ITS Inventory

ITS Element	Description
City of Eagle Pass Asset Inventory	Asset Management System for City of Eagle Pass.
City of Eagle Pass EMS Vehicles	Represents the ITS equipment (e.g. mobile data terminals) in emergency services vehicles.
City of Eagle Pass EOC	Emergency Operations Center for City of Eagle Pass.
City of Eagle Pass Field Equipment	Represents ITS roadway devices that are owned and operated by the City of Eagle Pass. These devices may include traffic signals and loop detectors, CCTV, VIVDS, DMS, Portable CMS, etc.
City of Eagle Pass Fire Dispatch	Dispatches fire services for the City of Eagle Pass.
City of Eagle Pass Fire Vehicles	Represents the ITS equipment on City of Eagle Pass Fire vehicles. Includes the volunteer fire vehicles.
City of Eagle Pass Fleet Maintenance	Facility responsible for vehicle and equipment repair.
City of Eagle Pass International Bridge Field Equipment	ITS equipment on the International Bridges. Includes CCTV for video surveillance license plate readers.
City of Eagle Pass International Bridge Toll Plaza Office	Back office functions for electronic toll on international bridges
City of Eagle Pass International Bridge Toll Plazas	Electronic Toll Collections Plazas on the International Bridges.
City of Eagle Pass Police Dispatch	Dispatch of police vehicles for City of Eagle Pass. Also serves as PSAP within City of Eagle Pass.
City of Eagle Pass Police Vehicles	Represents the ITS equipment (e.g. mobile data terminals) in City of Eagle Pass police vehicles.
City of Eagle Pass Public Access	Public Access television channel.
City of Eagle Pass Public Information Office	The office provides the official interface between the City of Eagle Pass traffic and maintenance departments and interests outside the departments such as the media.
City of Eagle Pass Public Works Dispatch	Dispatch function for City of Eagle Pass Department of Public Works. Responsible for roadway maintenance in the City of Eagle Pass.
City of Eagle Pass PWD Vehicles	The maintenance vehicles that are dispatch by City of Eagle Pass for municipal maintenance organizations to maintain either streets or ITS field equipment.
City of Eagle Pass Storage Yard	Responsible for storage of equipment and materials for roadway maintenance
City of Eagle Pass Toll Cards	Toll cards for use on International Bridges
City of Eagle Pass Traffic Operations Center	City traffic signal system which manages and operates closed loop signal control.
City of Eagle Pass Water Level Sensors and Signs	Water level sensors owned and monitored by the City of Eagle Pass. Signs indicating dangerous water conditions.
City of Eagle Pass Web Site	Existing City of Eagle Pass Web Site. Traffic information could be provided in the future.
Commercial Vehicle Operator Systems	Represents US or Mexico Carriers.
Commercial Vehicles	Privately owned commercial vehicles. Included in the architecture to cover HAZMAT incident reporting.
County EOC	Emergency Operations Center operated by the county.
County Road and Bridge Precincts	Public works. Maintenance of roads and bridges at County level.
County Road and Bridge Vehicles	The maintenance vehicles that are dispatch by County Road and Bridge Precincts.
County Sheriff Communications Center	Dispatch center operated by the County Sheriff.
County Sheriff Vehicles	Represents the ITS equipment (e.g. mobile data terminals) in the County Sheriff's vehicles.
Crash Data Users	Systems that access crash records data.
DPS Communications Service	Dispatches Highway Patrol Vehicles using two-way radio communication. Responsible for regional evacuation and some regional emergency communications functions.

