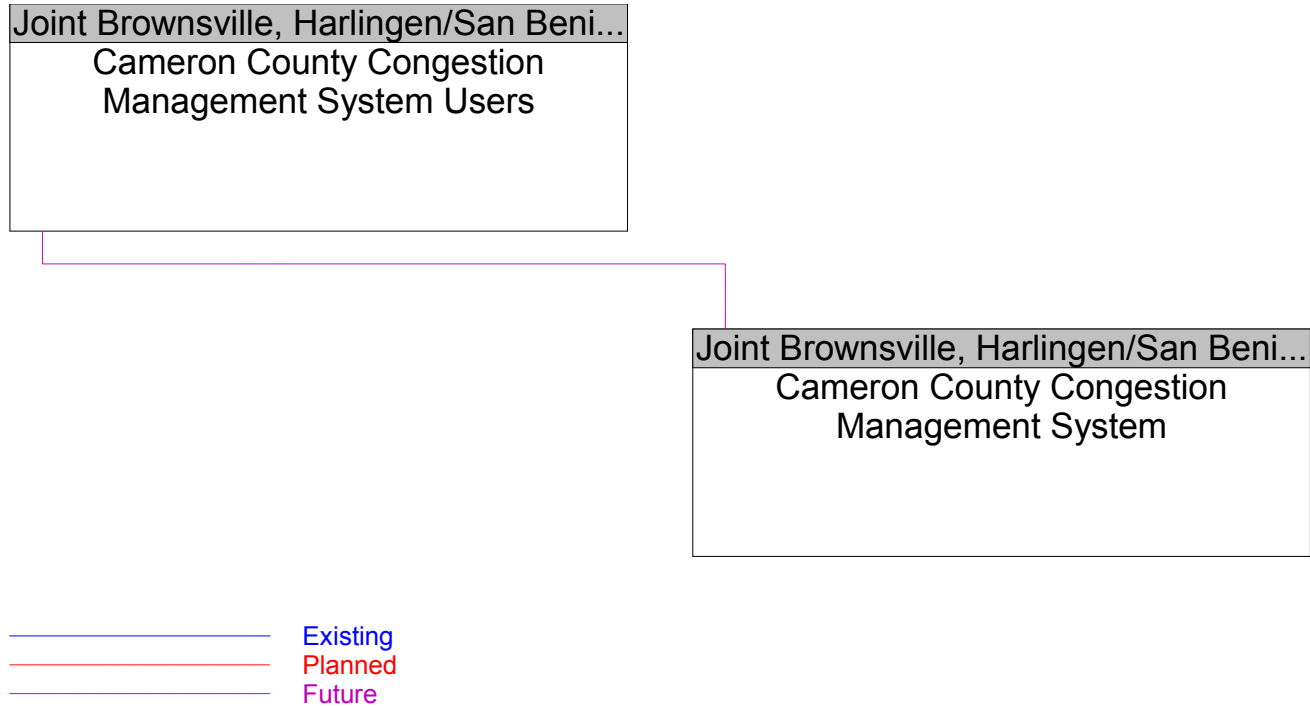


Figure B12 – Cameron County International Bridge Field Equipment Interfaces

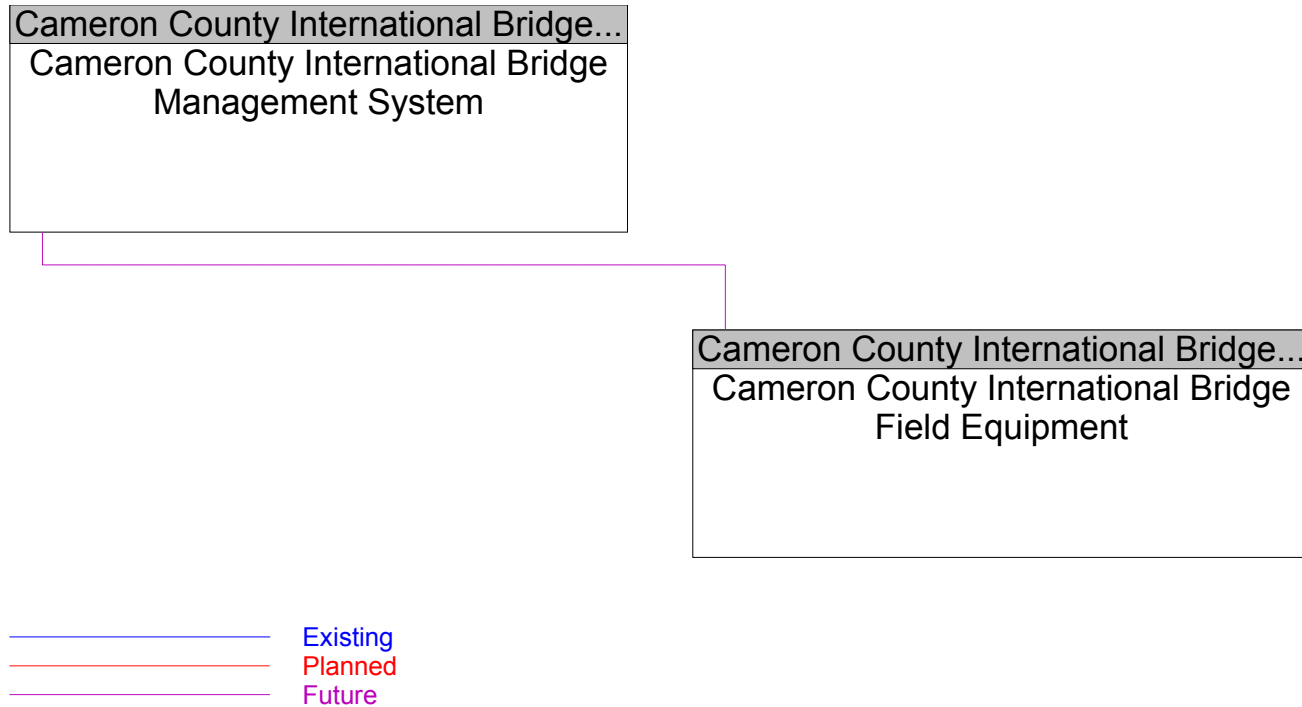


Figure B13 – Cameron County International Bridge Management System Interfaces

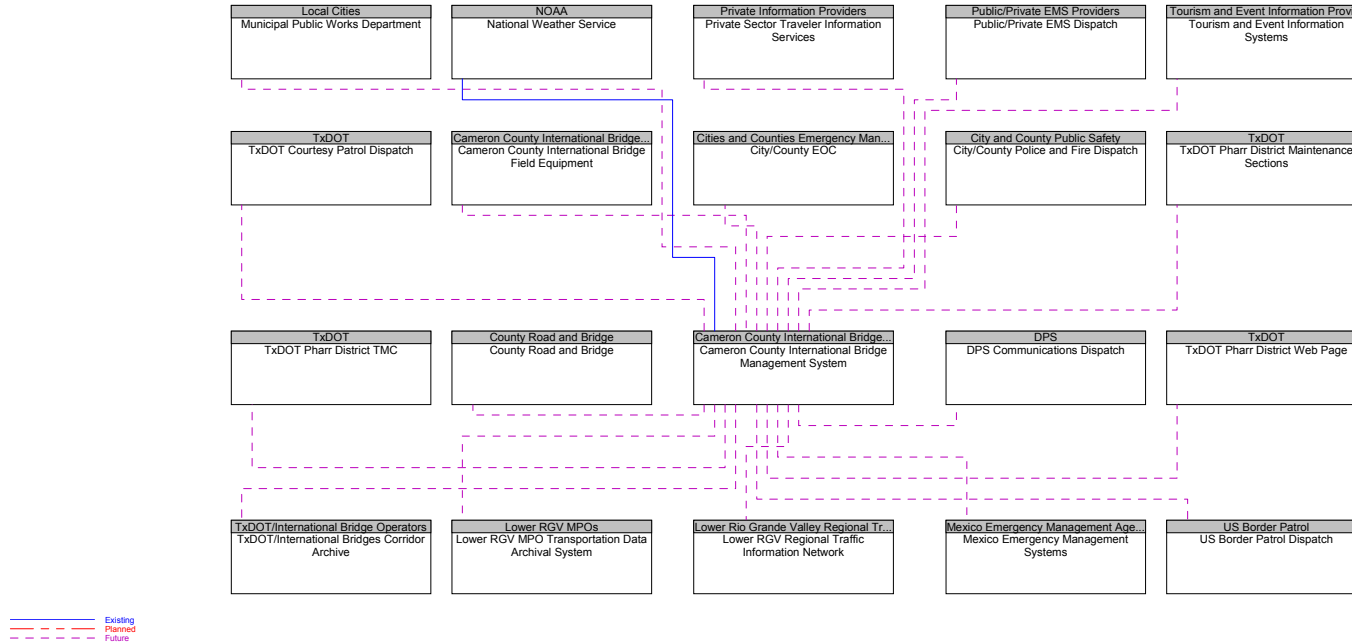


Figure B14 – Cameron County Traffic Data Collection System Interfaces

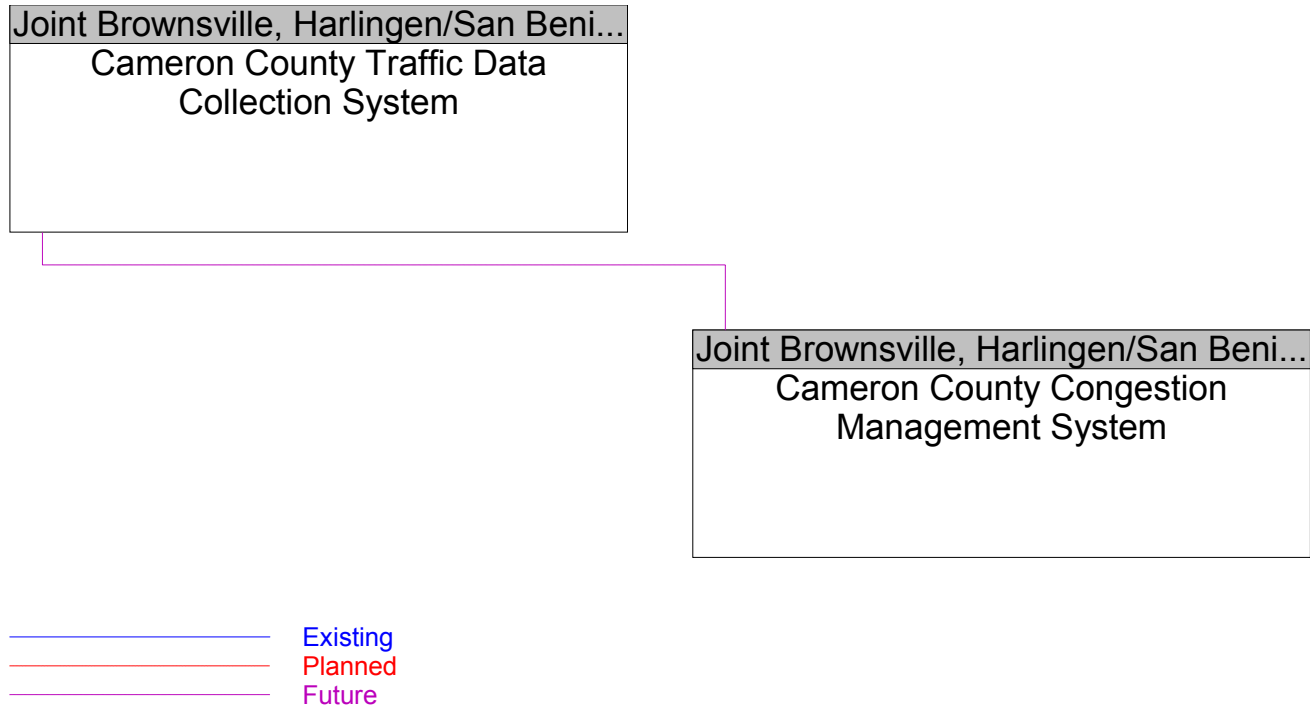


Figure B15 – City and Community Parking Management Systems Interfaces

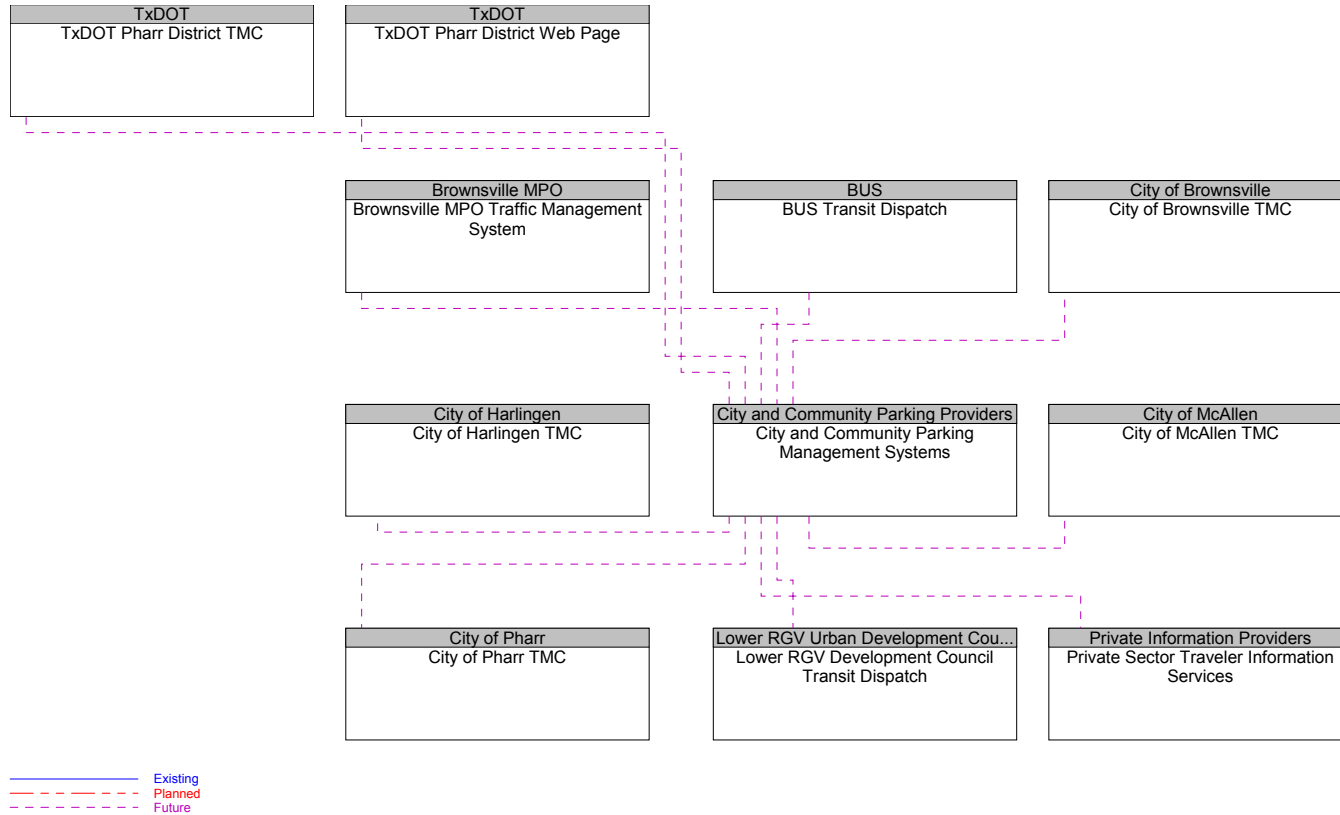


Figure B16 – City of Brownsville Field Equipment Interfaces

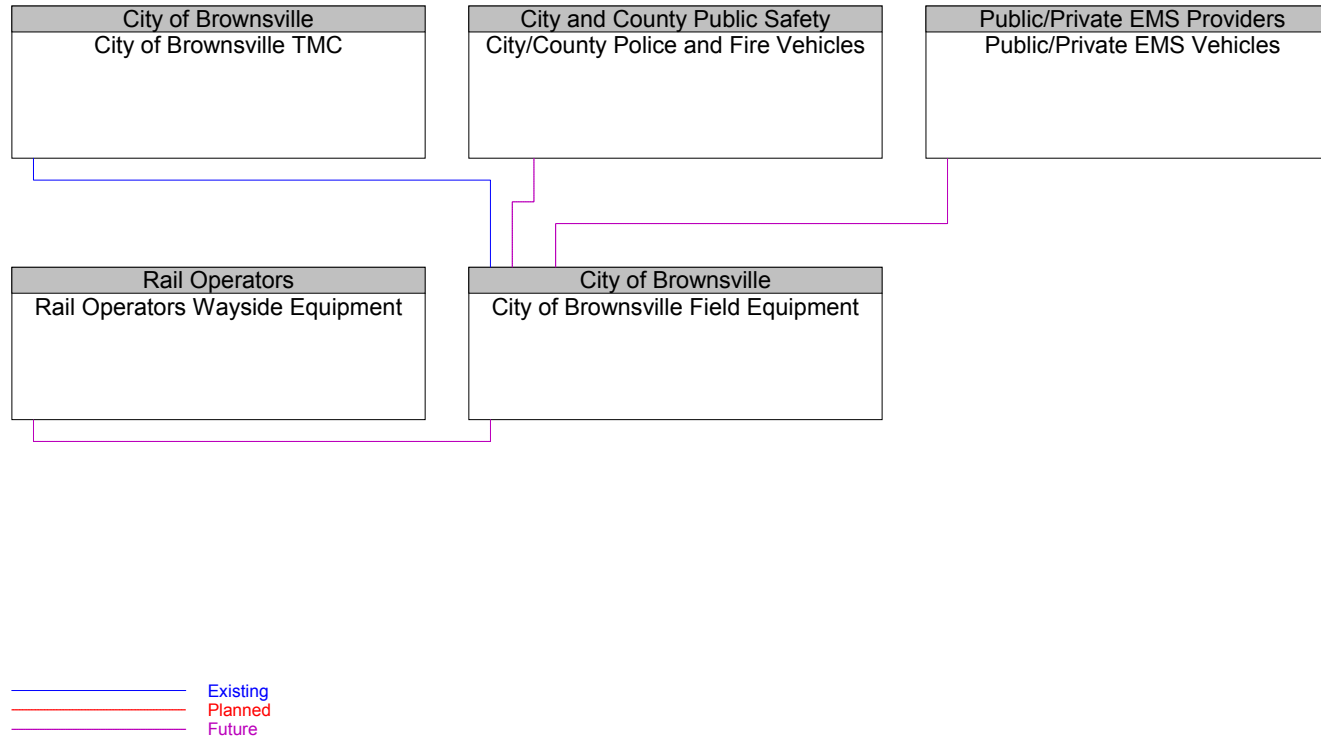


Figure B17 – City of Brownsville TMC Interfaces

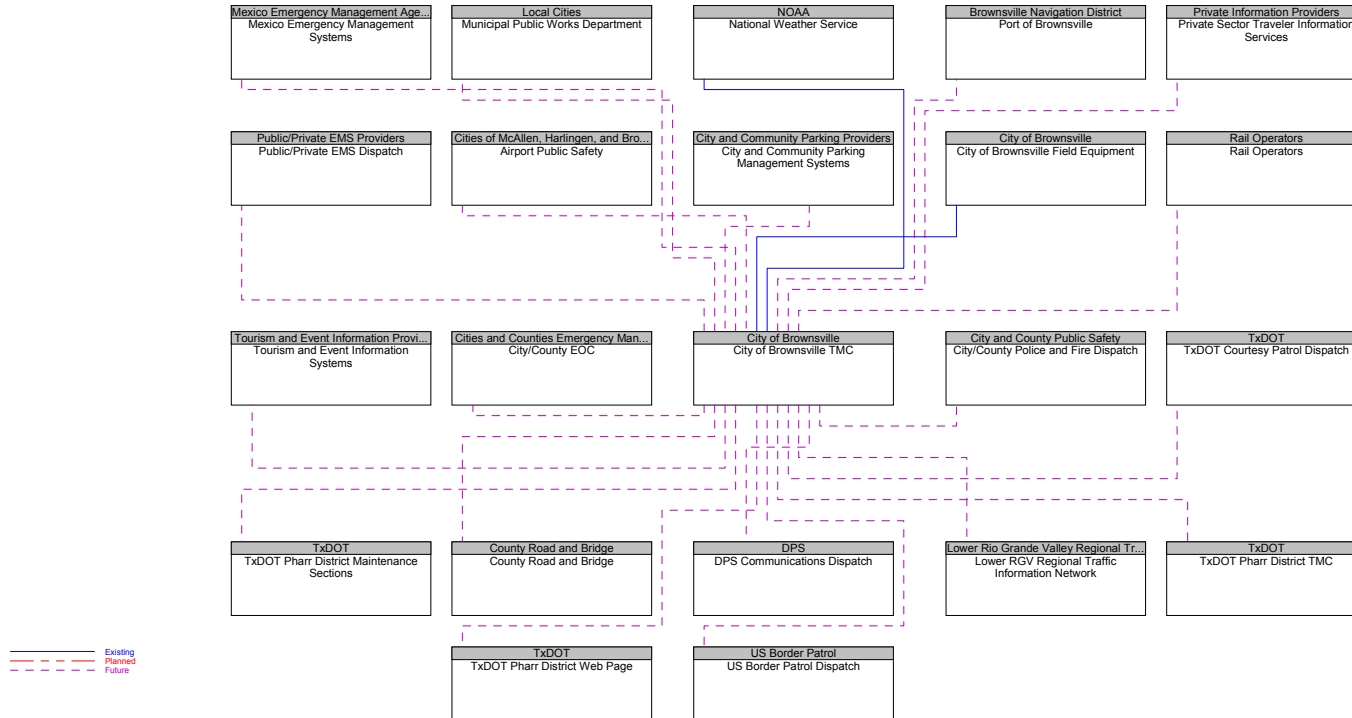


Figure B18 – City of Harlingen Field Equipment Interfaces

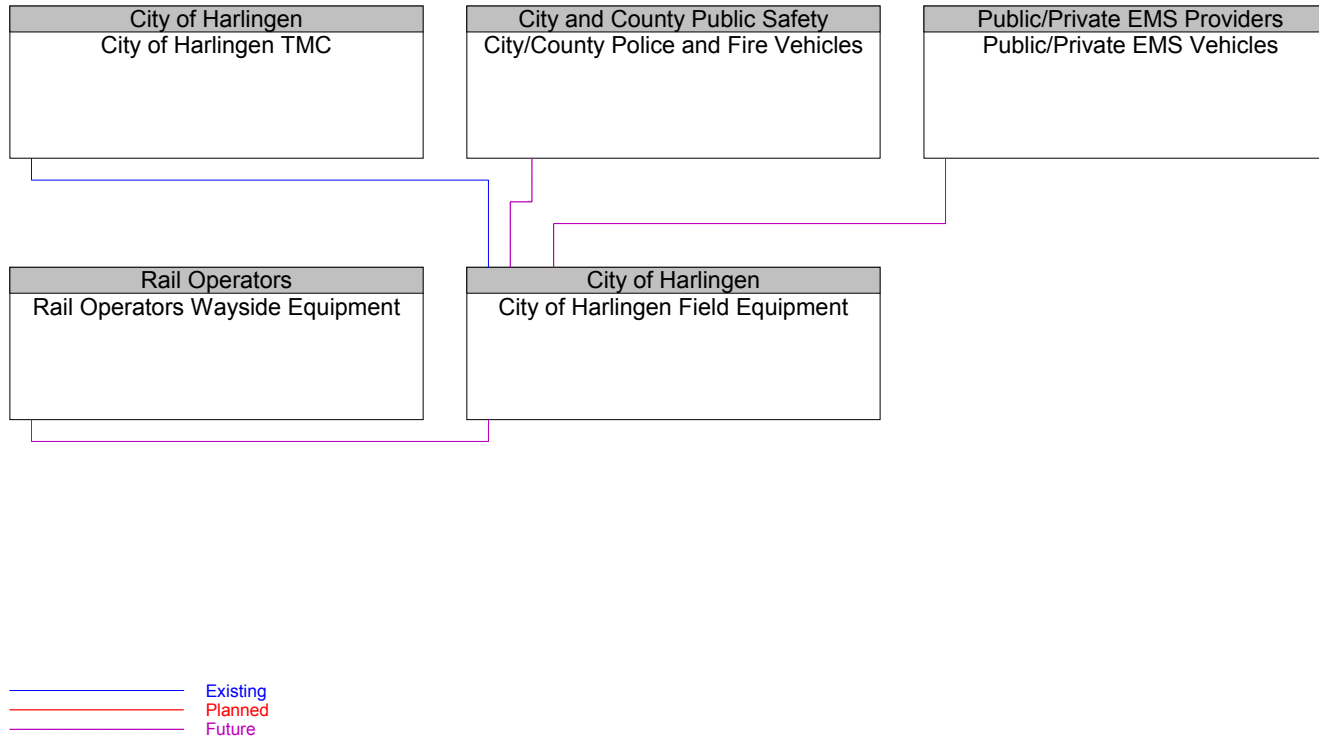


Figure B19 – City of Harlingen TMC Interfaces

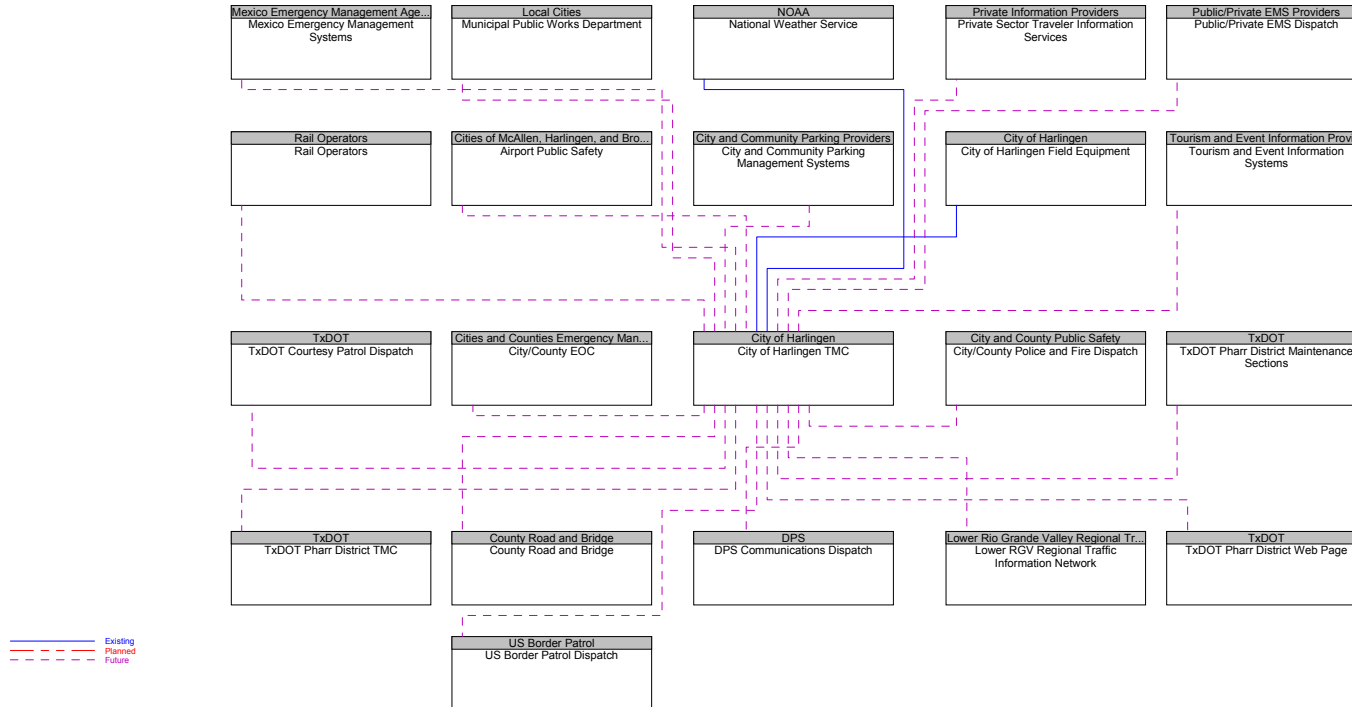


Figure B20 – City of McAllen Field Equipment Interfaces

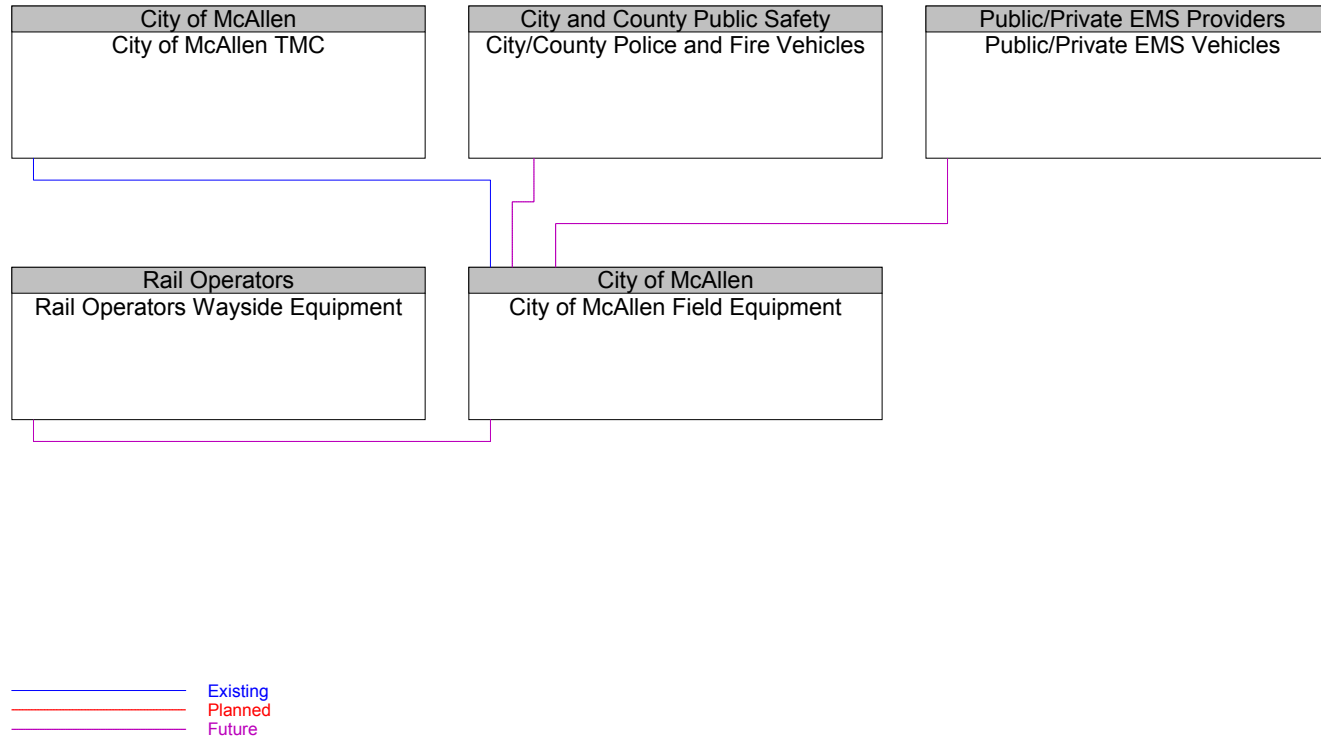


Figure B21 – City of McAllen TMC Interfaces

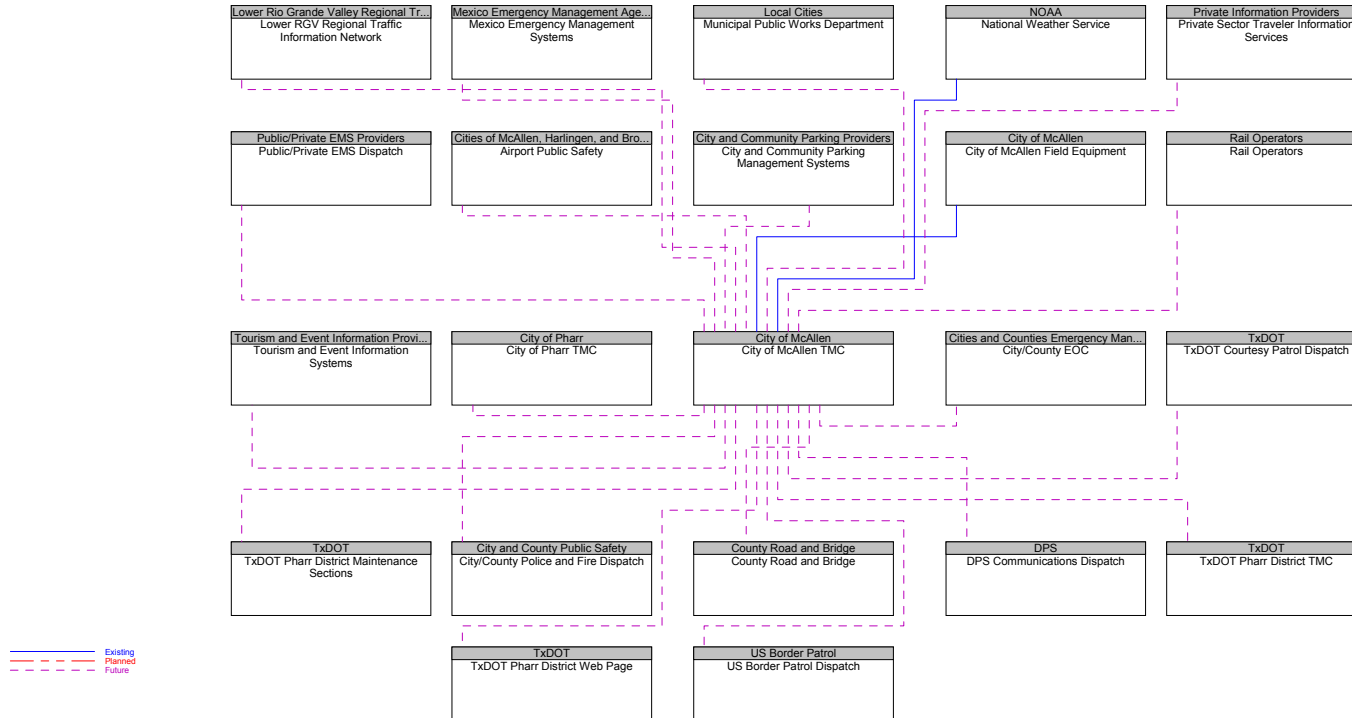


Figure B22 – City of Pharr and B/M Bridge Electronic Toll Collection System Interfaces

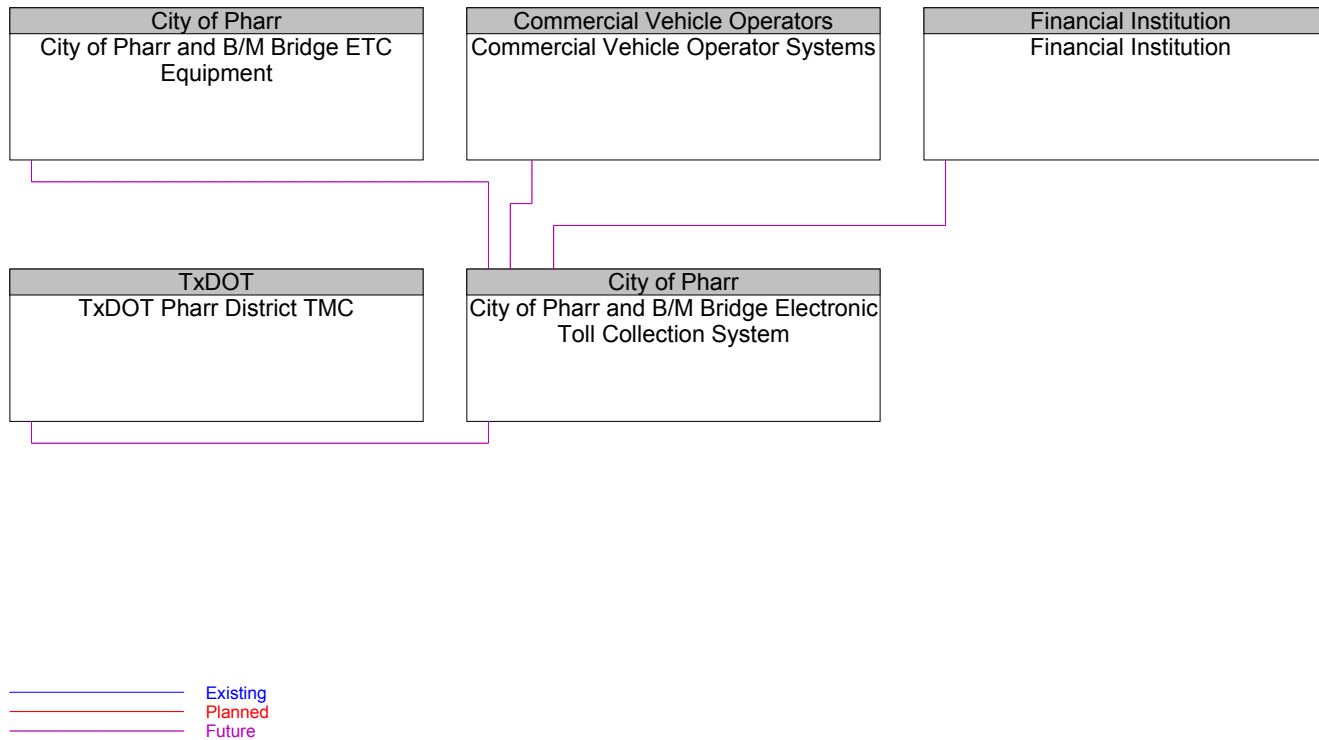


Figure B23 – City of Pharr and B/M Bridge ETC Equipment Interfaces

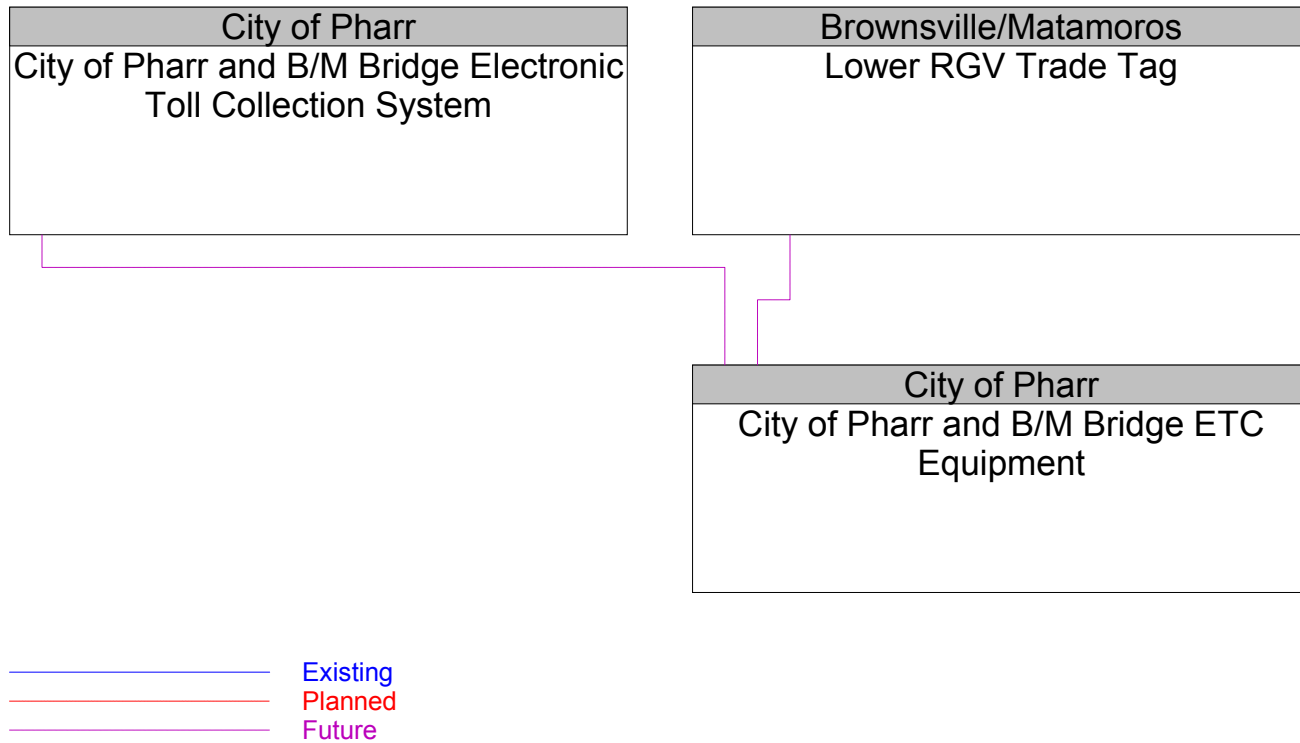


Figure B24 – City of Pharr Field Equipment Interfaces

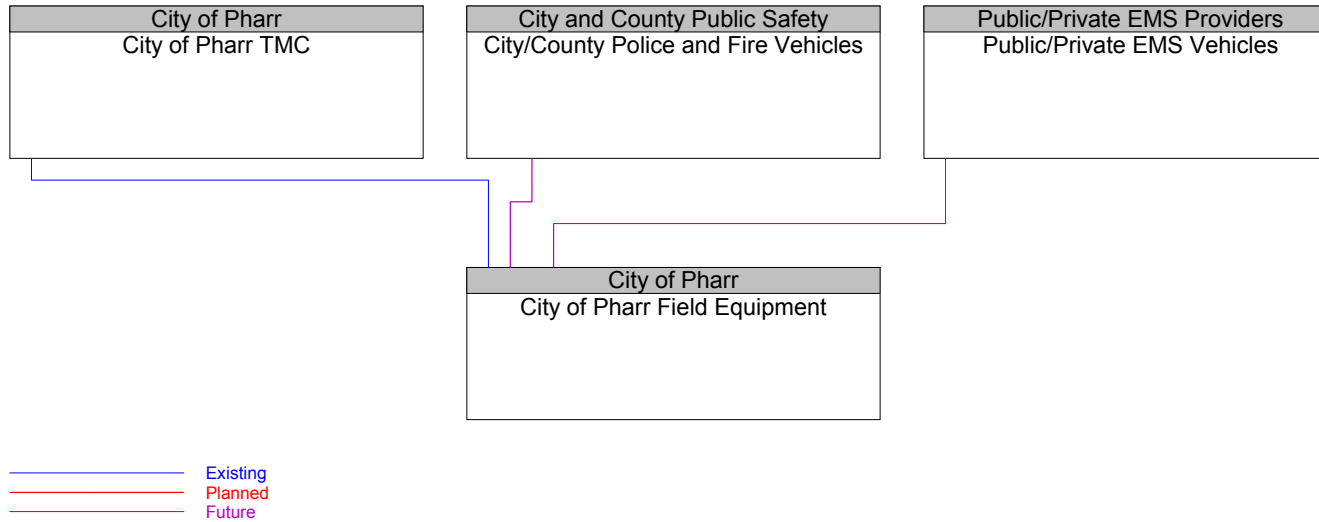


Figure B25 – City of Pharr TMC Interfaces

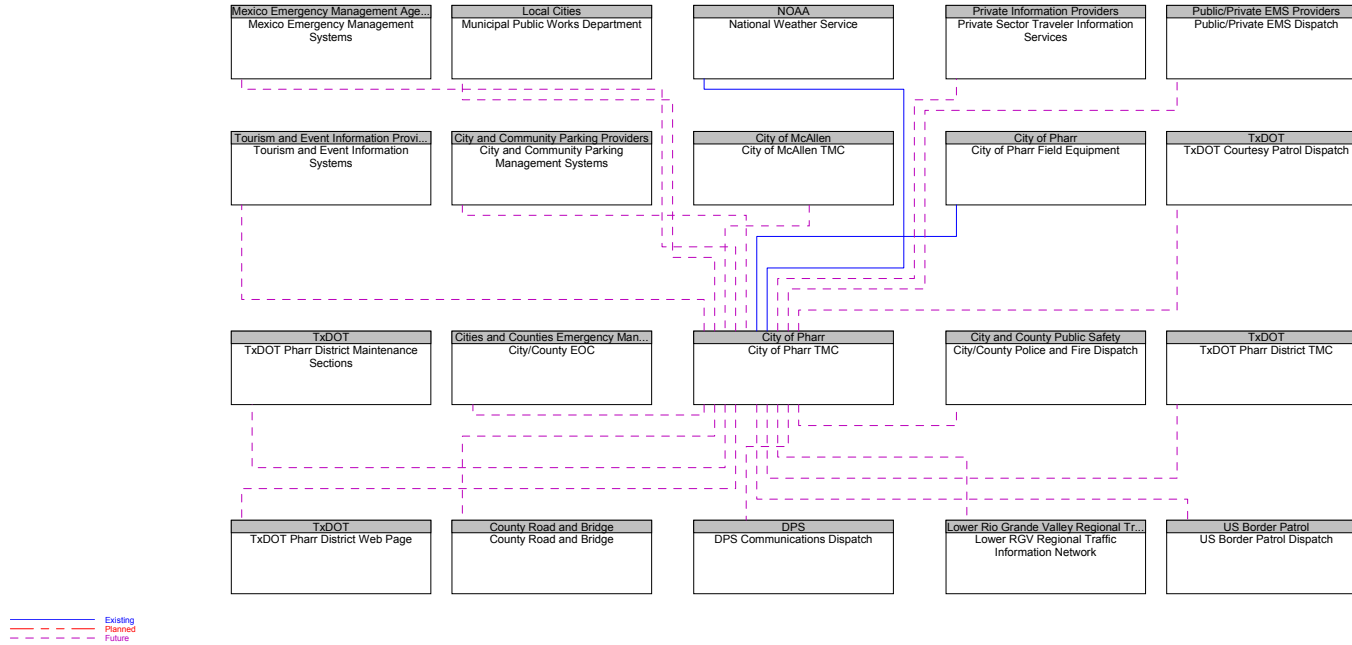


Figure B26 – City/County EOC Interfaces

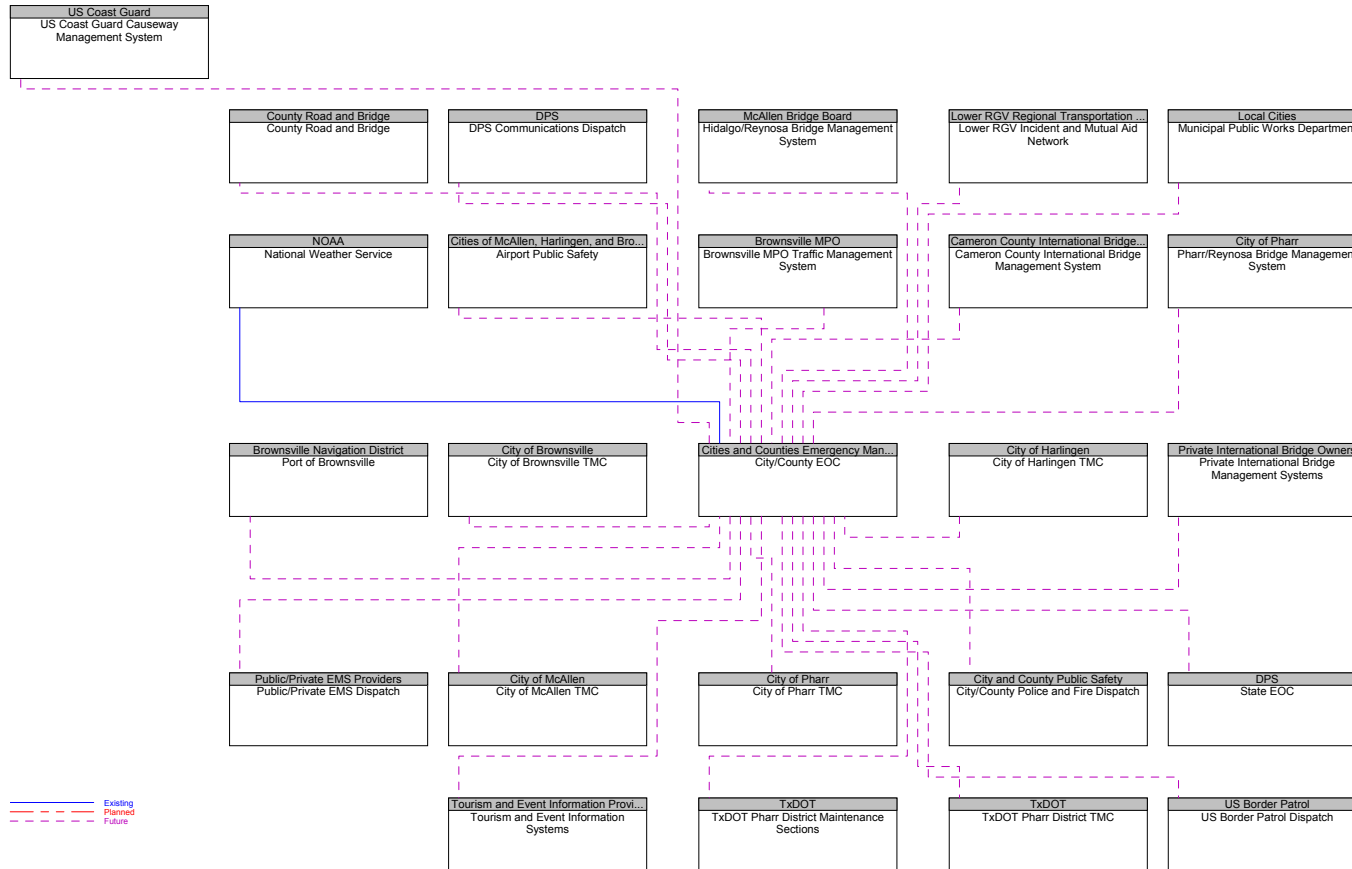


Figure B27 – City/County Police and Fire Dispatch Interfaces

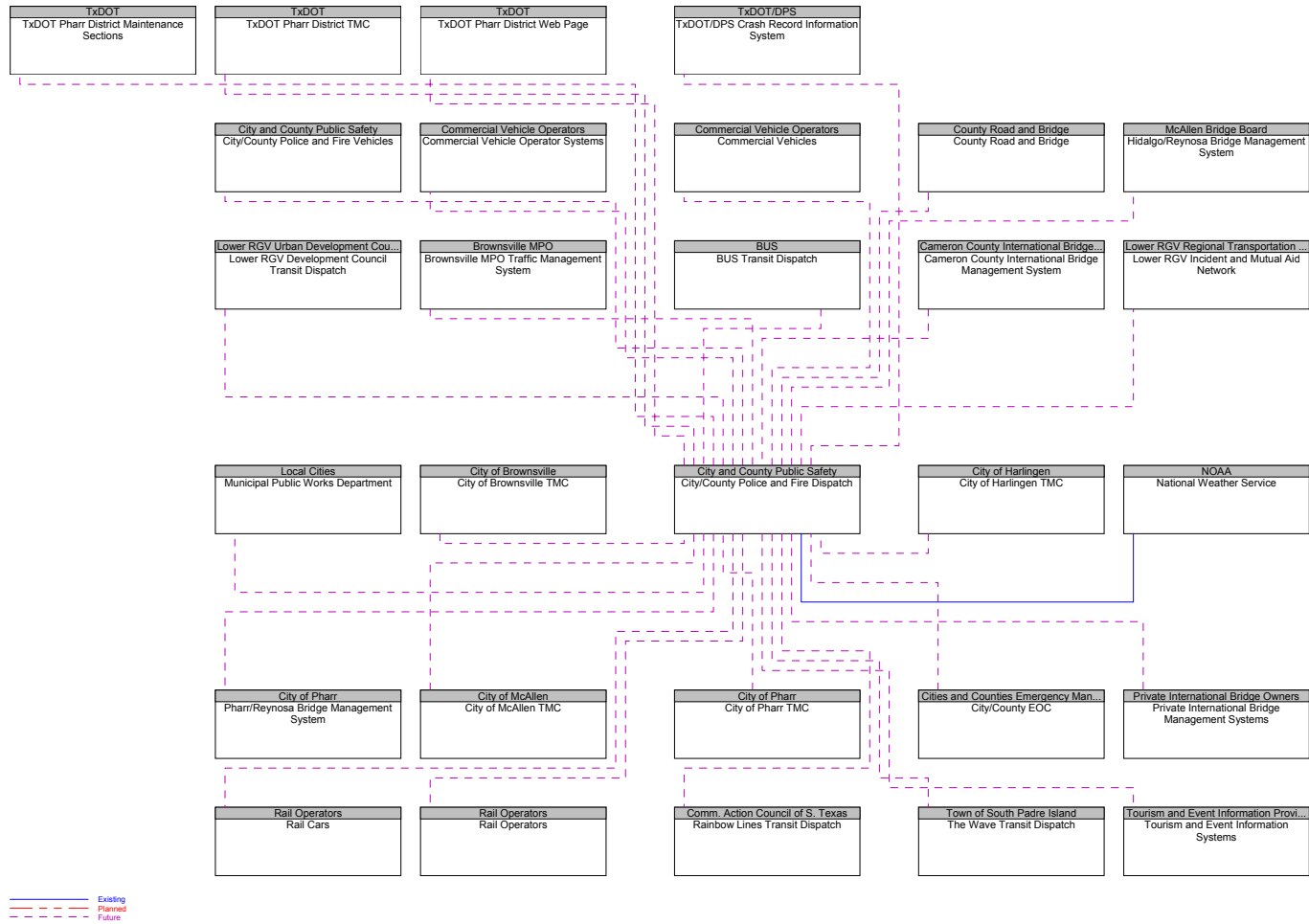


Figure B28 – City/County Police and Fire Vehicles Interfaces

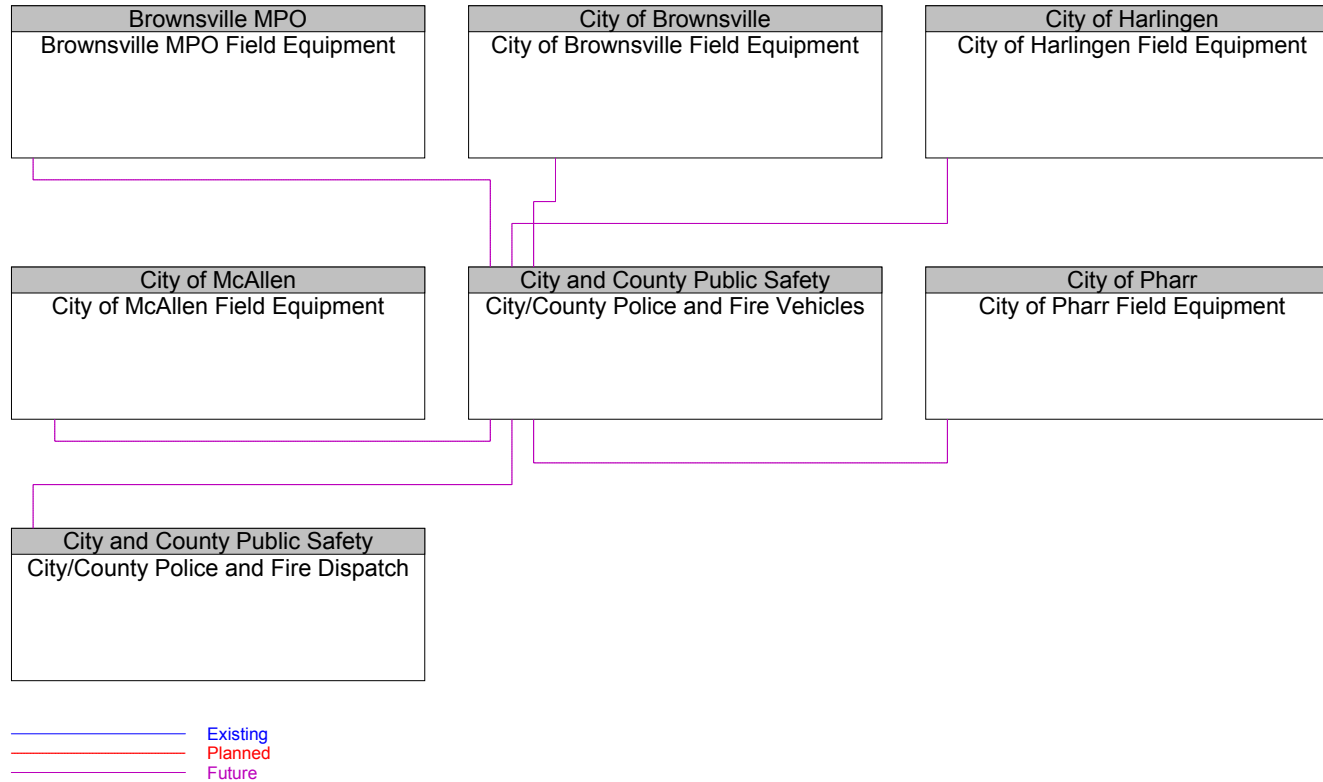


Figure B29 – Commercial Vehicle Operator Systems Interfaces

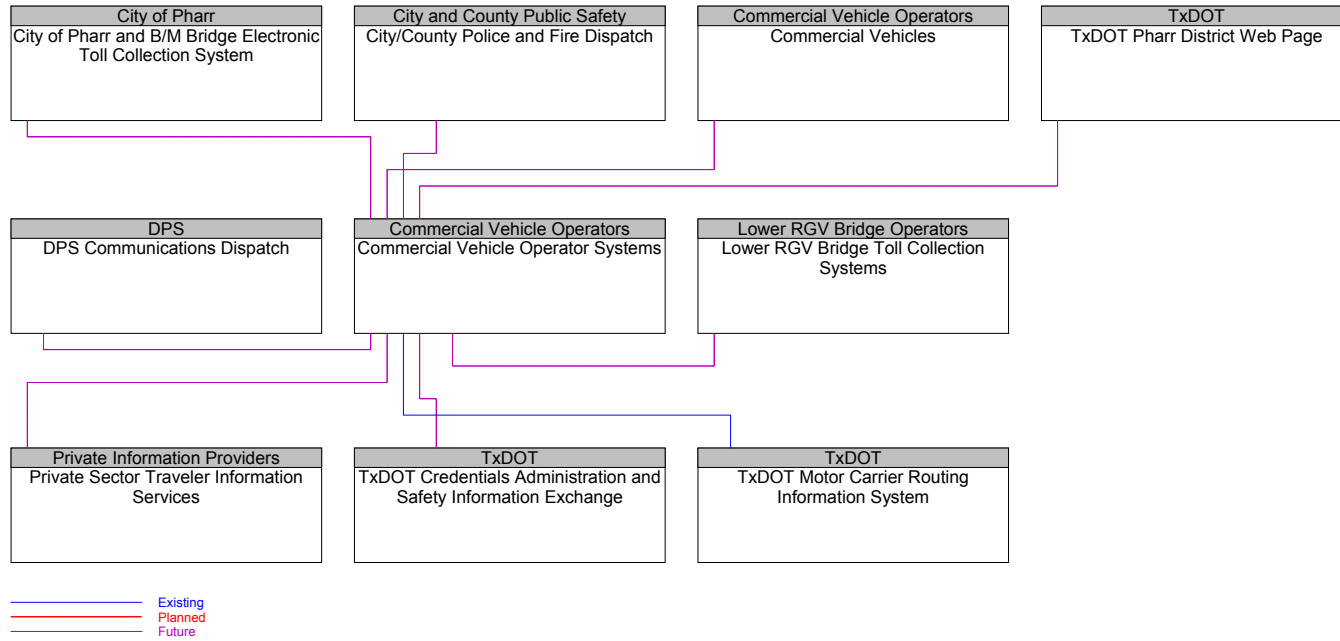


Figure B30 – Commercial Vehicles Interfaces

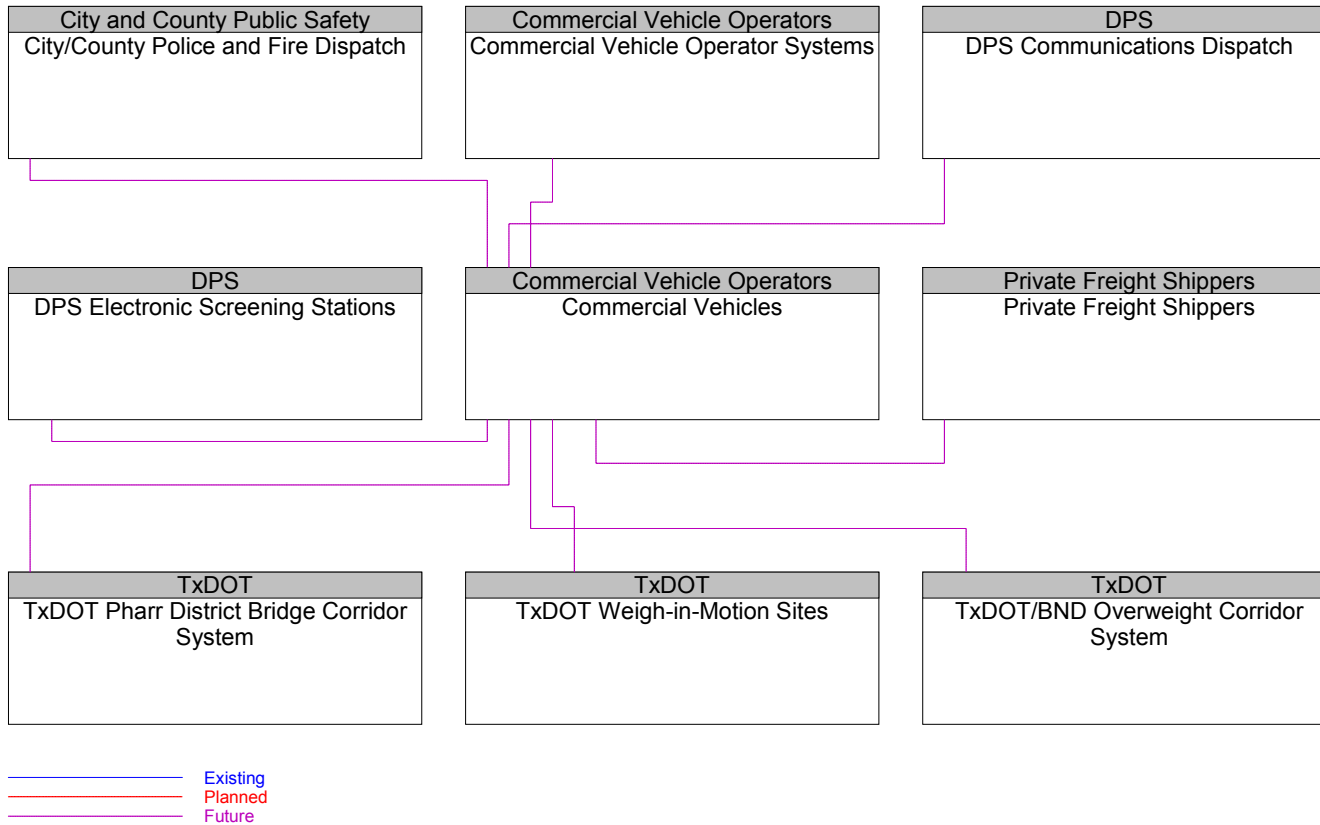


Figure B31 – County Road and Bridge Interfaces

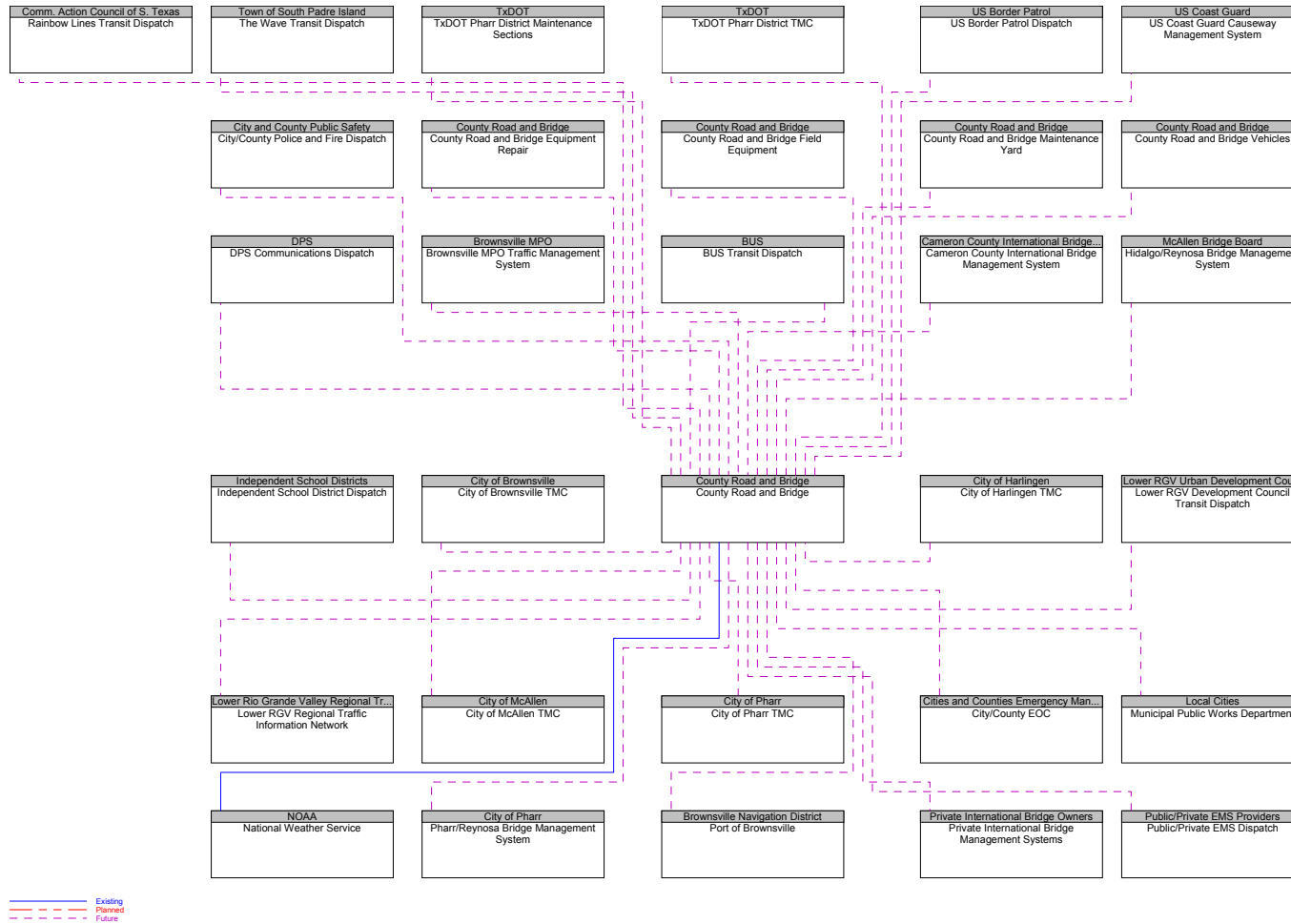


Figure B32 – County Road and Bridge Equipment Repair Interfaces

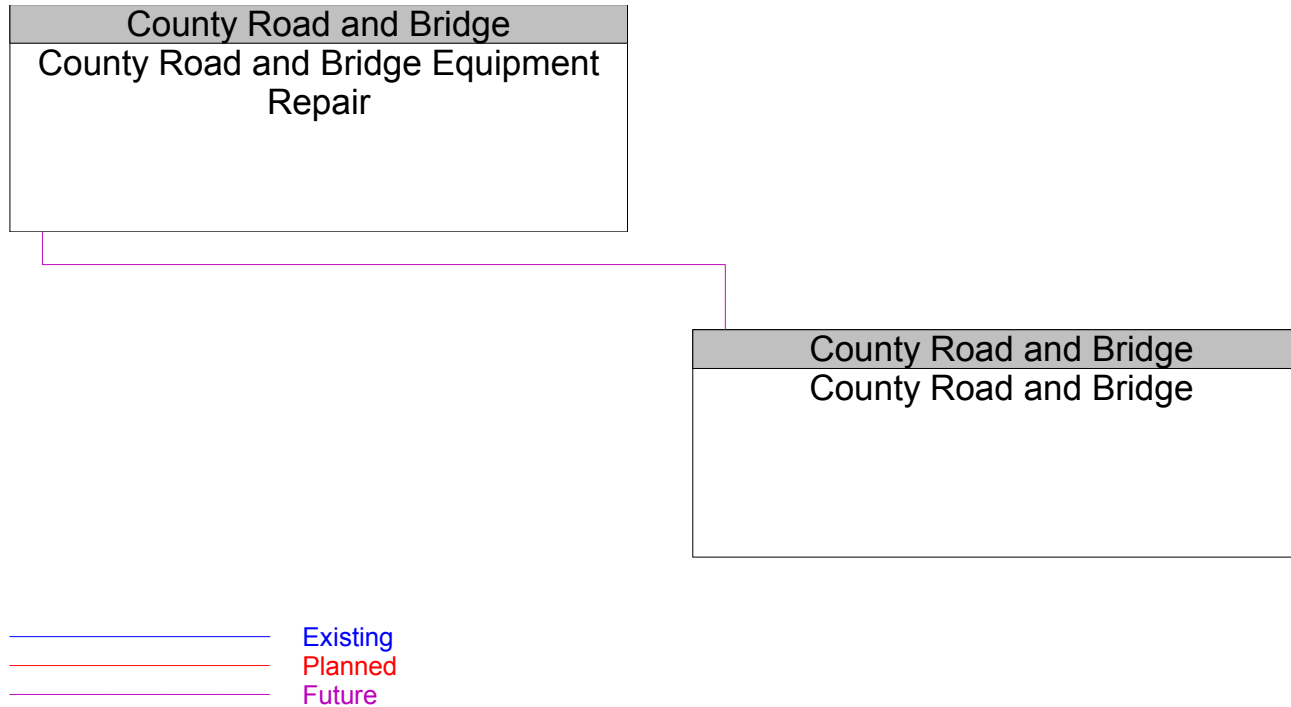


Figure B33 – County Road and Bridge Field Equipment Interfaces

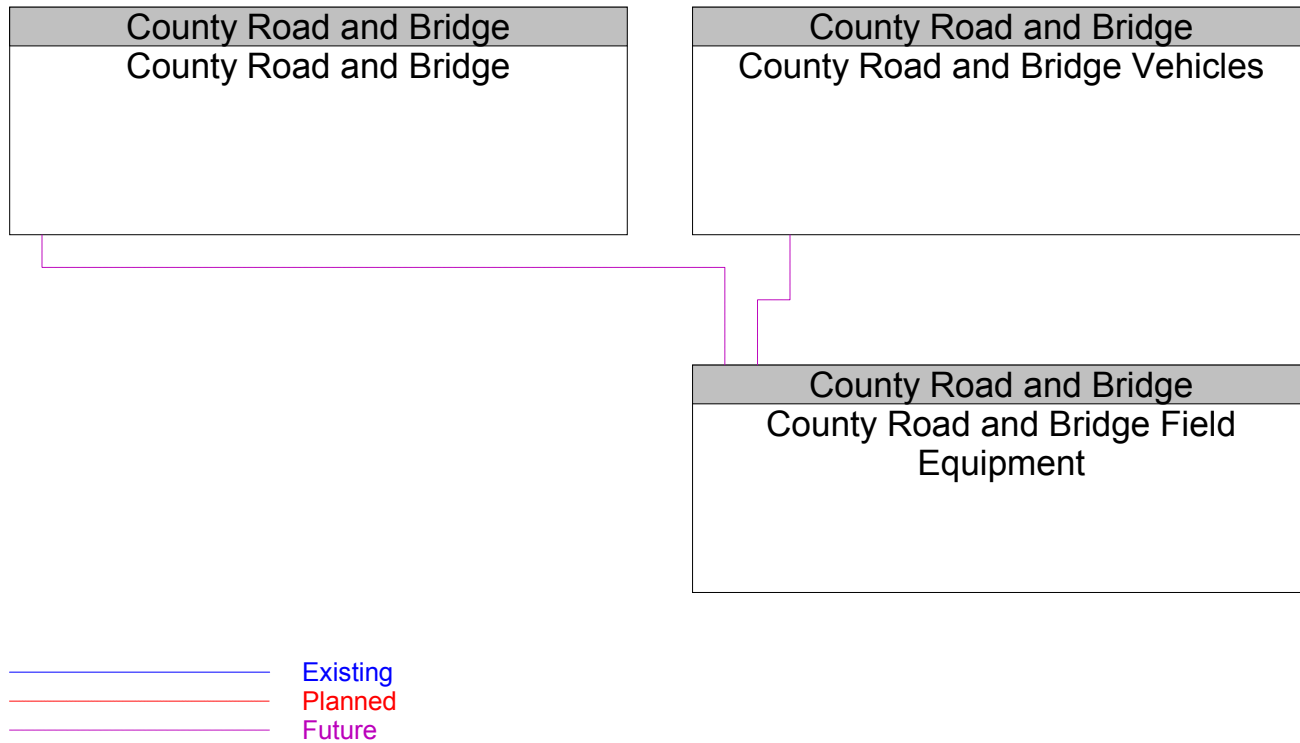


Figure B34 – County Road and Bridge Maintenance Yard Interfaces

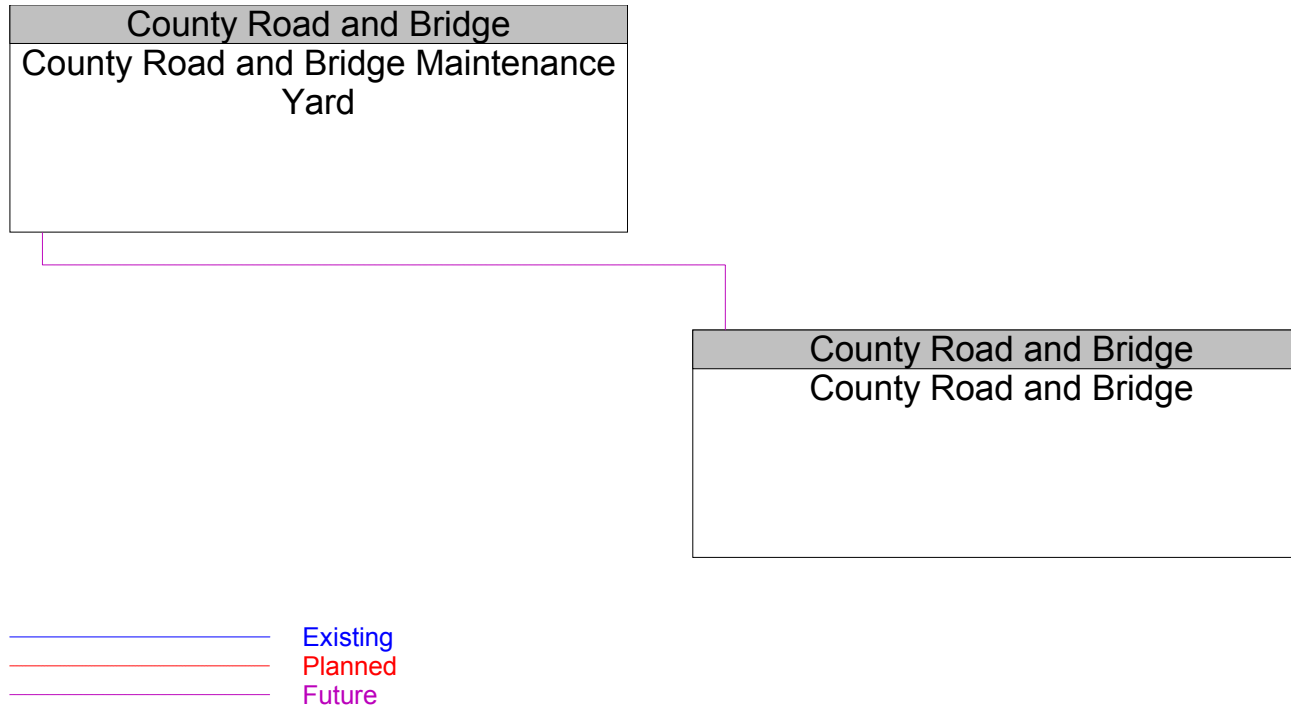


Figure B35 – County Road and Bridge Vehicles Interfaces

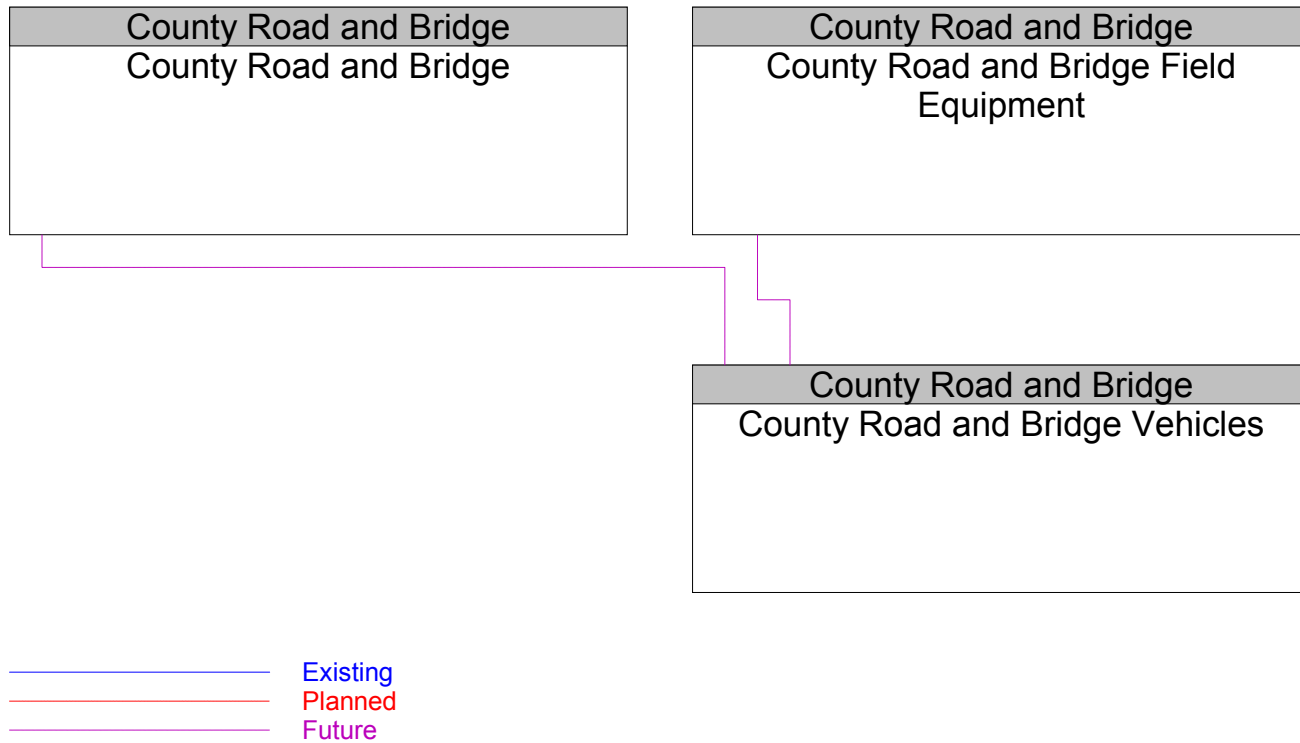


Figure B36 – DPS Administration Interfaces

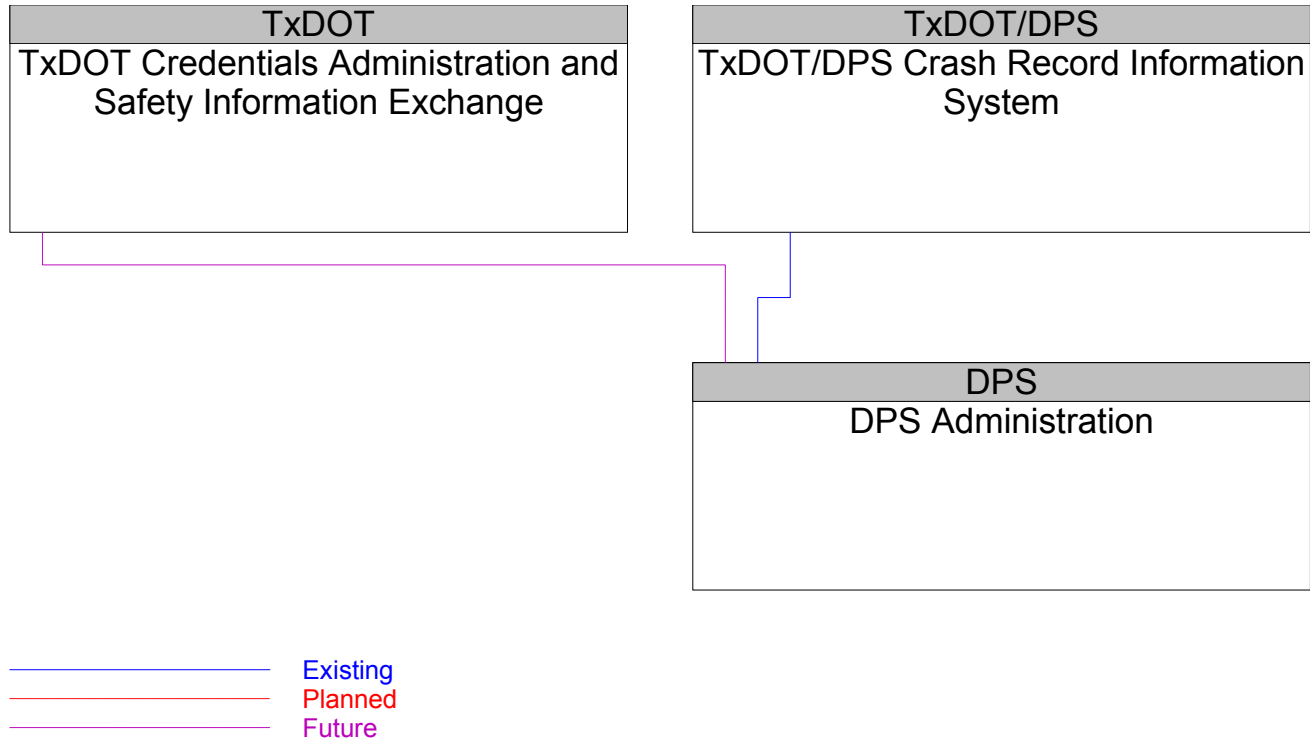


Figure B37 – DPS Communications Dispatch Interfaces

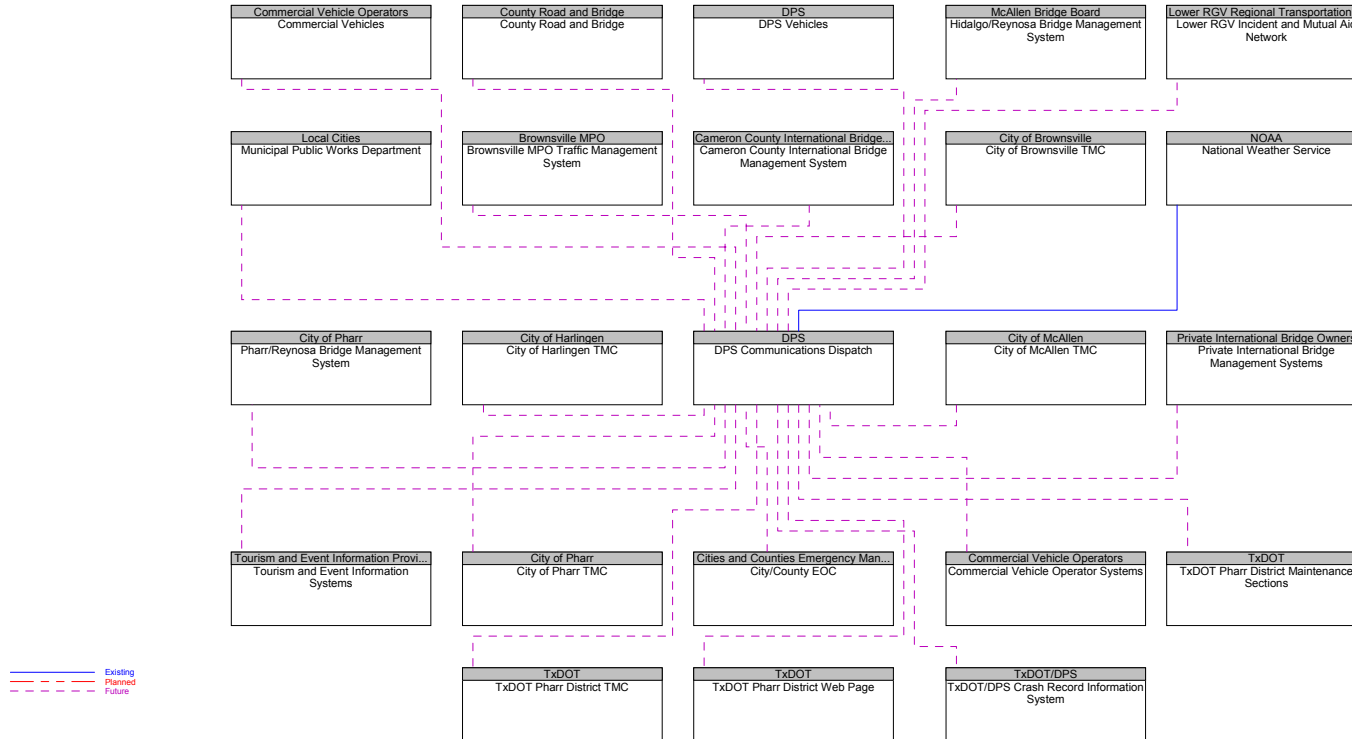


Figure B38 – DPS Electronic Screening Stations Interfaces

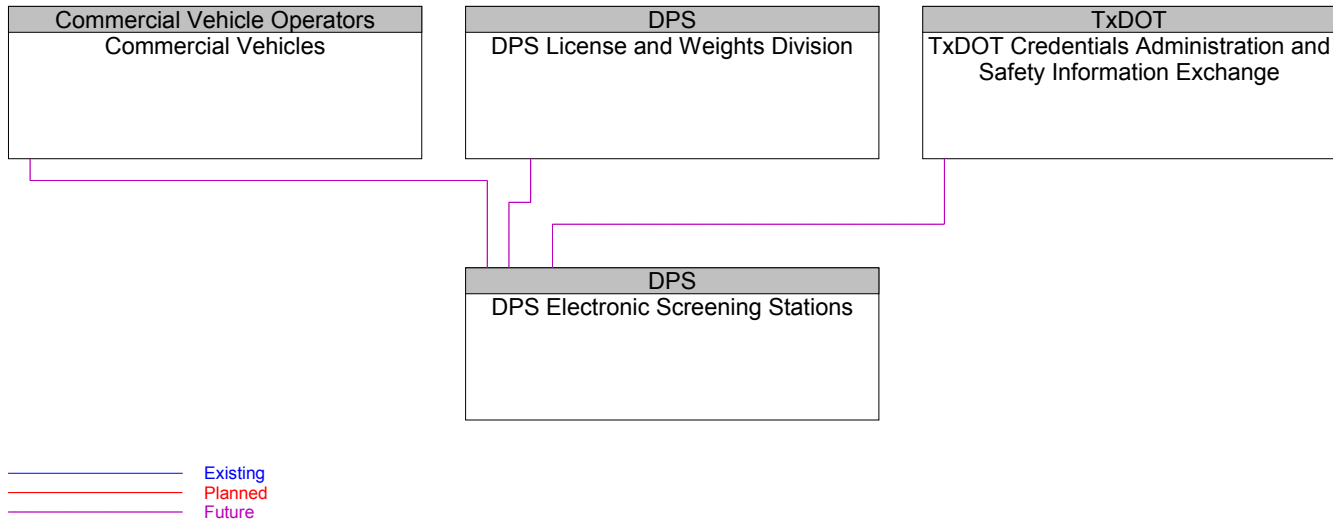


Figure B39 – DPS License and Weights Division Interfaces

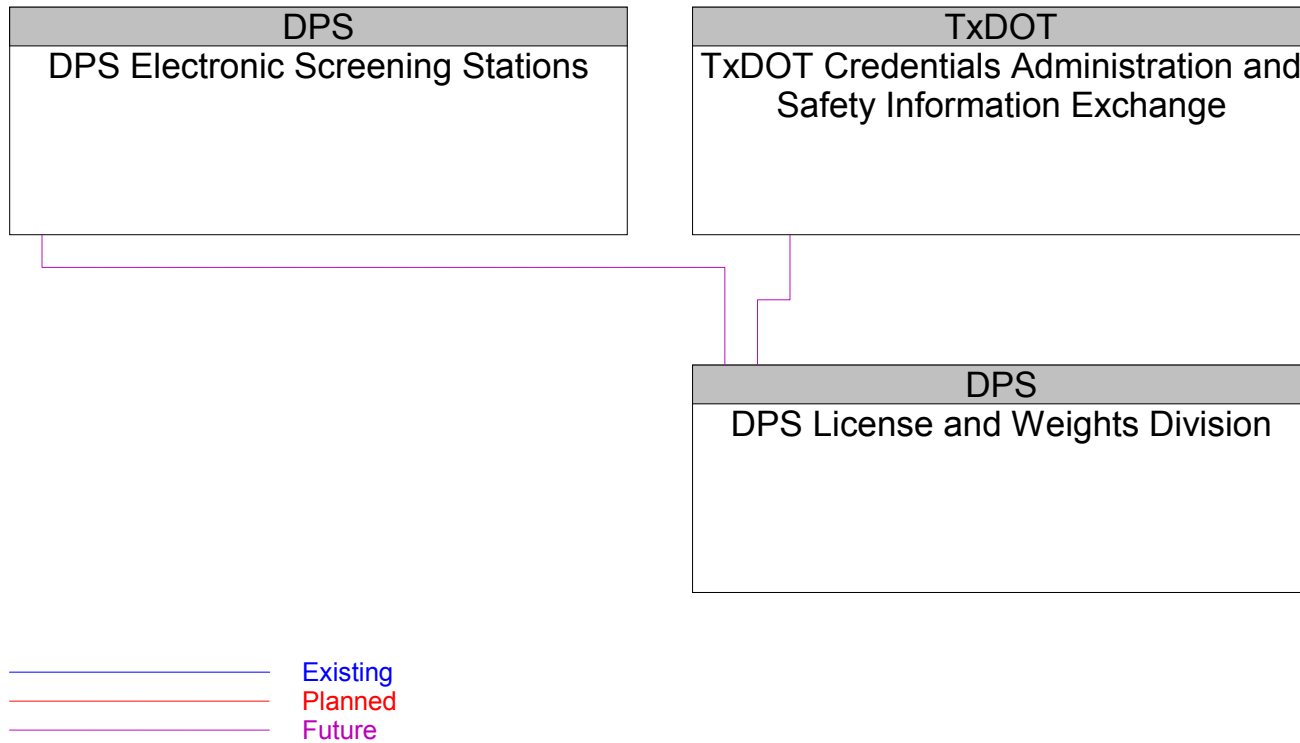


Figure B40 – DPS Vehicles Interfaces