ITS Element	Description
DPS Electronic Screening Stations	Commercial Vehicle inspection facility. Communicates with the CVIEW (Commercial Vehicle Information Exchange Window) element of the Safety Information Exchange network. May include SAFER (Safety and Fitness Electronic Records), MCMIS (Motor Carrier Management Information System) and others (ASPEN, SAFETYNET, OASIS).
DPS License and Weights Division	Agency responsible for processing weight or safety citations or violations.
DPS Vehicles	Represents the ITS equipment (e.g. mobile data terminals) in the Highway Patrol vehicles that provide public safety services on state owned roads and highways.
Eagle Pass Chamber of Commerce	Eagle Pass Chamber of Commerce has information on upcoming events in the region.
Eagle Pass International Bridge System	Represents the operations center and systems for the Eagle Pass International Bridge System.
Eagle Pass Regional Incident and Mutual Aid Network	Regional public safety communications network.
Eagle Pass Regional Planning Data System Users	Systems that access the Eagle Pass Planning Data archive.
Early Warning Broadcast System	Broadcast system providing emergency or warning messages to the public.
Financial Institution	Represents the financial institutions the regional transit agencies will use as part of electronic fare payment systems or that operators of bridge electronic toll systems would use or agencies managing electronic payment for parking.
Fort Duncan Regional Medical Center	Regional hospital located in Eagle Pass.
IBS Security Monitoring	Security equipment owned and operated by the Eagle Pass International Bridge System.
Independent School District Buses	The buses owned and operated by the independent school districts in the region.
Independent School District Police Dispatch	Some school districts have their own police agencies. This represents the dispatch function for these agencies.
Independent School District Police Vehicles	Represents the ITS-equipment (e.g., mobile data terminals) on police vehicles for the Independent School District Police forces.
Independent School District School Bus Dispatch	Dispatch function of the Independent School District in the region. Includes radio communication with school buses.
Local Print and Broadcast Media	Local TV (including cable TV), radio, and newspapers.
Mexican Public Safety	Public safety agencies in nearby municipalities and states in Mexico.
Mexico Credentials Administration and Safety Systems	Credentials and safety inspection systems in other countries.
MRGDC Data Archive	Archive management system for the Middle Rio Grande Development Council.
Municipal Maintenance Dispatch	The maintenance and construction division for the smaller municipalities within the region. Operates as the dispatch function for the municipal maintenance and construction vehicles.
Municipal Public Safety Dispatch	Municipal or county public safety dispatch center for police, fire, EMS, and PSAP for municipalities within the region that are not specifically called out in the architecture.
National Weather Service	National service for national, regional, and local weather information.
Other County Road and Bridge Precincts	Public works departments in neighboring counties. Maintenance of roads and bridges at County level.
Other TxDOT District Maintenance Sections	TxDOT Maintenance sections in neighboring districts.
Other TxDOT District TMCs	Traffic Management Centers in other TxDOT districts.
Private Sector Transit System Dispatch	Private fixed route transit service dispatch for rural areas of region.
Private Taxi Provider Dispatch	Dispatch function for private taxi providers.
Private Transit Provider Website	Website for private transit providers (intercity bus services), that contract with SWART to provide service to Eagle Pass region.
Private Travelers Personal Computing Devices	Includes personal and office computers, pagers, smartphones, tablets, and other handheld devices used by travelers to receive ITS information.
Private Vehicles	Vehicles owned by private individuals in the area.
Rail Operations Centers	The dispatch centers for major railroads in the region (e.g. Union Pacific in Omaha, NE).