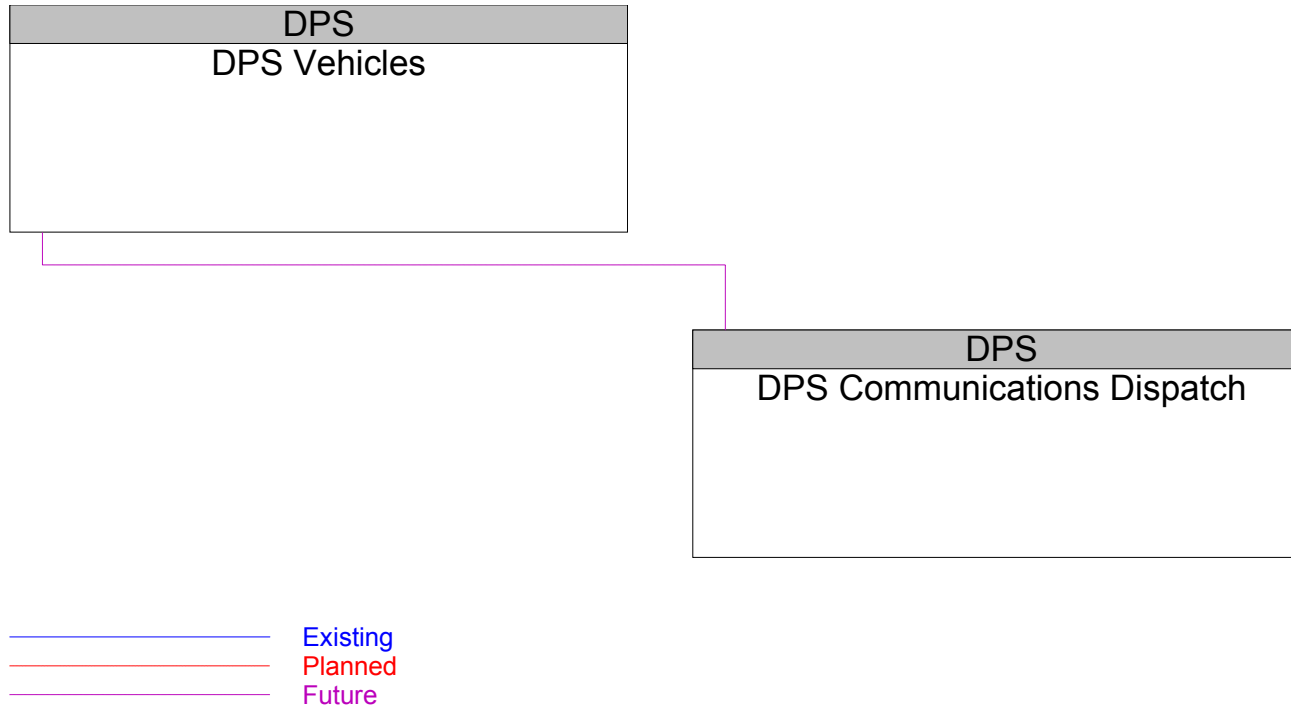


Figure B41 – Financial Institution Interfaces

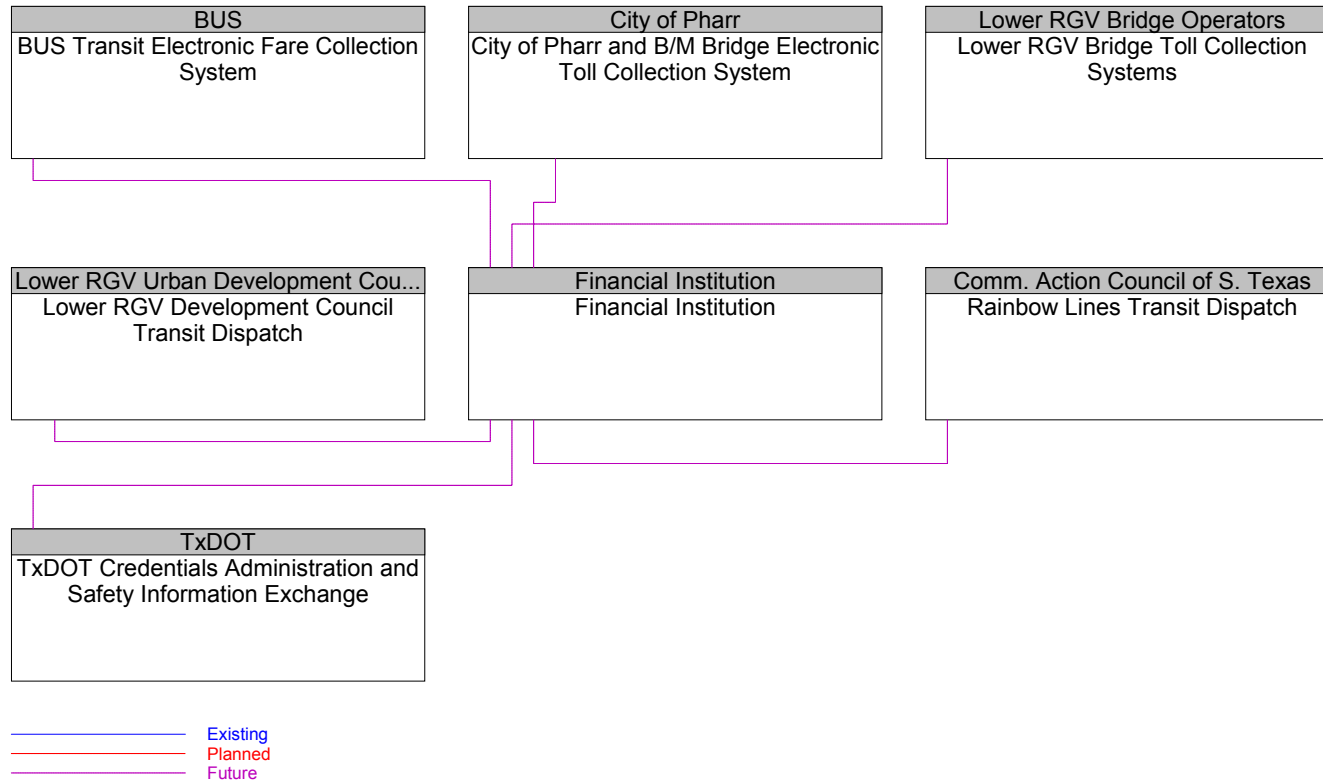


Figure B42 – Hidalgo County Archived Data System Users Interfaces

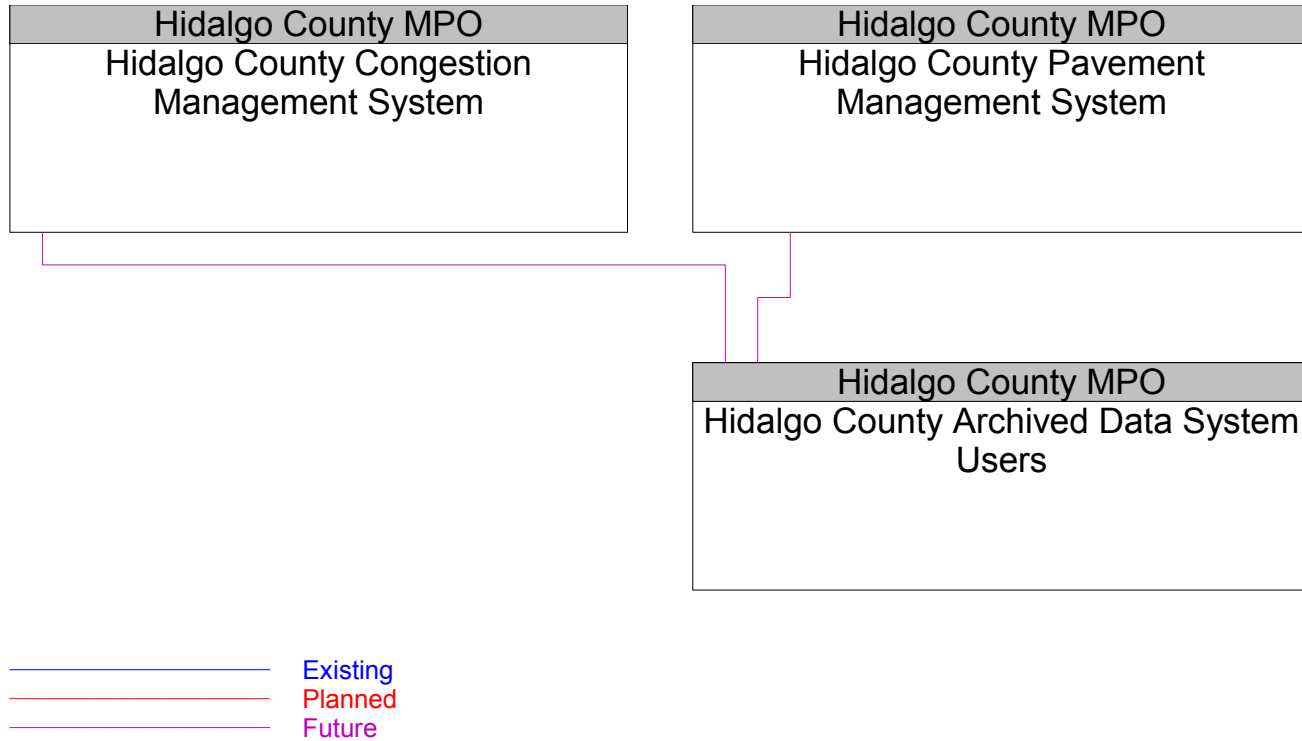


Figure B43 – Hidalgo County Congestion Management System Interfaces

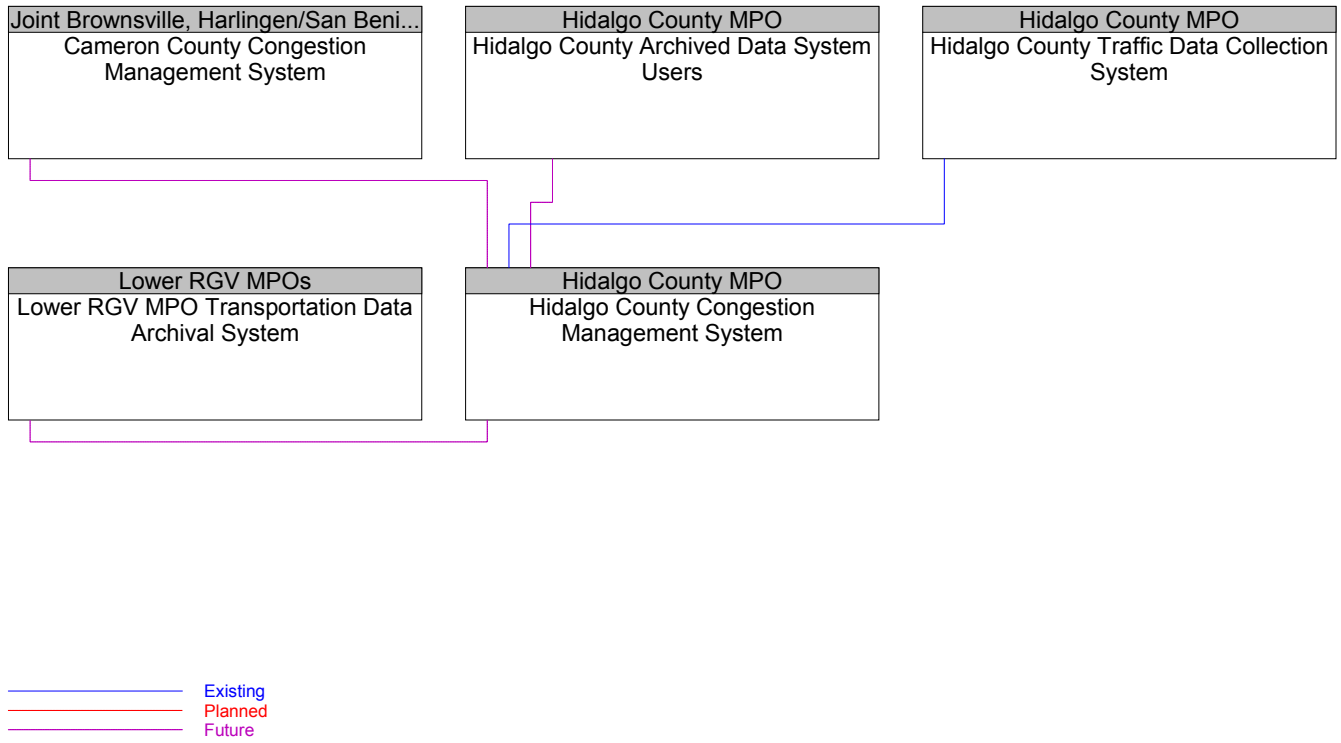


Figure B44 – Hidalgo County Pavement Data Collection System Interfaces

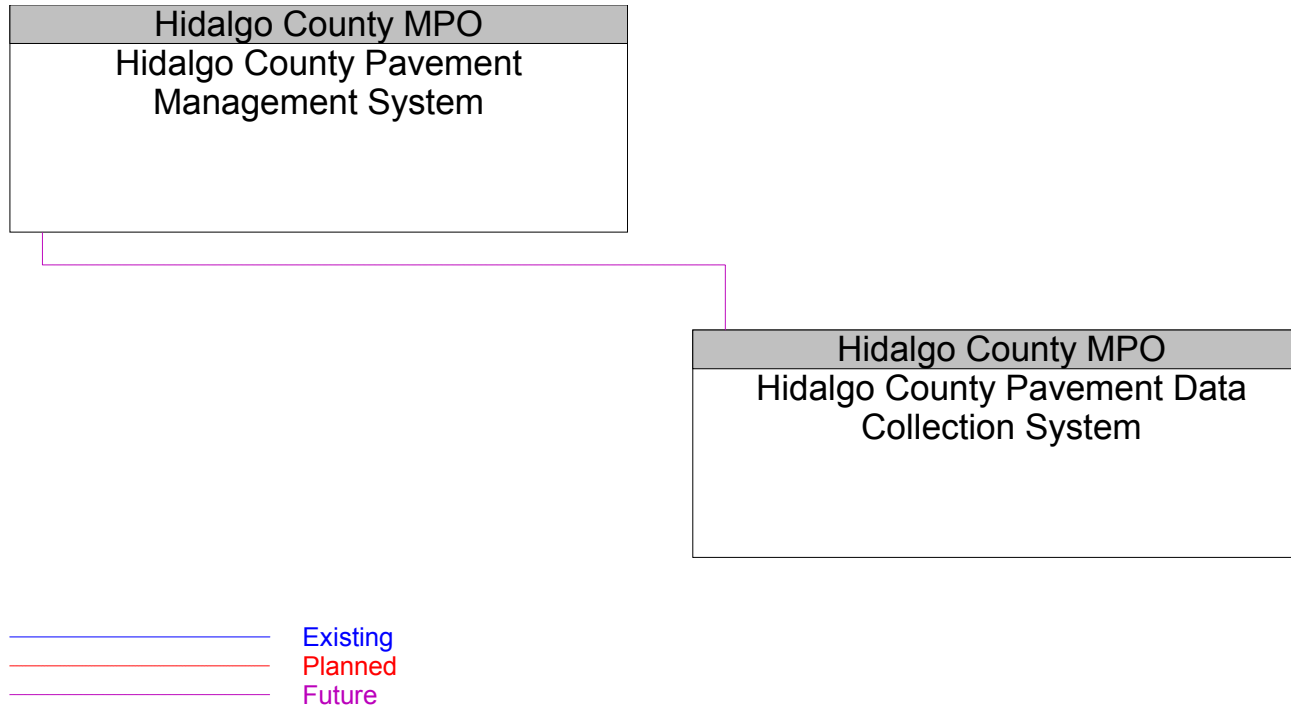


Figure B45 – Hidalgo County Pavement Management System Interfaces

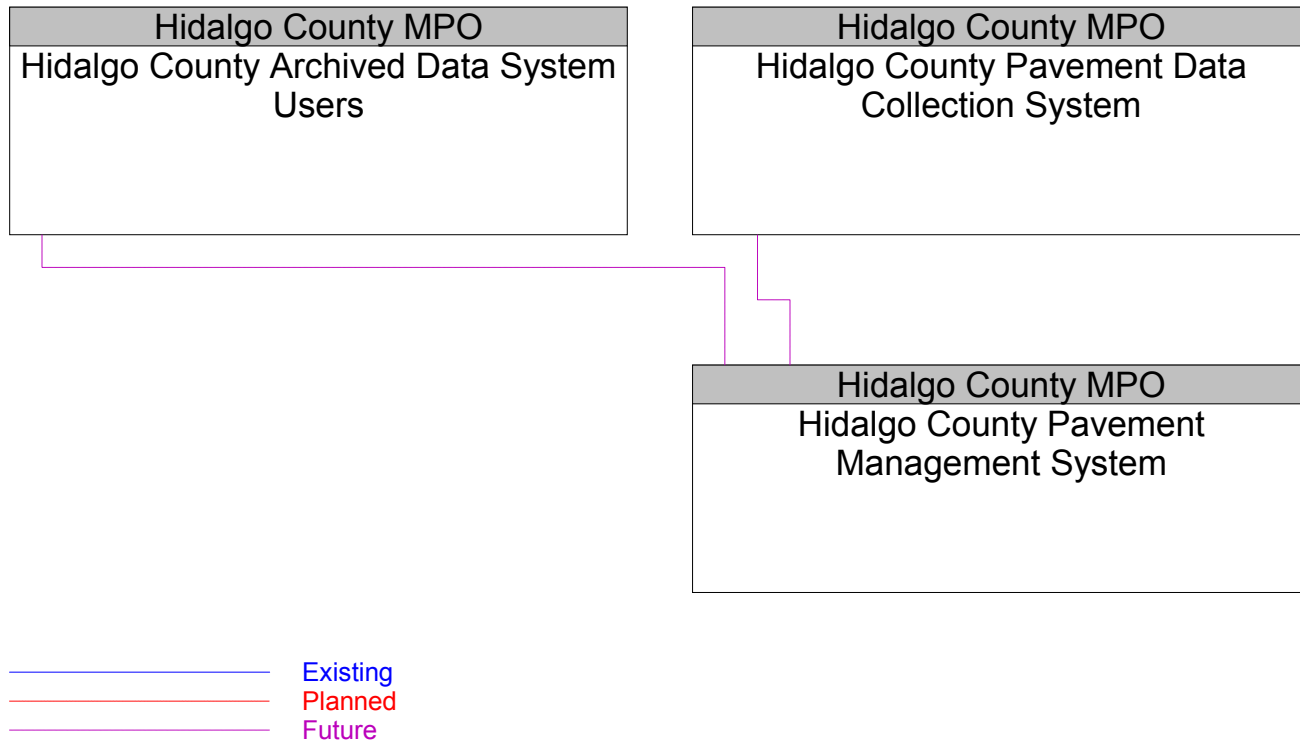


Figure B46 – Hidalgo County Traffic Data Collection System Interfaces

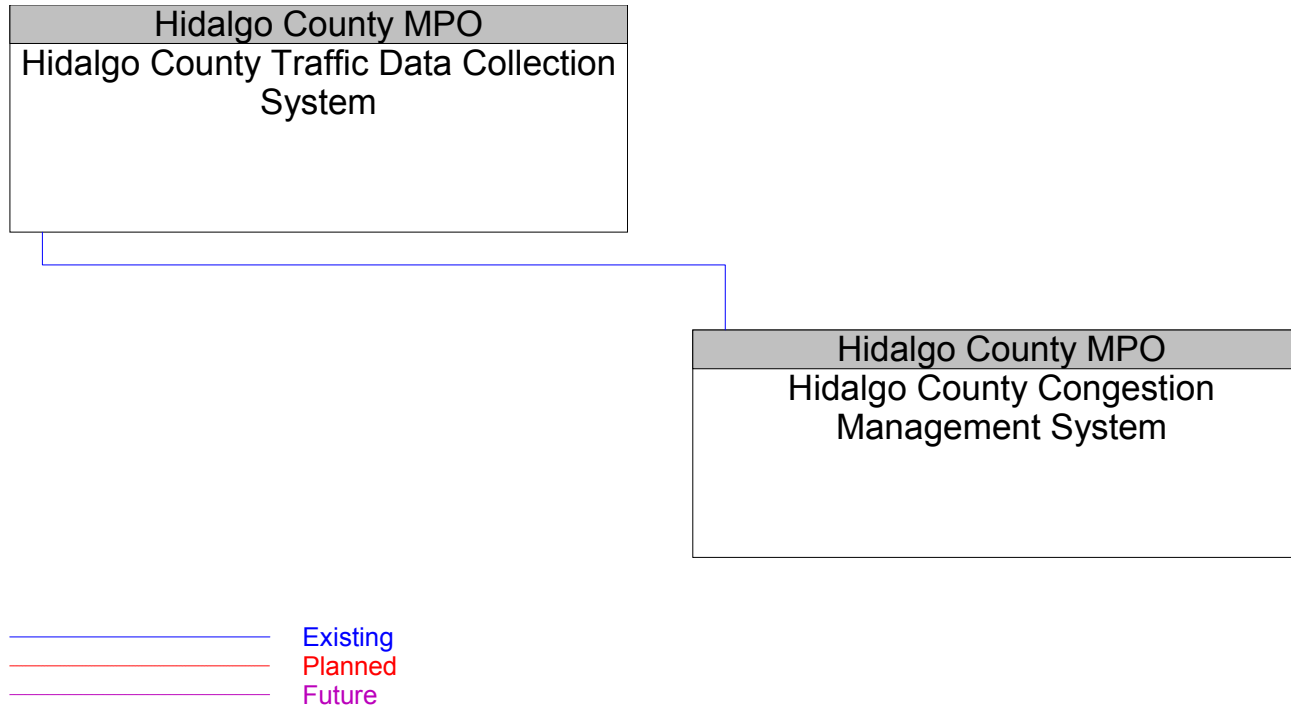


Figure B47 – Hidalgo/Reynosa Bridge Field Equipment Interfaces

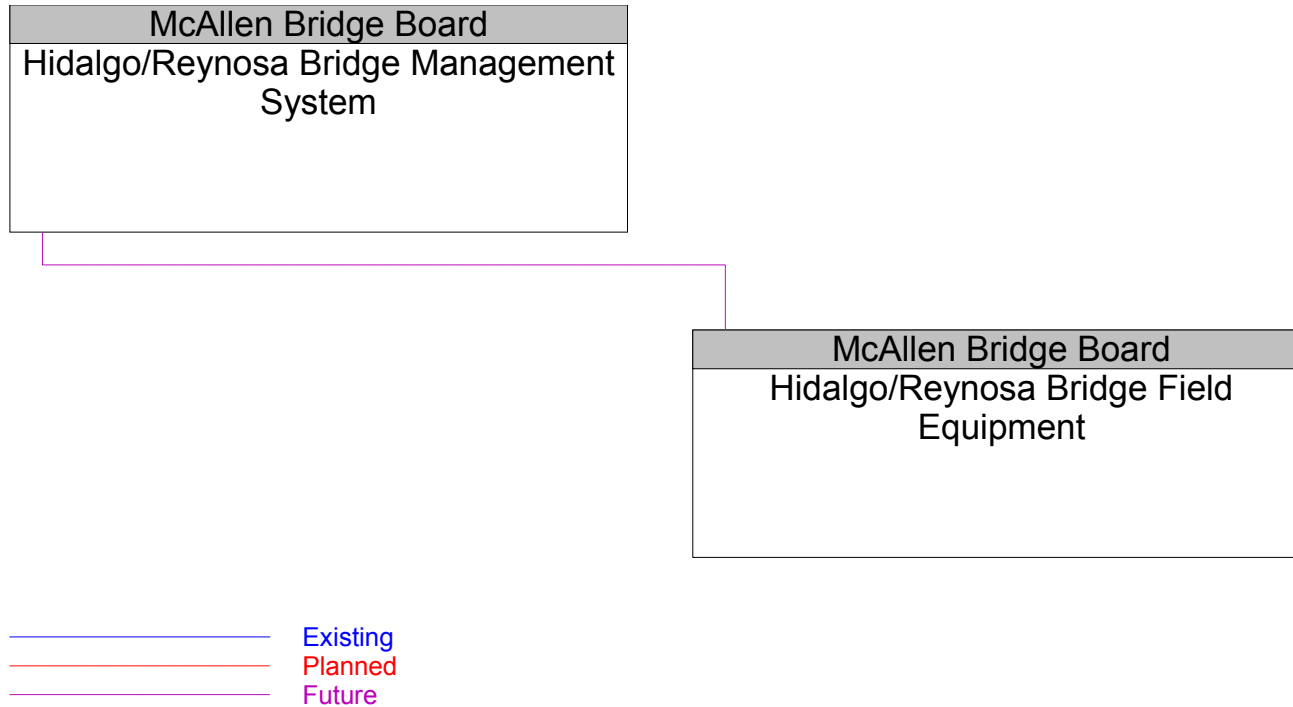


Figure B48 – Hidalgo/Reynosa Bridge Management System Interfaces

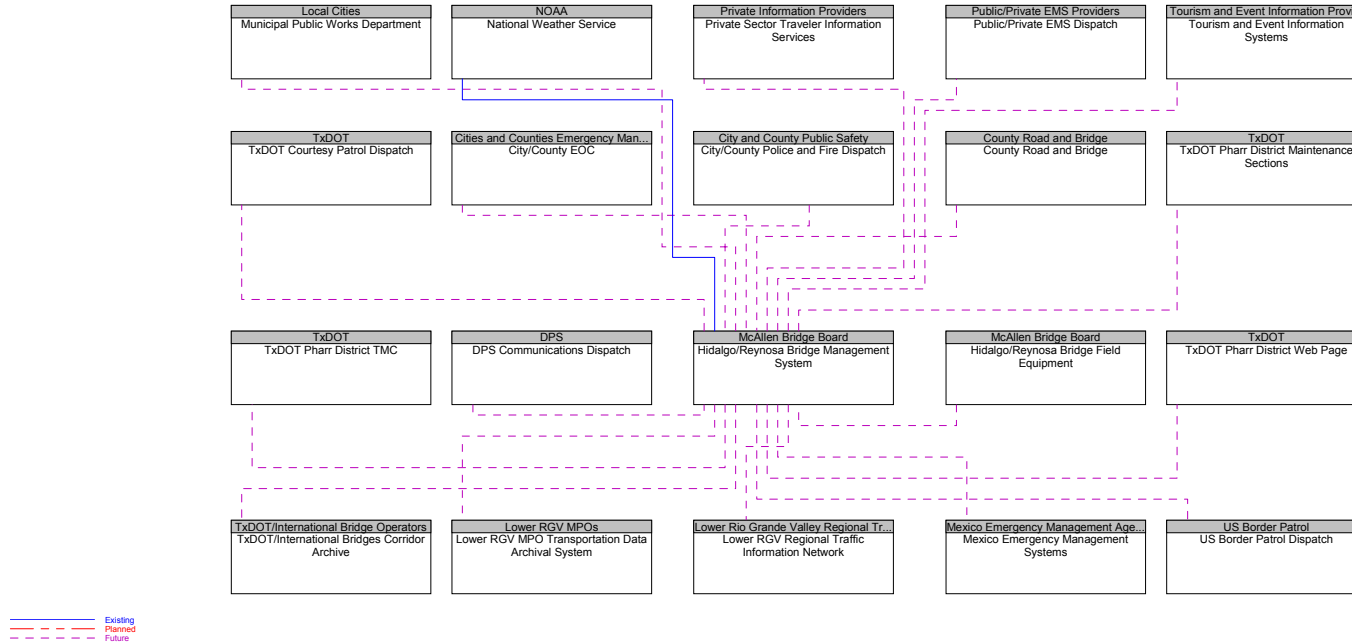


Figure B49 – IBWC Rio Grande River Flood Monitoring System Interfaces

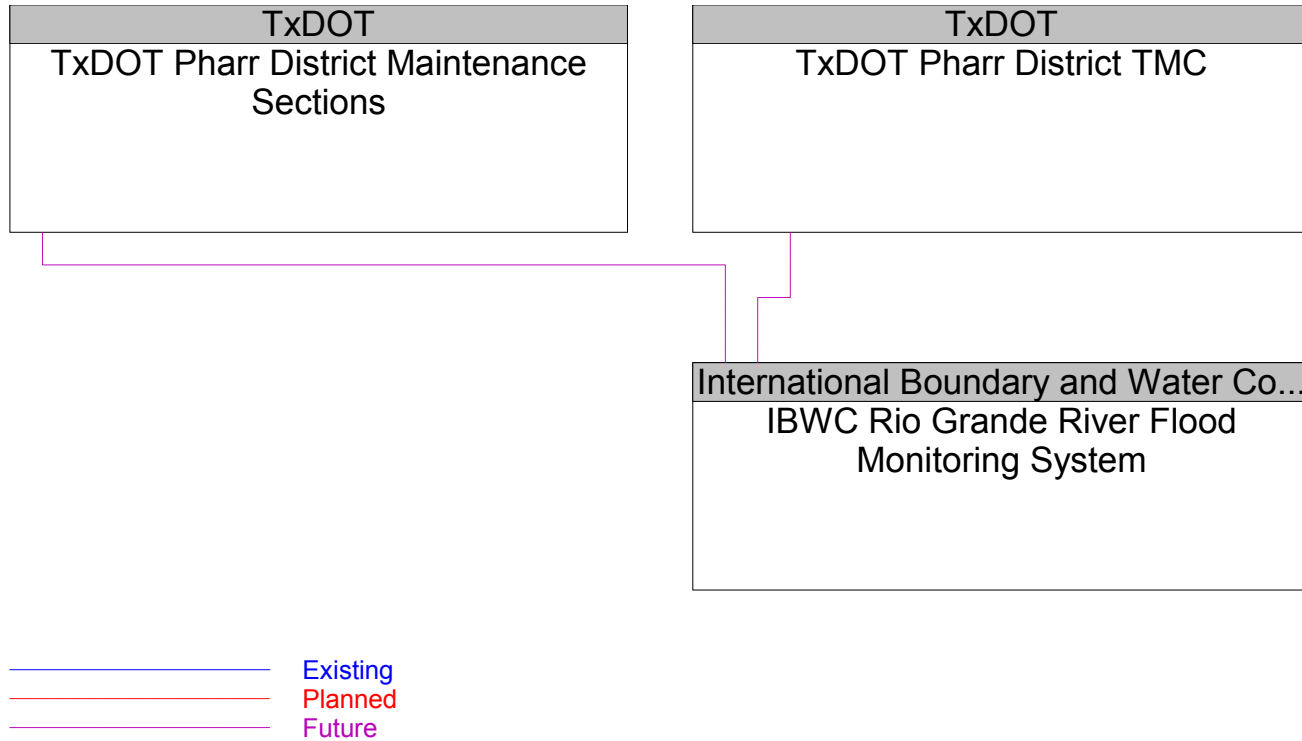


Figure B50 – Independent School District Buses Interfaces

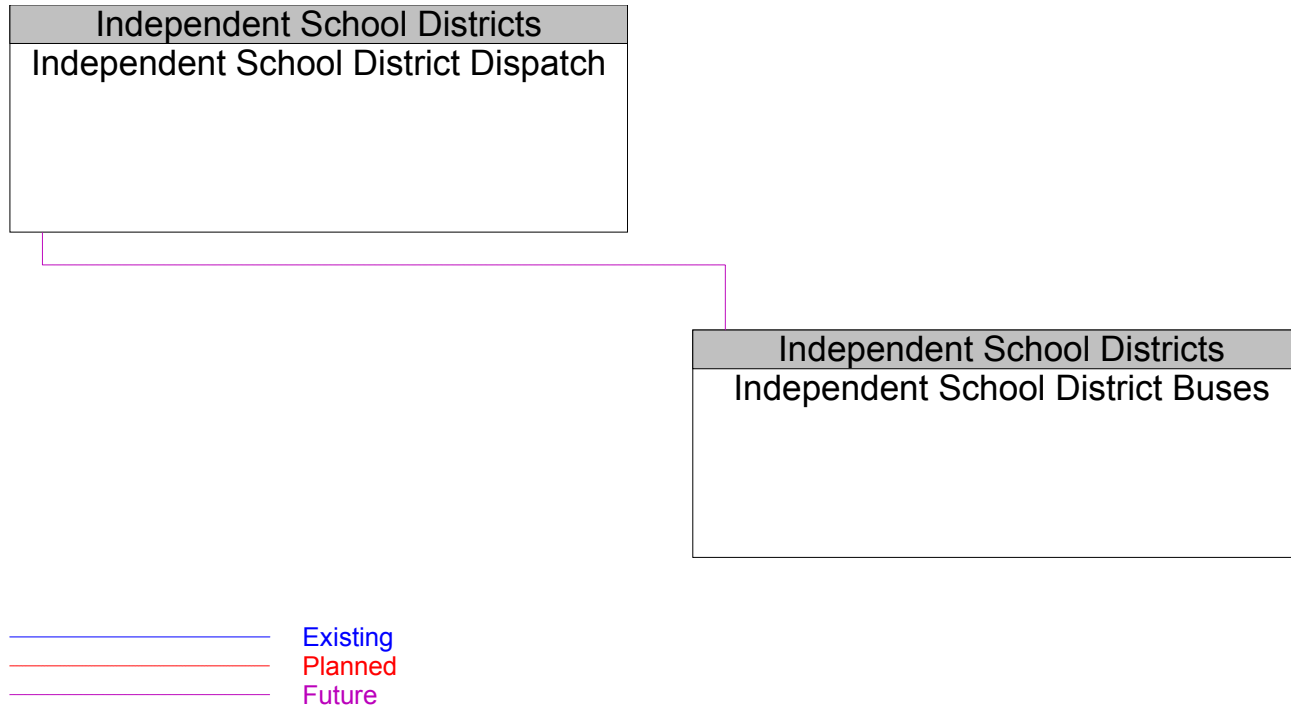


Figure B51 – Independent School District Dispatch Interfaces

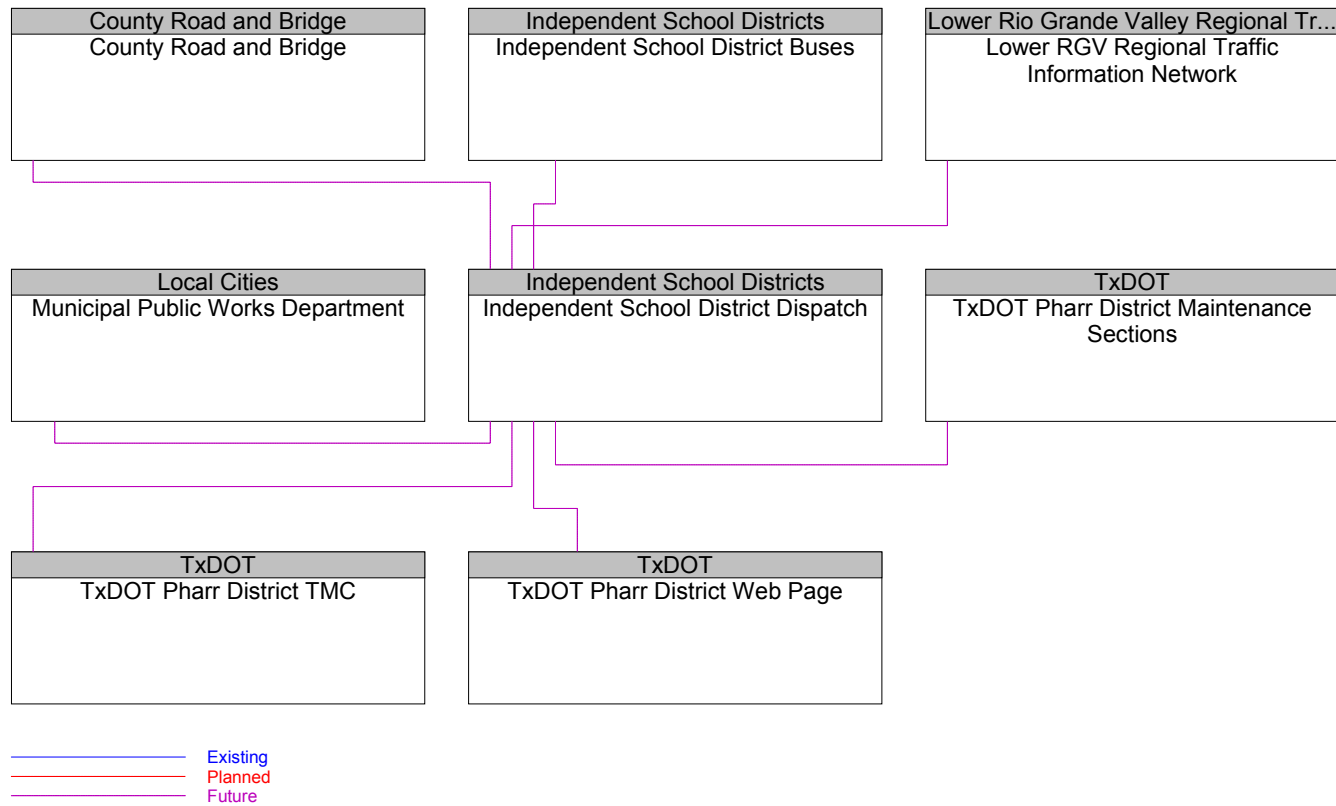




Figure B52 – Lower RGV Bridge ETC Equipment Interfaces

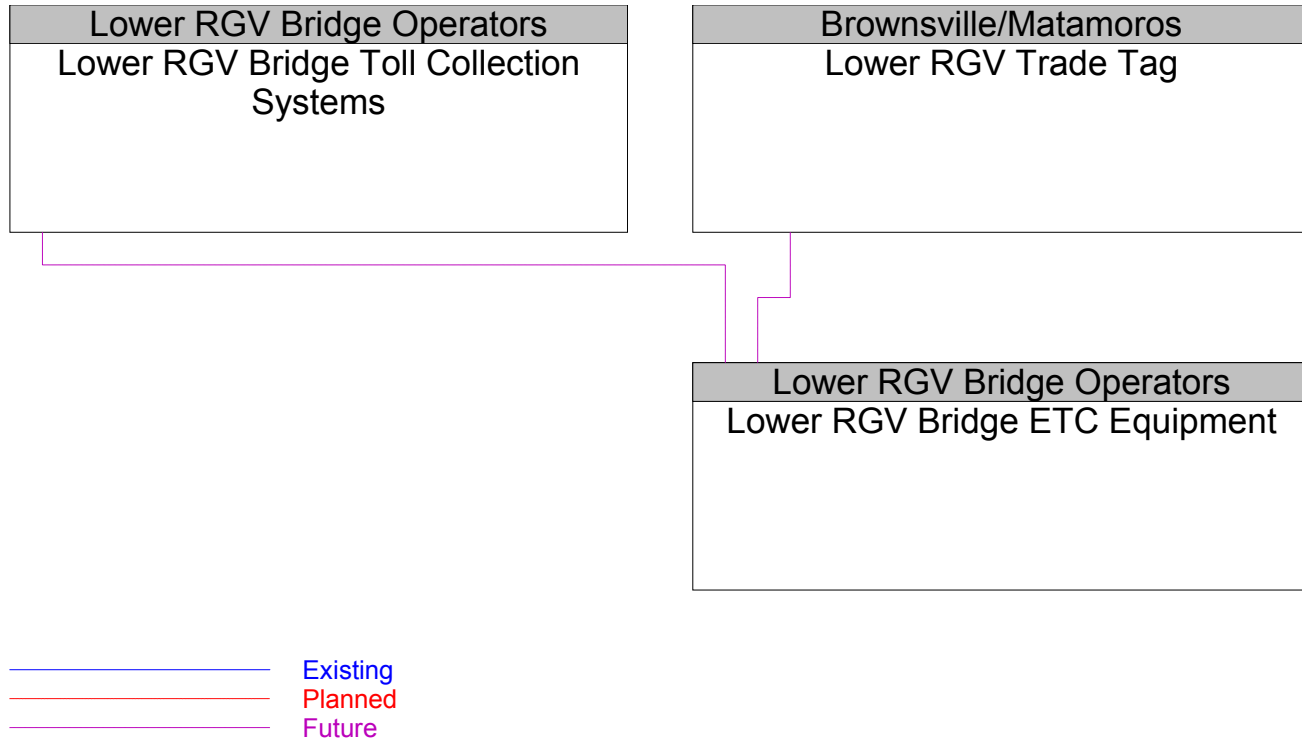


Figure B53 – Lower RGV Bridge Toll Collection Systems Interfaces

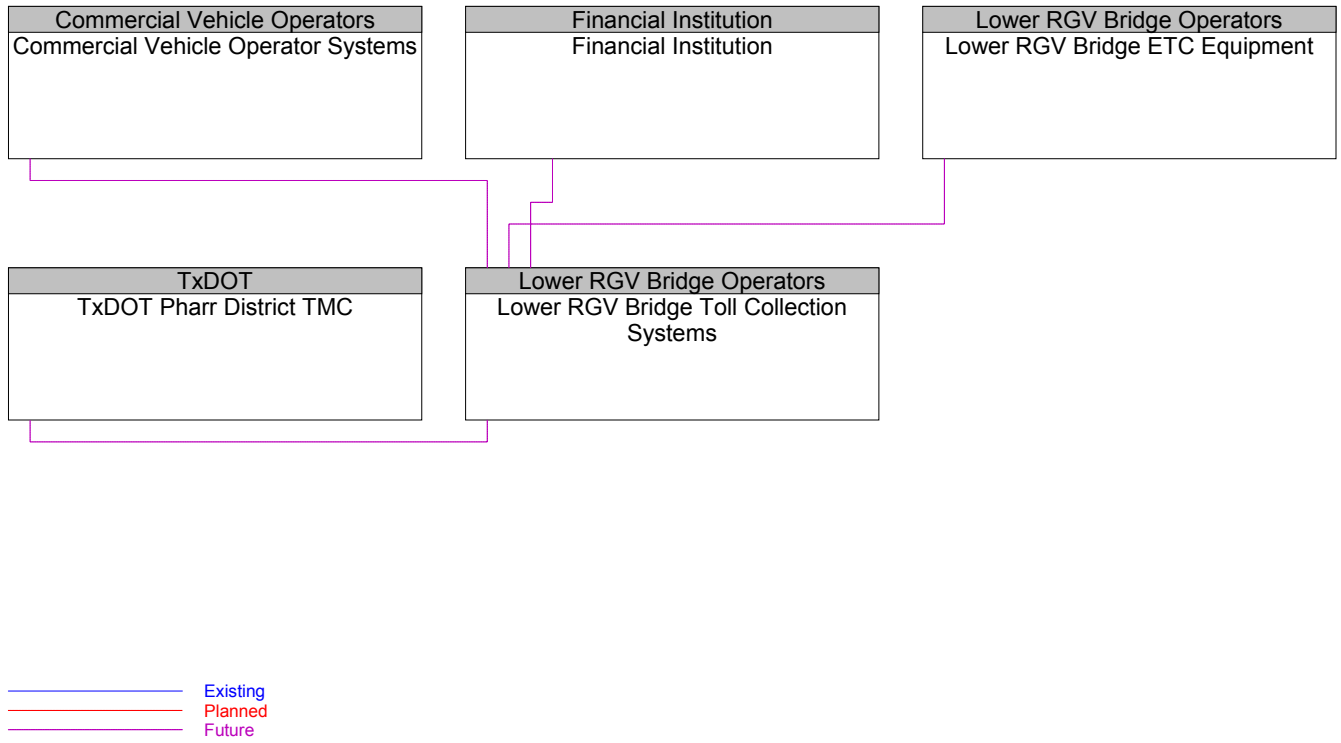


Figure B54 – Lower RGV Development Council Transit Dispatch Interfaces

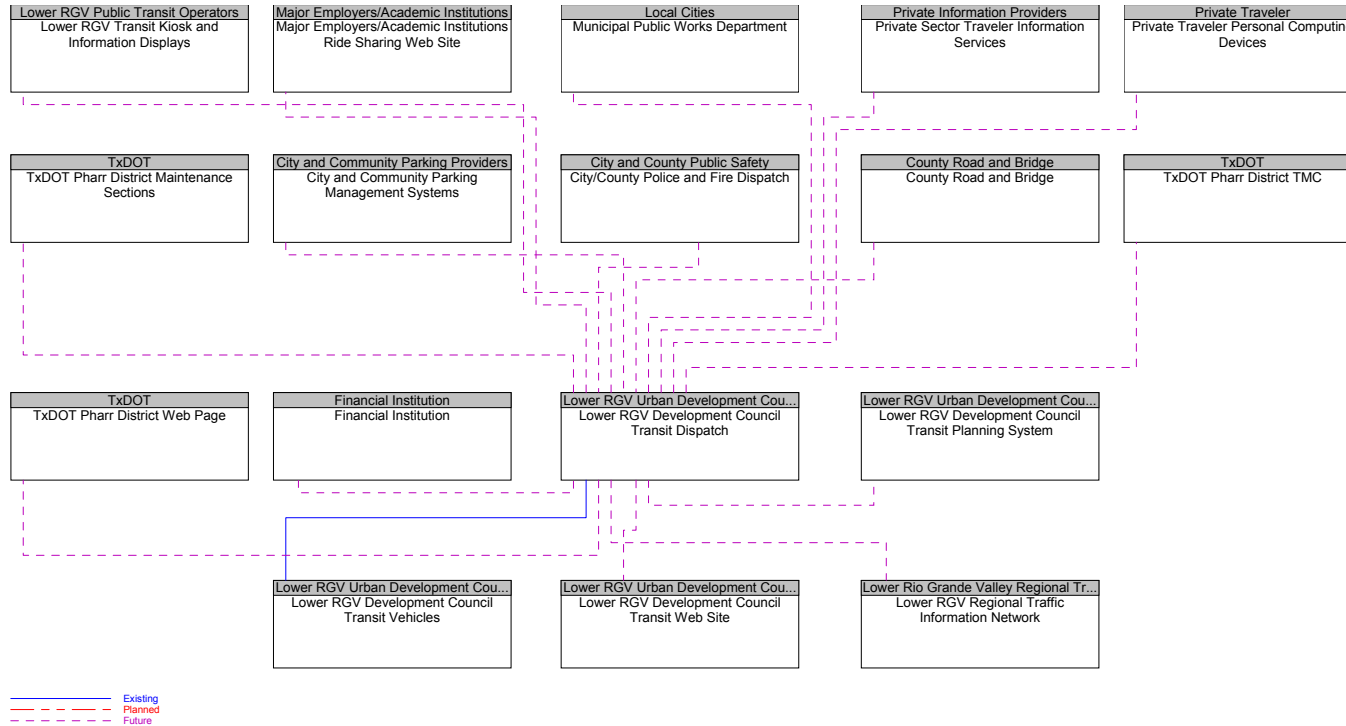




Figure B55 – Lower RGV Development Council Transit Planning System Interfaces

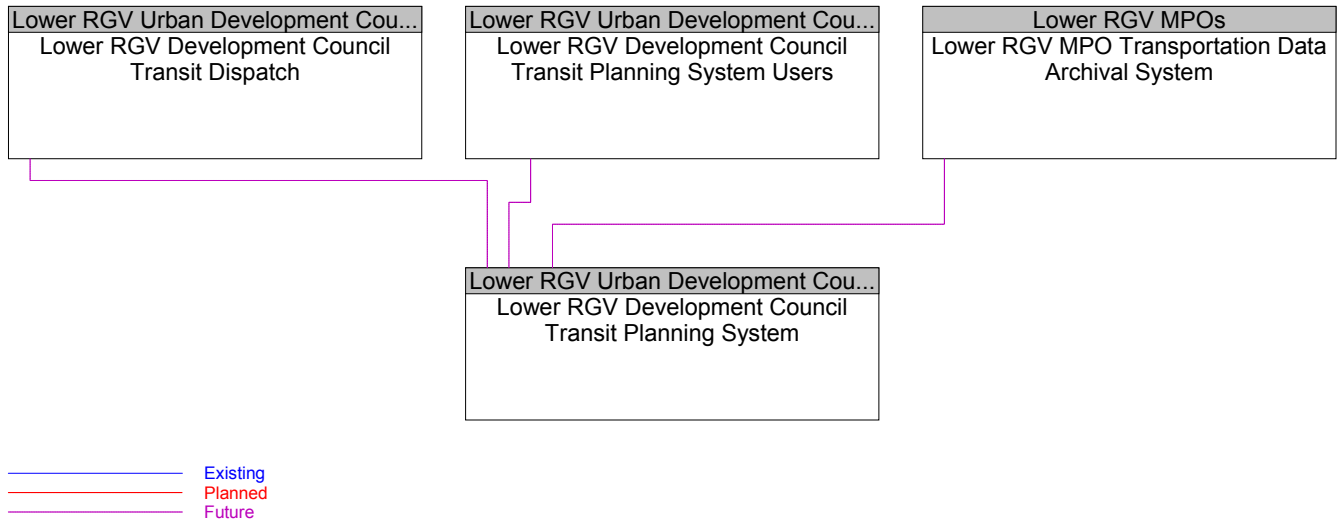


Figure B56 – Lower RGV Development Council Transit Planning System Users Interfaces

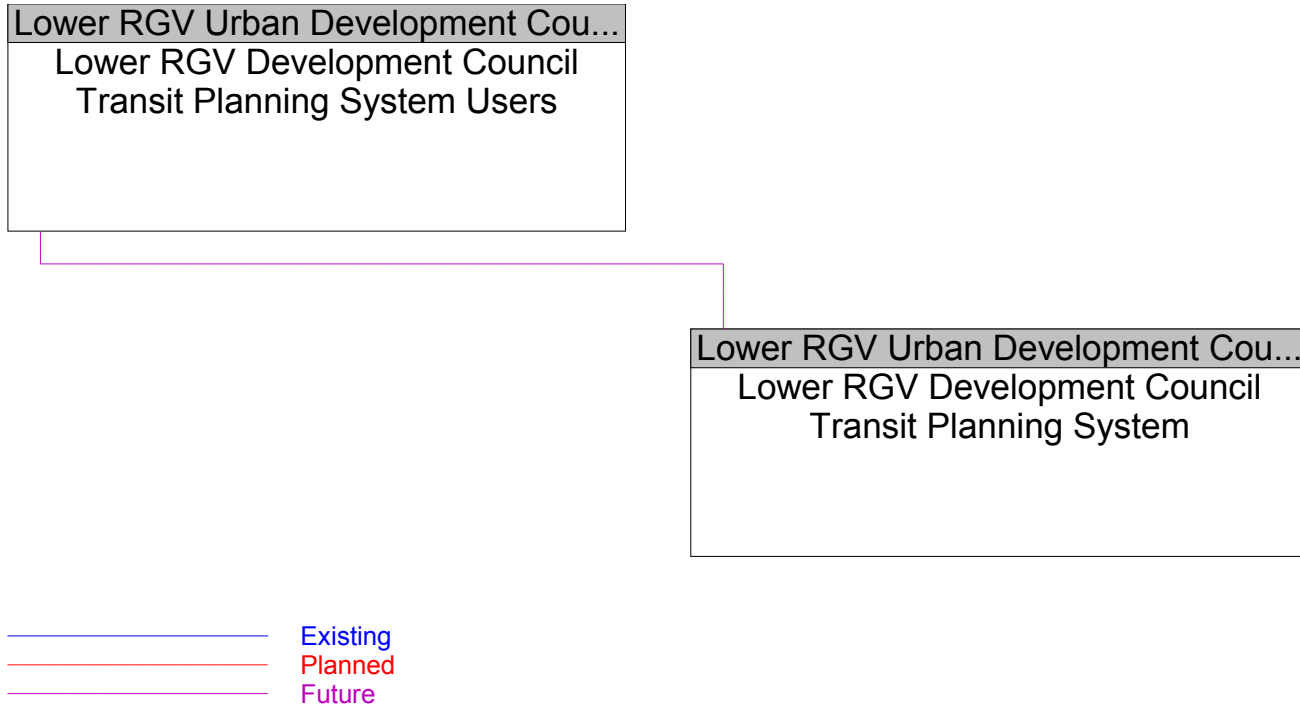




Figure B57 – Lower RGV Development Council Transit Vehicles Interfaces

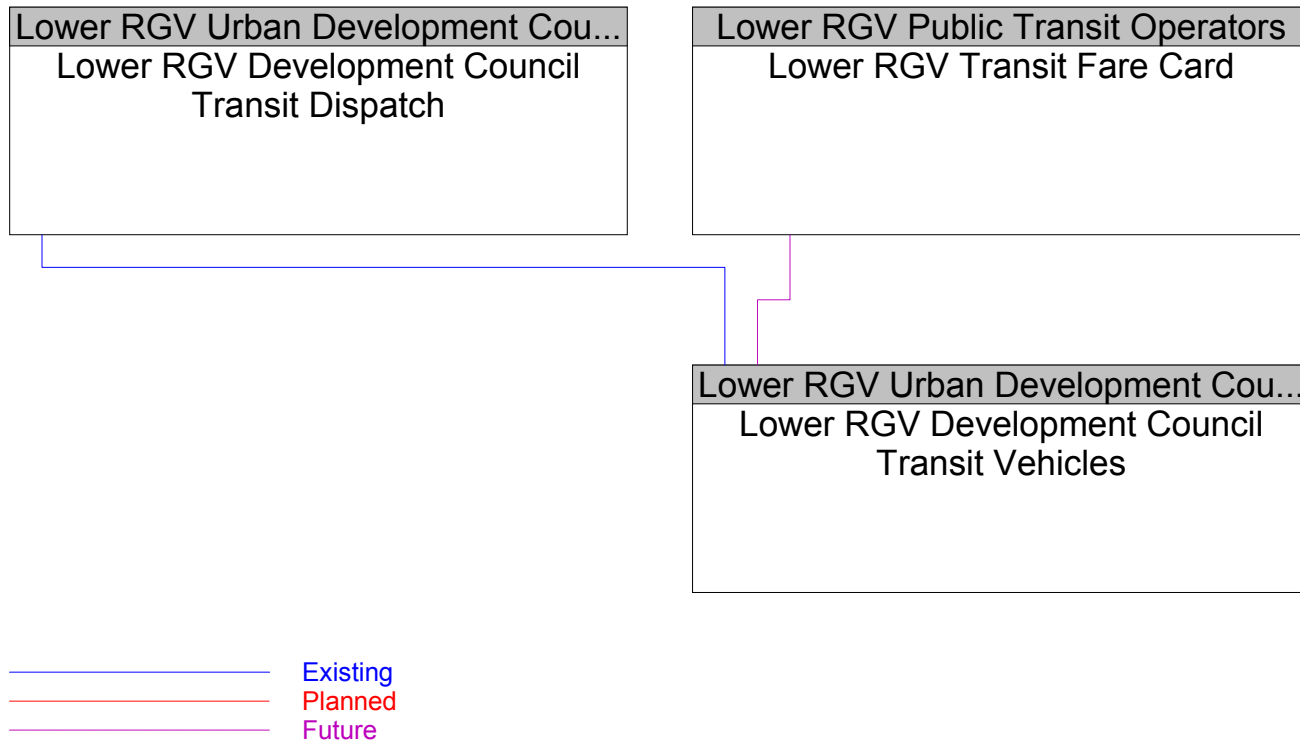




Figure B58 – Lower RGV Development Council Transit Web Site Interfaces

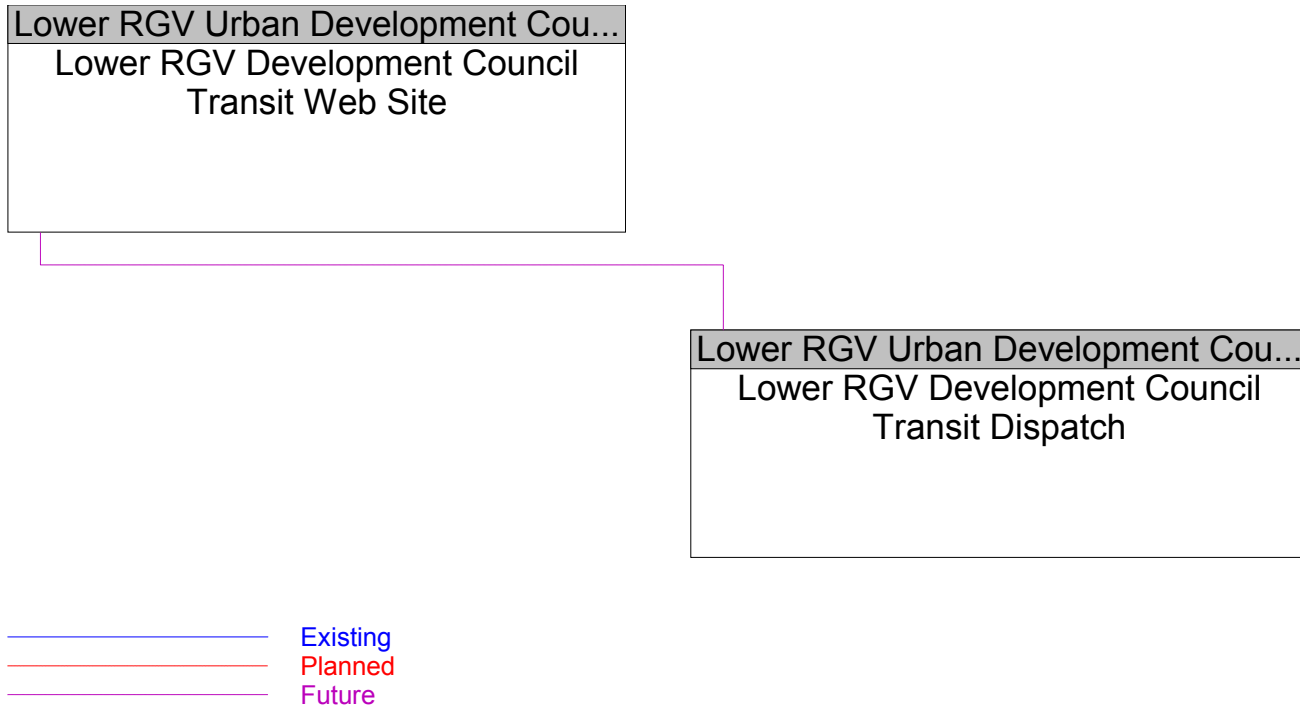


Figure B59 – Lower RGV Incident and Mutual Aid Network Interfaces

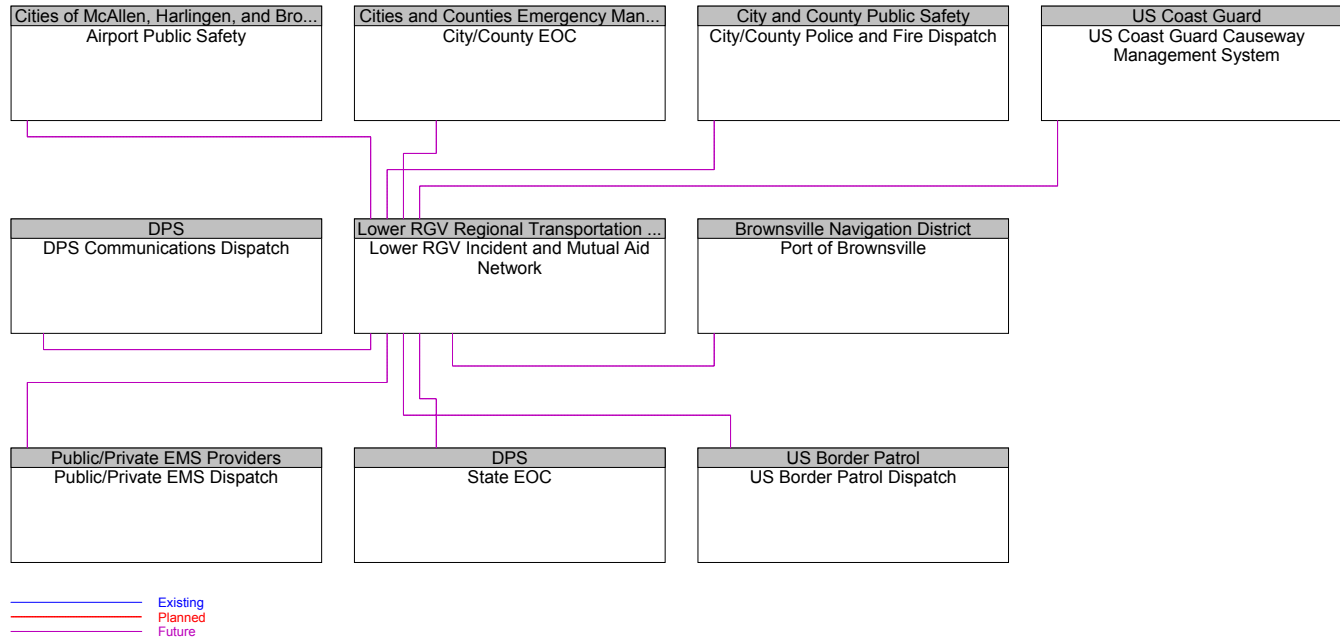


Figure B60 – Lower RGV MPO Transportation Data Archival System Interfaces

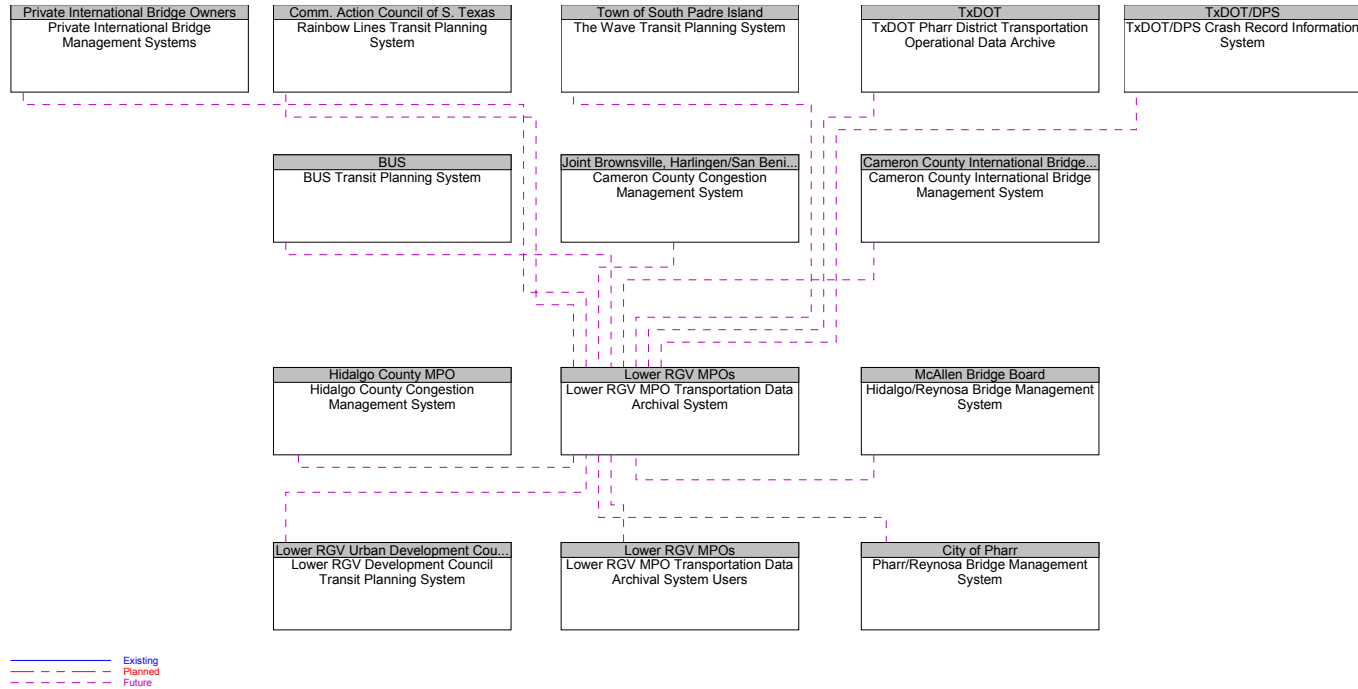


Figure B61 – Lower RGV MPO Transportation Data Archival System Users Interfaces

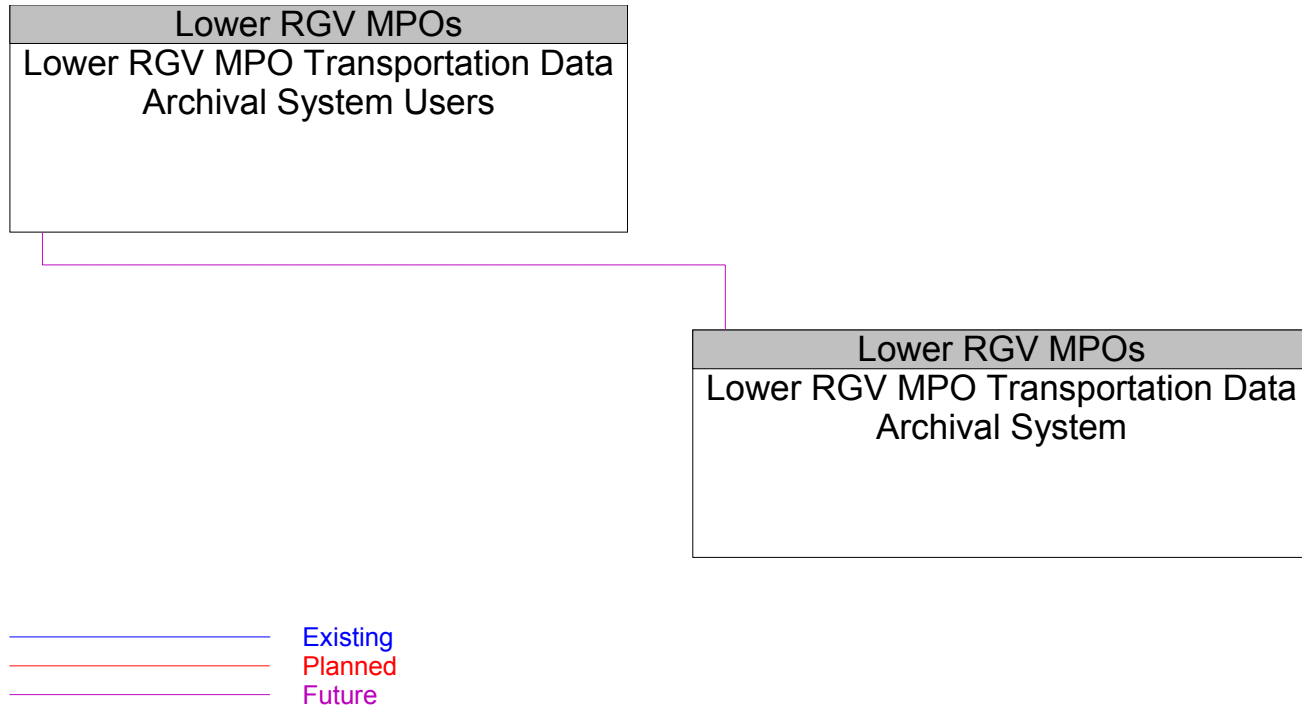


Figure B62 – Lower RGV Regional Traffic Information Network Interfaces

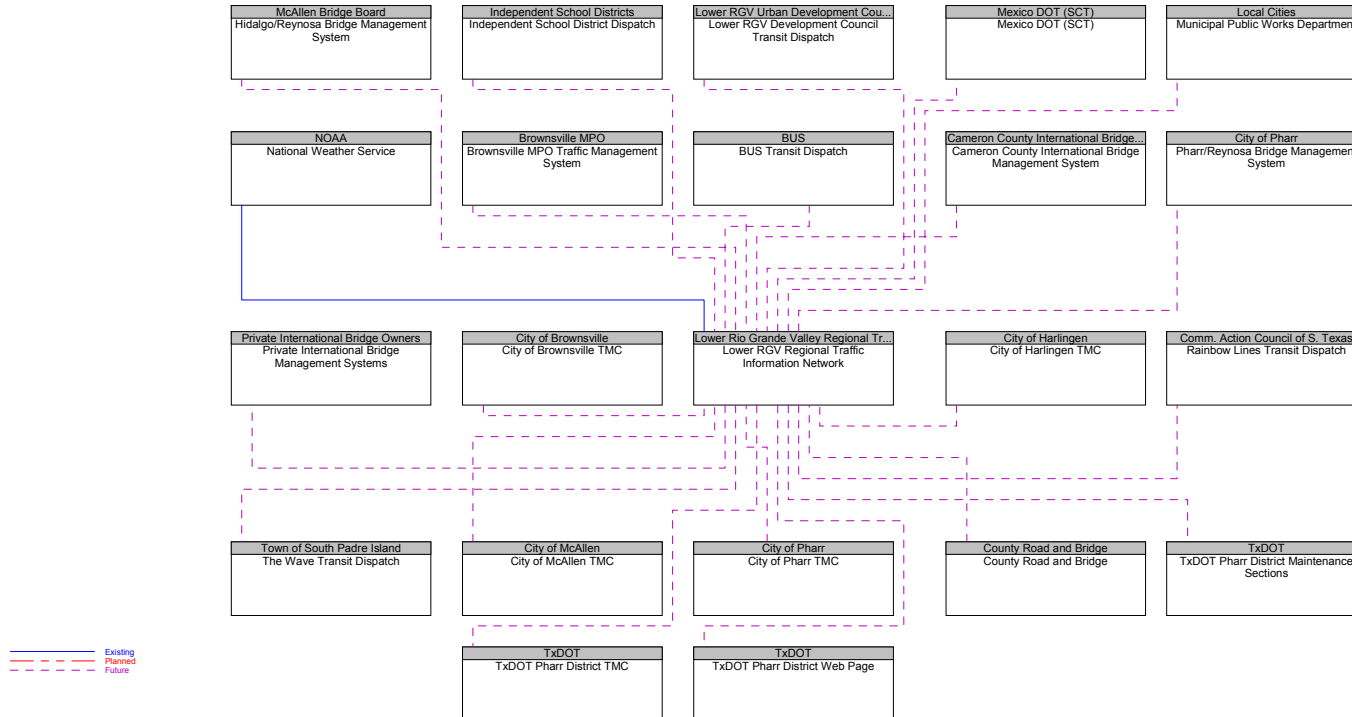




Figure B63 – Lower RGV Trade Tag Interfaces

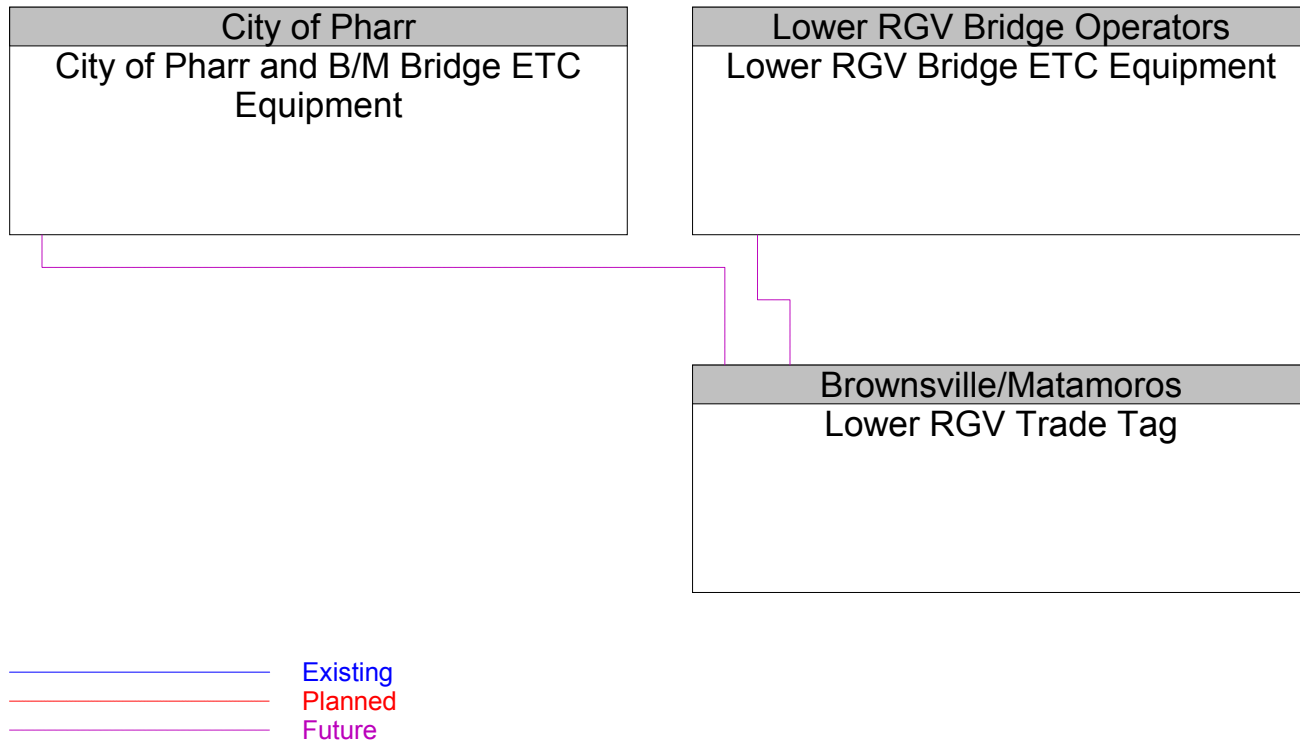




Figure B64 – Lower RGV Transit Fare Card Interfaces

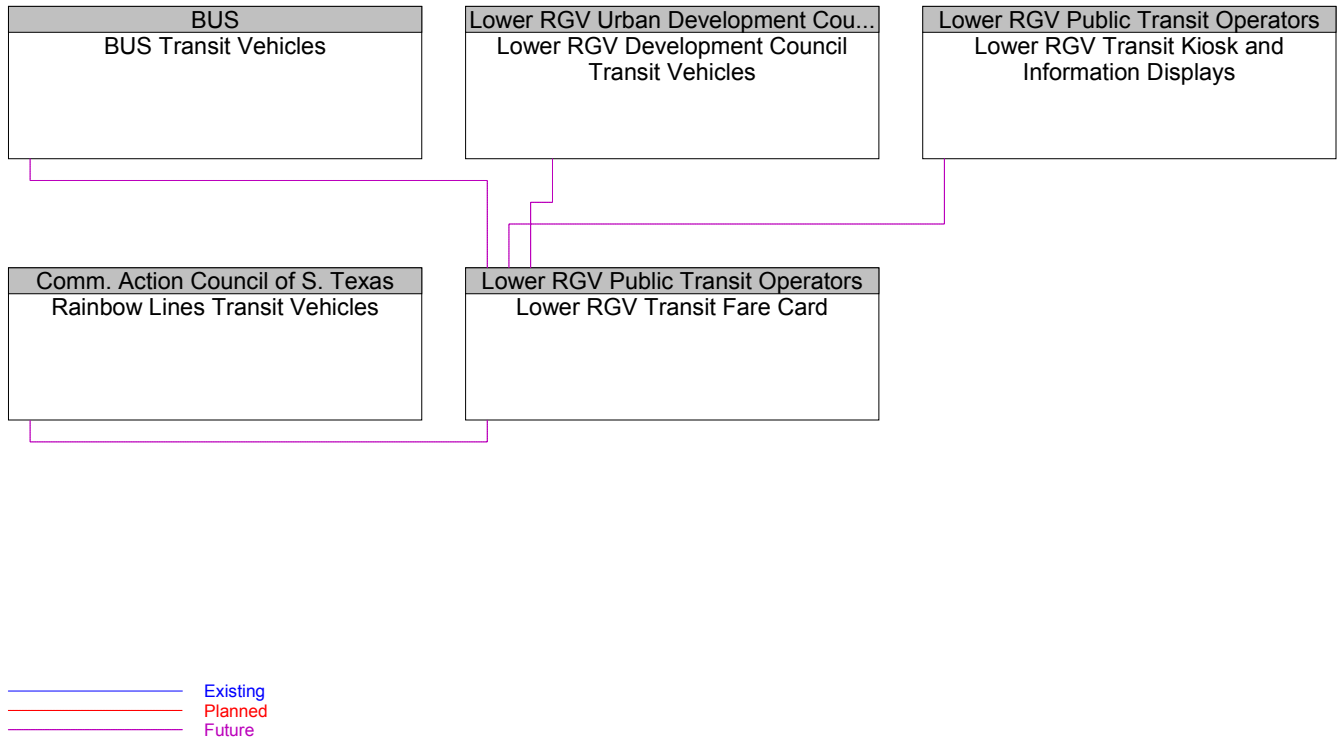


Figure B65 – Lower RGV Transit Kiosk and Information Displays Interfaces

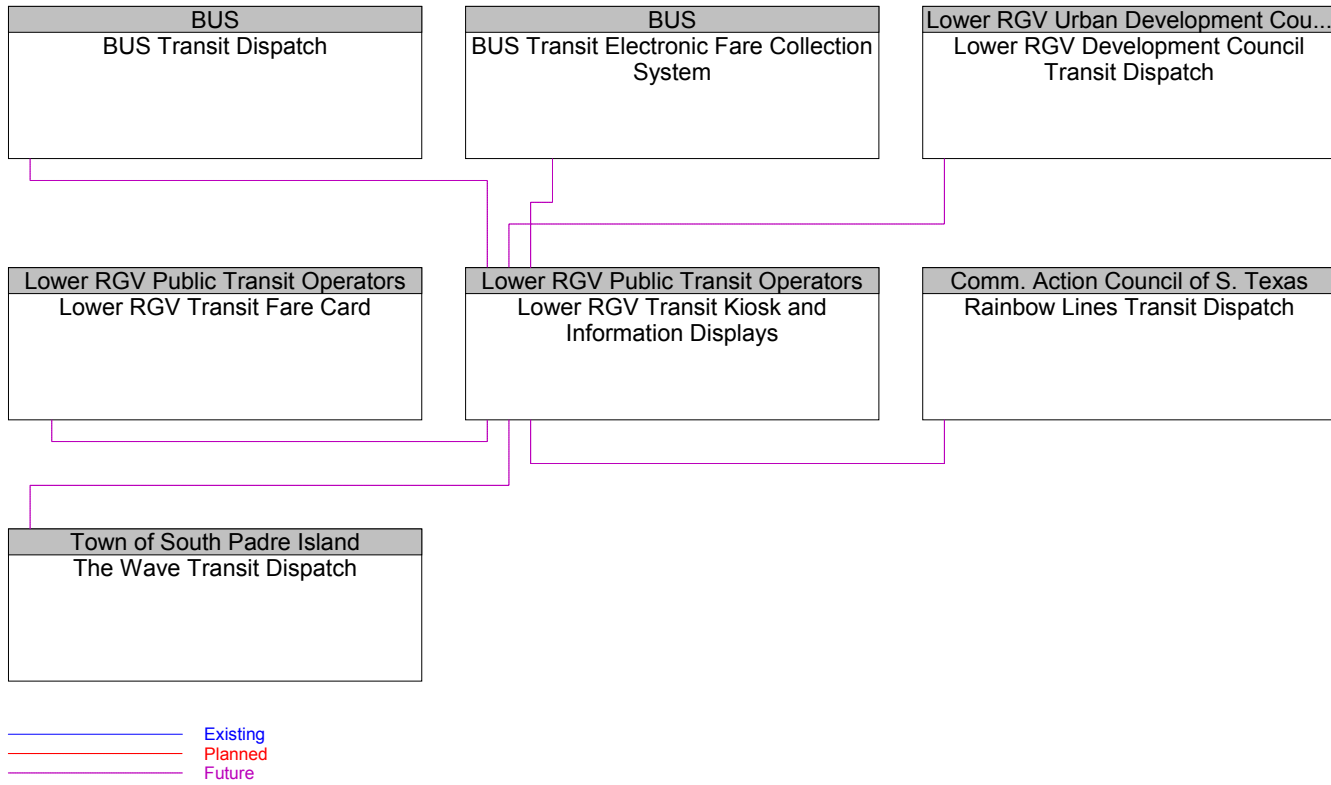


Figure B66 – Major Employers/Academic Institutions Ride Sharing Web Site Interfaces

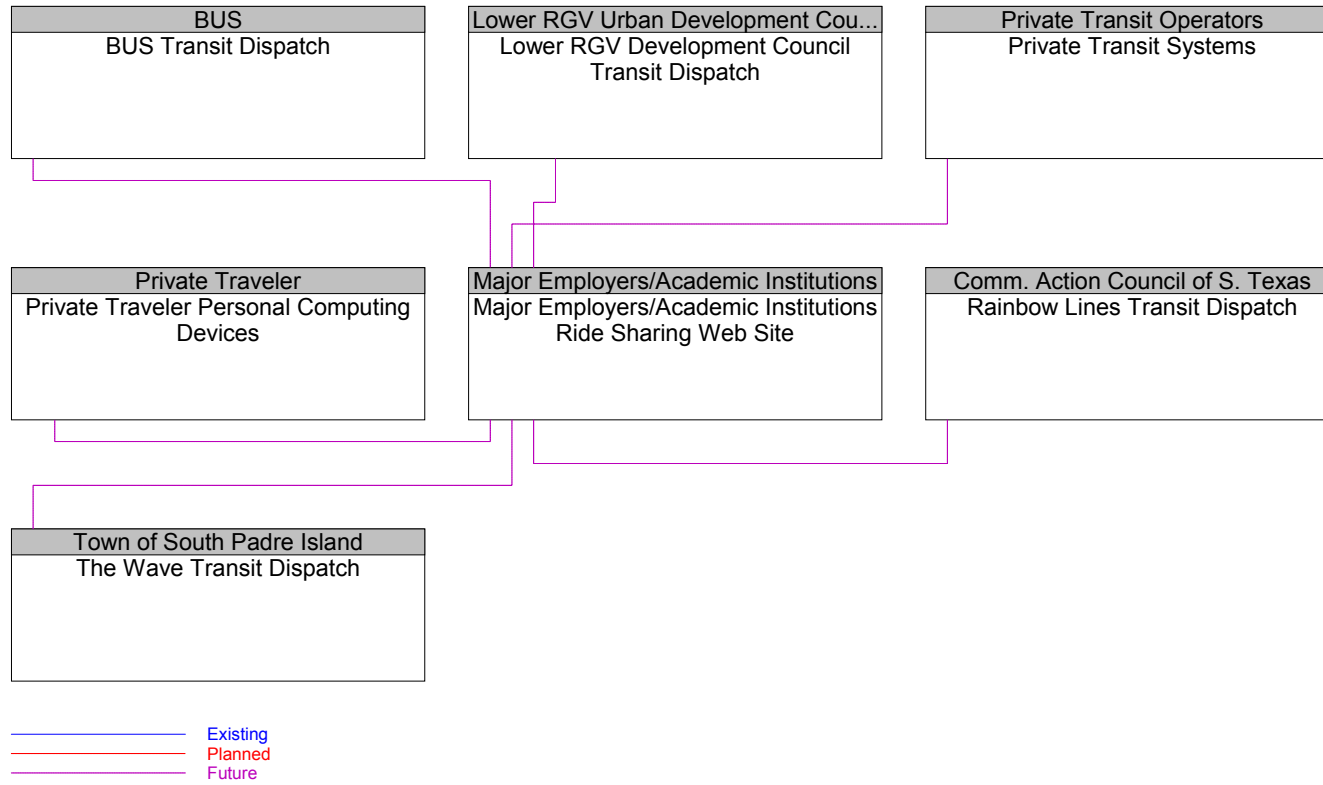


Figure B67 – Mexico Credentials Administration and Safety Systems Interfaces

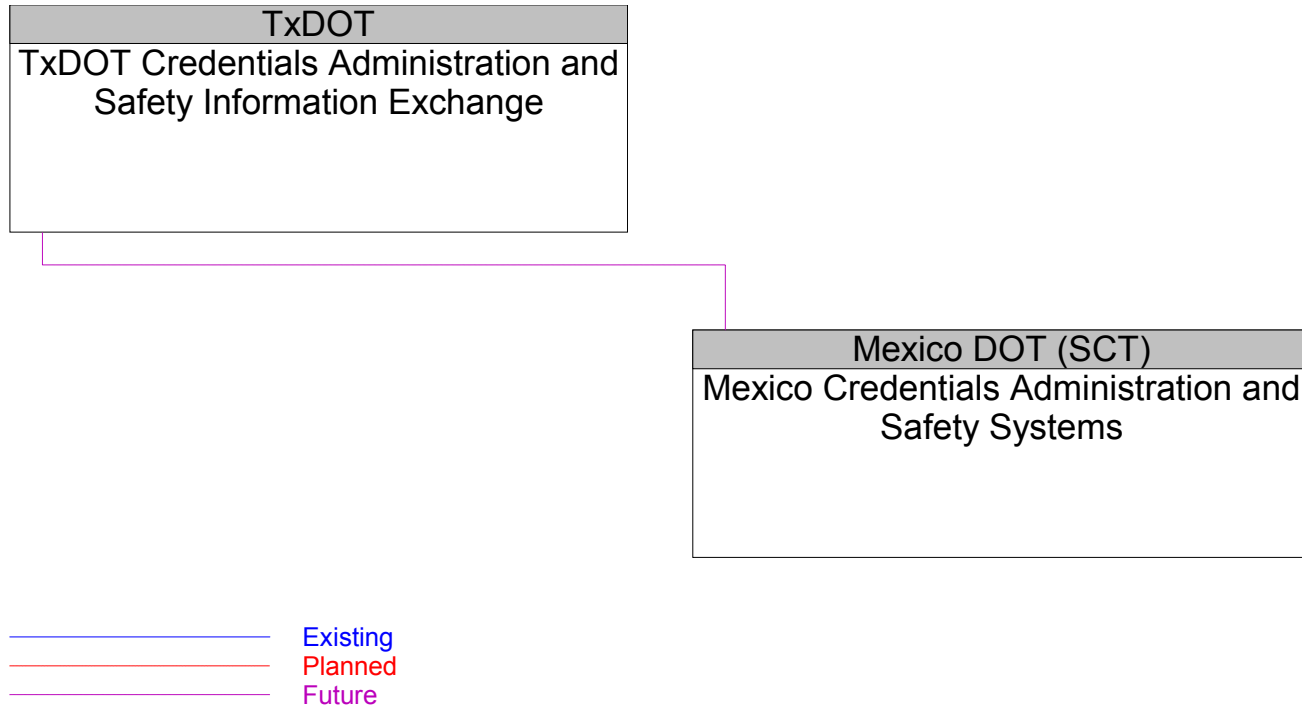


Figure B68 – Mexico DOT (SCT) Interfaces

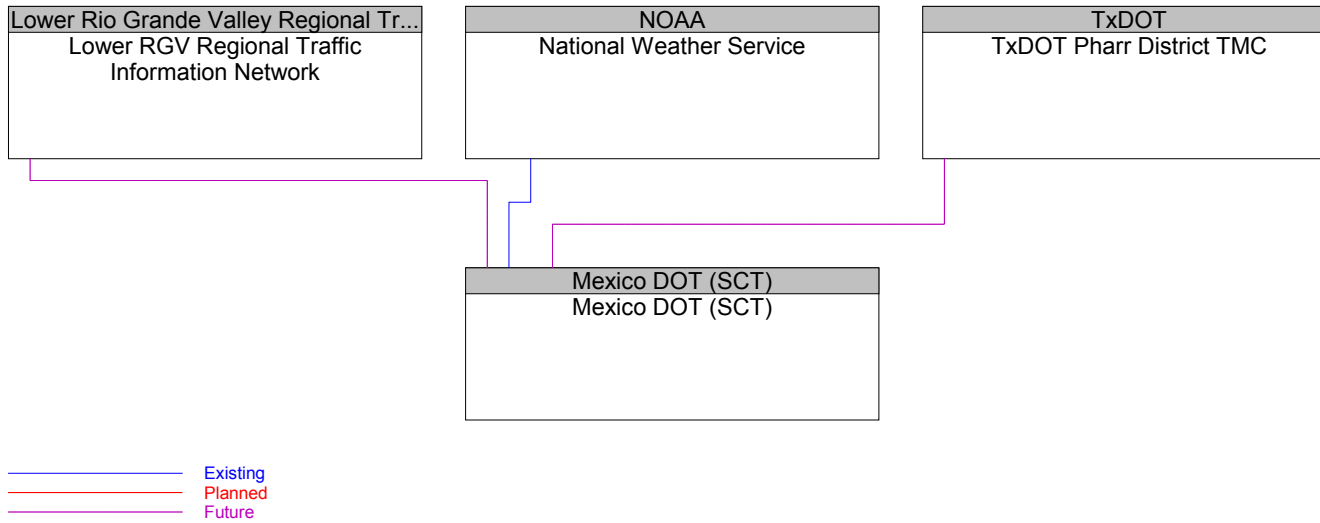


Figure B69 – Mexico Emergency Management Systems Interfaces

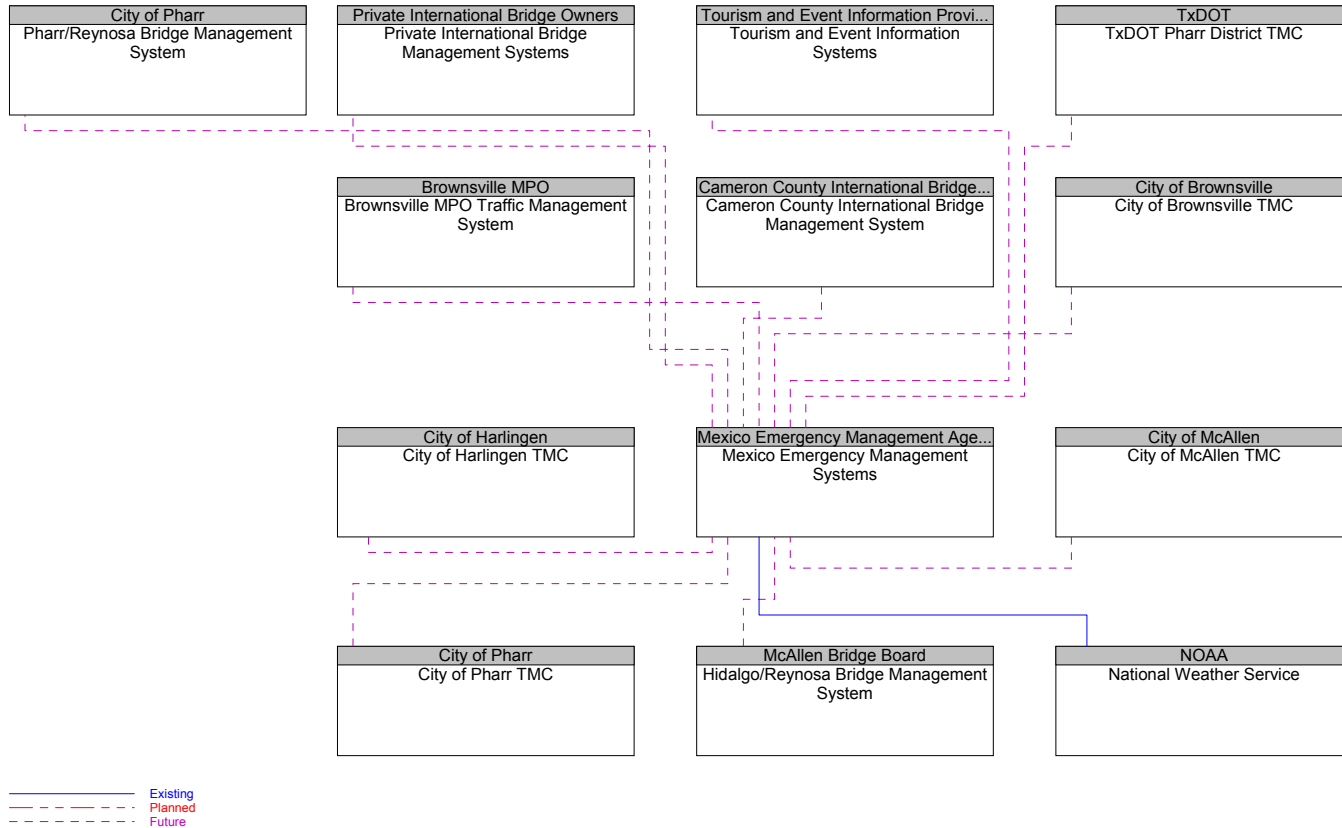


Figure B70 – Municipal Public Works Department Interfaces

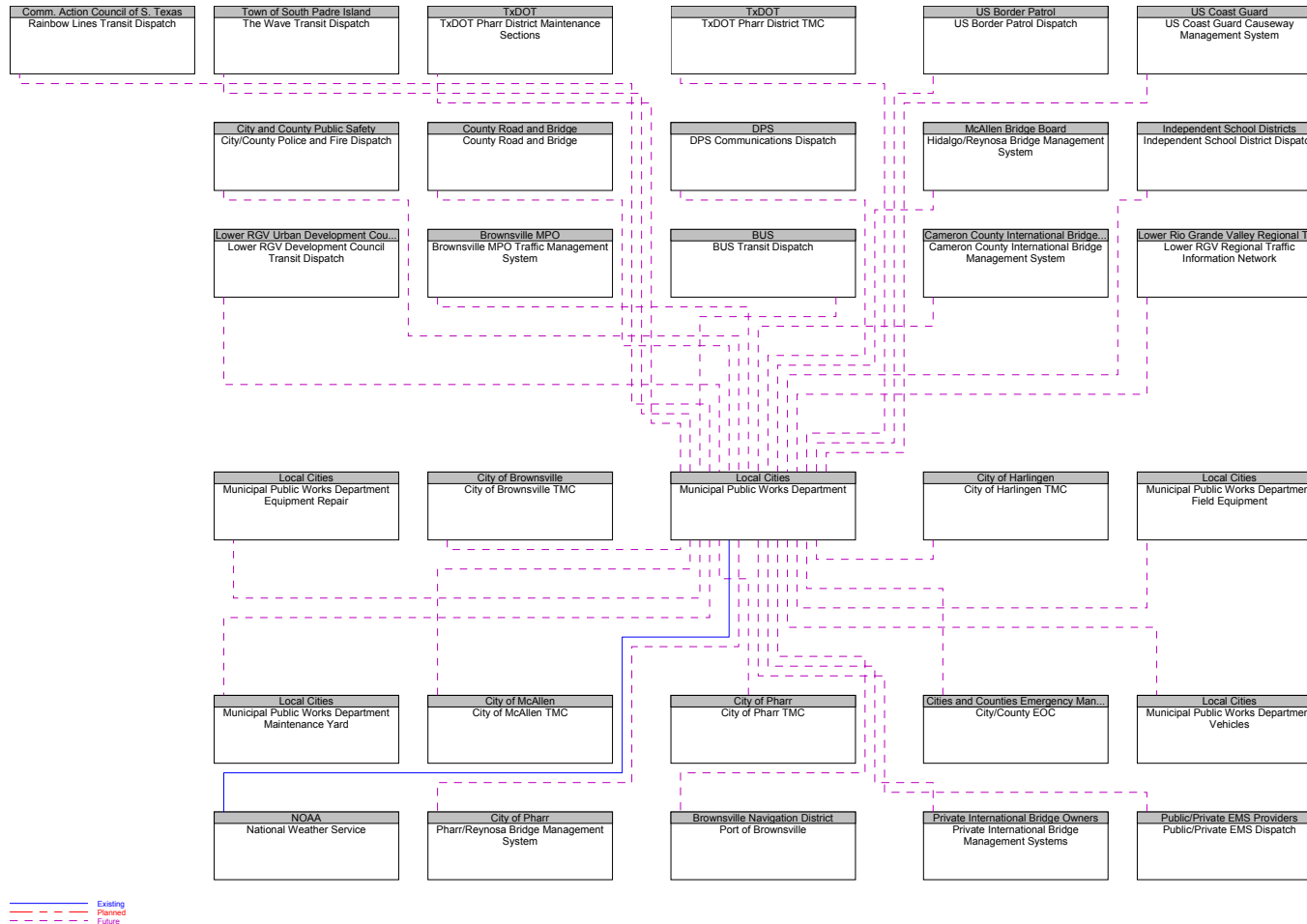


Figure B71 – Municipal Public Works Department Equipment Repair Interfaces

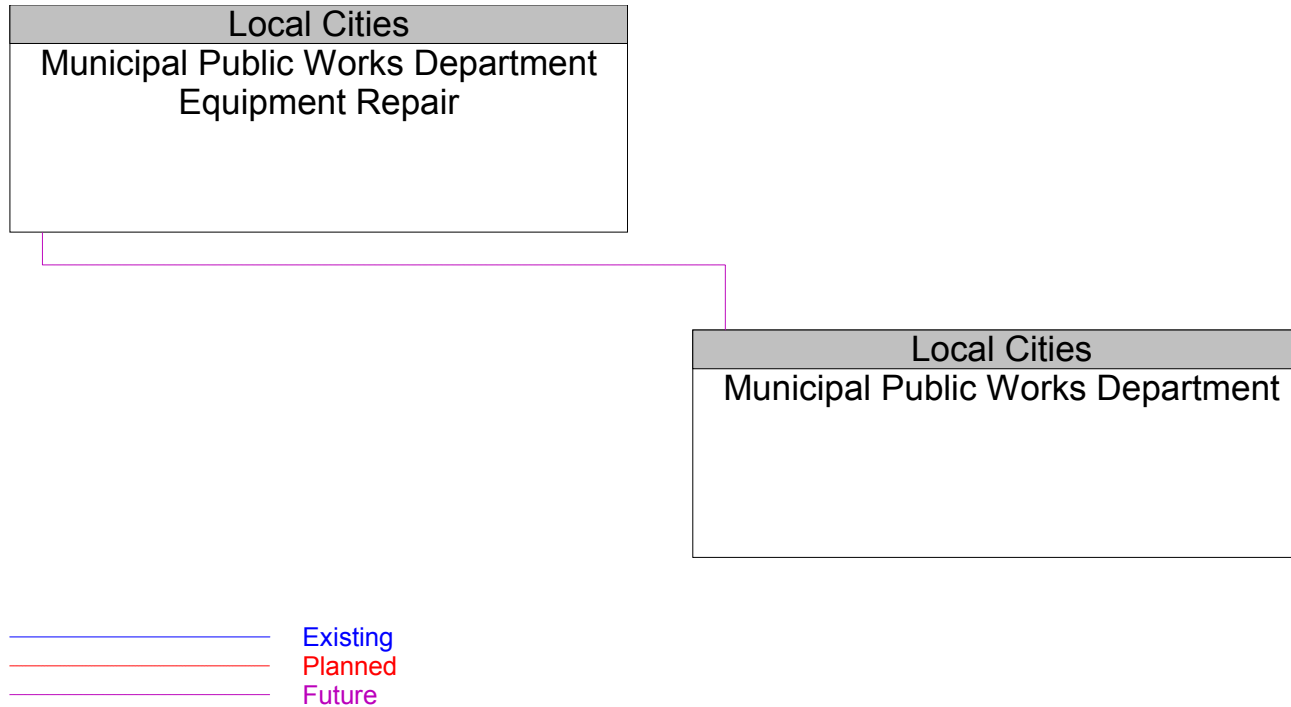


Figure B72 – Municipal Public Works Department Field Equipment Interfaces

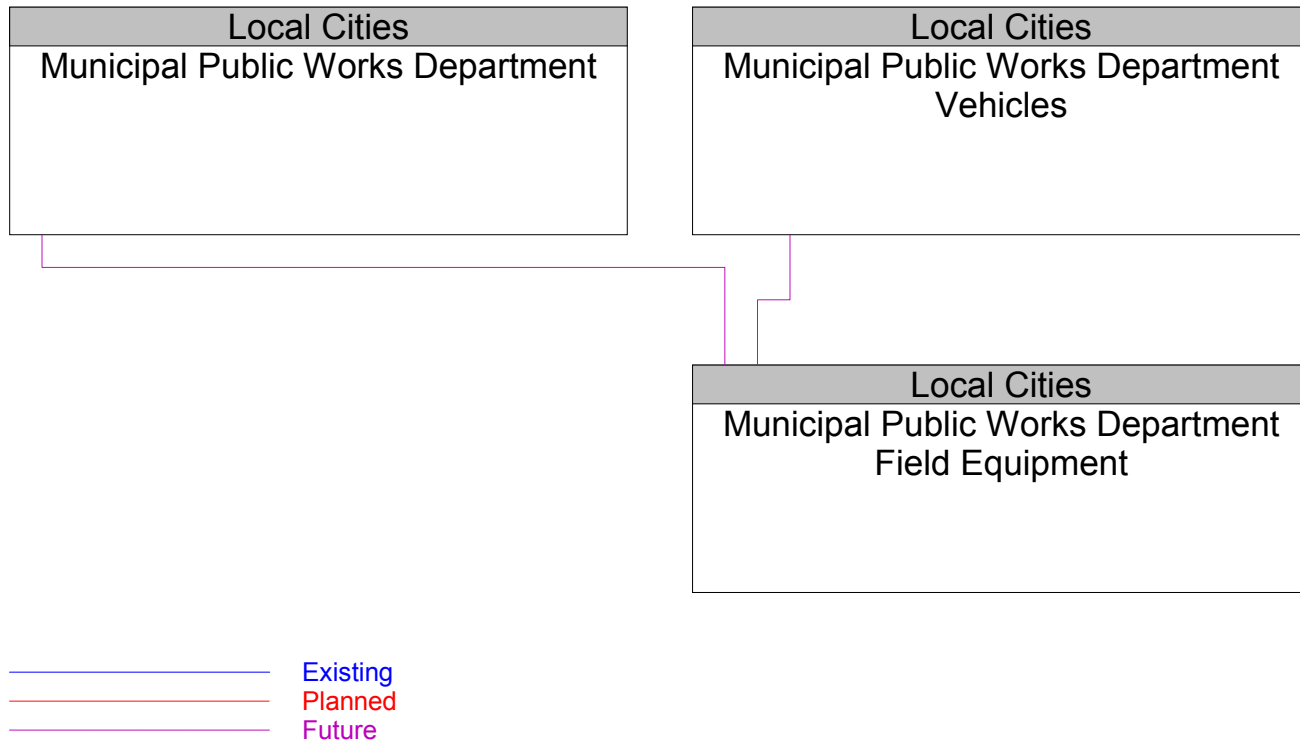


Figure B73 – Municipal Public Works Department Maintenance Yard Interfaces

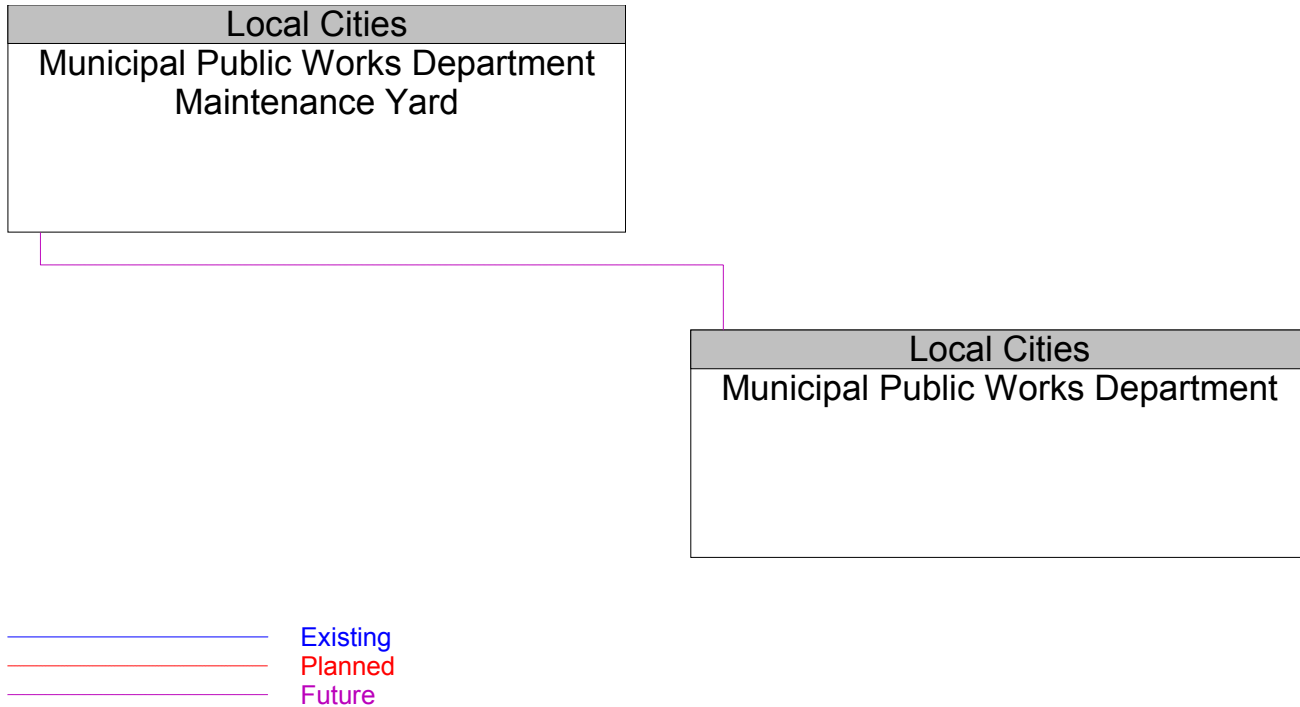


Figure B74 – Municipal Public Works Department Vehicles Interfaces

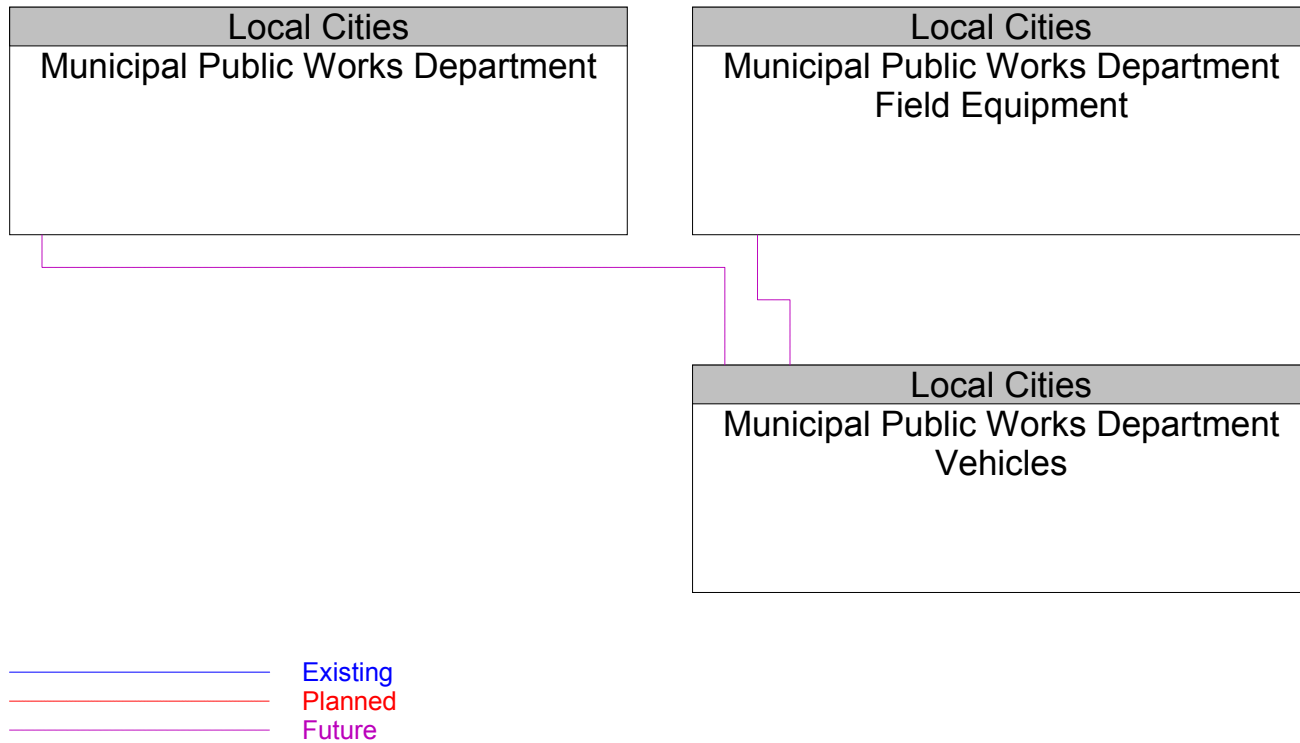


Figure B75 – National Weather Service Interfaces

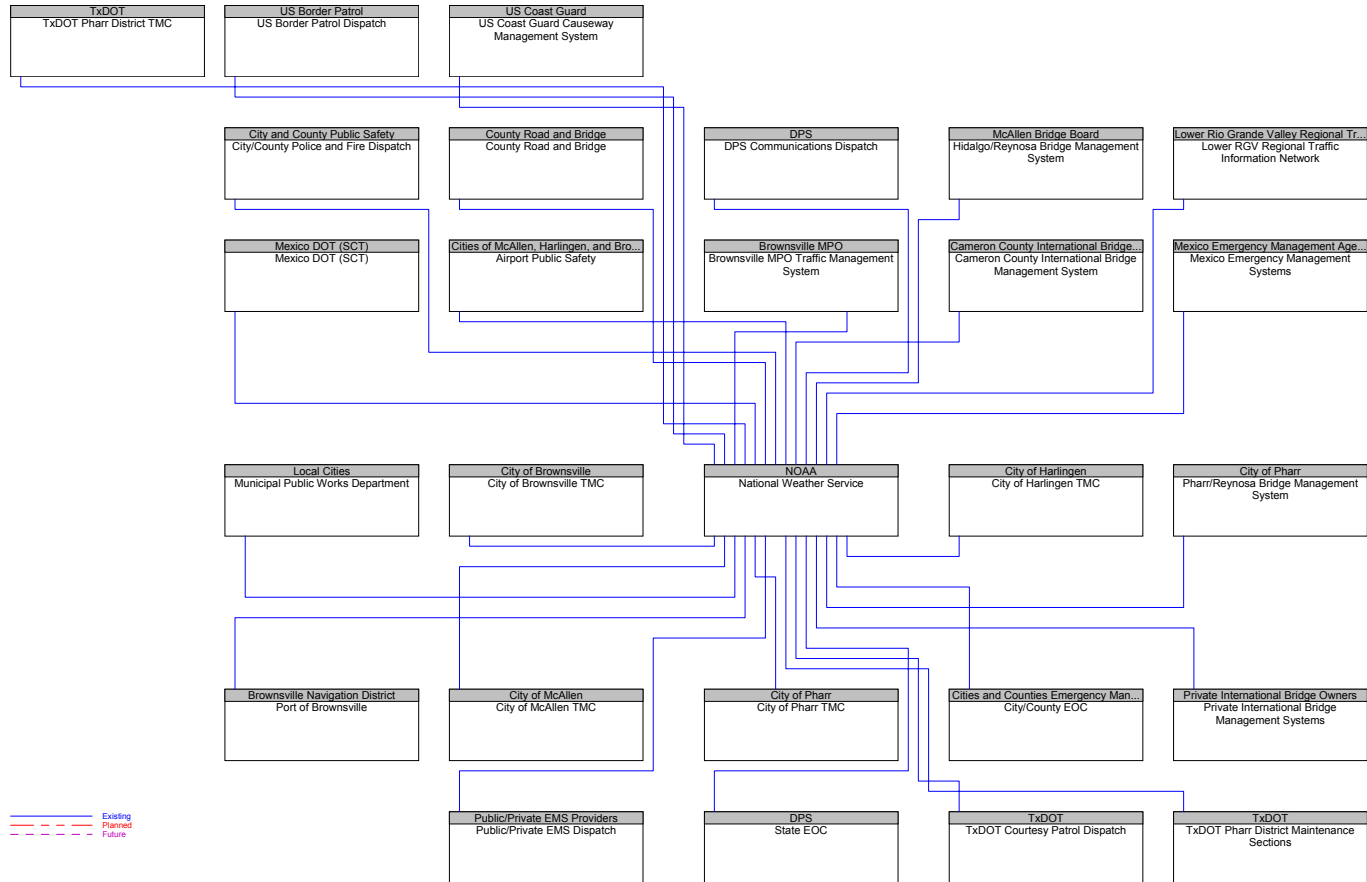


Figure B76 – Other States Credentials Administration and Safety Systems Interfaces

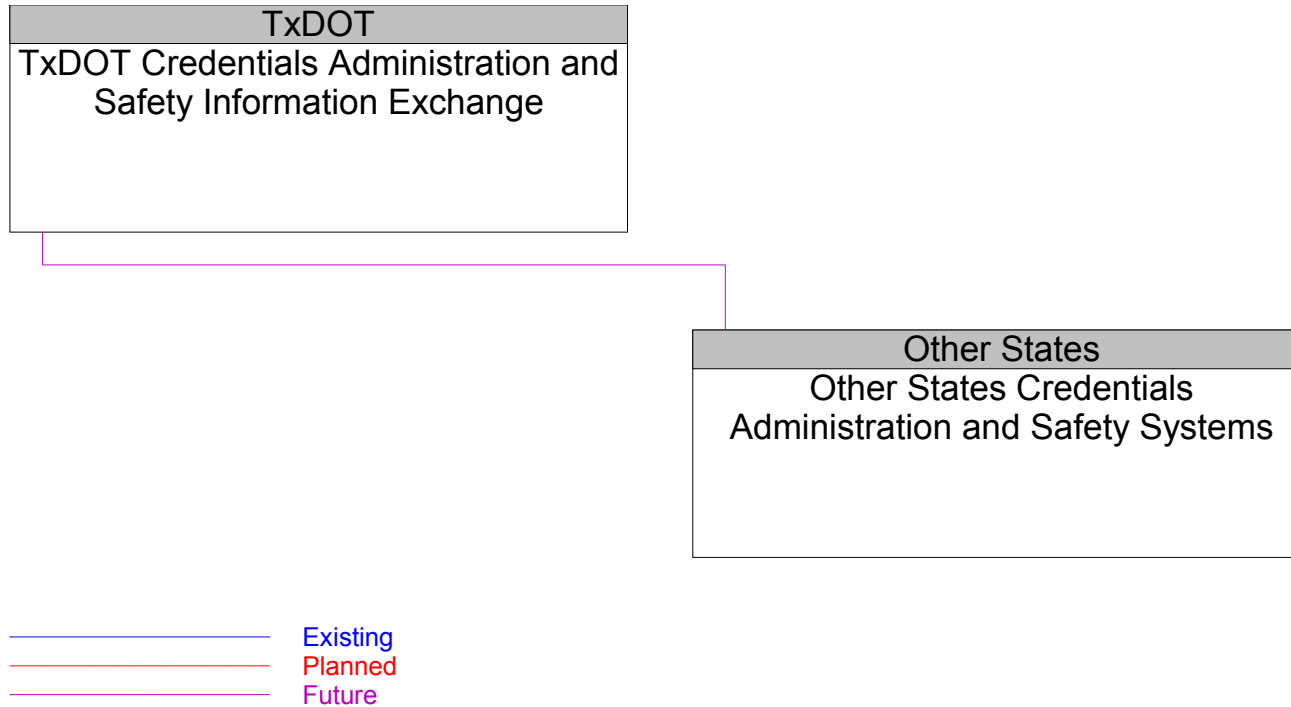


Figure B77 – Other Texas Region TMCs Interfaces

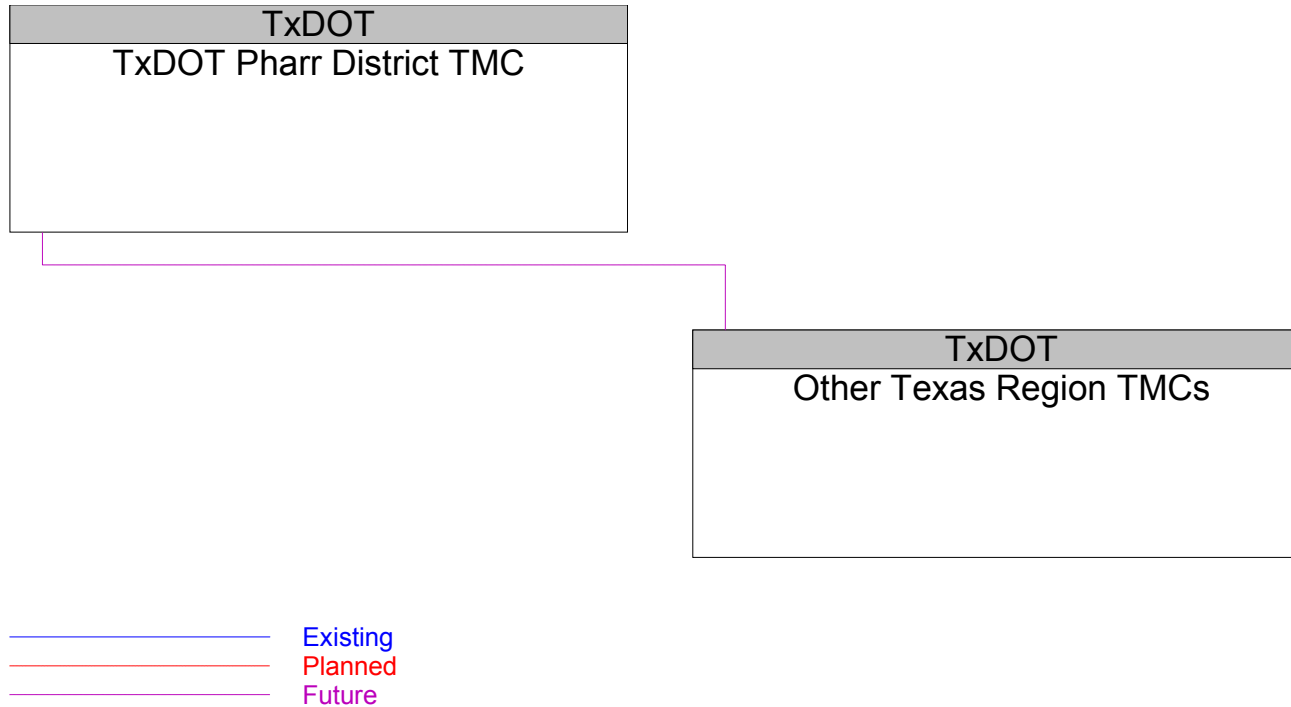


Figure B78 – Pharr/Reynosa Bridge Field Equipment Interfaces

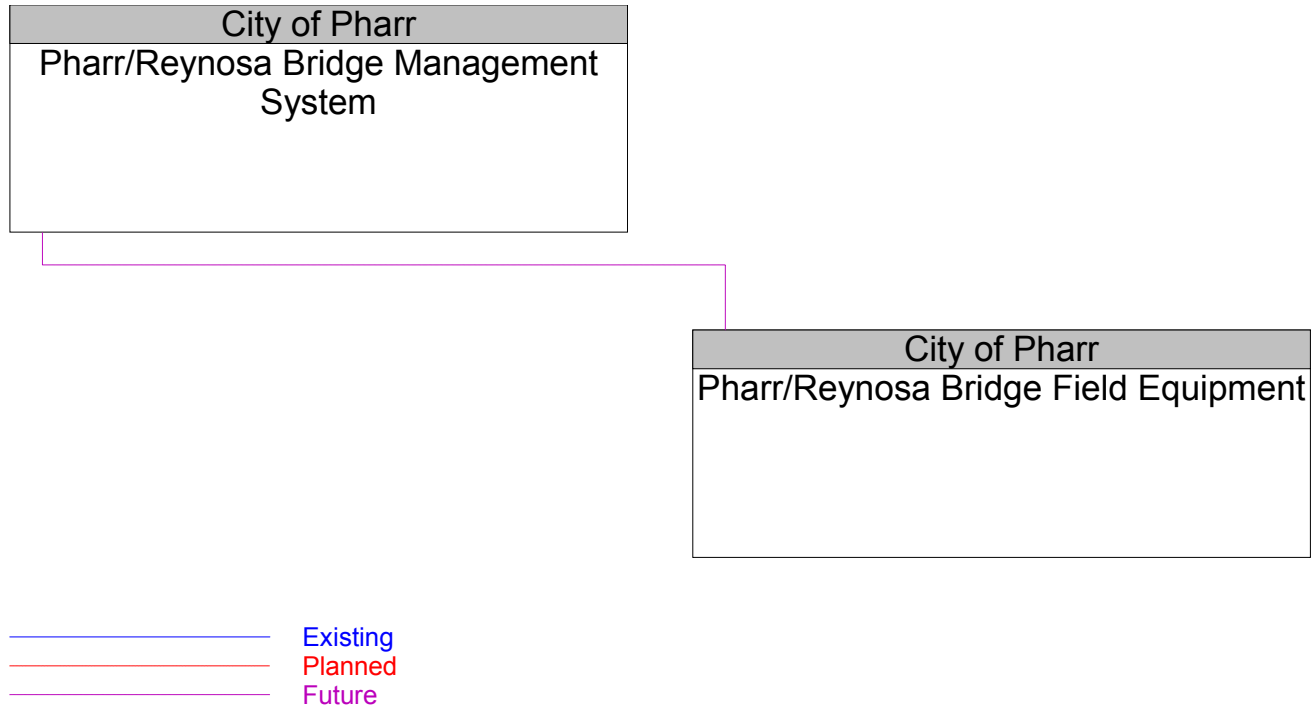


Figure B79 – Pharr/Reynosa Bridge Management System Interfaces

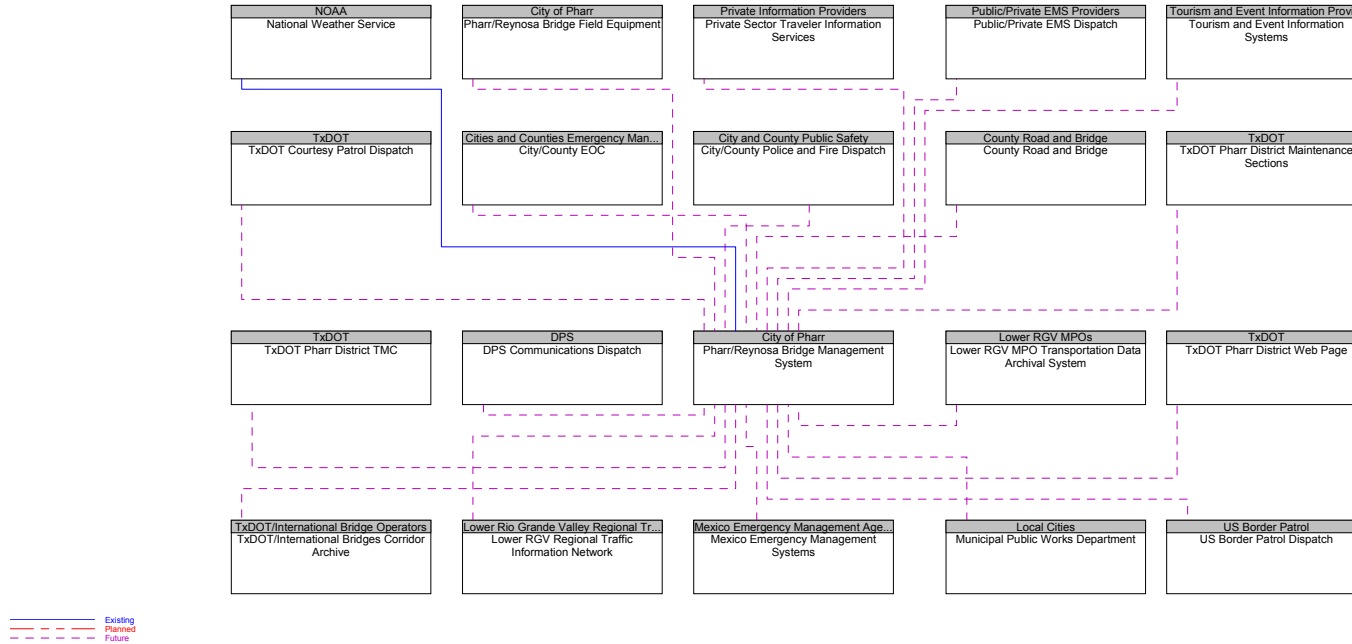


Figure B80 – Port of Brownsville Interfaces

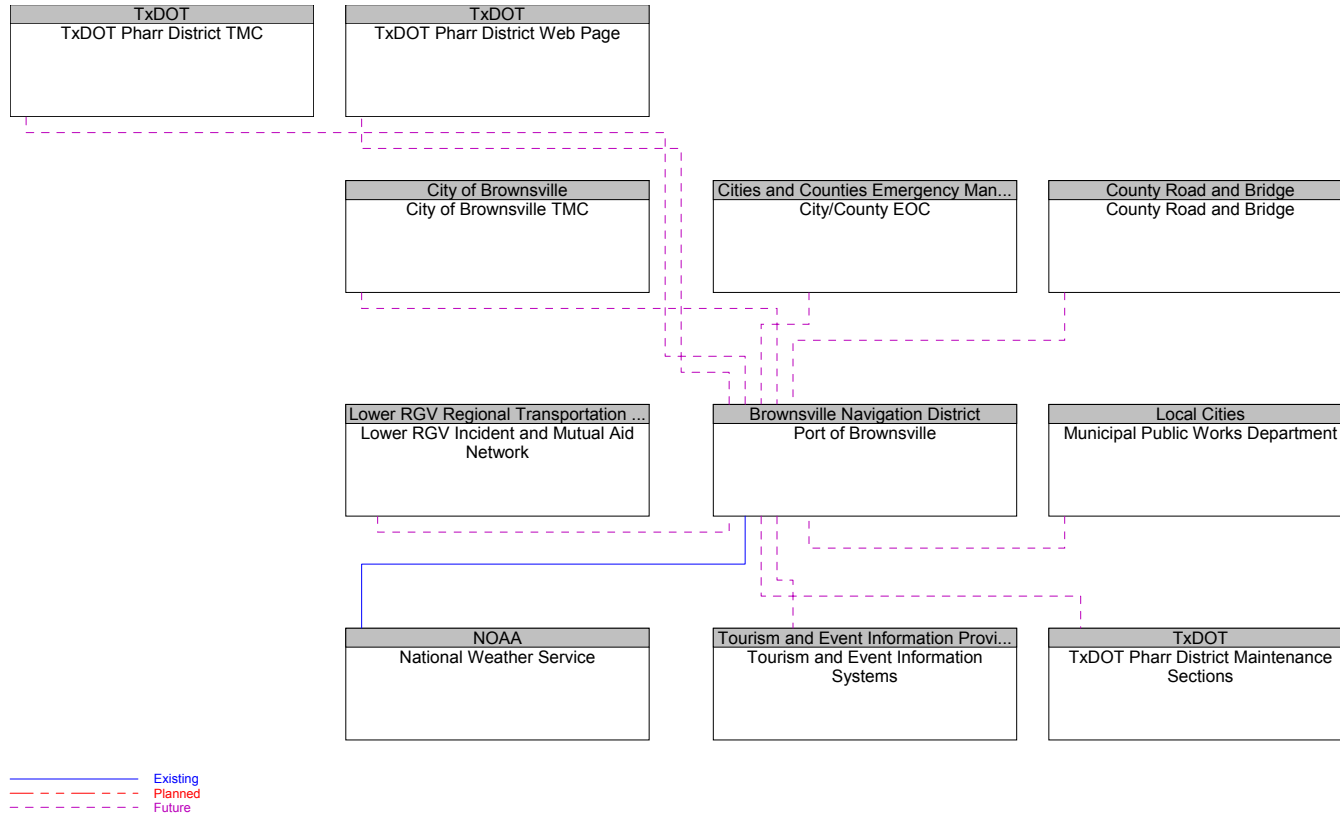


Figure B81 – Print and Broadcast Media Interfaces

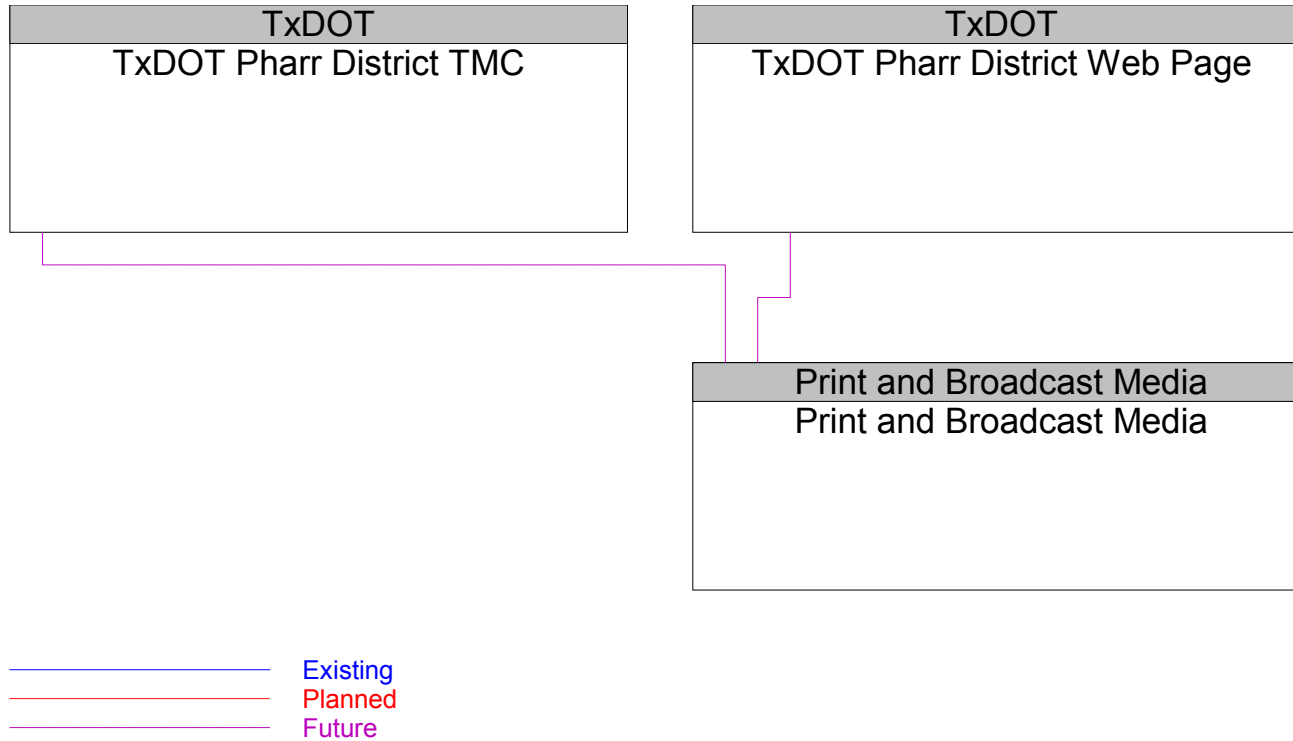


Figure B82 – Private Freight Shippers Interfaces

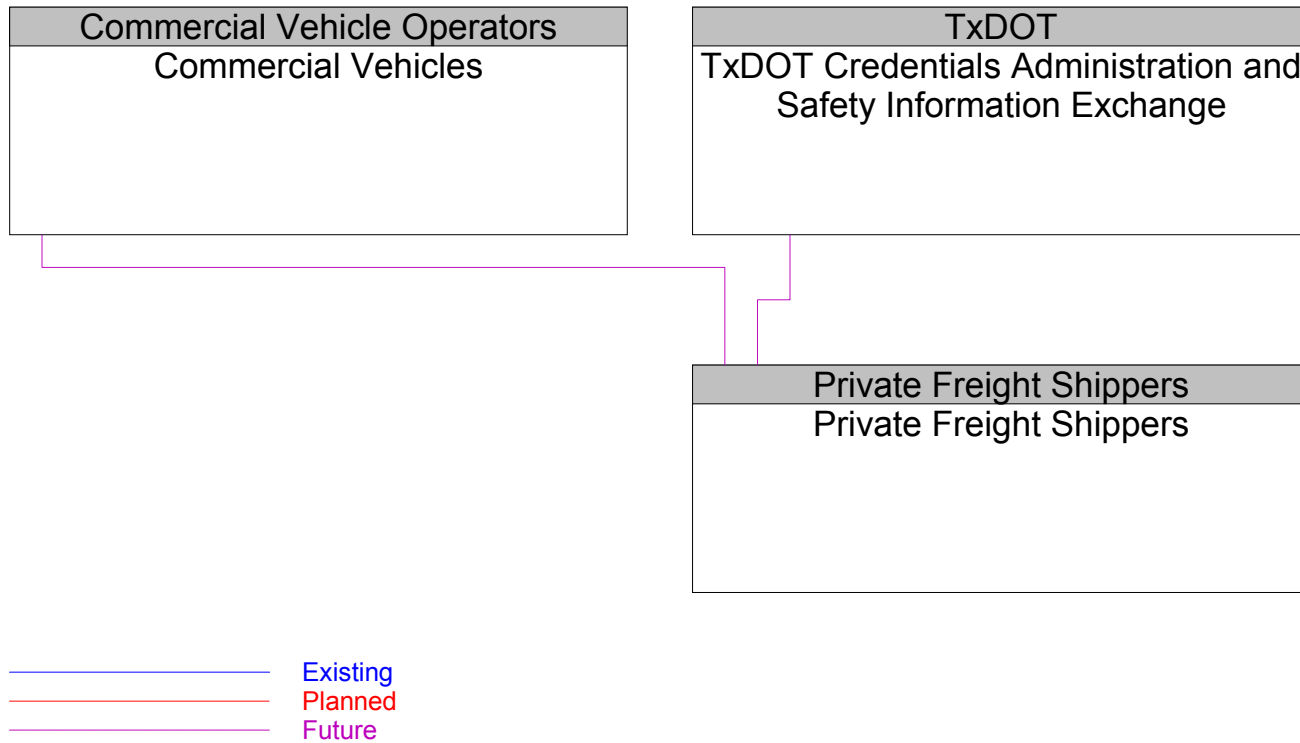


Figure B83 – Private International Bridge Field Equipment Interfaces

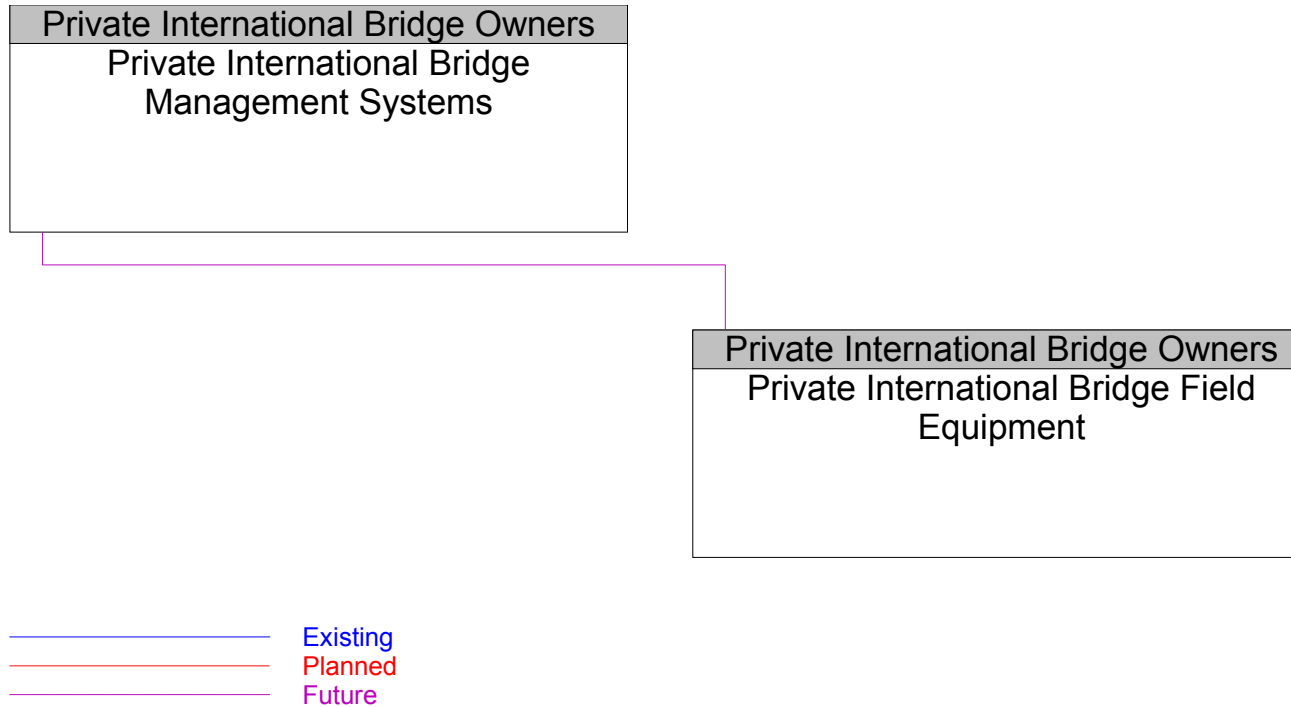


Figure B84 – Private International Bridge Management Systems Interfaces

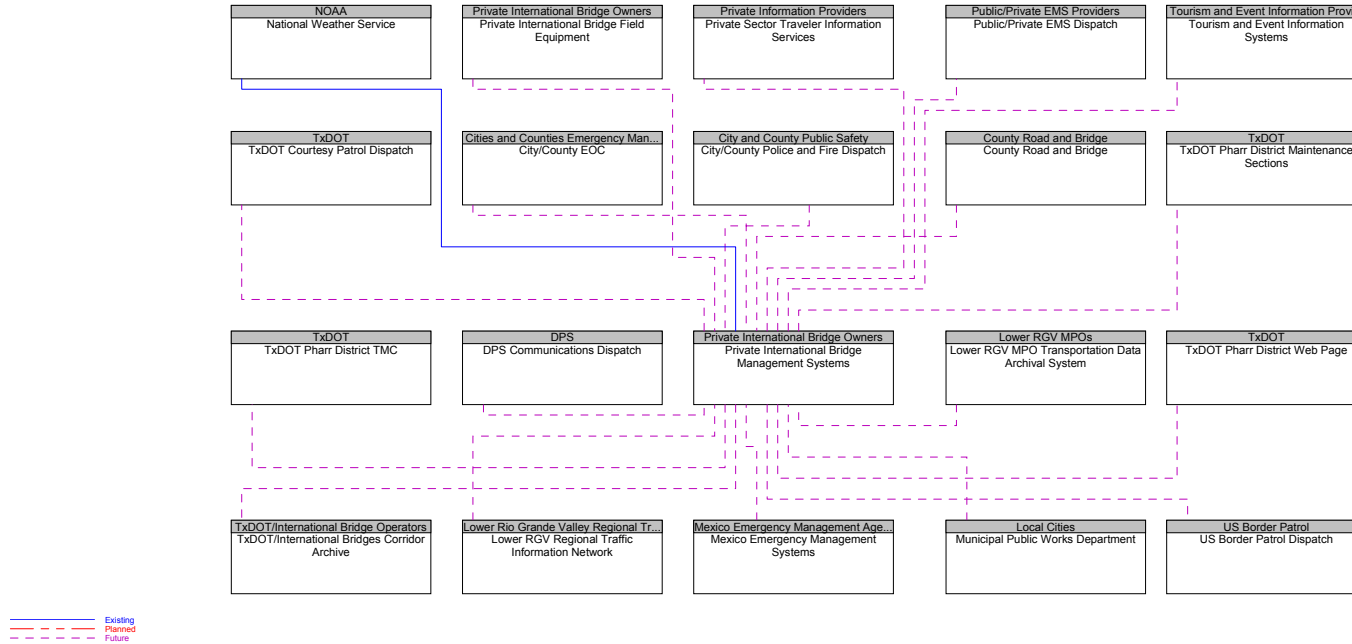


Figure B85 – Private Sector Traveler Information Services Interfaces

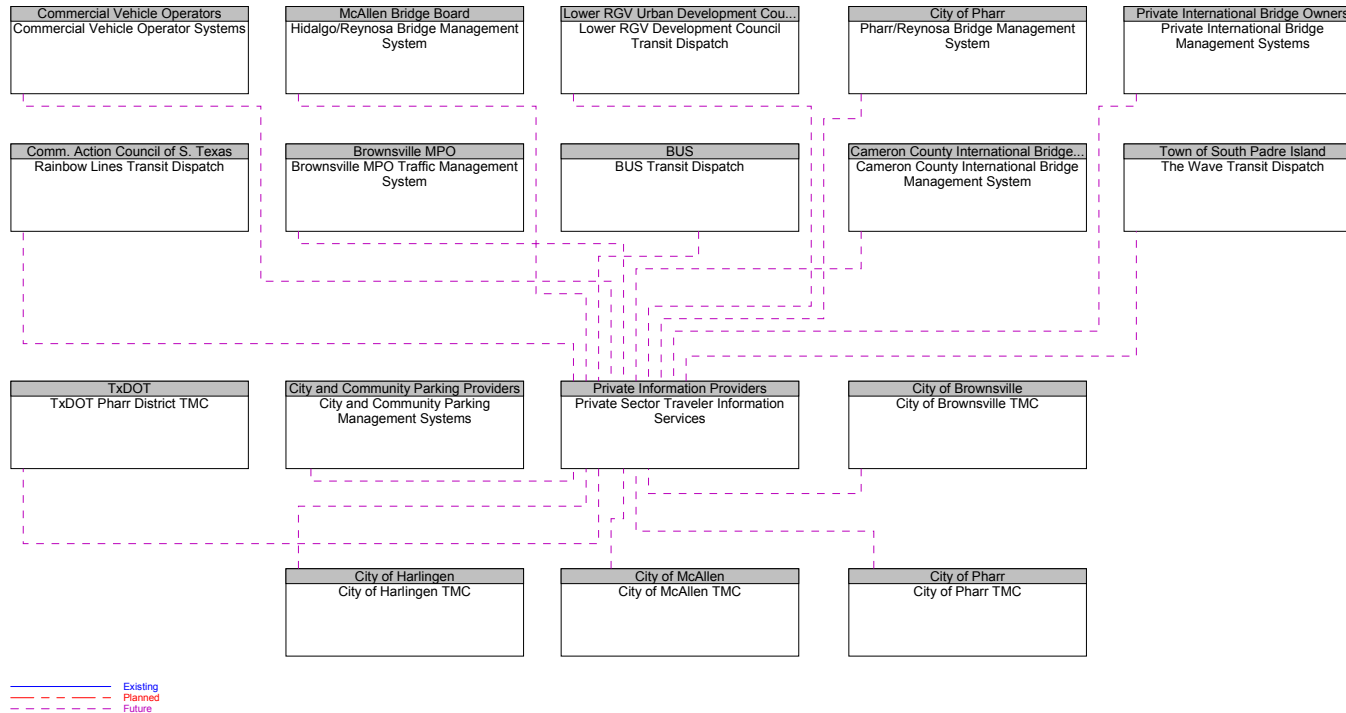


Figure B86 – Private Transit Systems Interfaces

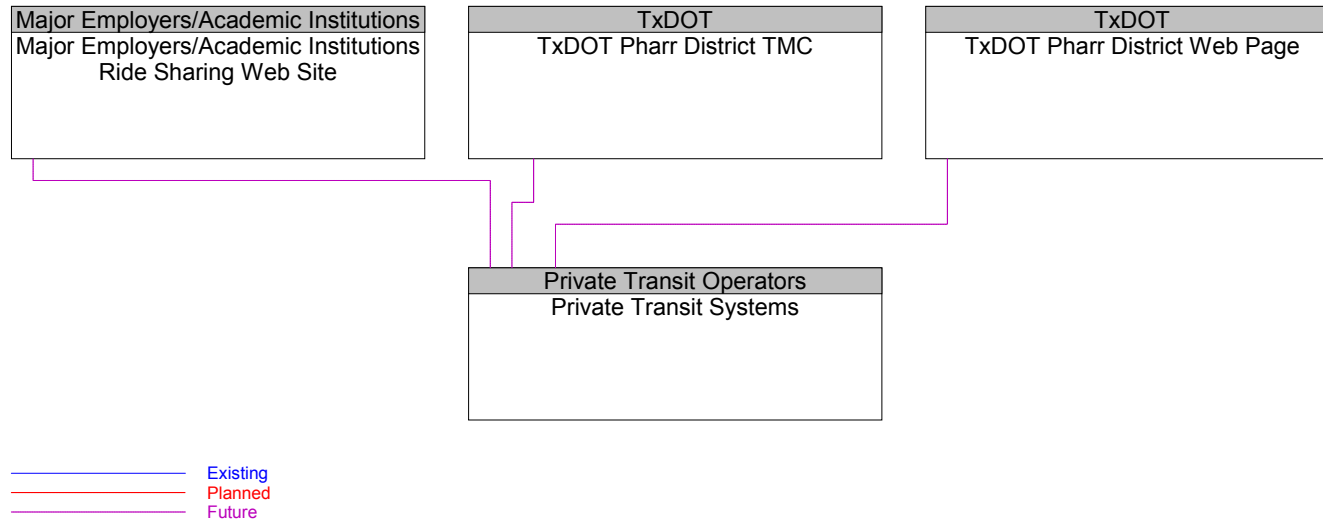


Figure B87 – Private Traveler Personal Computing Devices Interfaces

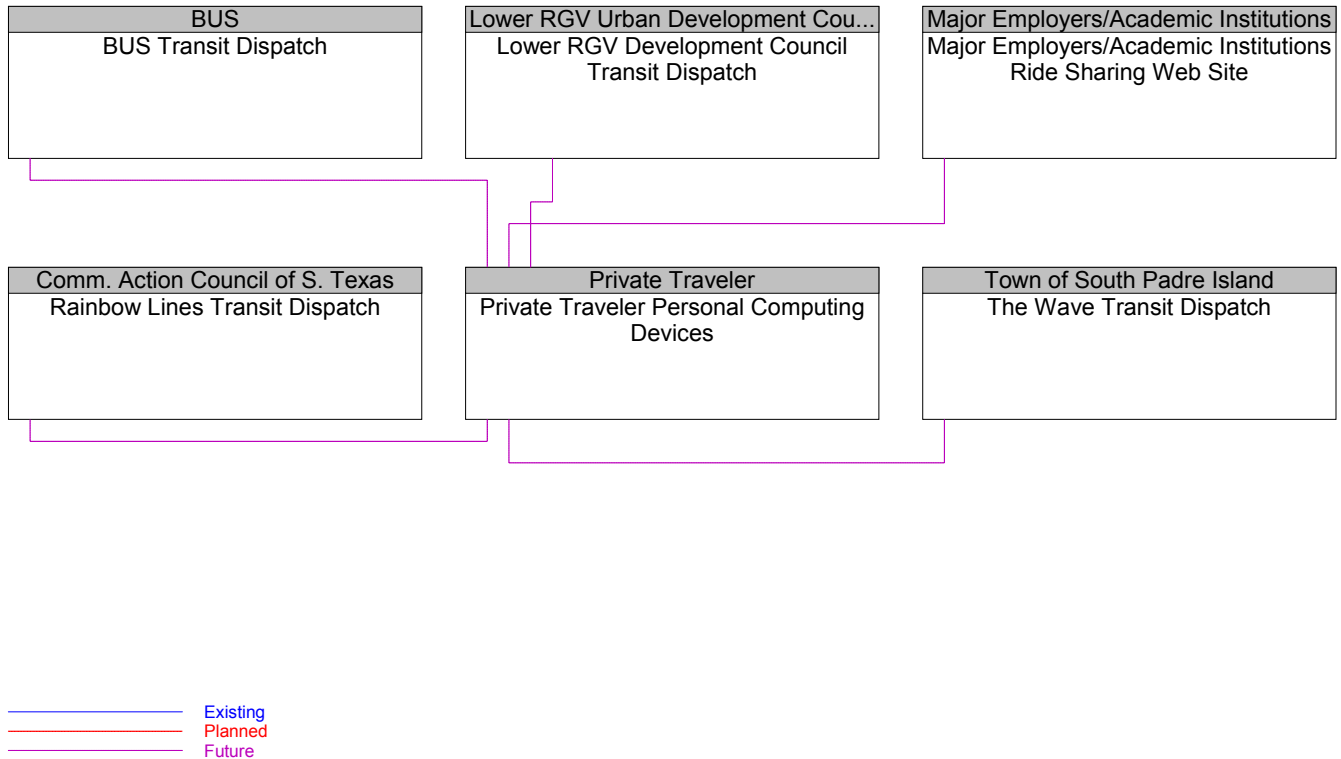


Figure B88 – Private Vehicles Interfaces

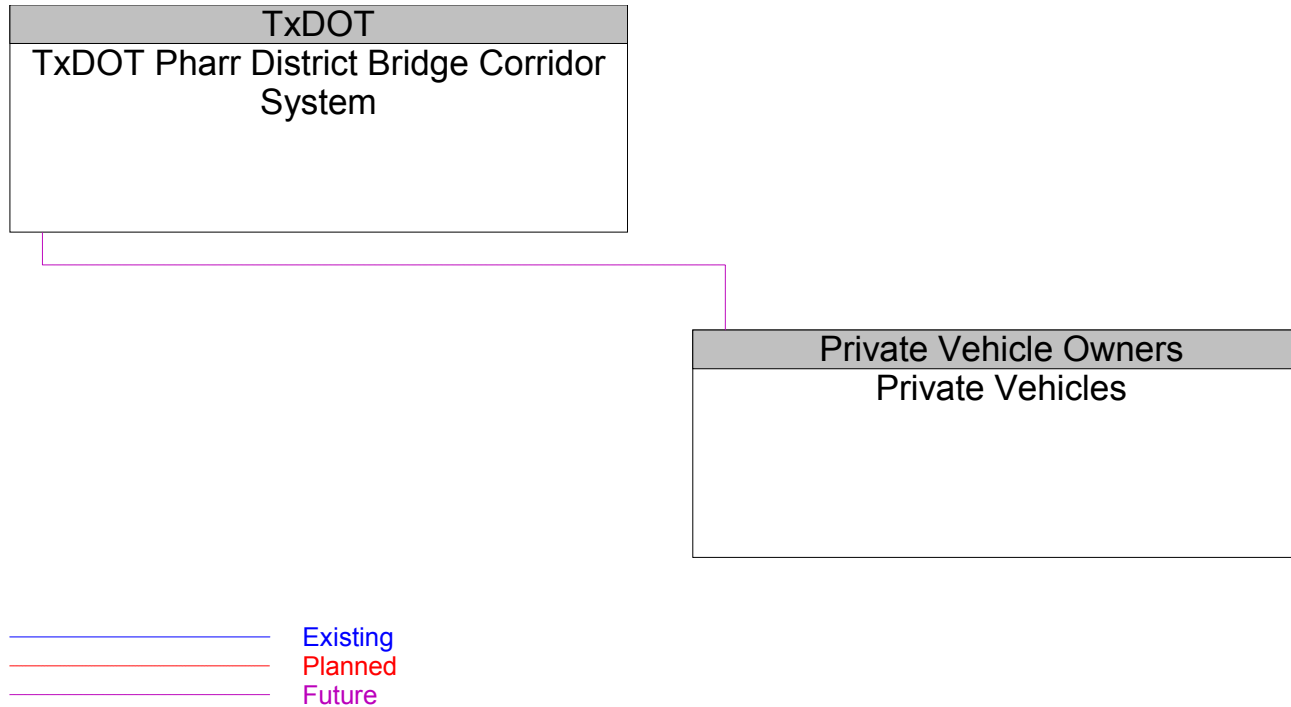


Figure B89 – Public/Private EMS Dispatch Interfaces

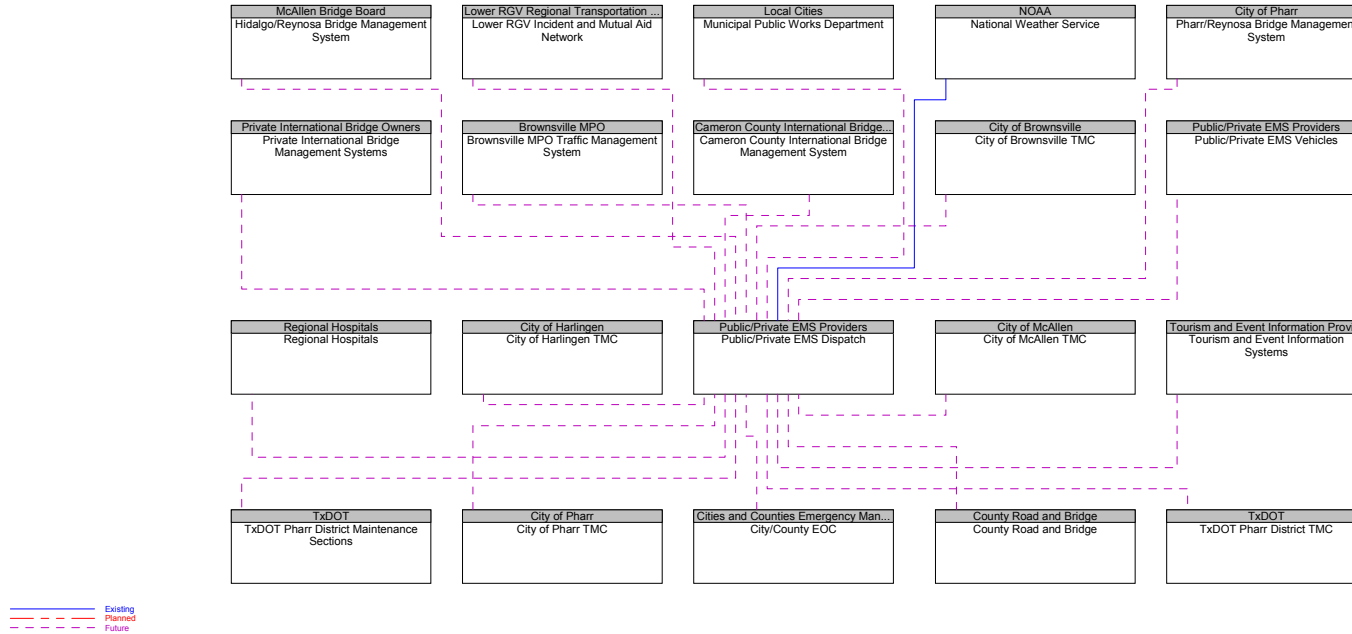


Figure B90 – Public/Private EMS Vehicles Interfaces

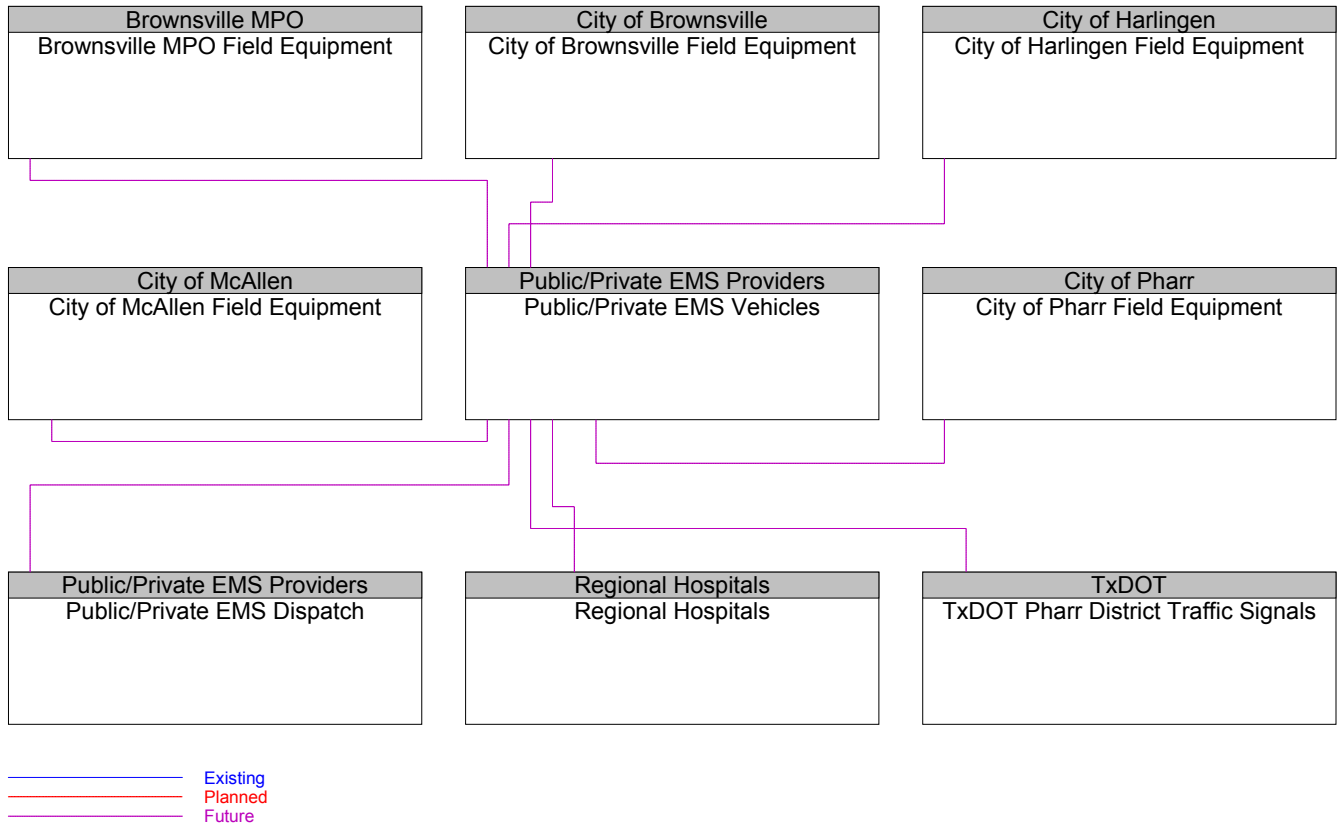


Figure B91 – Rail Cars Interfaces

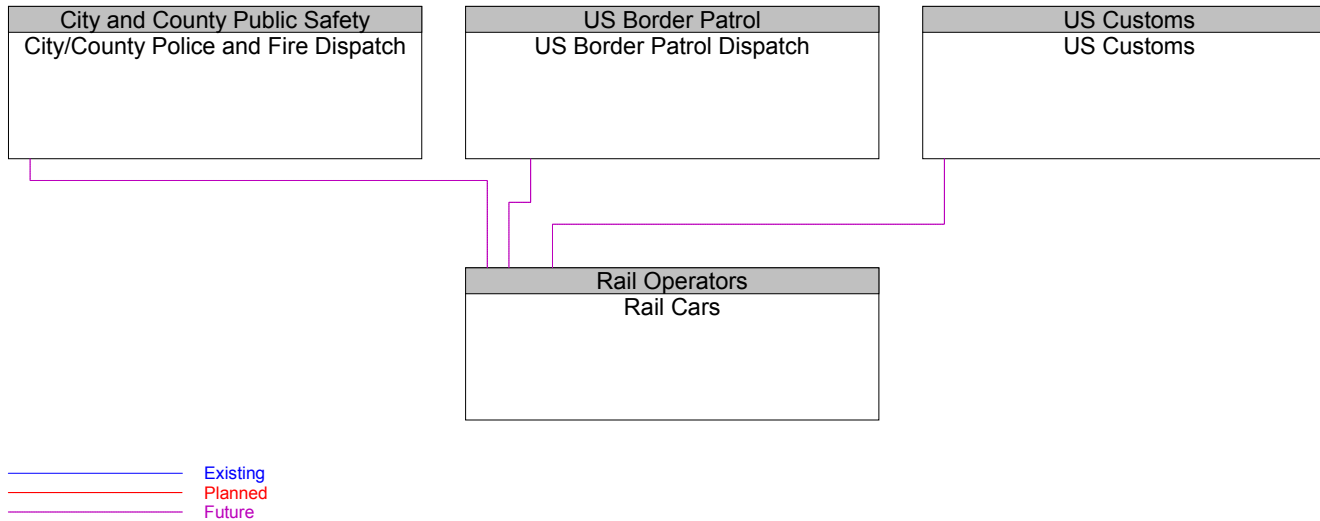


Figure B92 – Rail Operators Interfaces

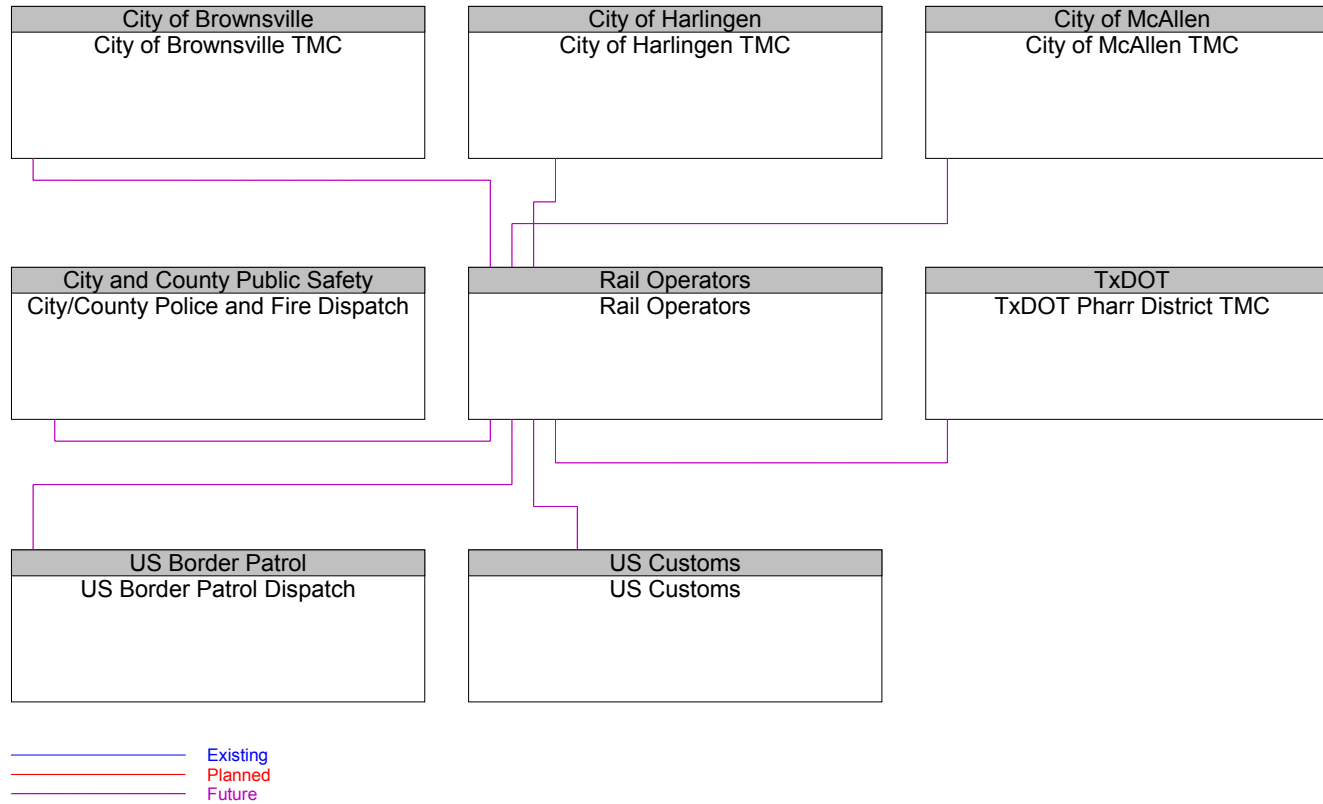


Figure B93 – Rail Operators Wayside Equipment Interfaces

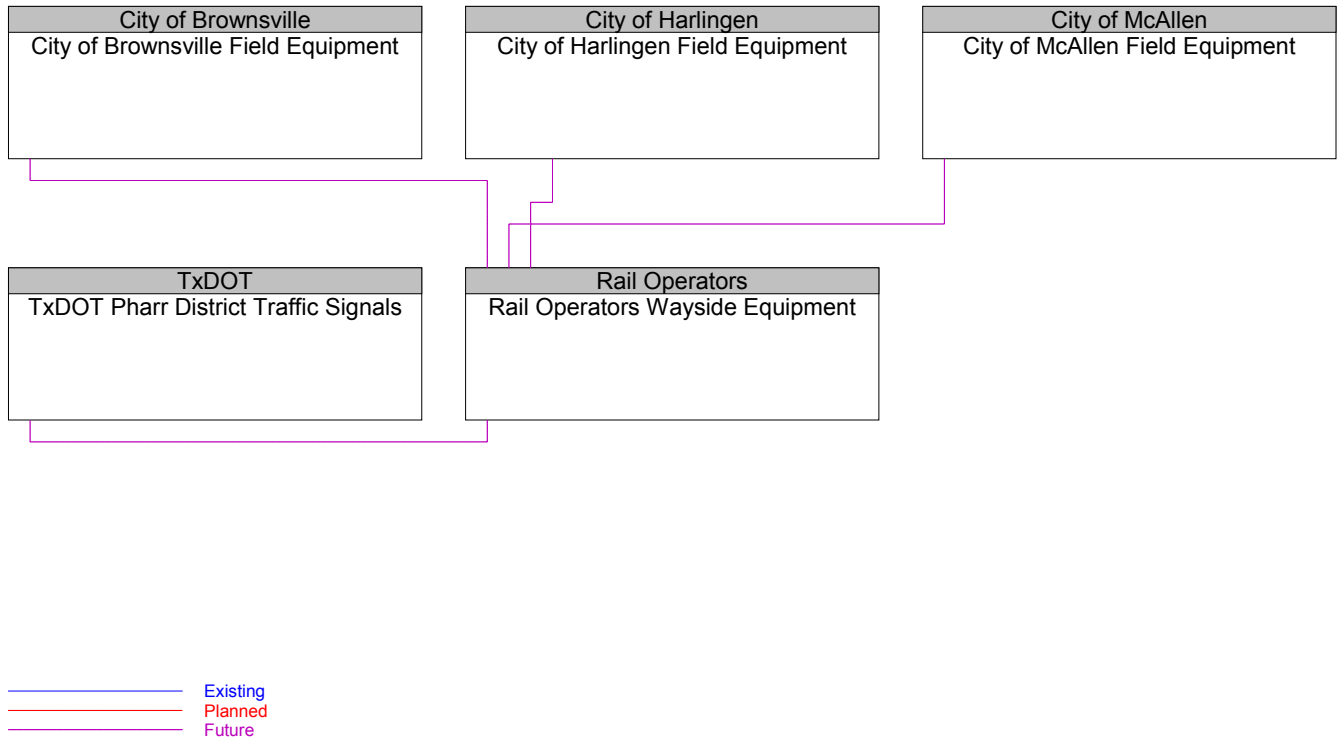


Figure B94 – Rainbow Lines Transit Dispatch Interfaces

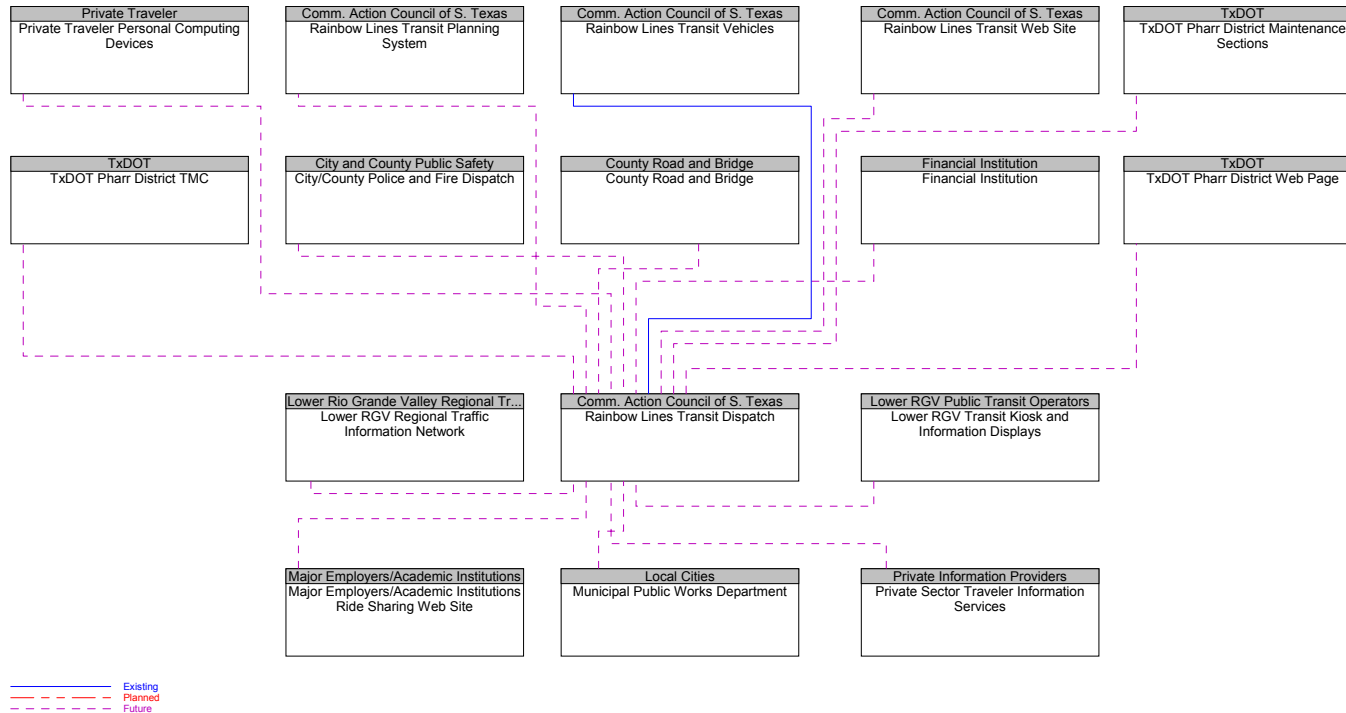


Figure B95 – Rainbow Lines Transit Planning System Interfaces

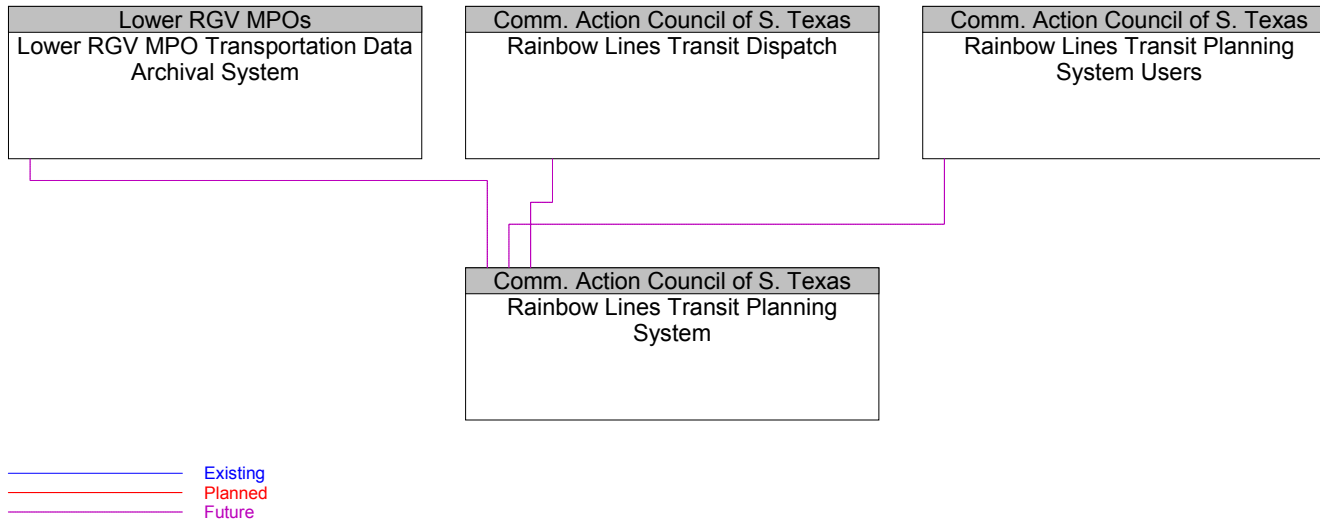


Figure B96 – Rainbow Lines Transit Planning System Users Interfaces

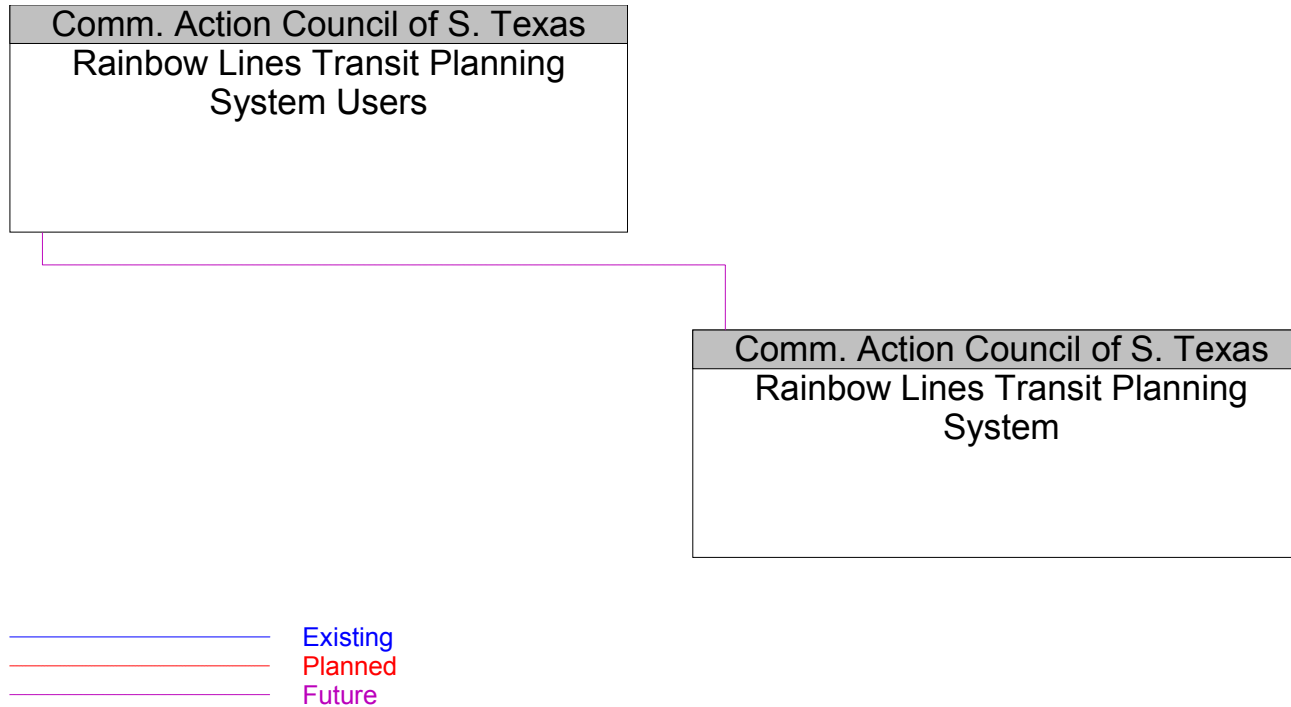


Figure B97 – Rainbow Lines Transit Vehicles Interfaces

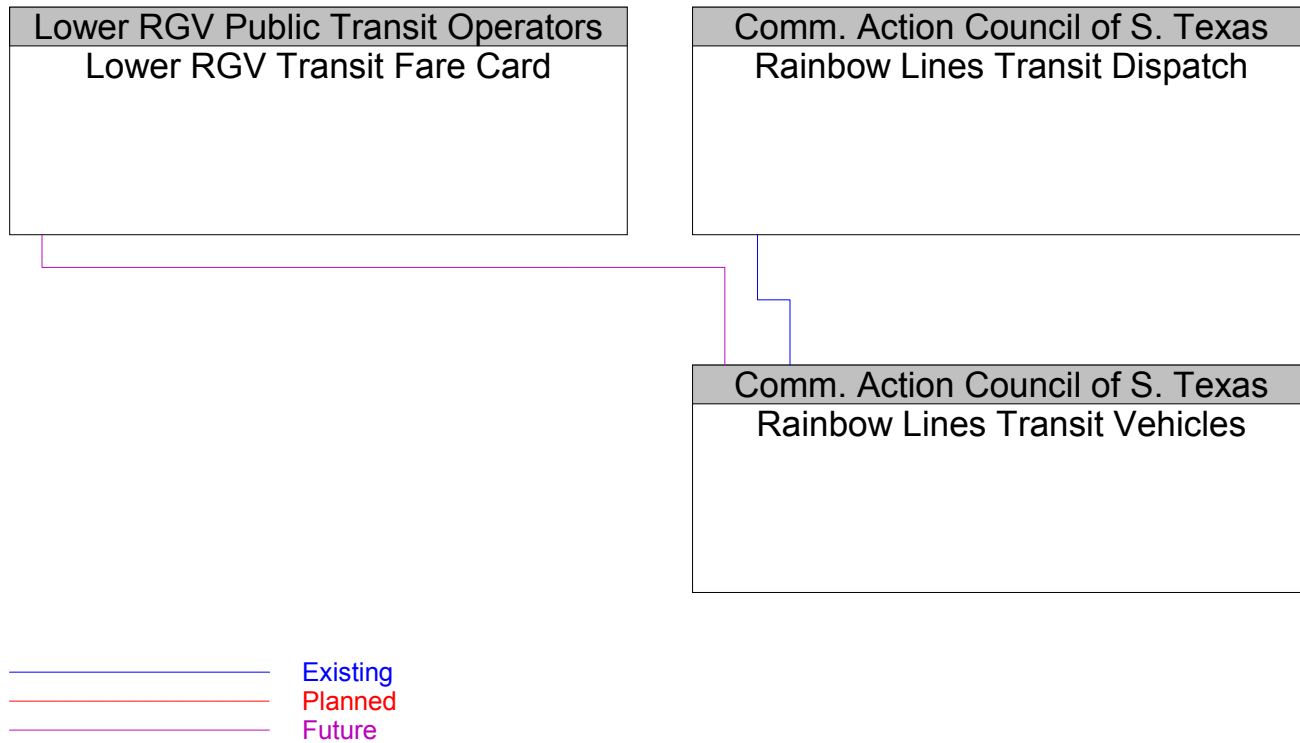


Figure B98 – Rainbow Lines Transit Web Site Interfaces

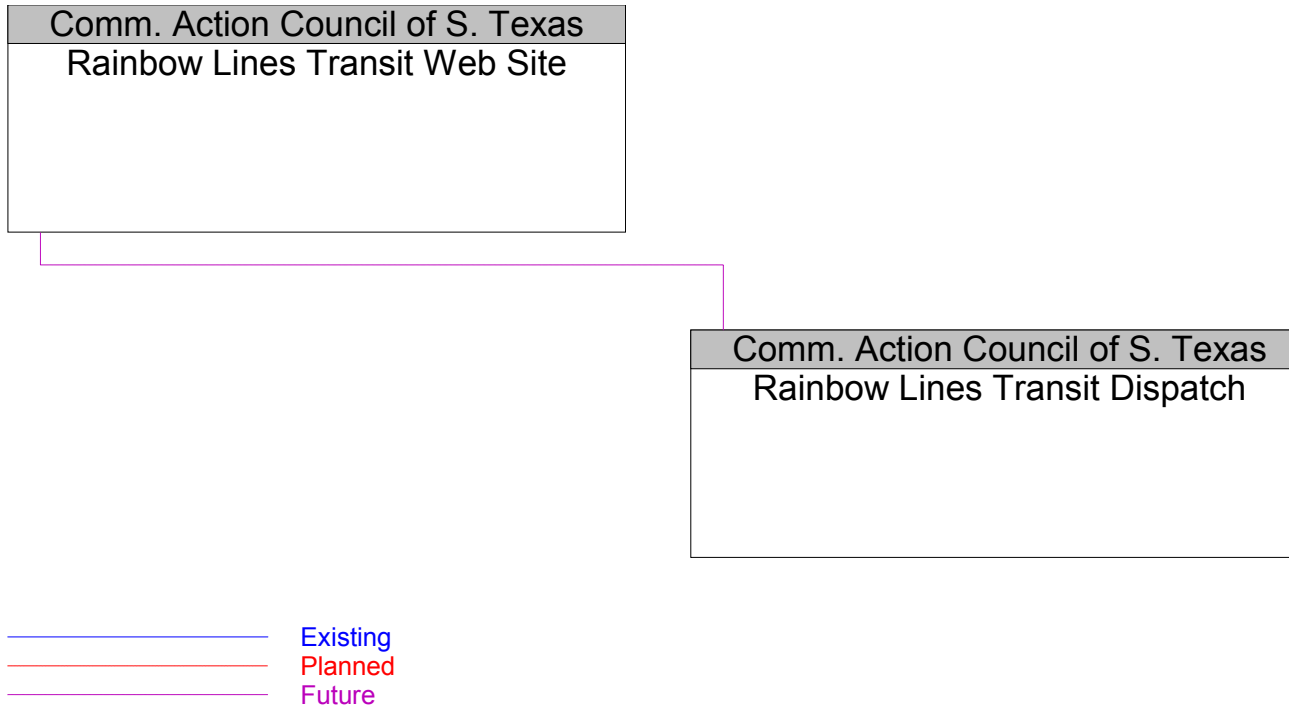


Figure B99 – Regional Hospitals Interfaces

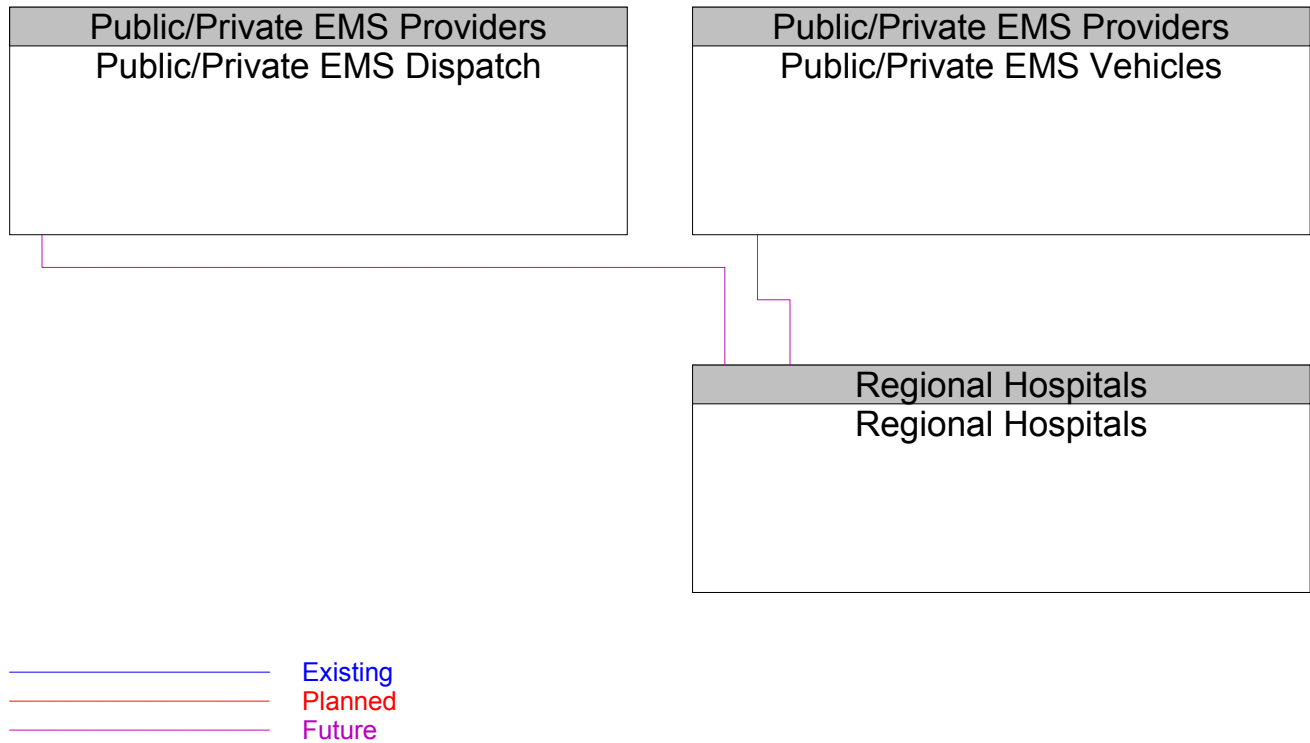


Figure B100 – State EOC Interfaces

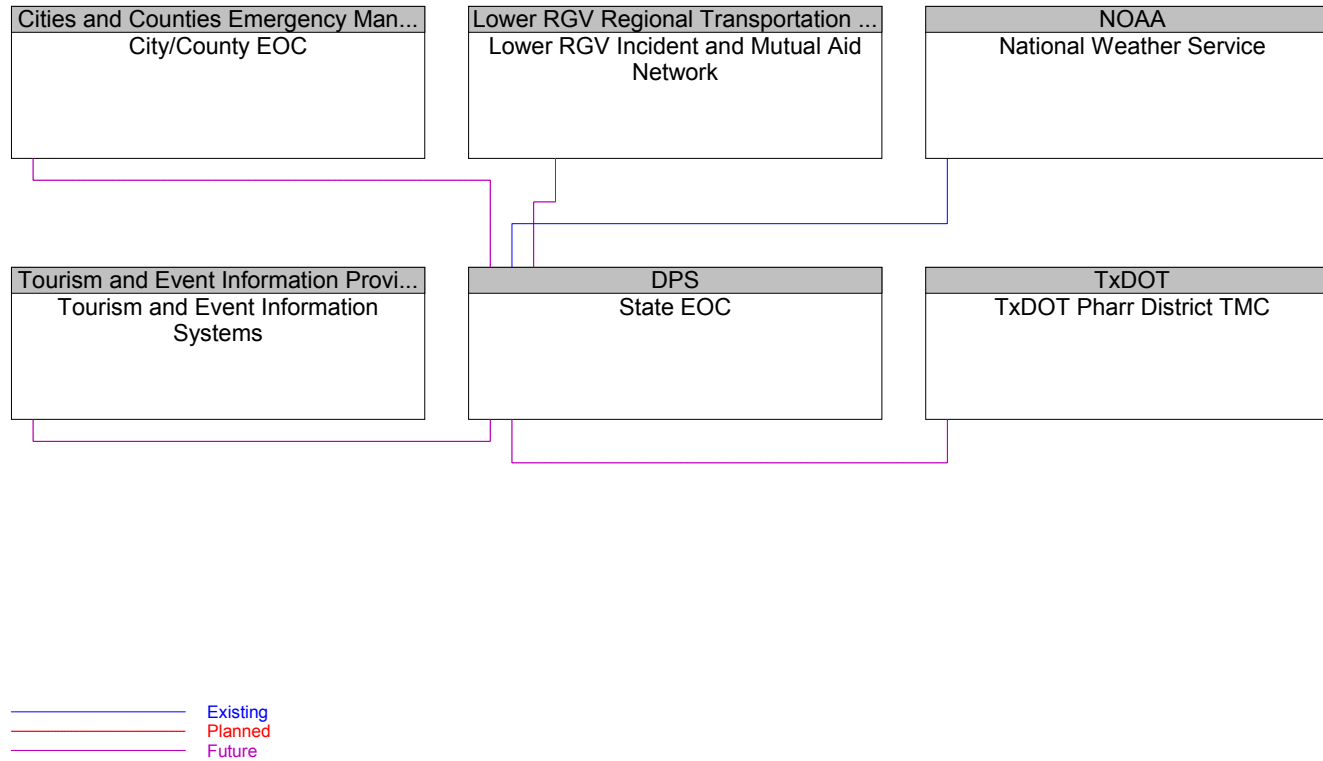


Figure B101 – The Wave Transit Dispatch Interfaces

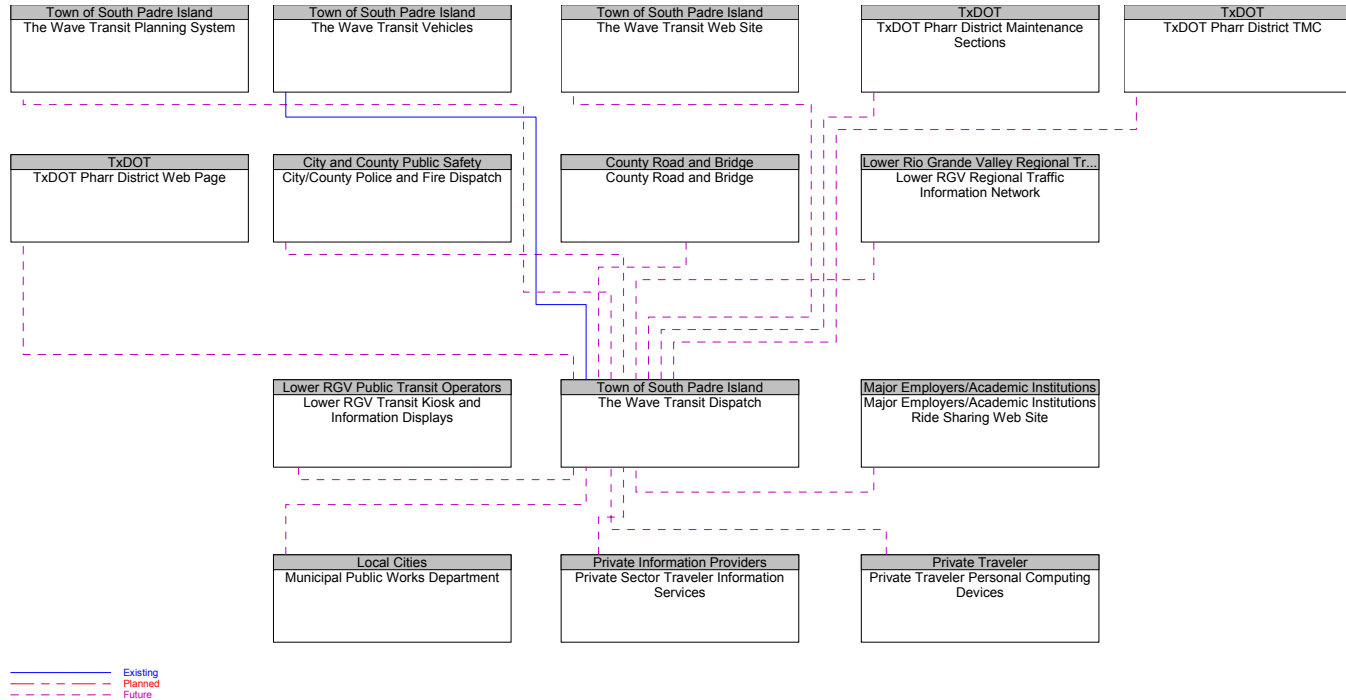


Figure B102 – The Wave Transit Planning System Interfaces

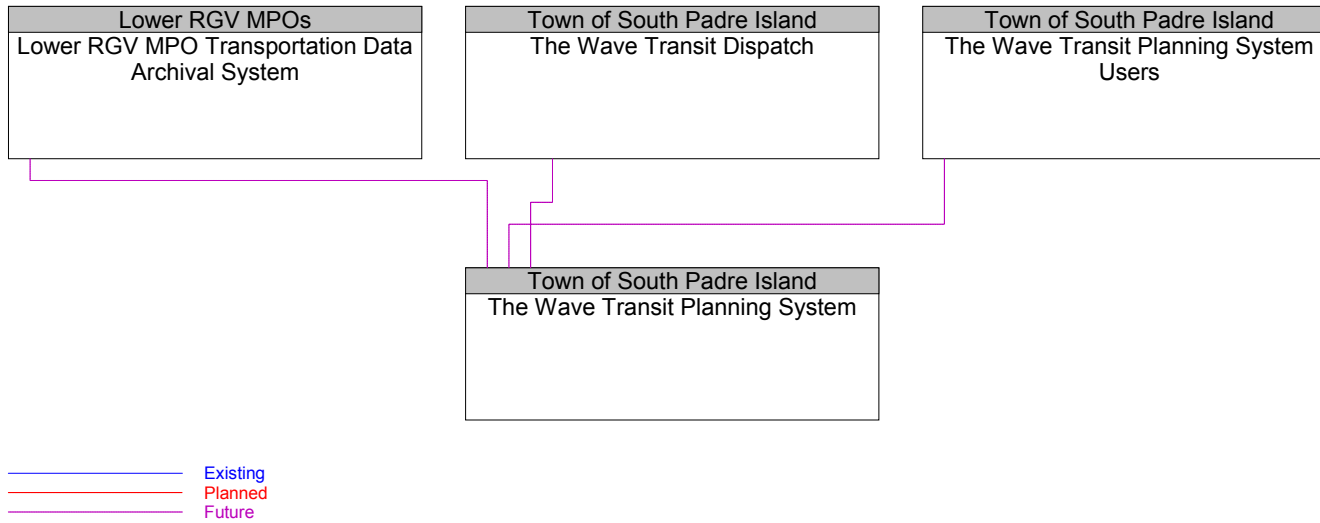


Figure B103 – The Wave Transit Planning System Users Interfaces

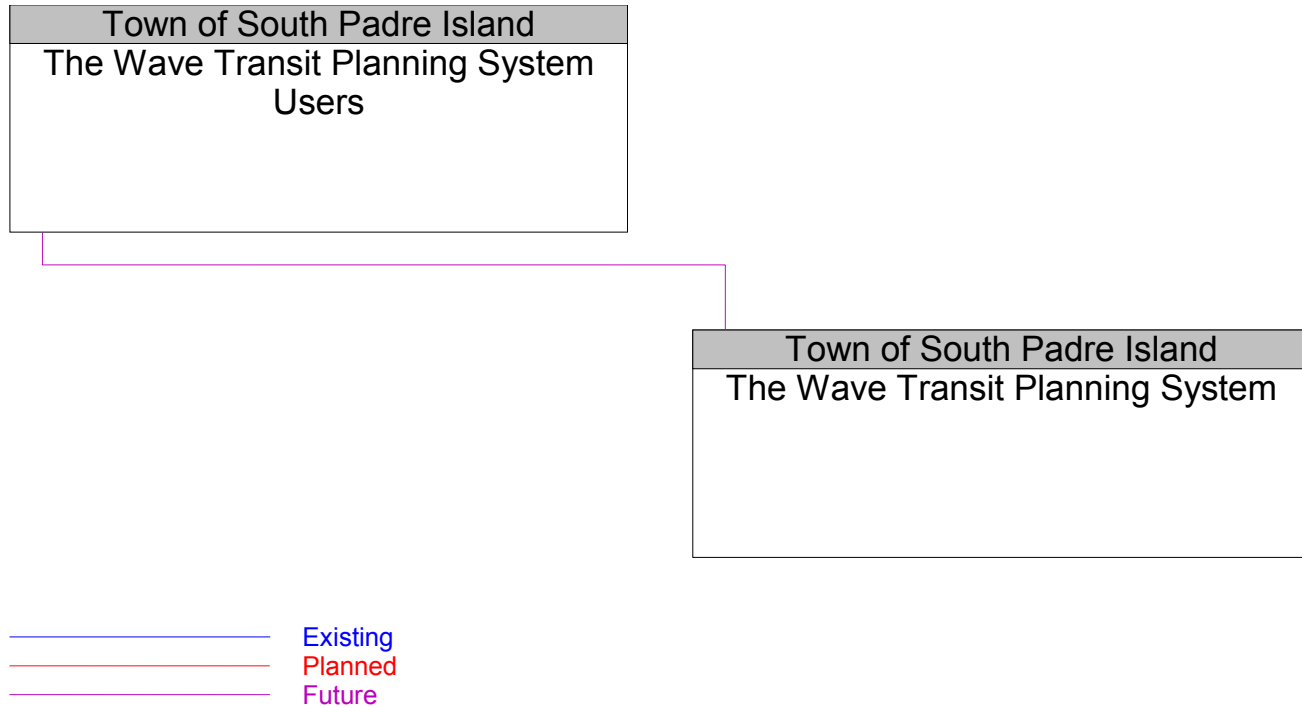


Figure B104 – The Wave Transit Vehicles Interfaces

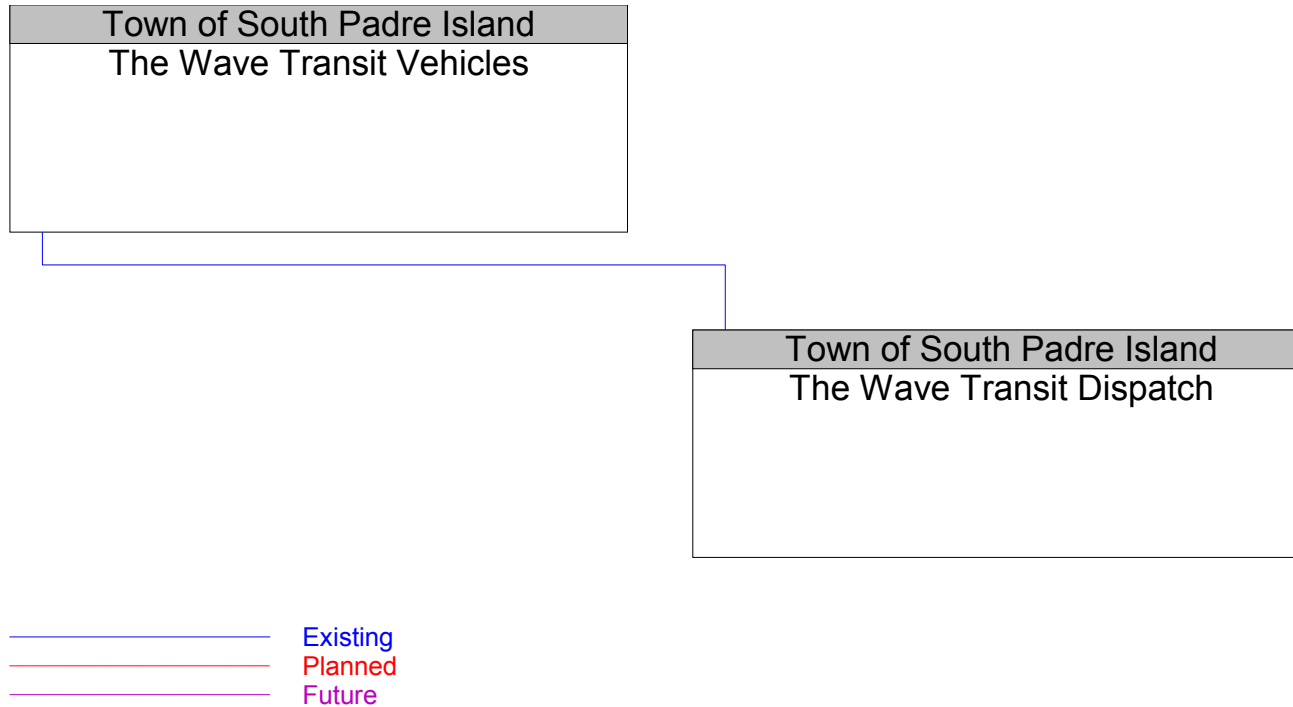


Figure B105 – The Wave Transit Web Site Interfaces

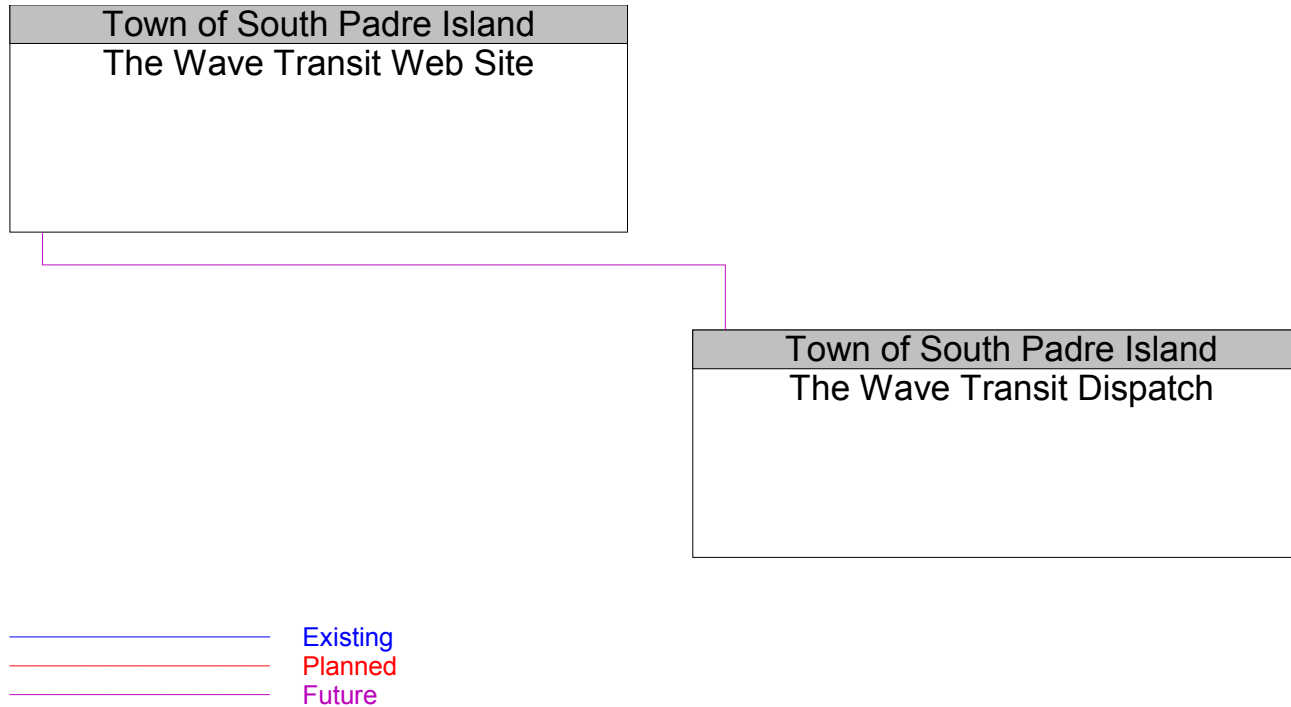


Figure B106 – Tourism and Event Information Systems Interfaces

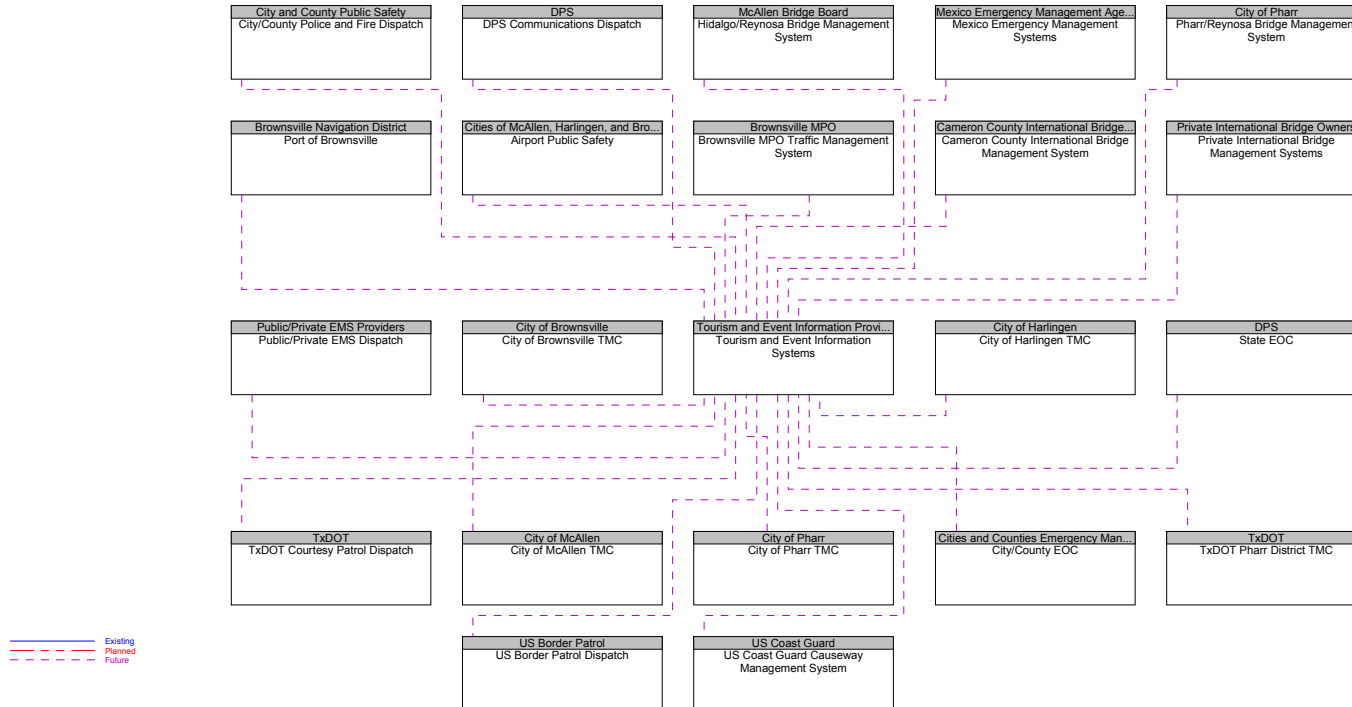


Figure B107 – TxDOT 511 System Interfaces

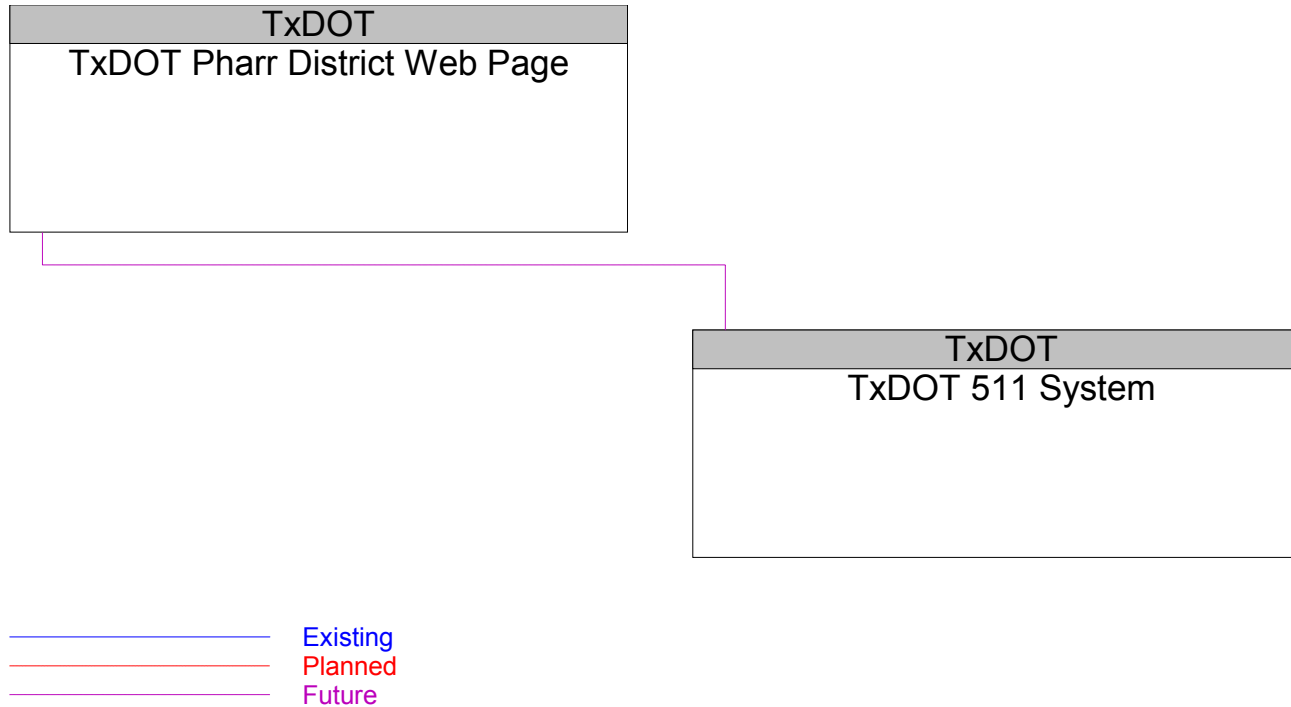


Figure B108 – TxDOT BRINSAP Interfaces

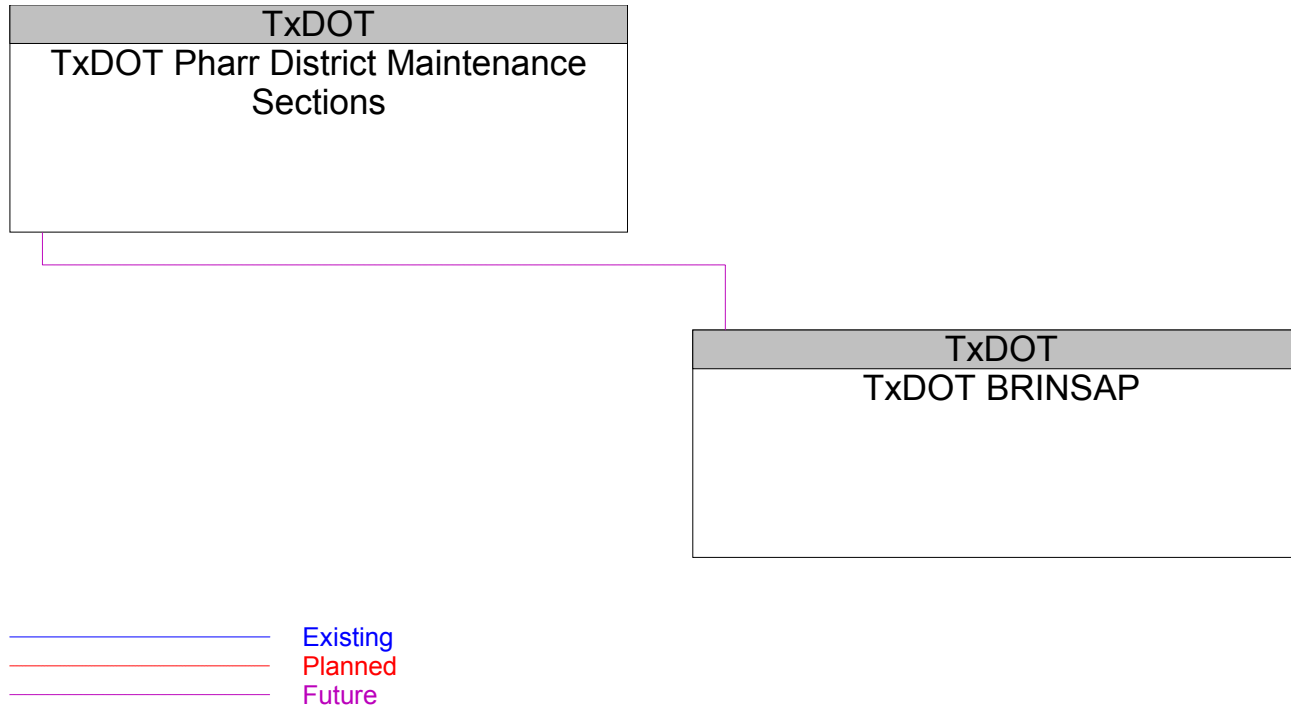


Figure B109 – TxDOT Courtesy Patrol Dispatch Interfaces

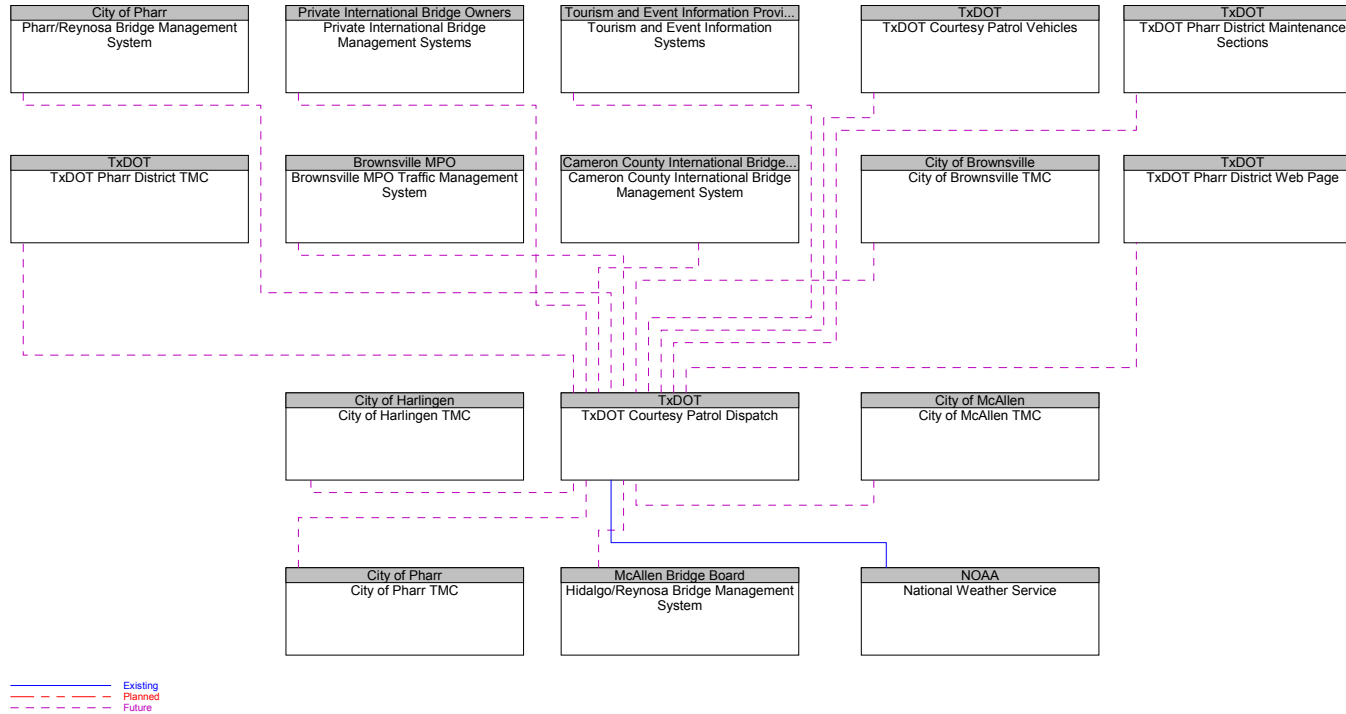


Figure B110 – TxDOT Courtesy Patrol Vehicles Interfaces

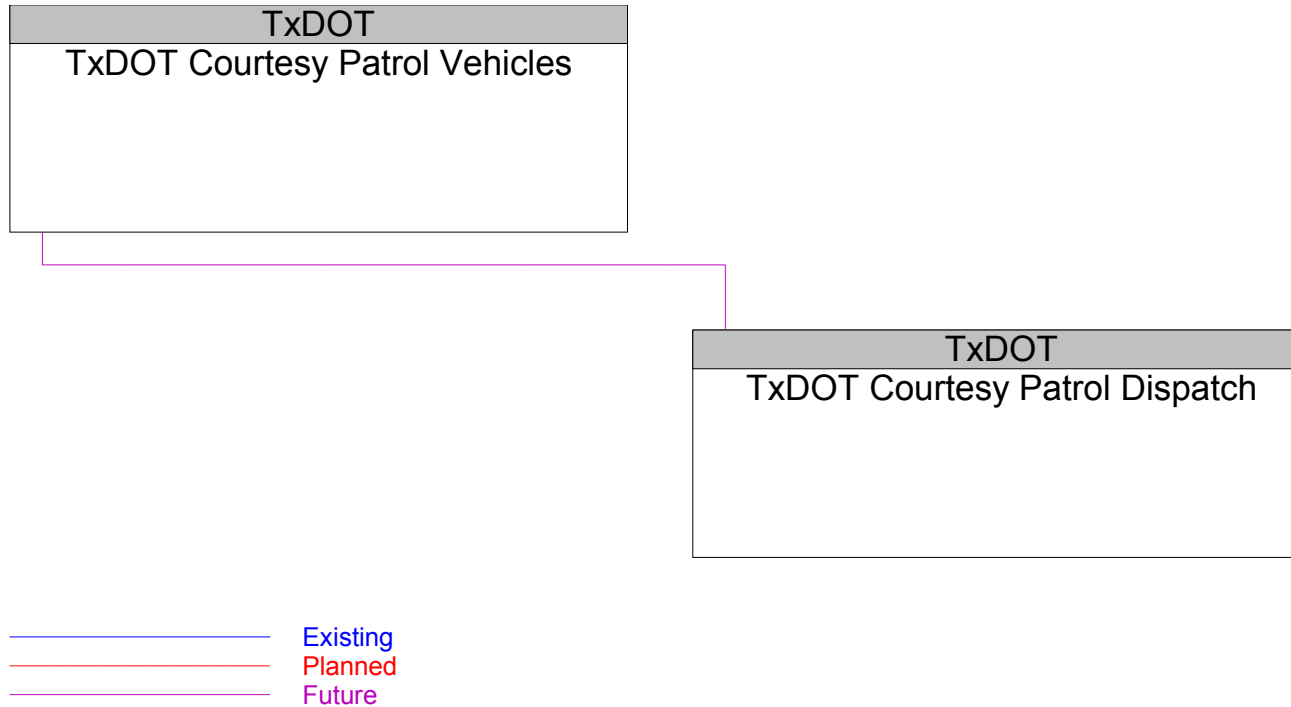


Figure B111 – TxDOT Credentials Administration and Safety Information Exchange Interfaces

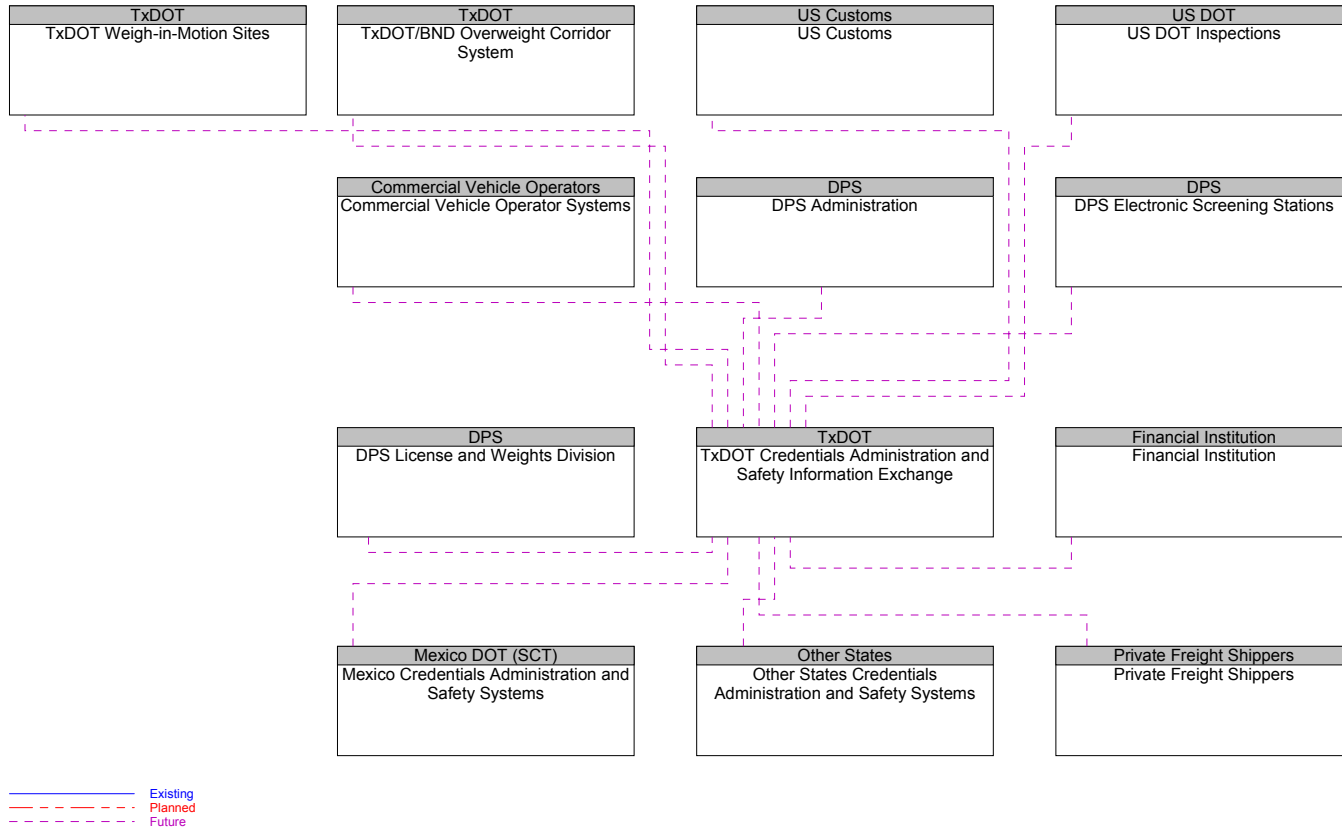


Figure B112 – TxDOT District Shop Interfaces

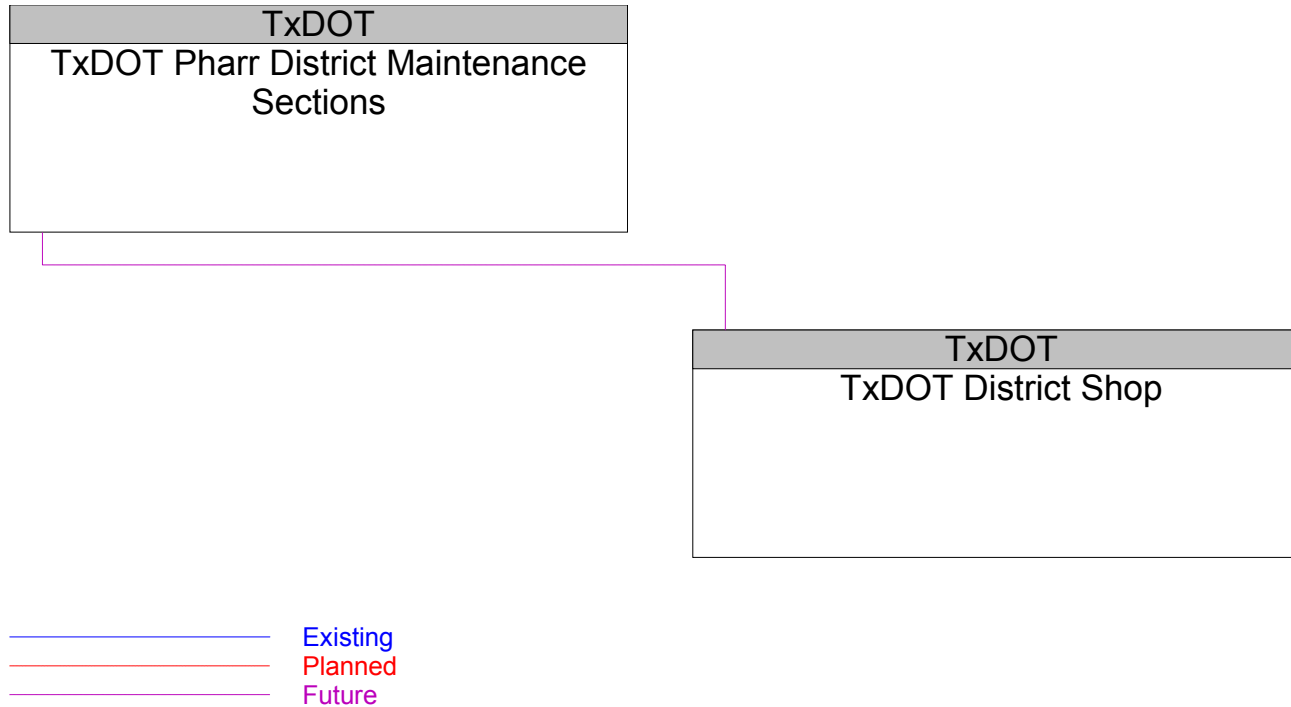


Figure B113 – TxDOT Motor Carrier Routing Information System Interfaces

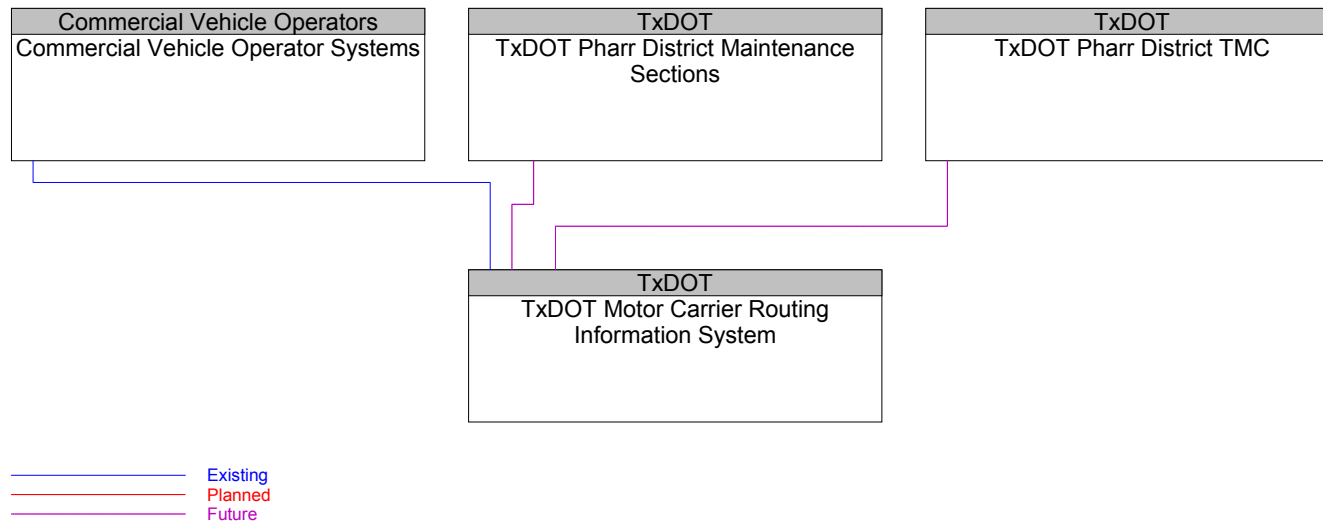


Figure B114 – TxDOT Pharr District Bridge Corridor System Interfaces

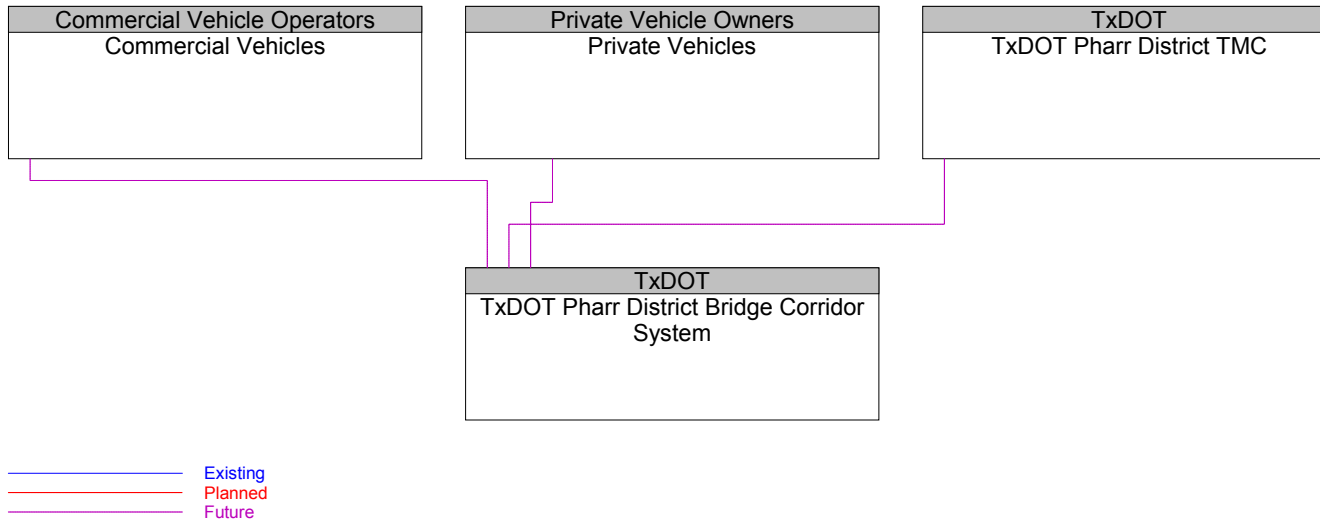


Figure B115 – TxDOT Pharr District CCTV Interfaces

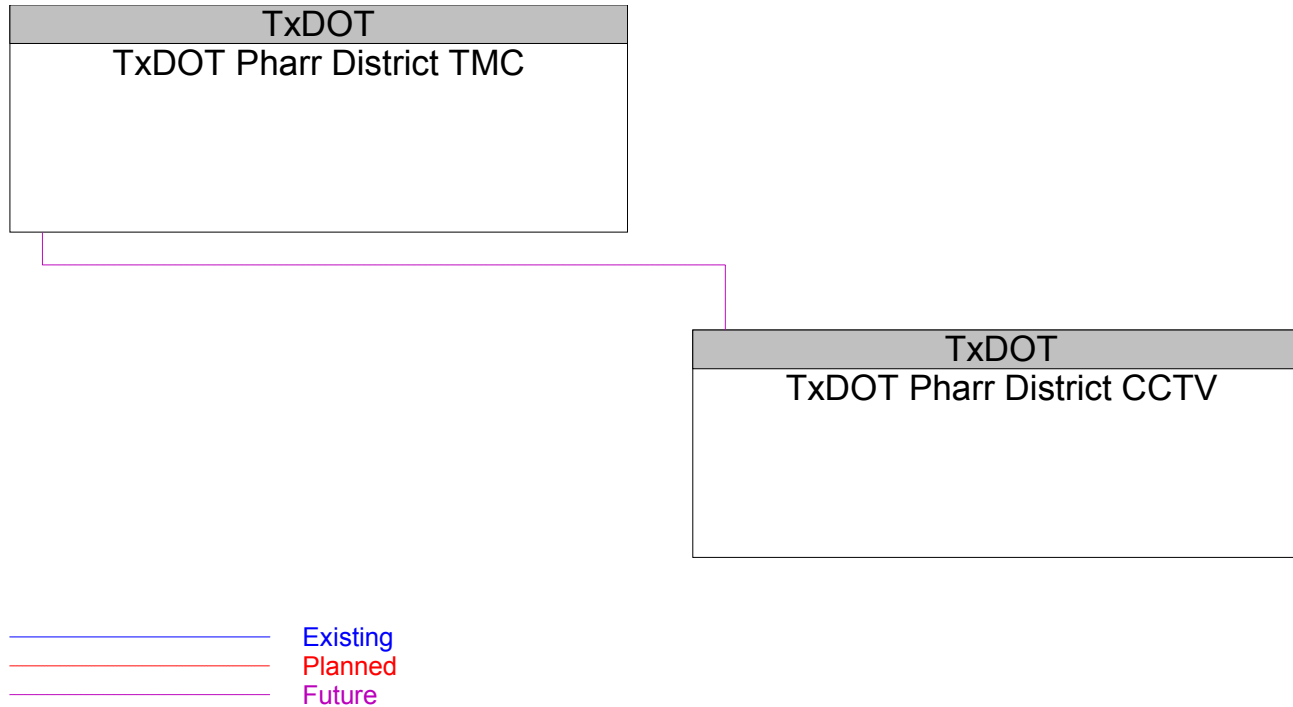


Figure B116 – TxDOT Pharr District DMS Interfaces

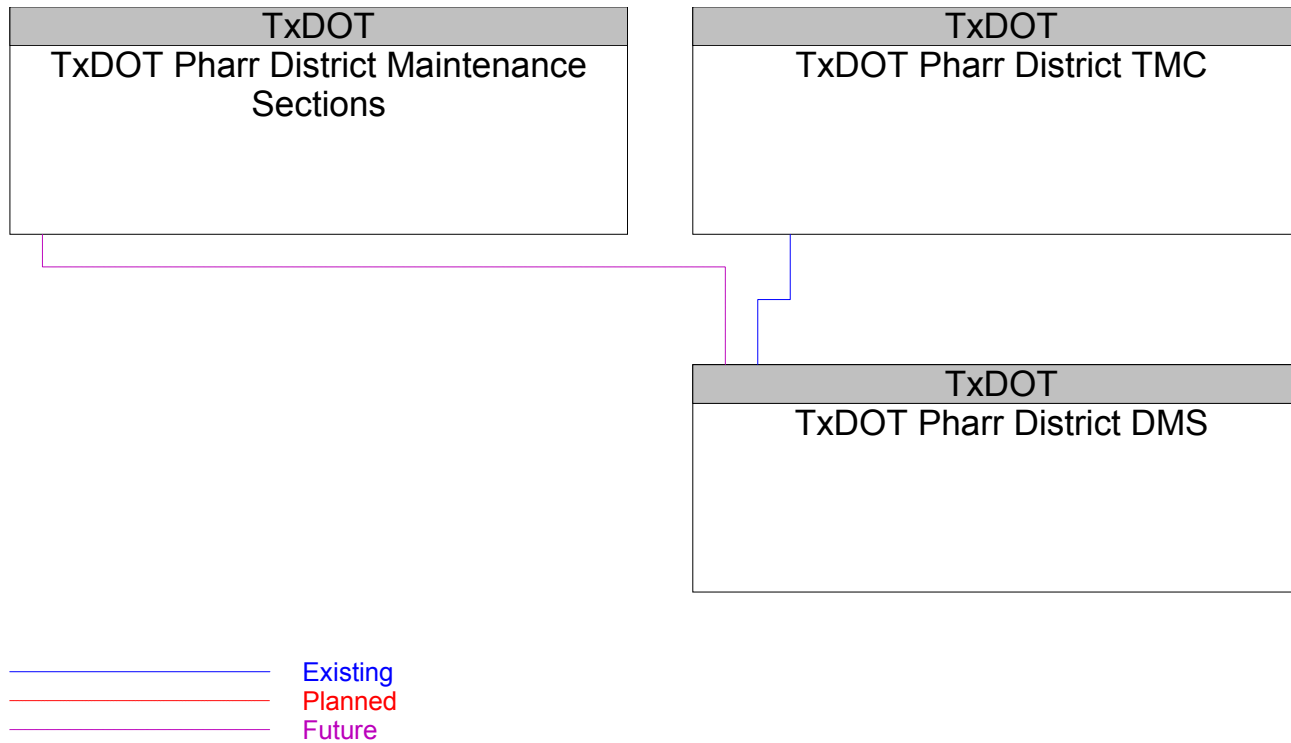


Figure B117 – TxDOT Pharr District Field Sensors Interfaces

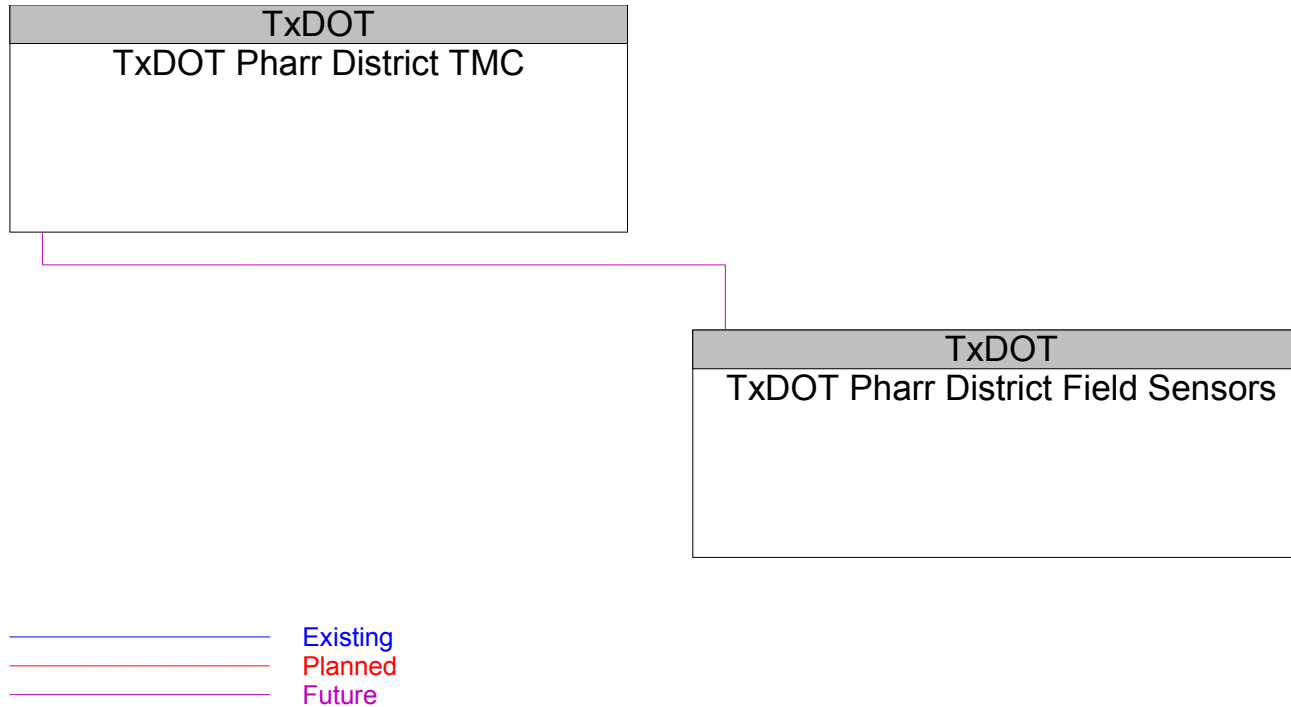


Figure B118 – TxDOT Pharr District Flood Monitoring System Interfaces

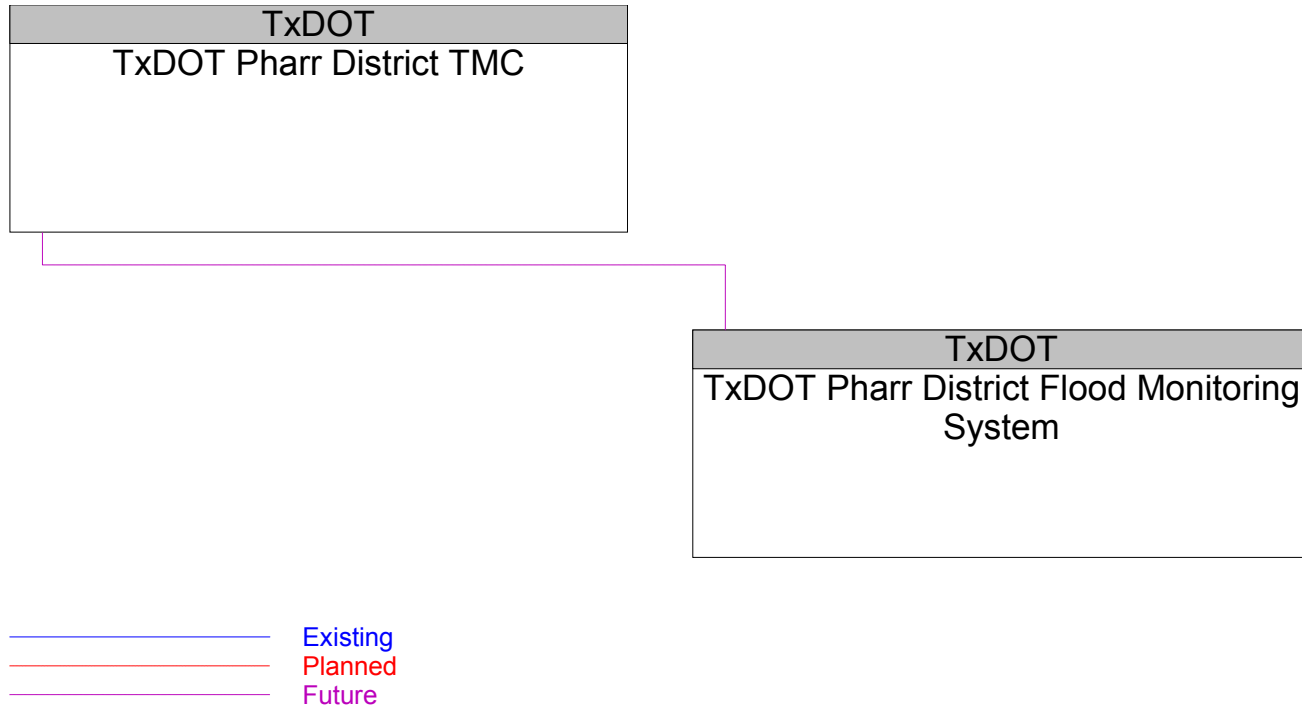


Figure B119 – TxDOT Pharr District HAR Interfaces

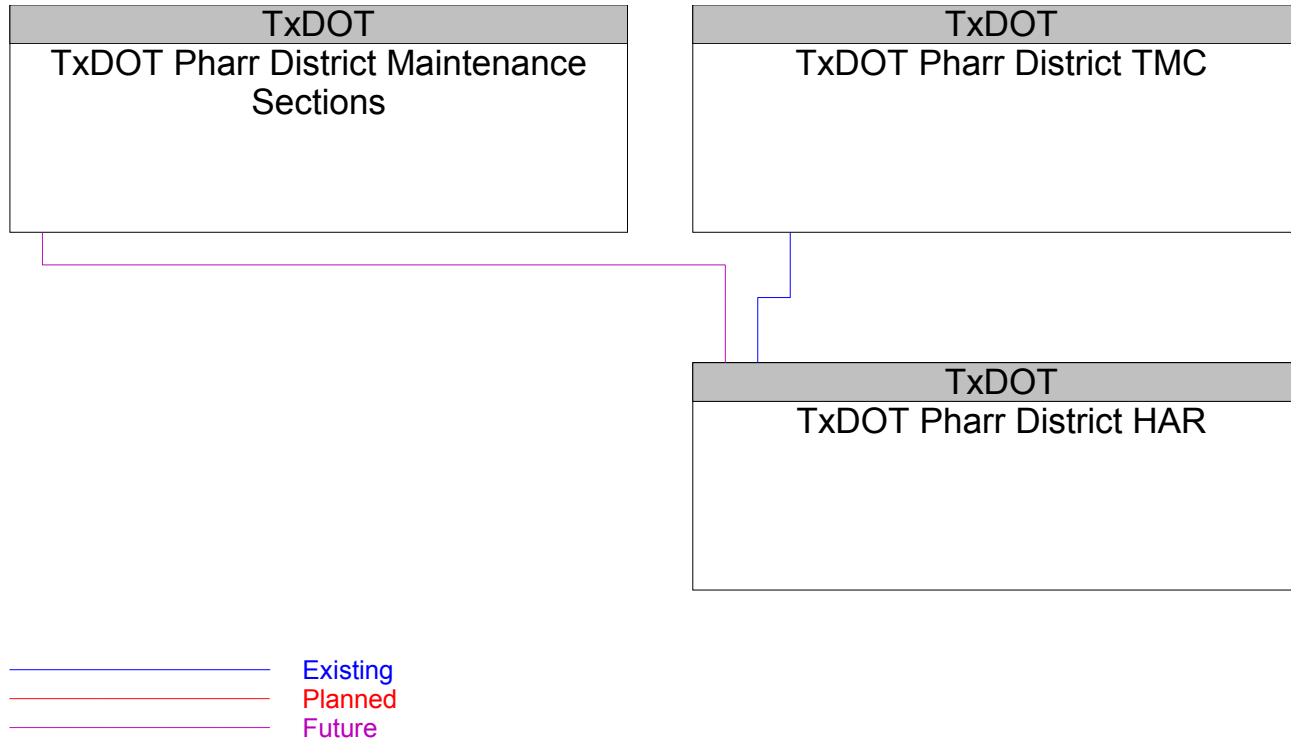


Figure B120 – TxDOT Pharr District HCRS Interfaces

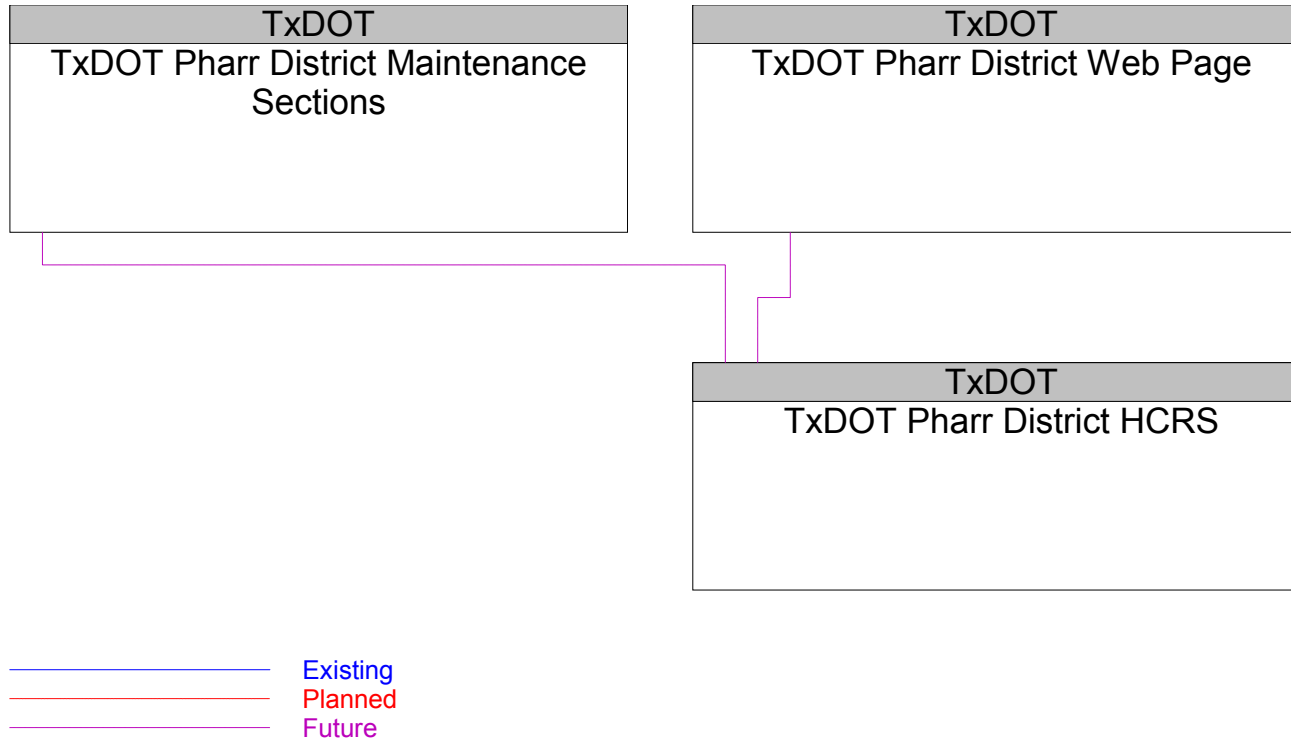


Figure B121 – TxDOT Pharr District Lane Control Signals Interfaces

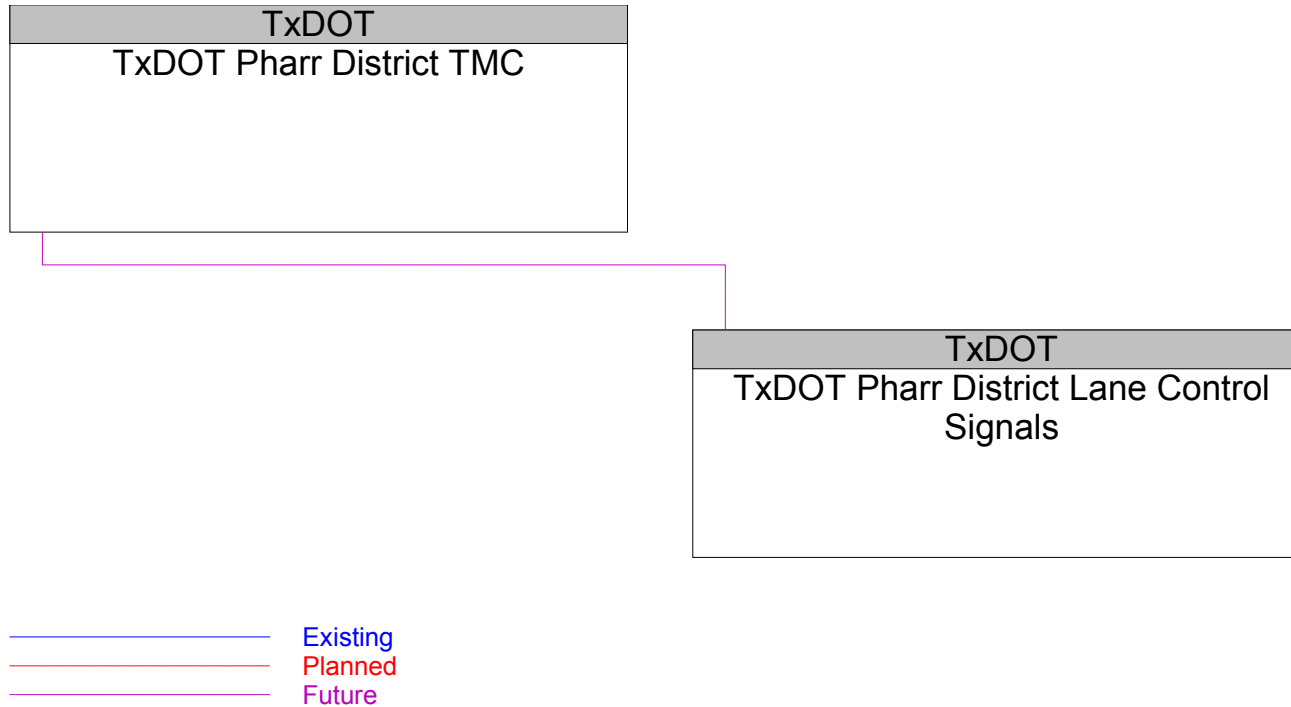


Figure B122 – TxDOT Pharr District Maintenance Section Yard Interfaces

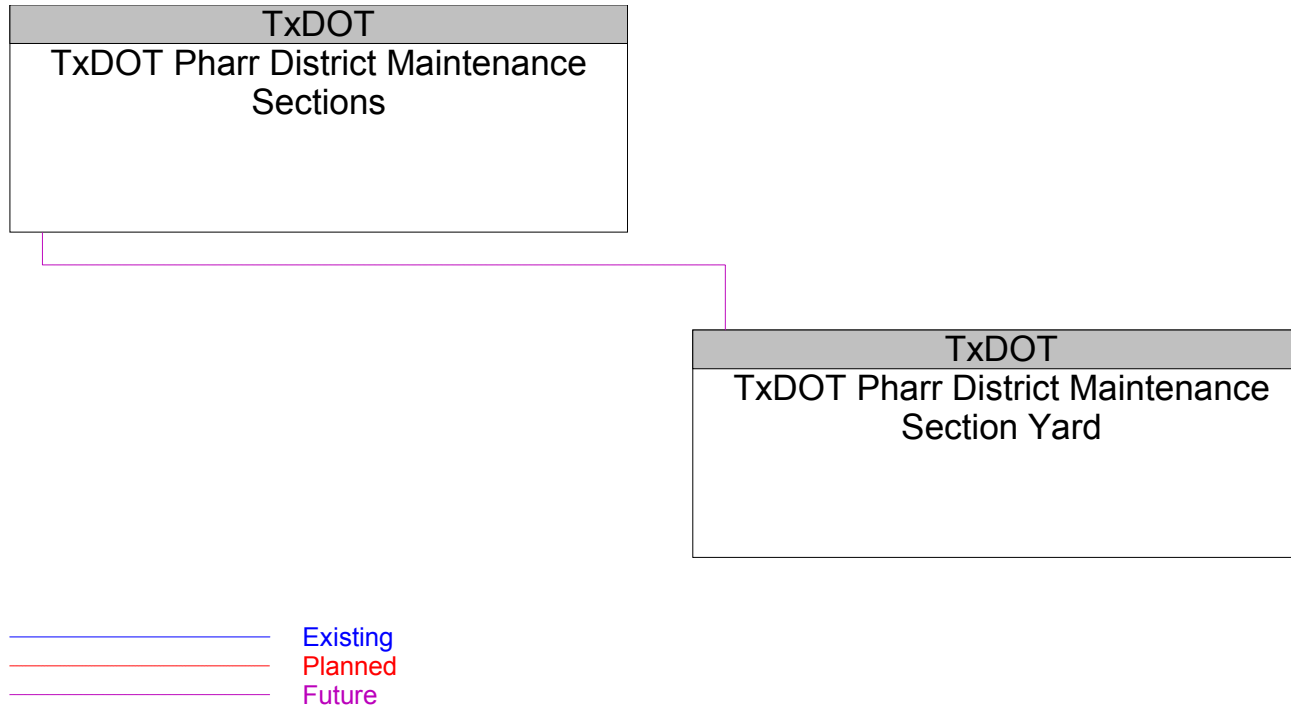


Figure B123 – TxDOT Pharr District Maintenance Sections Interfaces

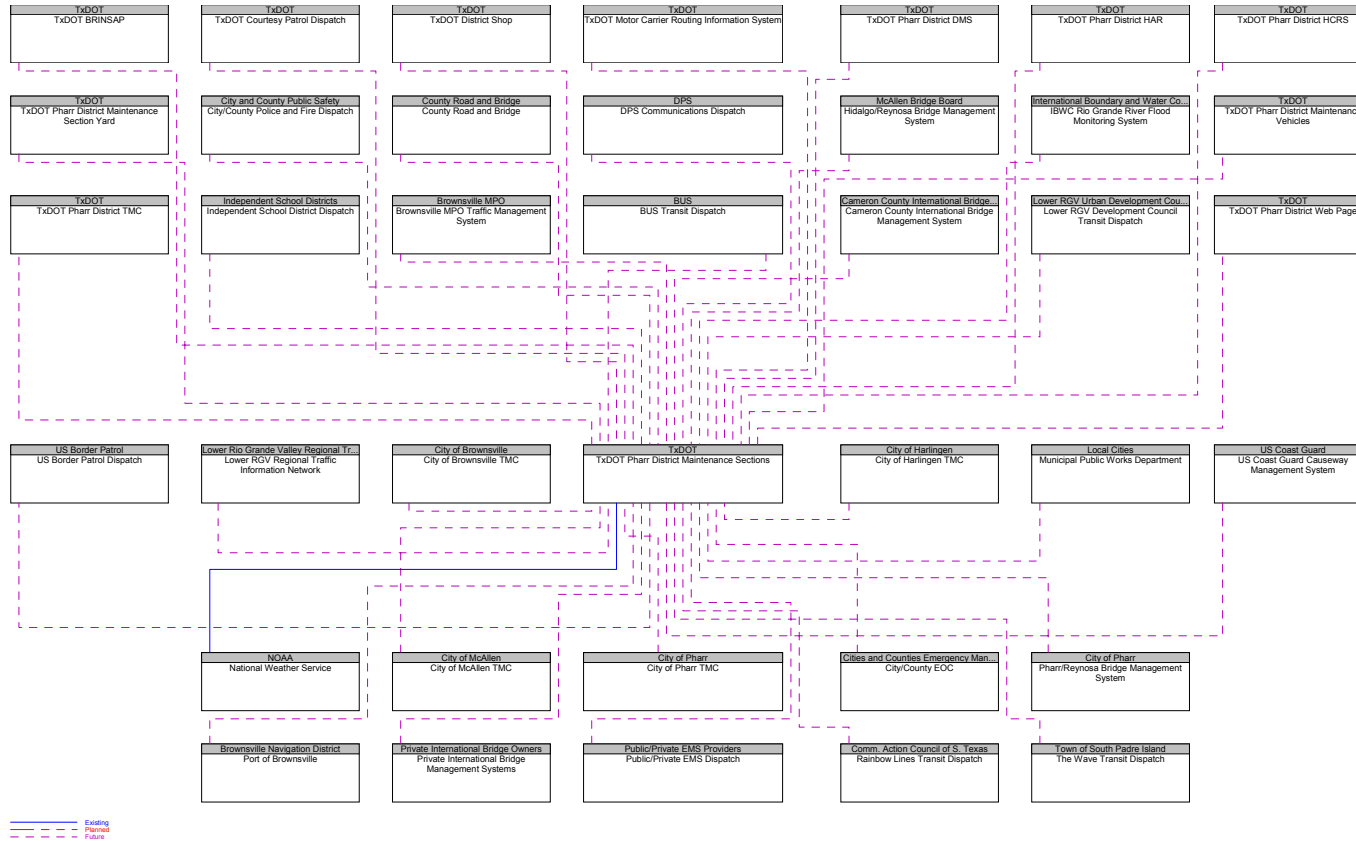


Figure B124 – TxDOT Pharr District Maintenance Vehicles Interfaces

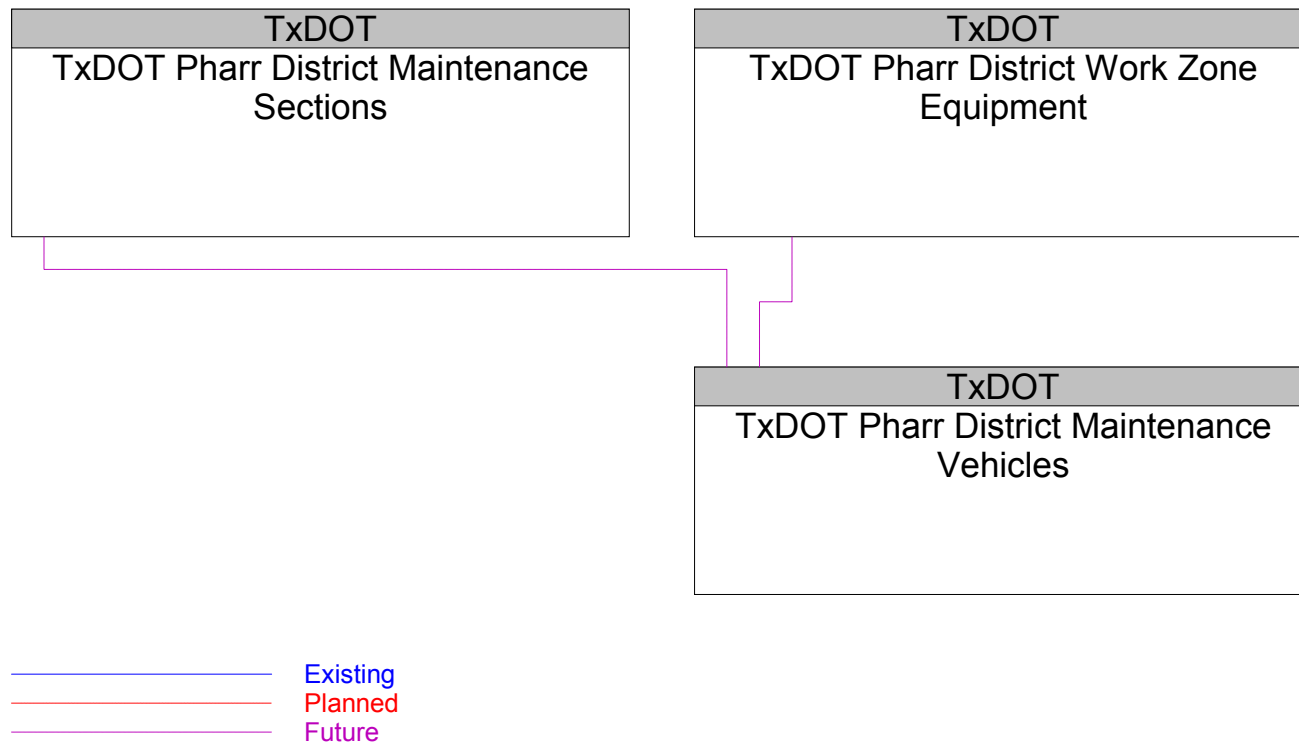


Figure B125 – TxDOT Pharr District Pavement Data Collection System Interfaces

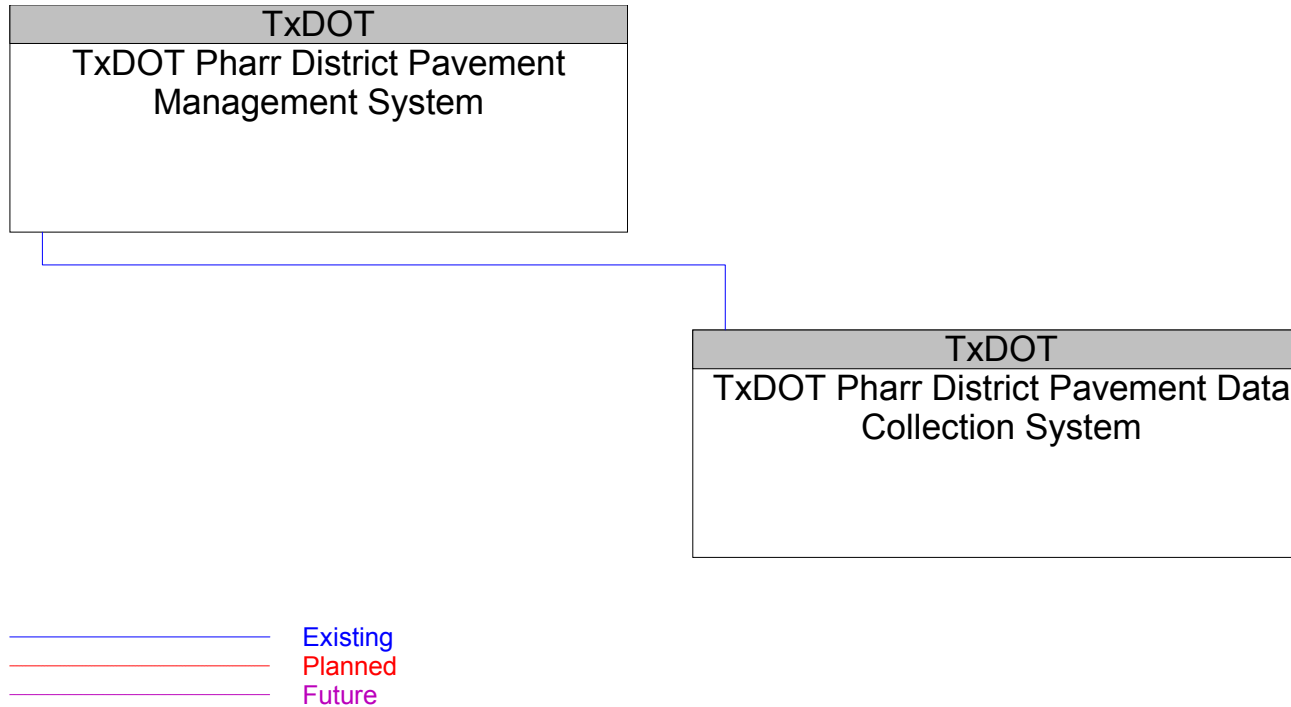


Figure B126 – TxDOT Pharr District Pavement Management System Interfaces

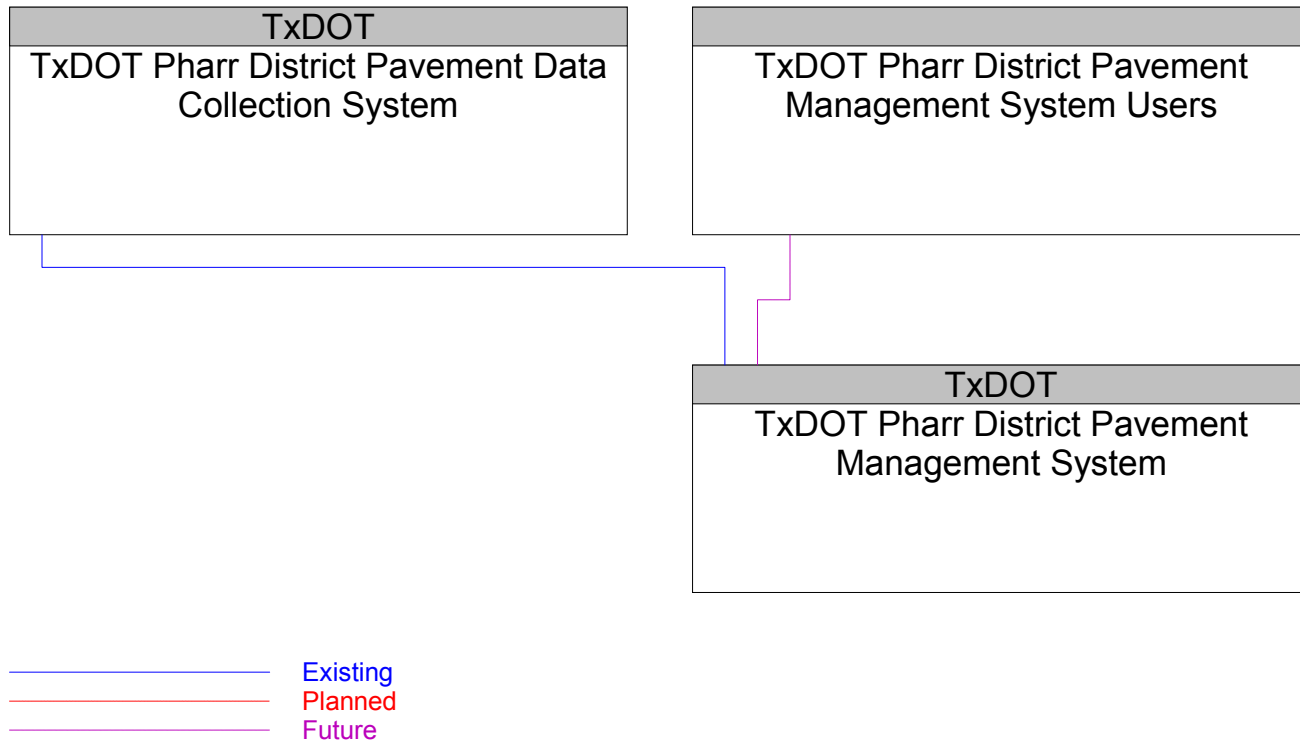


Figure B127 – TxDOT Pharr District Pavement Management System Users Interfaces

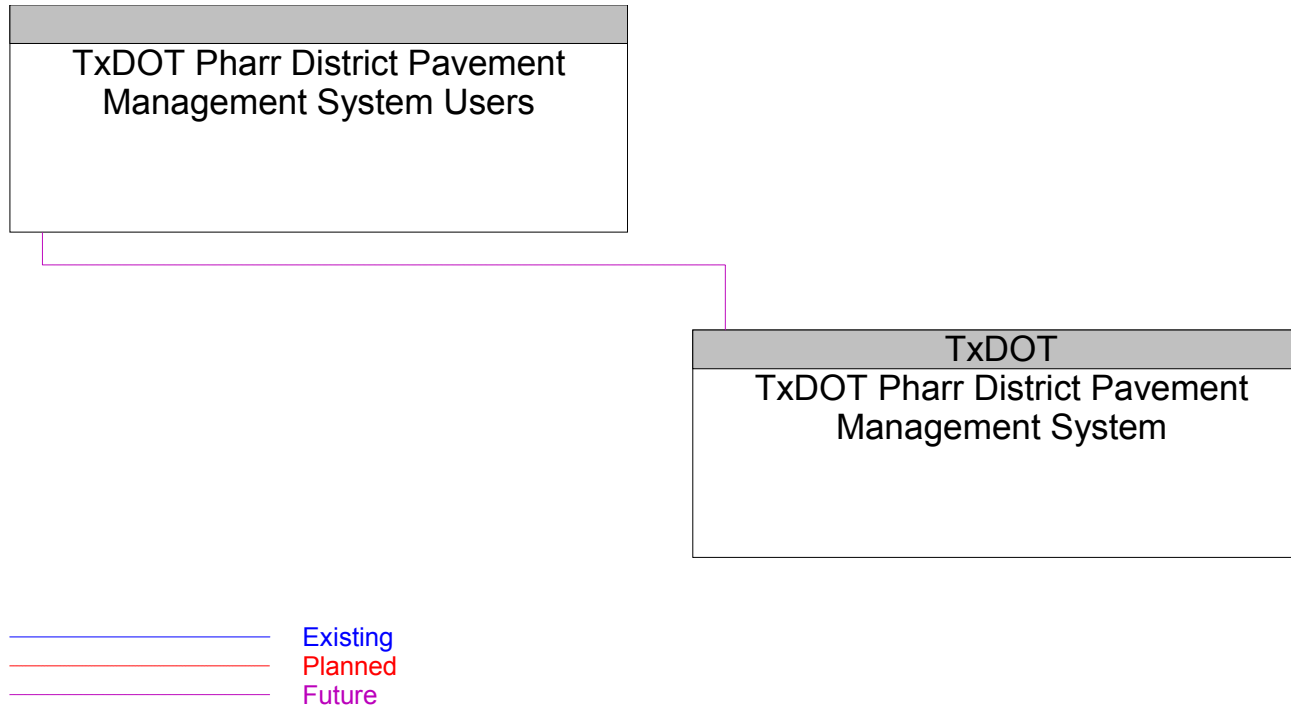


Figure B128 – TxDOT Pharr District TMC Interfaces

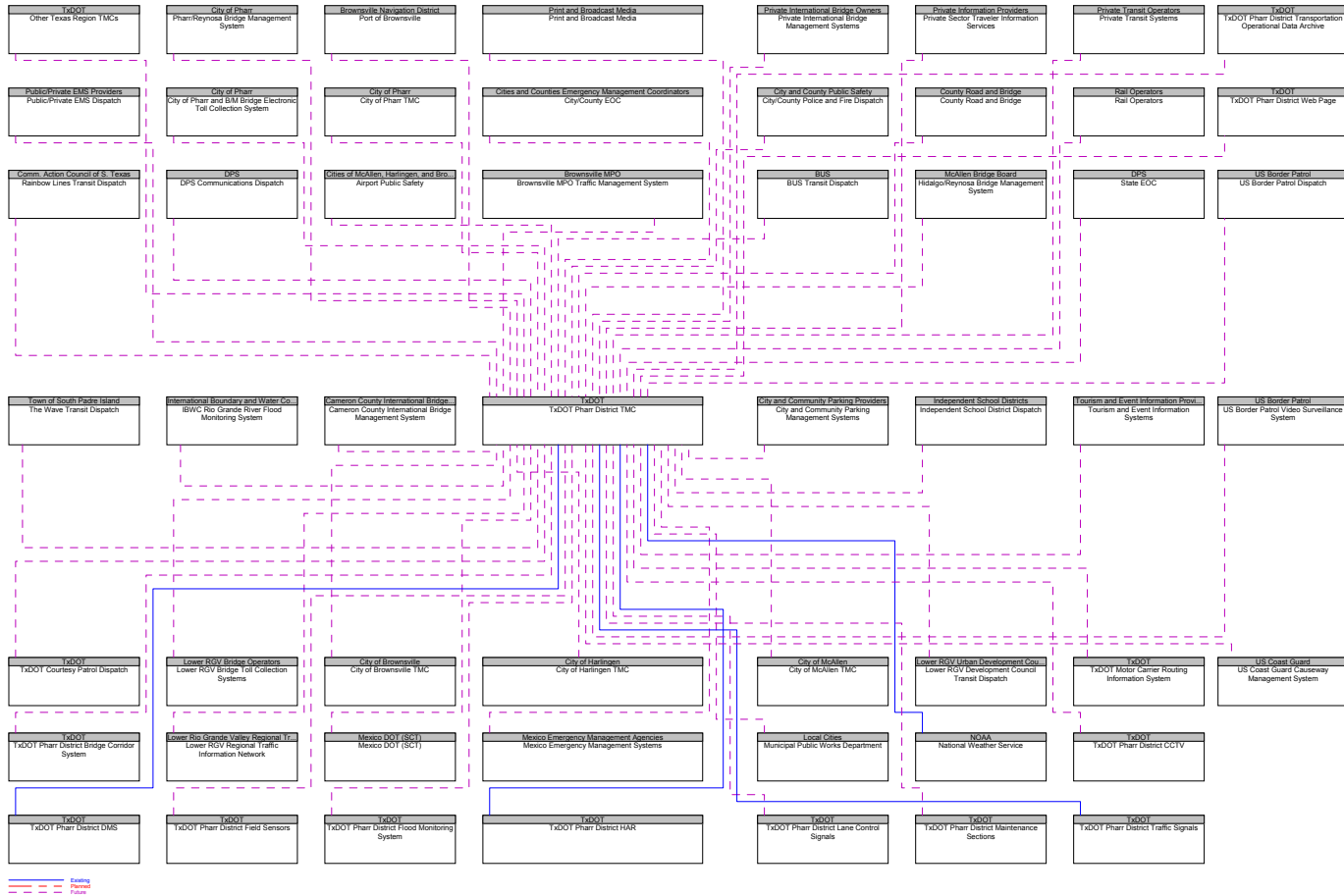


Figure B129 – TxDOT Pharr District Traffic Signals Interfaces

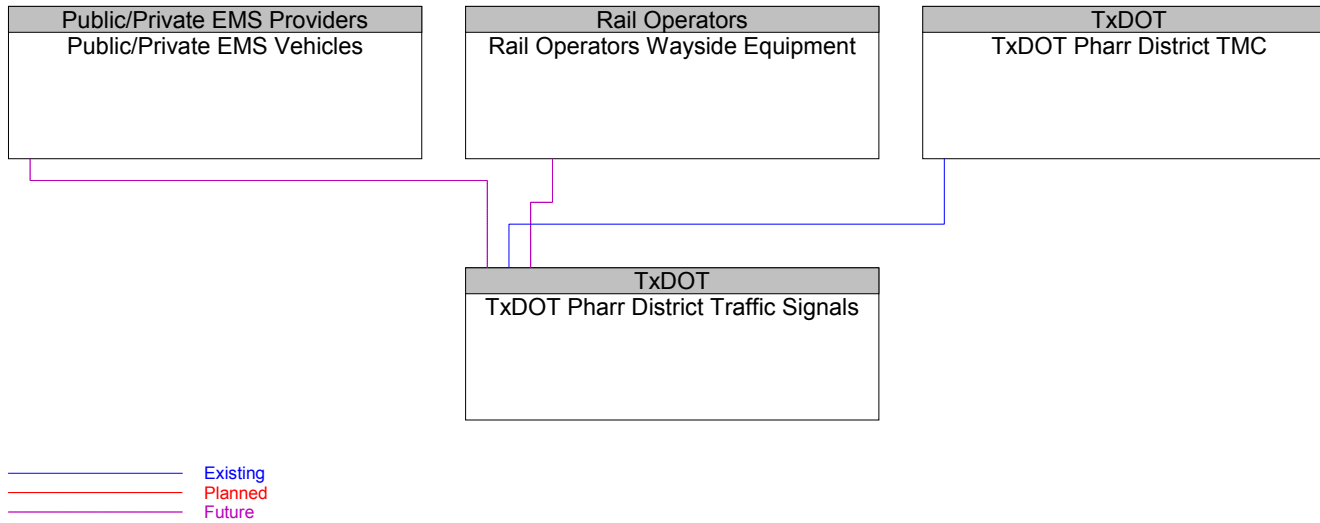


Figure B130 – TxDOT Pharr District Transportation Operational Data Archive Interfaces

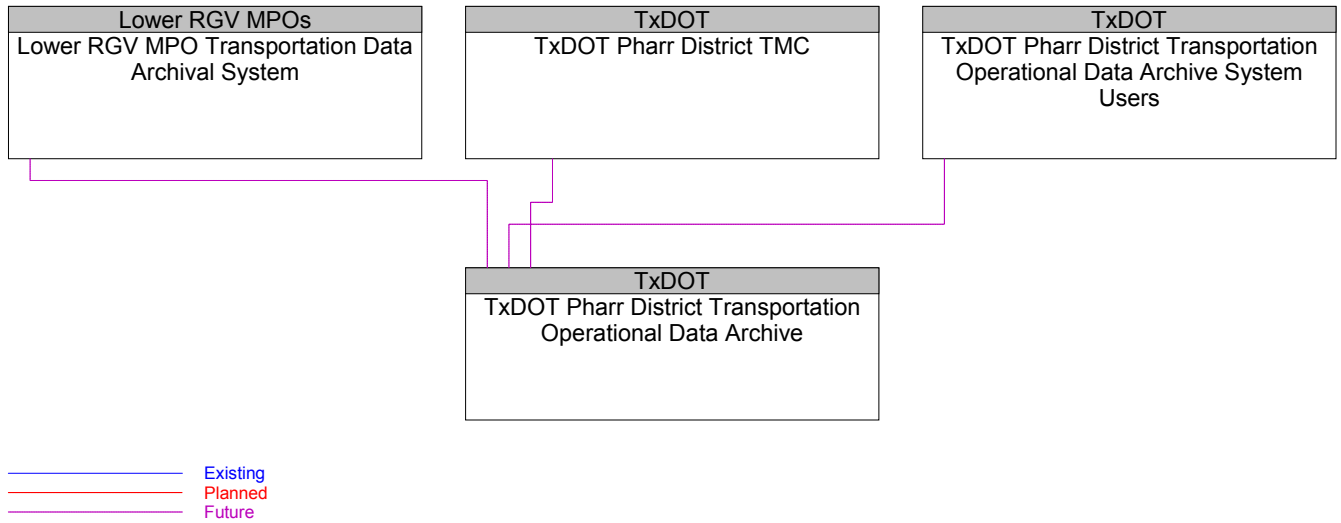


Figure B131 – TxDOT Pharr District Transportation Operational Data Archive System Users Interfaces

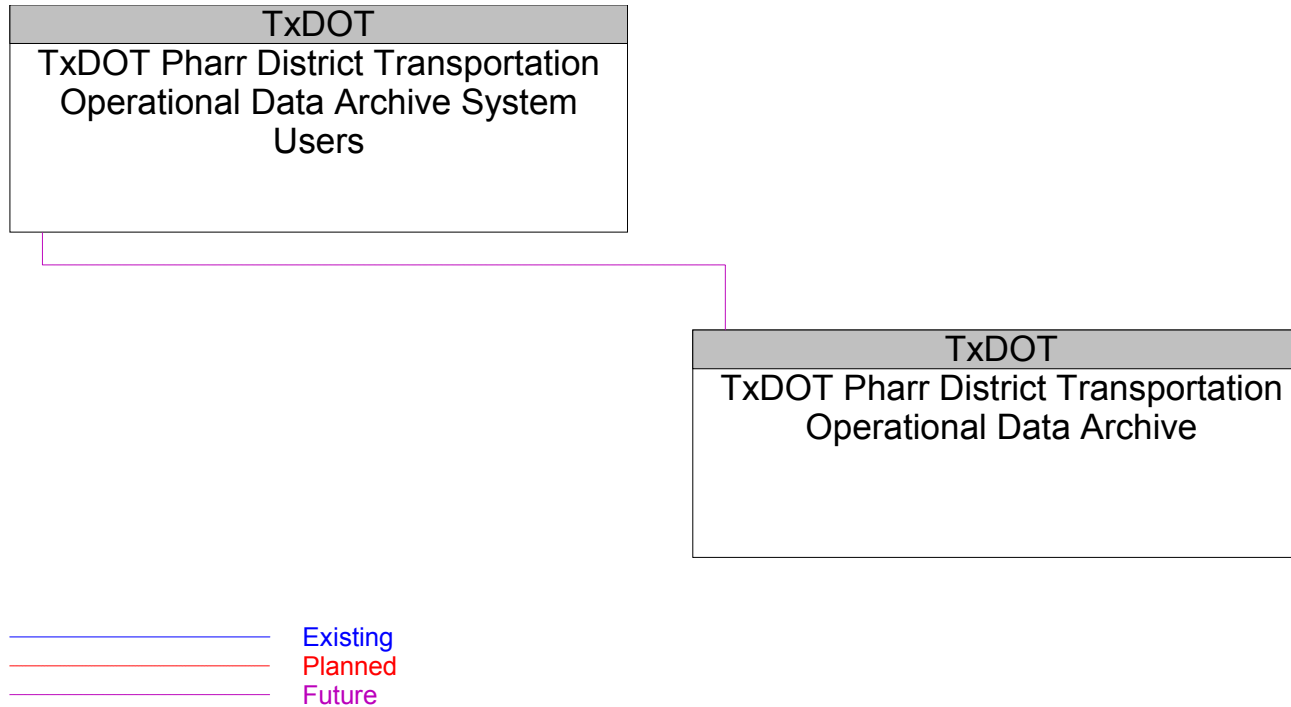


Figure B132 – TxDOT Pharr District Web Page Interfaces

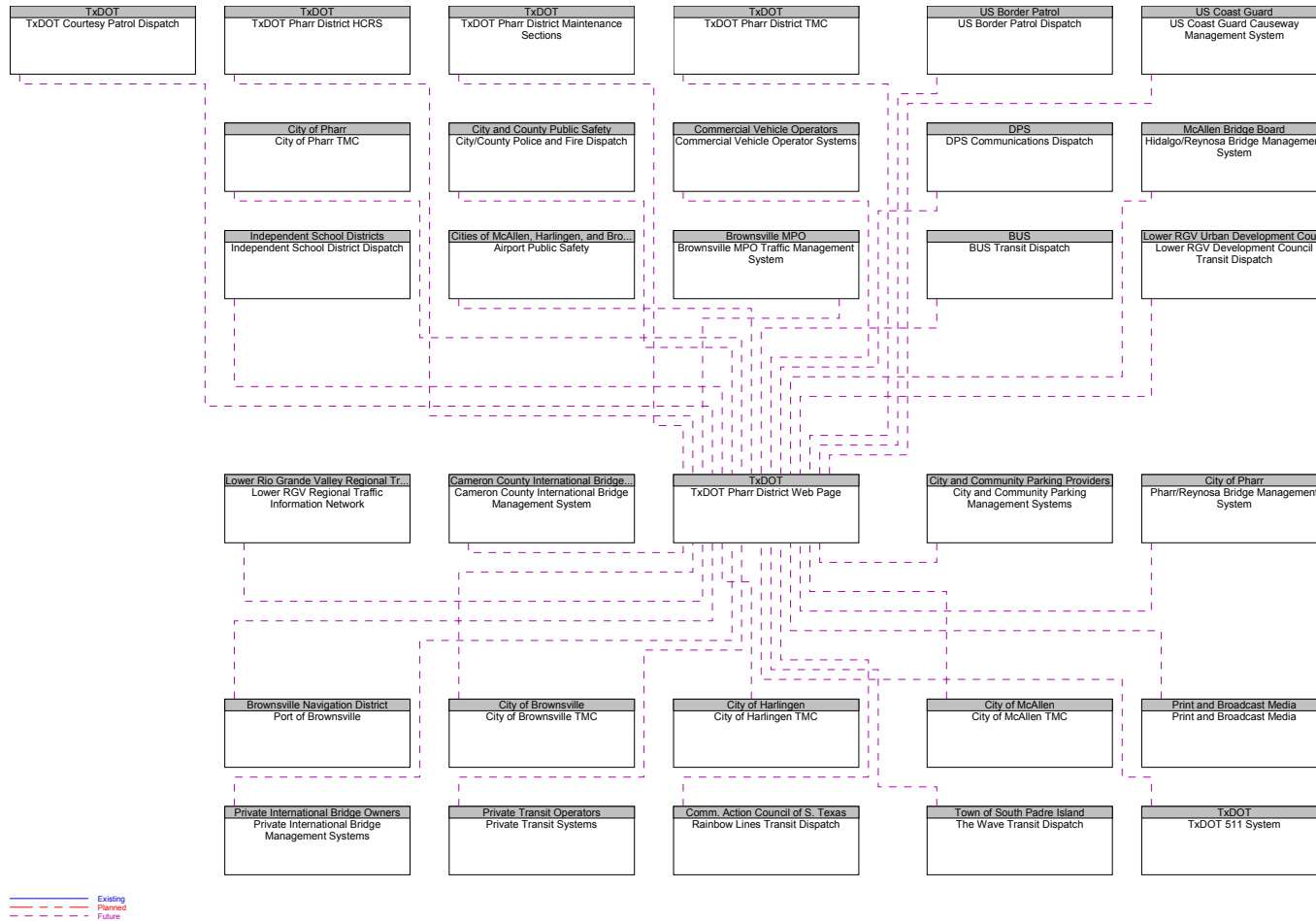


Figure B133 – TxDOT Pharr District Work Zone Equipment Interfaces

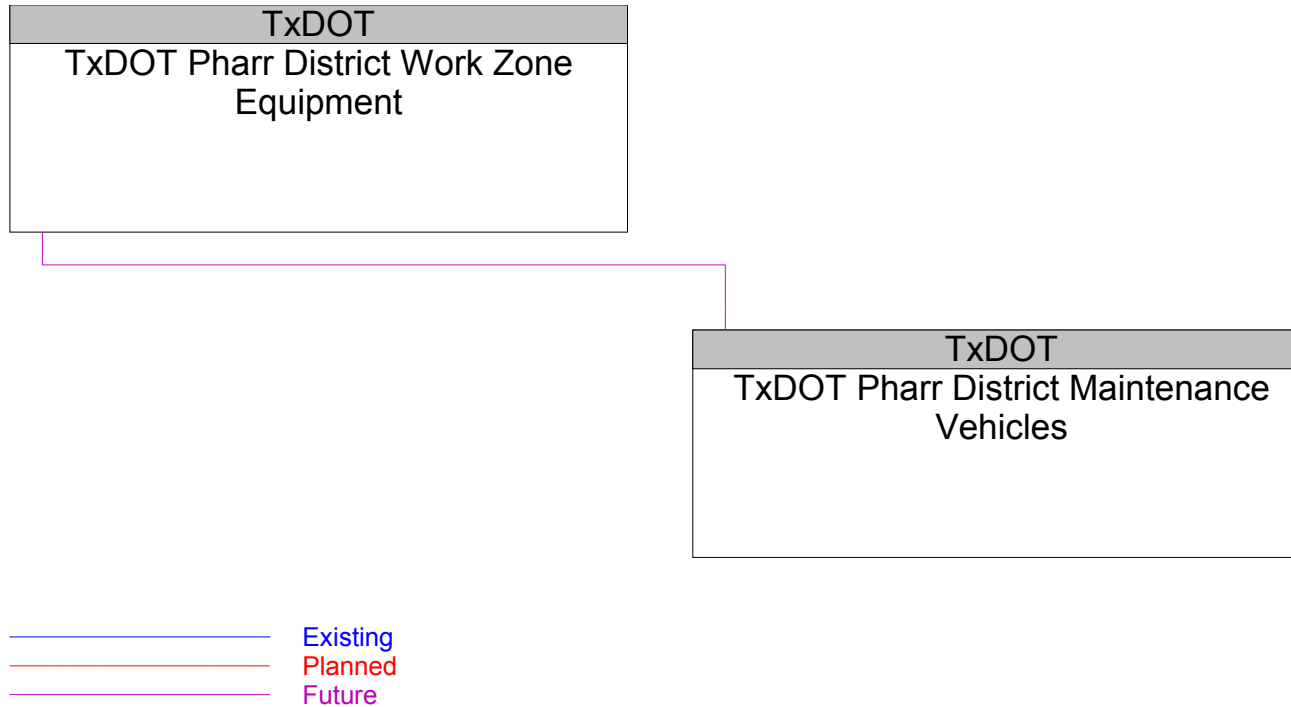


Figure B134 – TxDOT Weigh-in-Motion Sites Interfaces

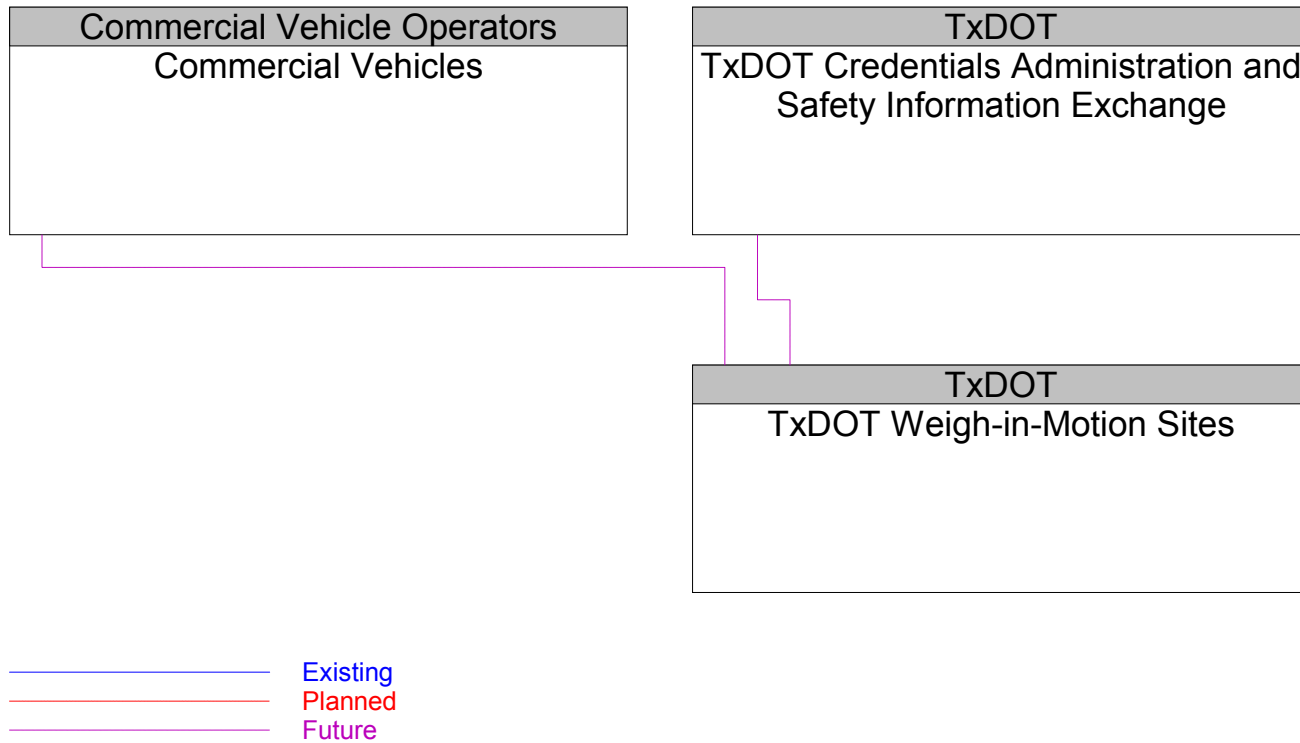


Figure B135 – TxDOT/BND Overweight Corridor System Interfaces

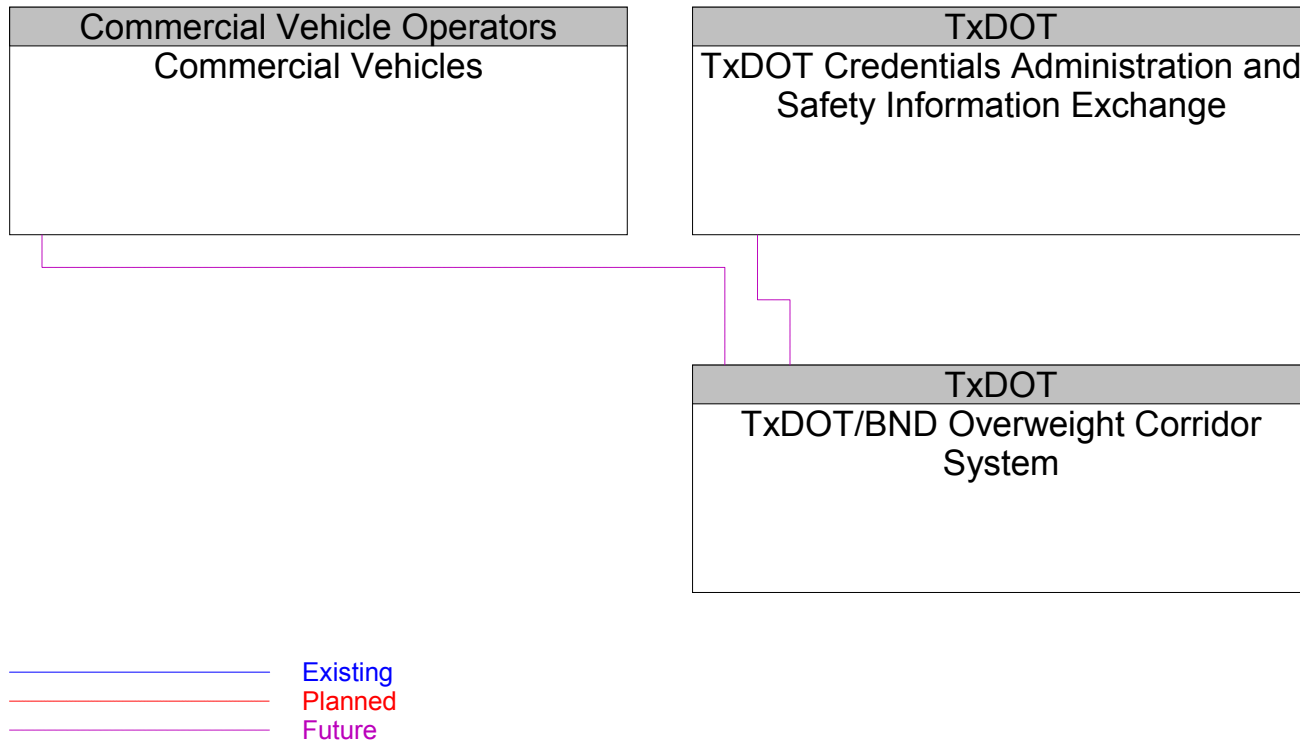


Figure B136 – TxDOT/DPS Crash Record Information System Interfaces

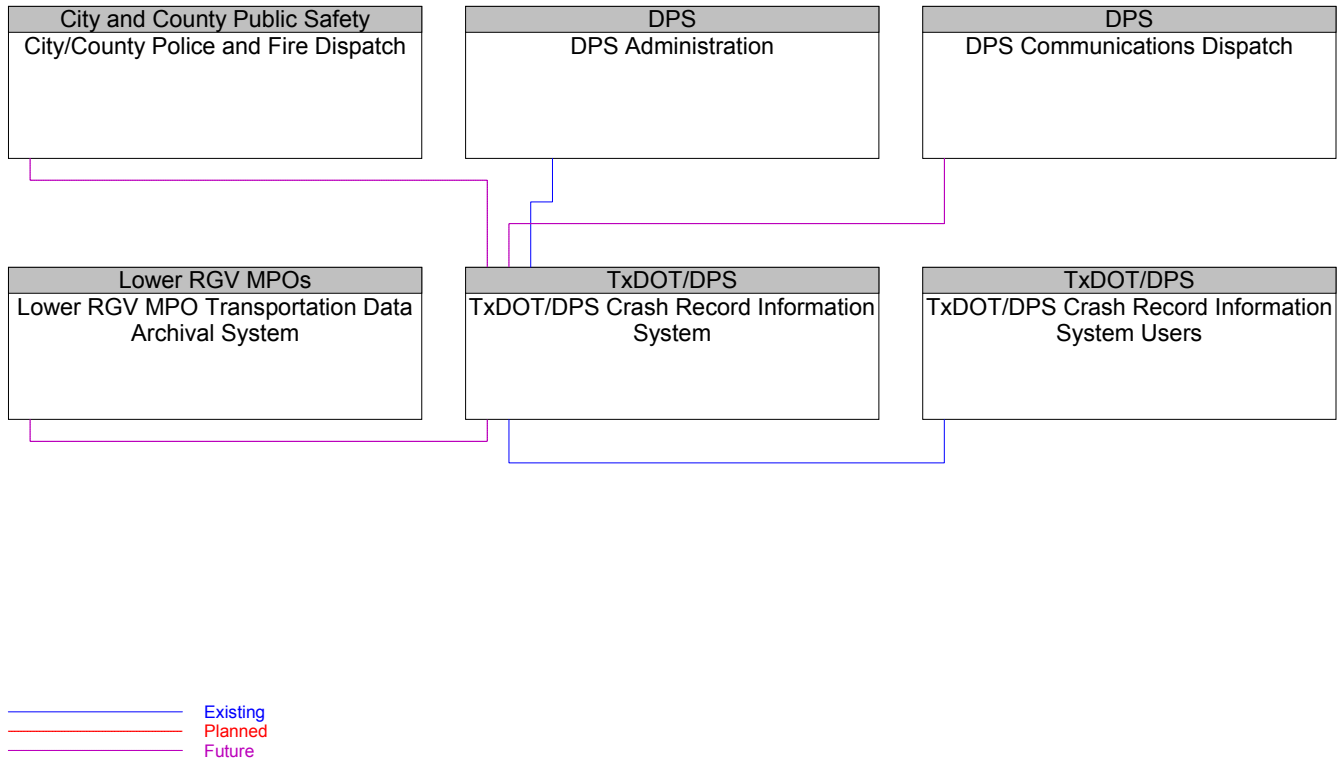


Figure B137 – TxDOT/DPS Crash Record Information System Users Interfaces

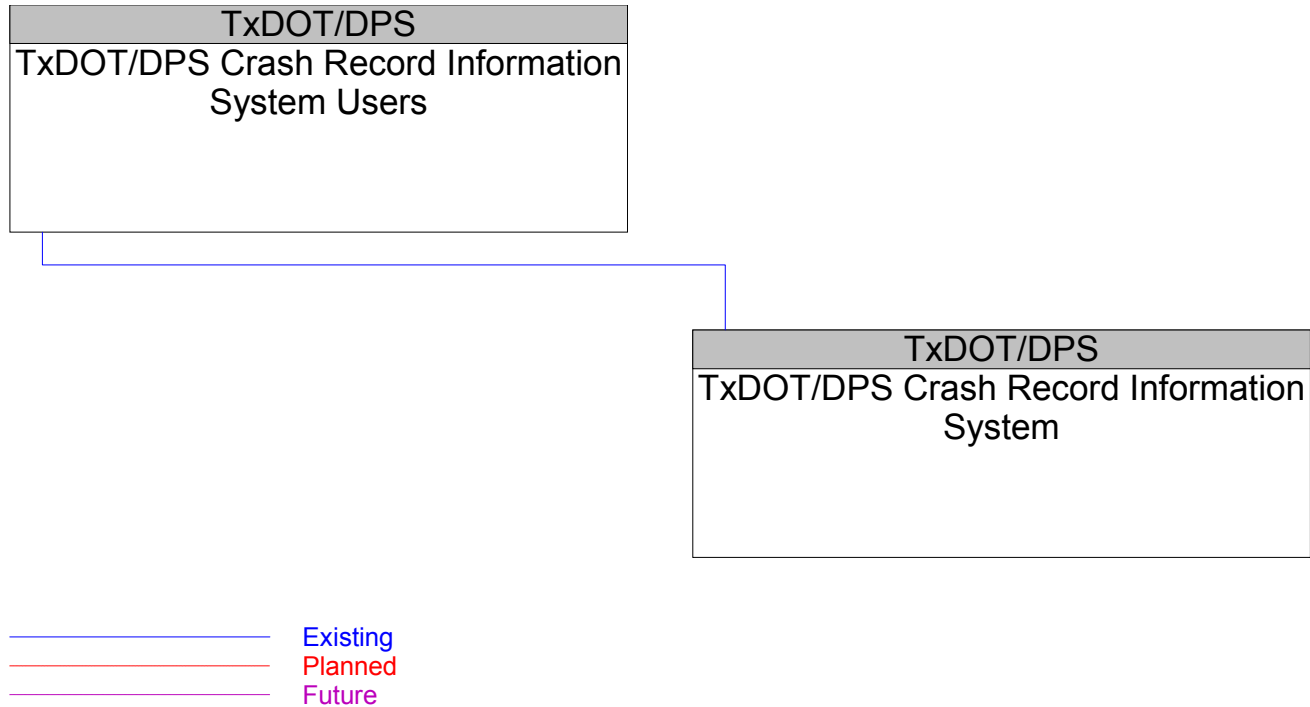


Figure B138 – TxDOT/International Bridges Corridor Archive Interfaces

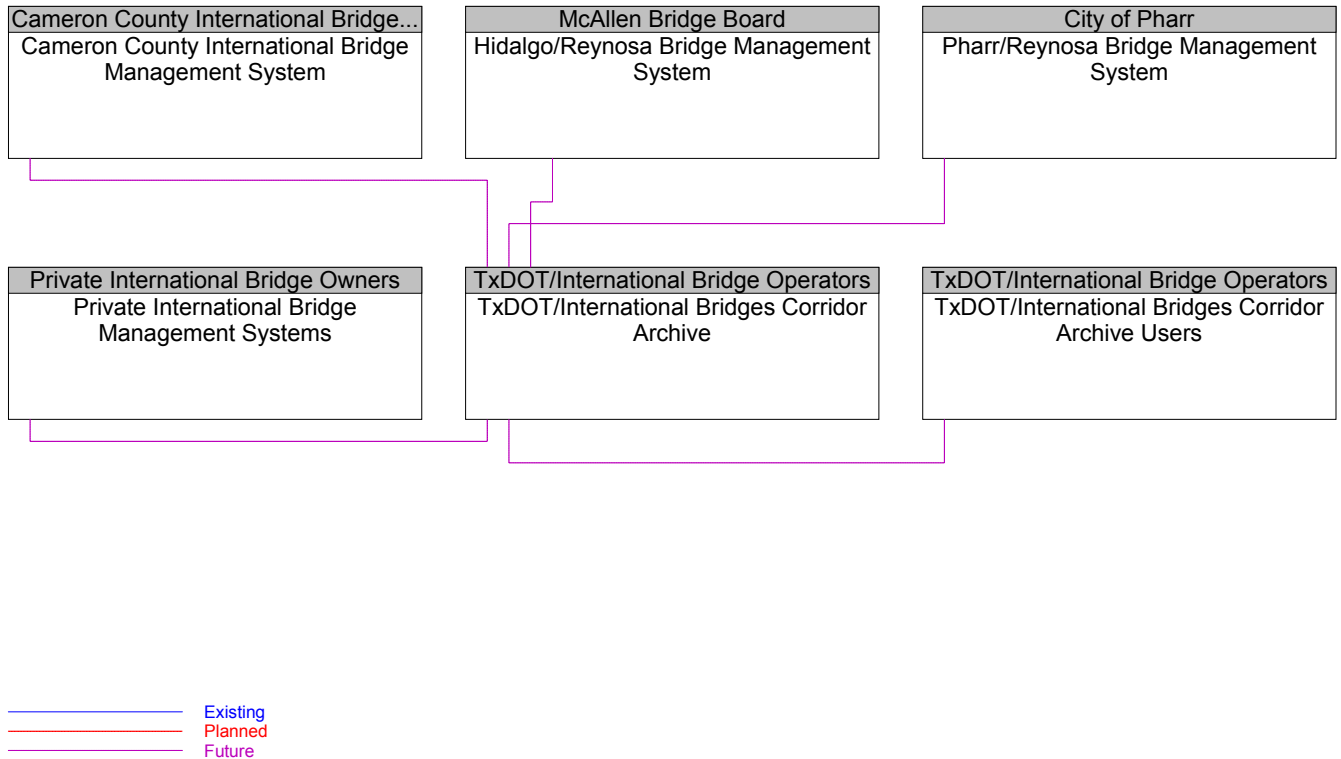


Figure B139 – TxDOT/International Bridges Corridor Archive Users Interfaces

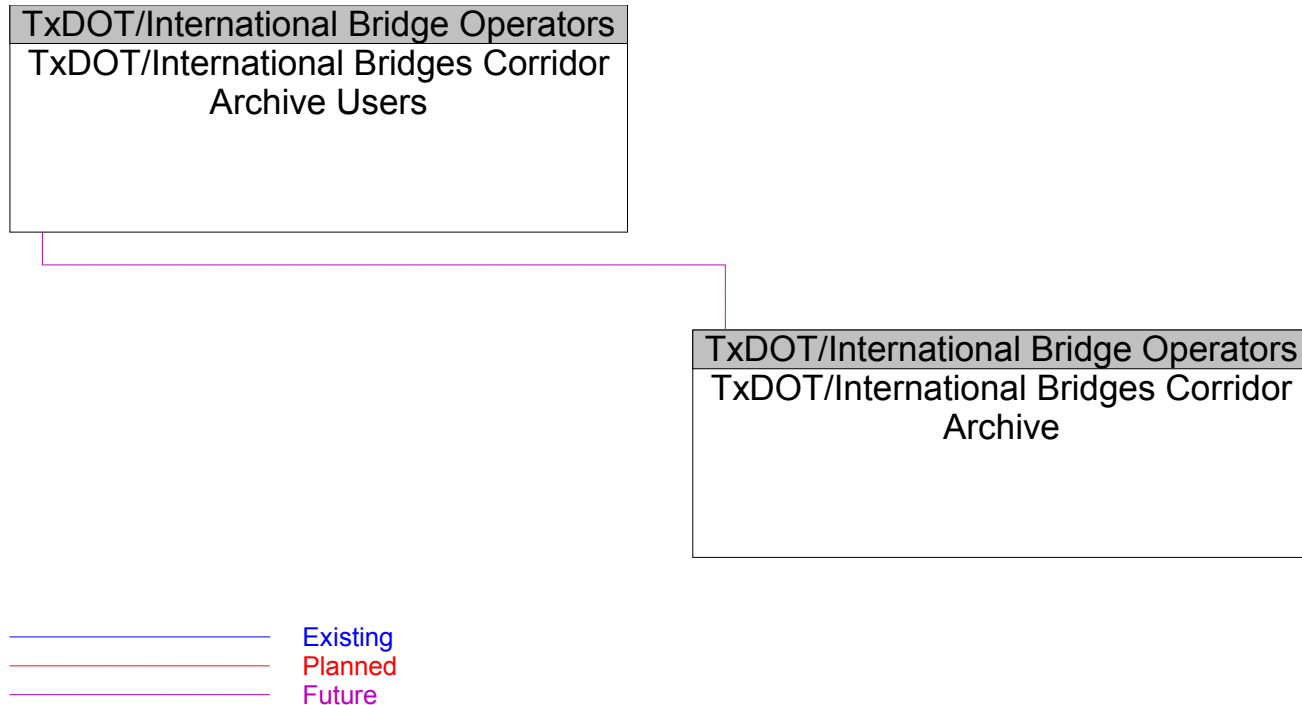


Figure B140 – US Border Patrol Dispatch Interfaces

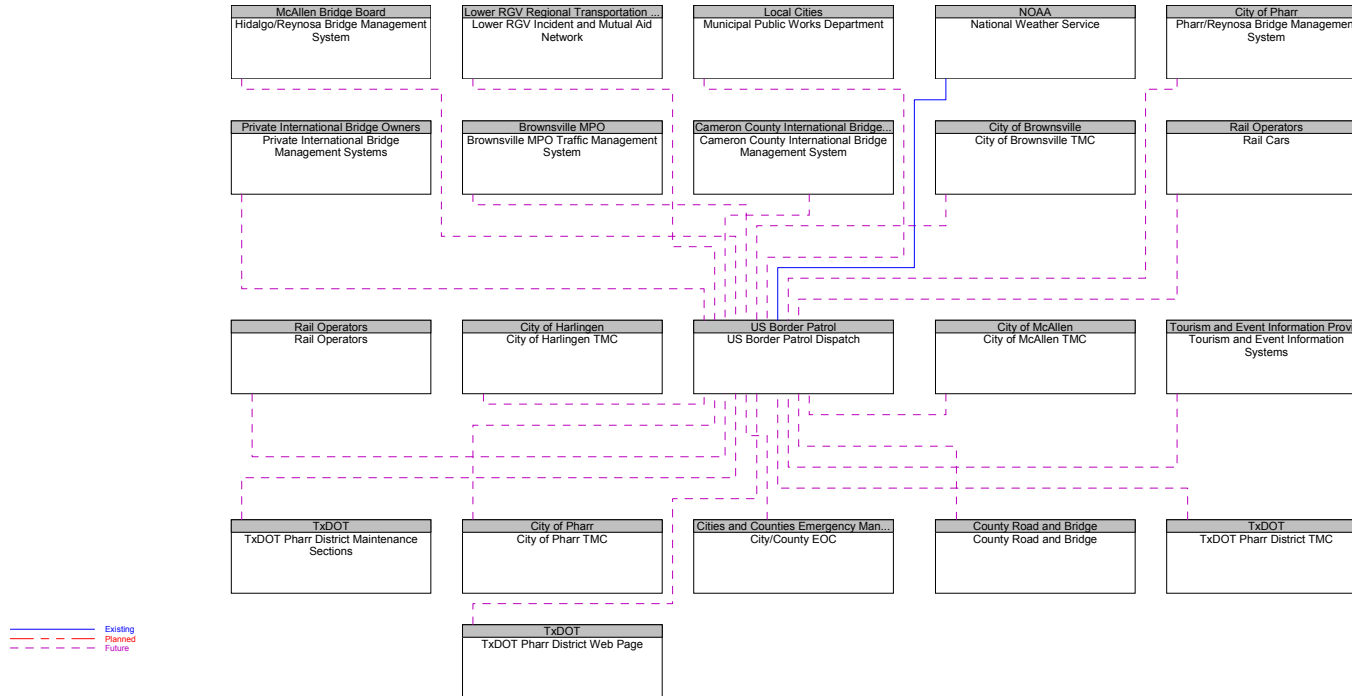


Figure B141 – US Border Patrol Field Equipment Interfaces

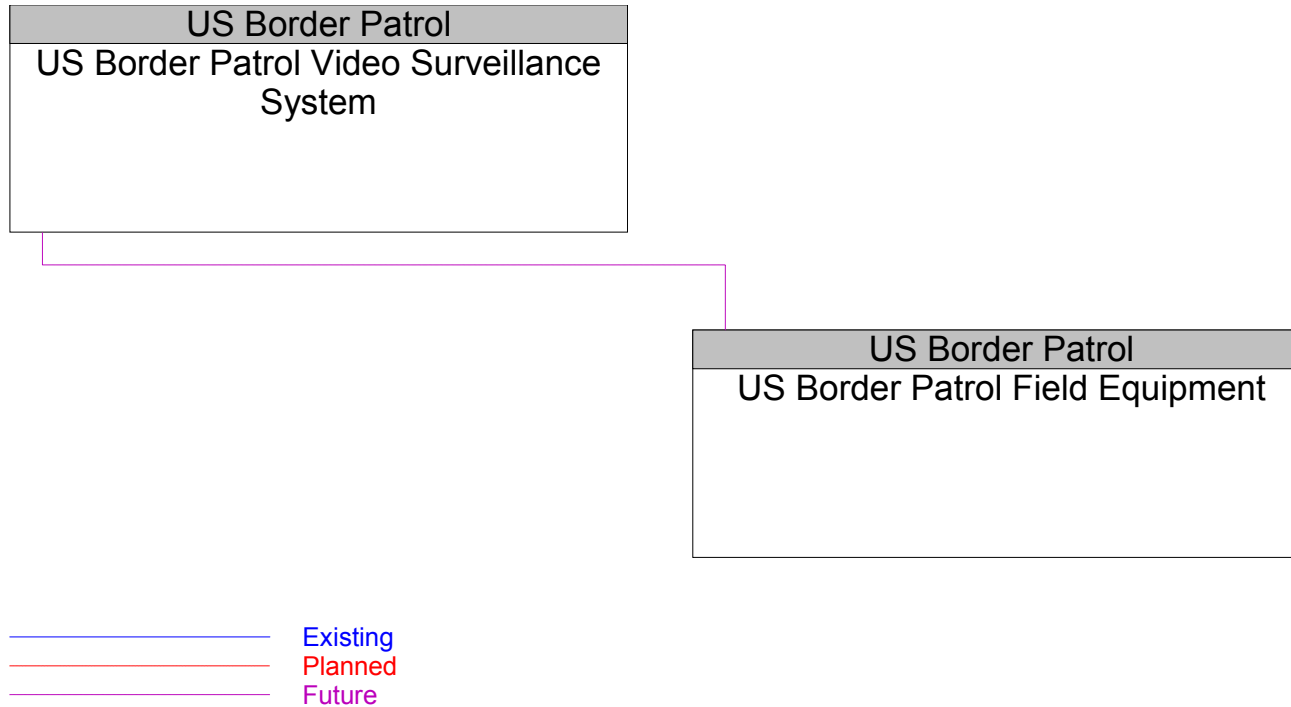


Figure B142 – US Border Patrol Video Surveillance System Interfaces

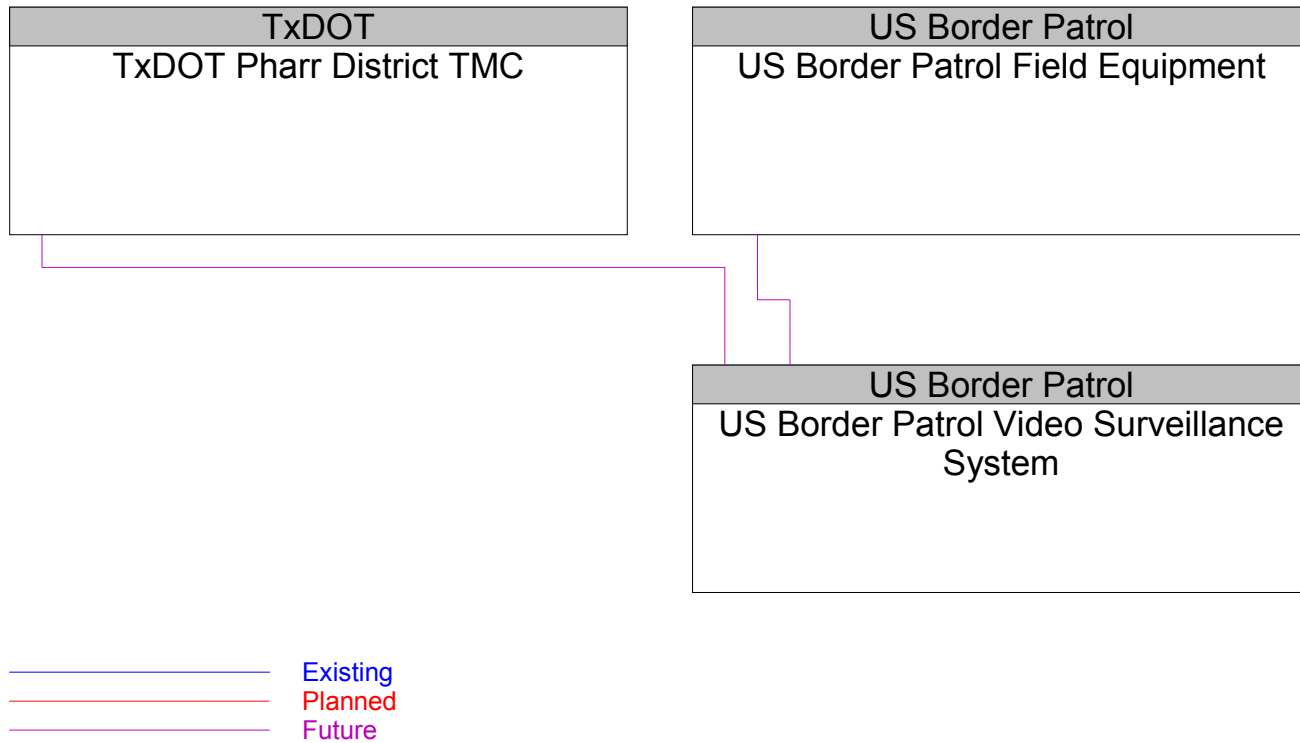


Figure B143 – US Coast Guard Causeway Management System Interfaces

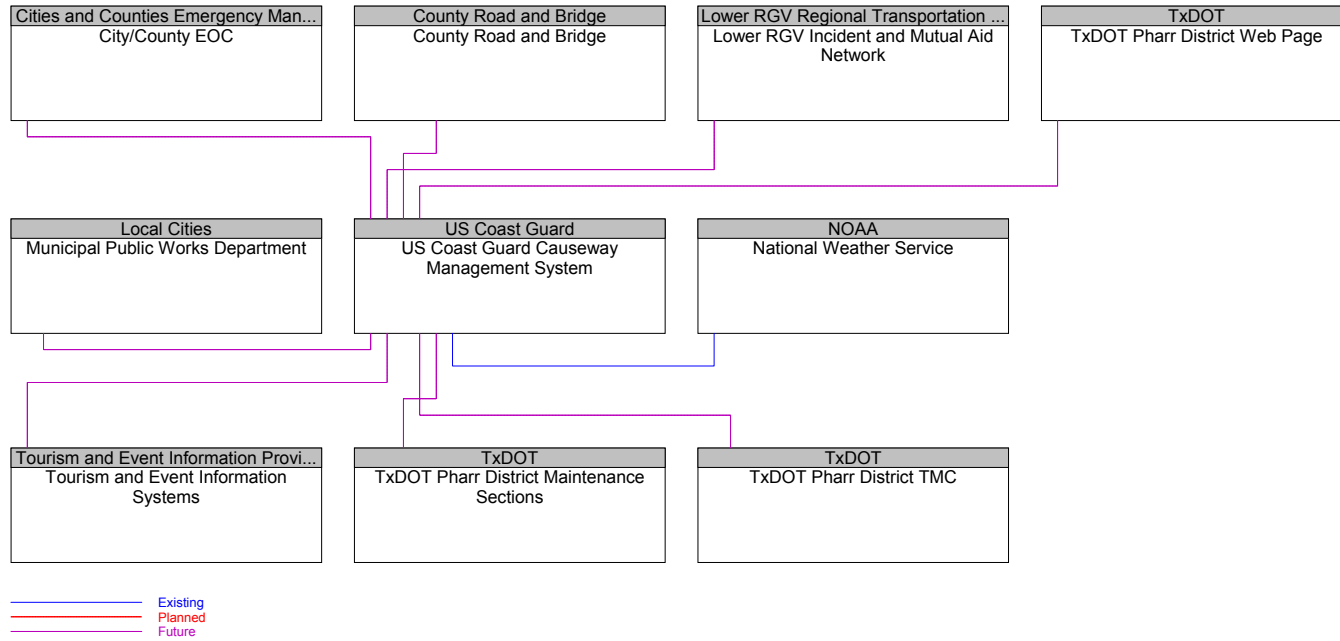


Figure B144 – US Customs Interfaces

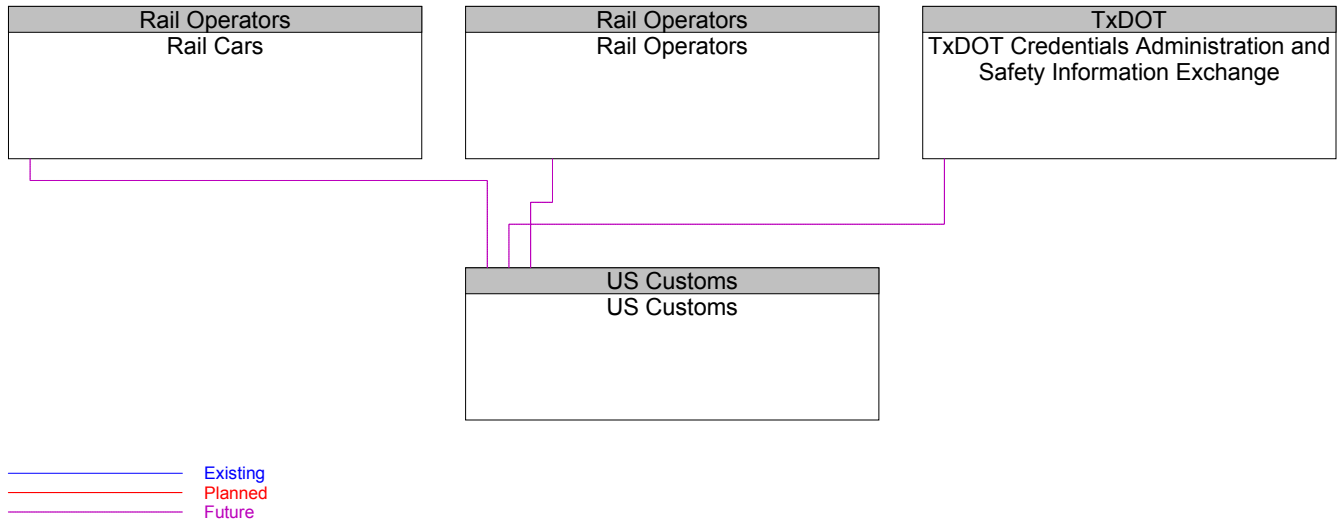
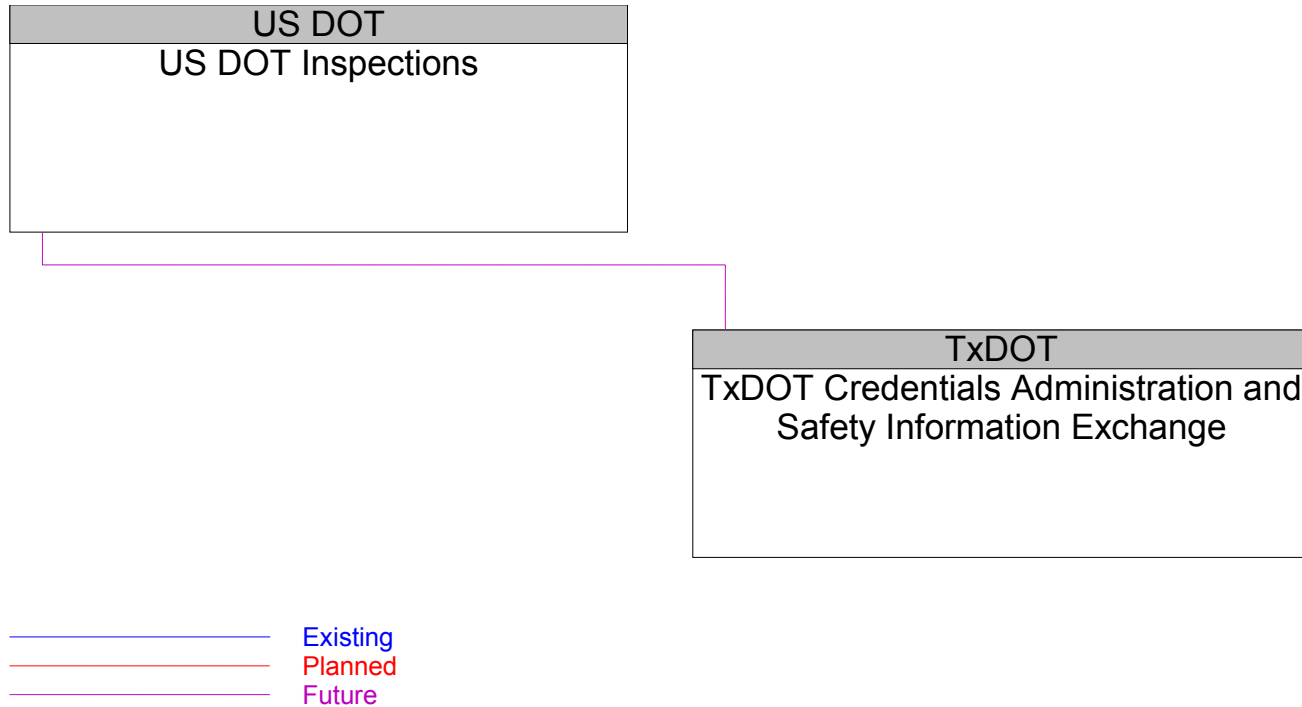


Figure B145 – USDOT Inspections Interfaces





APPENDIX C – AGREEMENTS

SUPPLEMENTAL AGREEMENT NO. 1
TO
AGREEMENT FOR THE INSTALLATION AND REIMBURSEMENT FOR THE
OPERATION AND MAINTENANCE OF TRAFFIC SIGNALS
WITHIN A MUNICIPALITY

WHEREAS, on the 3RD day of October, 1968, Agreement for the Installation and Reimbursement for the Operation and Maintenance of Traffic Signals within a Municipality was entered into by and between the Texas Department of Transportation hereinafter called the "State," and the City of BROWNSVILLE, hereinafter called the "City," and subsequently identified the agreement as Contract No. XXM5004 (Previous) 6066-28-001 (New); and

WHEREAS, the parties to this agreement have mutually determined that it is necessary to amend the original agreement due to the following reason/reasons:

Additional traffic signals have been removed, constructed and others changed from one payment class to another since the last revision.

NOW, THEREFORE, Contract No. XXM5004 (Previous) 6066-28-001 (New) is amended as follows:

EXHIBIT 1

EXHIBIT 1 is amended to add, delete and modify traffic signals installed in the City since the last revision. A copy of the revised EXHIBIT 1 is attached hereto and made a part of this agreement.

Article 4. Compensation

The maximum amount payable under this agreement is increased from \$24,320.00 to \$27,780.00 per year in accordance with the above changes. Calculations for the increase to the maximum amount payable are as follows:

AMOUNT OF THIS SUPPLEMENTAL AGREEMENT	\$ 3,460.00
ORIGINAL MAXIMUM AMOUNT PAYABLE PER YEAR	\$24,320.00
REVISED MAXIMUM AMOUNT PAYABLE PER YEAR	\$27,780.00

Renewal Agreement:
CONTRACT NO. 6066-28-001
Effective Date: September 1, 2002

Original Agreement:
CONTRACT NO. XXM5004
Effective Date: September 2, 2001

ARTICLE 5. Payment

The amount of this supplemental agreement shown above shall be a prorated amount based on the cost for the type of installation calculated on EXHIBIT 3 of the original agreement and any increases or decreases caused by any subsequent supplemental agreements. The monthly payment shall be adjusted accordingly.

All other terms or conditions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, THE PARTIES HAVE EXECUTED DUPLICATE
COUNTERPARTS TO EFFECTUATE THIS AGREEMENT.

The City of BROWNSVILLE

By: Larry S. Lambert
(Name)

City Manager
(Title)

August 9, 2001
(Date)

ATTEST:

James Reed
City Secretary

THE STATE OF TEXAS

Executed and approved for the Texas
Transportation Commission for the
purpose and effect of activating
and/or carrying out the orders,
established policies or work
programs heretofore approved and
authorized by the Texas
Transportation Commission.

APPROVED:

By: Amadeo Saenz
Amadeo Saenz, Jr. P.E.
District Engineer
Pharr District

Date: 8/21/01

EXHIBIT 1

CONTRACT #: 6066-28-001
MUNICIPALITY: City of Brownsville

Signalized intersections on State Highways located within the City of BROWNSVILLE.

Fixed Time Intersections:	US 77 EXPWY	at	13th Street
Total: 2	US 77 EXPWY	at	14th Street
Diamond Intersections:	US 77 EXPWY	at	Price Road
Total: 5	US 77 EXPWY	at	SH 48 (Boca Chica)
	US 77 EXPWY	at	SH 4 (International)
	US 77 EXPWY	at	FM 802 (Ruben Torres)
	US 77 EXPWY	at	FM 3248 (Alton Gloor)
Post Mount Flashers:	US 77 EXPWY SBFR	at	FM 3248 (Alton Gloor)
Total: 1			
Overhead Flashing Beacon:	US 77 EXPWY NBFR	at	Rancho Viejo
Total: 8	US 77 EXPWY SBFR	at	Rancho Viejo
	US 77 EXPWY NBFR	at	FM 511
	US 77 EXPWY SBFR	at	FM 511
	US 77 EXPWY SBFR	at	6th Street
	US 77 EXPWY SBFR	at	7th Street
	US 77 EXPWY NBFR	at	FM 1732
	US 77 EXPWY SBFR	at	FM 1732

EXHIBIT 3

CONTRACT #: 6066-28-001
MUNICIPALITY: City of Brownsville

Fixed Time Intersections shall be reimbursed at
\$1,800.00 per intersection per year.

Calculation:
2 location(s) X \$1,800.00 = \$3,600.00 Per Year
\$300.00 Per Month

Diamond Intersections shall be reimbursed at
\$3,000.00 per intersection per year.

Calculation:
5 location(s) X \$3,000.00 = \$15,000.00 Per Year
\$1,250.00 Per Month

Post Mount Flashers shall be reimbursed at
\$1,020.00 per intersection per year.

Calculation:
1 location(s) X \$1,020.00 = \$1,020.00 Per Year
\$85.00 Per Month

Overhead Flashing Beacons shall be reimbursed at
\$1,020.00 per intersection per year.

Calculation:
8 location(s) X \$1,020.00 = \$8,160.00 Per Year
\$680.00 Per Month

TOTAL: \$27,780.00 Per Year
\$2,315.00 Per Month

SUPPLEMENTAL AGREEMENT NO. 2
TO
AGREEMENT FOR THE INSTALLATION AND REIMBURSEMENT FOR THE
OPERATION AND MAINTENANCE OF TRAFFIC SIGNALS
WITHIN A MUNICIPALITY

WHEREAS, on the 19TH day of August, 1968, Agreement for the Installation and Reimbursement for the Operation and Maintenance of Traffic Signals within a Municipality was entered into by and between the Texas Department of Transportation hereinafter called the "State," and the City of HARLINGEN, hereinafter called the "City," and subsequently identified the agreement as Contract No. XXM5002 (Previous) 6066-29-001 (New); and

WHEREAS, the parties to this agreement have mutually determined that it is necessary to amend the original agreement due to the following reason:

In accordance with Texas Administrative Code, Title 43, Chapter 25, Subchapter A, Rule Section 25.5, incorporated cities of 50,000 or more population (latest federal census) are responsible for the maintenance and operation of traffic signals at locations on the state highway system other than freeway frontage road intersections. TxDOT will continue to contract with the City to maintain and operate the frontage road intersections.

NOW, THEREFORE, Contract No. XXM5002 (Previous) 6066-29-001 (New) is amended as follows:

EXHIBIT 1

EXHIBIT 1 is amended to delete all traffic signal installations not on the freeway frontage road intersections and revise the descriptions of all freeway frontage road intersections to be maintained by the City under this agreement. A copy of the revised EXHIBIT 1 is attached hereto and made a part of this agreement.

Article 4. Compensation

The maximum amount payable under this agreement is decreased from \$132,240.00 to \$47,220.00 per year in accordance with the above changes. Calculations for the decrease to the maximum amount payable are as follows:

AMOUNT OF THIS SUPPLEMENTAL AGREEMENT	- \$85,020.00
ORIGINAL MAXIMUM AMOUNT PAYABLE PER YEAR	\$132,240.00
REVISED MAXIMUM AMOUNT PAYABLE PER YEAR	\$47,220.00

Renewal Agreement:
CONTRACT NO. 6066-29-001
Effective Date: September 1, 2002

Original Agreement:
CONTRACT NO. XXM5002
Effective Date: September 2, 2001

ARTICLE 5. Payment

The amount of this supplemental agreement shown above shall be a prorated amount based on the cost for the type of installation calculated on EXHIBIT 3 of the original agreement and any increases or decreases caused by any subsequent supplemental agreements. The monthly payment shall be adjusted accordingly.

All other terms or conditions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, THE PARTIES HAVE EXECUTED DUPLICATE
COUNTERPARTS TO EFFECTUATE THIS AGREEMENT.

The City of HARLINGEN

THE STATE OF TEXAS

By: 
(Name)

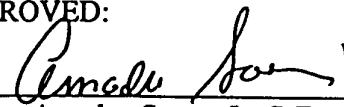
Executed and approved for the Texas
Transportation Commission for the
purpose and effect of activating
and/or carrying out the orders,
established policies or work
programs heretofore approved and
authorized by the Texas
Transportation Commission.

City Manager
(Title)

August 21, 2001
(Date)

APPROVED:

ATTEST:

By: 
Amadeo Saenz, Jr. P.E.
District Engineer
Pharr District


Asst. City Secretary

Date: 8/21/01

EXHIBIT 1

CONTRACT #: 6066-29-001
MUNICIPALITY: City of Harlingen

Signalized intersections on State Highways located within the City of Harlingen.

Actuated Intersections:	US 83 EBFR	at	Palm Court
Total: 1			
Diamond Intersections:	US 77 EXPWY	at	Spur 54
Total: 10	US 77 EXPWY	at	Harrison
	US 77 EXPWY	at	Tyler
	US 83 EXPWY	at	Dixieland
	US 83/77 EXPWY	at	Lincoln
	US 83/77 EXPWY	at	M Street
	US 83/77 EXPWY	at	F Street
	US 83/77 EXPWY	at	FM 1479
	US 83/77 EXPWY	at	New Hampshire
	US 83/77 EXPWY	at	Spur 499 (Ed Cary)
Overhead Flashing Beacons:	US 77 EXPWY NBFR	at	Primera
Total: 13	US 77 EXPWY SBFR	at	Primera
	US 77 EXPWY NBFR	at	FM 3994 (Wilson)
	US 77 EXPWY SBFR	at	FM 3994 (Wilson)
	US 83 EXPWY WBFR	at	Stuart Place
	US 83 EXPWY EBFR	at	Stuart Place
	US 83 EXPWY WBFR	at	Lewis Lane
	US 83 EXPWY EBFR	at	Lewis Lane
	US 83 EXPWY WBFR	at	Chester Park
	US 83 EXPWY EBFR	at	Chester Park
	US 83/77 EXPWY EBFR	at	L Street
	US 83/77 EXPWY EBFR	at	Louisiana
	US 83/77 EXPWY WBFR	at	Louisiana

EXHIBIT 3

CONTRACT #: 6066-29-001
MUNICIPALITY: City of Harlingen

Actuated Signals at conventional intersections and at Tee intersections shall be reimbursed at \$2,400.00 per intersection per year.

Calculation:

1 location(s) X \$2,400.00 = \$2,400.00 Per Year
\$200.00 Per Month

Diamond Intersections shall be reimbursed at \$3,000.00 per intersection per year.

Calculation:

10 location(s) X \$3,000.00 = \$30,000.00 Per Year
\$2,500.00 Per Month

Overhead Flashing Beacons shall be reimbursed at \$1,140.00 per intersection per year.

Calculation:

13 location(s) X \$1,140.00 = \$14,820.00 Per Year
\$1,235.00 Per Month

**TOTAL: \$47,220.00 Per Year
\$3,935.00 Per Month**