Eagle Pass Regional ITS Architecture

ITS Element	Description
Rail Operators Wayside Equipment	The rail operated equipment at highway rail intersections. Interconnect with traffic control.
Regional Event Facilities	Regional Event Facilities providing event information to systems in the region (e.g. International Center for Trade in Eagle Pass).
Statewide Crash Records Information System	Statewide database of vehicle crash records. Input to system provided by elements in the region.
SWART Fleet Manager	Represents SWART fleet management systems
SWART Flex Route Dispatch	Dispatch function for SWART's flex routing transit operations. Flex routing is a hybrid of demand responsive and fixed route service.
SWART Flex Route Vehicles	Flex route vehicles owned and operated by SWART. Vehicles may have AVL, security field equipment, and MDTs/tablets for driver, and automated fare payment. Flex route service is a hybrid of demand responsive service and fixed route service.
SWART IVR System	IVR System providing trip confirmation info to Demand Responsive users.
SWART Kiosk	Kiosks for purchasing SWART Smartcards.
SWART POS Terminal	Point of Service Terminal at SWART offices for purchasing SWART Smart Card.
SWART Smart Card	Smart Card used for transit and other electronic systems.
SWART Subcontractor Dispatch	DRT Dispatch for subcontractors to SWART
SWART Website	The website for SWART where fare and schedule information may be found. In the future it may be possible to request and pay for a demand response transit trip.
TDEM District Coordinator- Del Rio	Incident Management liaison to Eagle Pass region. Formerly known as Regional Liaison Officer (RLO).
TDEM State Operations Center (SOC)	Statewide Emergency Operations Center
ТМНР	Transportation's Electronic Journal for Authorized Services- clearinghouse for Medical Transportation Program (MTP) payments and authorizations. Formerly known as Tejas.
TxDMV Credentials Administration and Safety Information Exchange	Includes End-to-end credentials application, processing and issuance processes. Electronic Application includes CAT (Carrier Automated Transaction) with a CI (Credentialing Interface) interfacing to Legacy Systems such as the IRP (International Registration Plan) Clearinghouse and IFTA (International Fuel Tax Agreement) Clearinghouse and other states Credential Systems. Safety Information Exchange is centered on CVIEW (Commercial Vehicle Information Exchange Window) that exchanges information with the field Electronic Screening elements and with the TxDOT Credentialing functions. CVIEW also coordinates exchange of information with SAFER (Safety and Fitness Electronic Records), MCMIS (Motor Carrier Management Information System), ASPEN and SAFETYNET. Mexican carriers can apply for IFTA and single state registration.
TxDMV Motor Carrier Routing Information	This on-line system allows motor carriers to view routing and roadway information, including load restricted bridges, low vertical clearance, metro lane closures, and permit restrictions.
TxDOT BRINSAP	TxDOT Bridge Inspection and Inventory System. Statewide system holding information regarding the inventory and inspection status of all bridges.
TxDOT DriveTexas	Provides detailed construction closures, detours, restrictions, permit and weather information. Collected by District Public Information staff. Accessible to public by: Internet (DriveTexas) provides access to information by route, county or district. Includes contact information, Phone (800-452-9292) for construction, closures, hazards, detour information.
TxDOT Eagle Pass Field Equipment	Closed loop traffic signal system operated and maintained by TxDOT. Includes DMS, CCTV, HAR and environmental sensors to measure rainfall.
TxDOT Eagle Pass Traffic Operations Center	Closed loop signal system(s) in the region. Future: will include control of other ITS equipment such as DMS, CCTV, HAR, environmental sensors, and water level sensors and signs. It may be physically located at the TxDOT Maintenance Office in Eagle Pass or another local office.
TxDOT Laredo Archived Data Management System	The kinds of information that may be made available include: asset inventory (field equipment), maintenance schedules, traffic counts and planning information.
TxDOT Laredo District Area Engineers Office	Construction design and supervision (schedules and plans) for the Laredo District. Provide content to TMCs for maintenance and construction road status.

Eagle Pass Regional ITS Architecture

ITS Element	Description
TxDOT Laredo District Public Information Office	The office provides the official interface between TxDOT traffic and maintenance departments and interests outside the departments such as the media.
TxDOT Laredo District Shop	This facility provides repair and maintenance services for TxDOT maintenance vehicles and equipment (e.g. portable DMS).
TxDOT Laredo TMC - STRATIS	Texas DOT Traffic Management Center - South Texas Regional Advanced Transportation Information System. This TMC monitors and manages traffic flow. Incidents are detected and verified and incident information is provided to the appropriate agencies, like the DPS, Local Fire and local Police Dispatch, and also to third party providers. Some ITS technologies currently used by this center are Dynamic Message Signs (DMS), Closed Circuit Television (CCTV) cameras, and Traffic Detectors. This center is staffed 14 hours per day with night support.
TxDOT Maintenance Section Storage Facility	TxDOT Maintenance Section's storage facilities.
TxDOT Maintenance Sections	TxDOT maintenance sections for Laredo district. Section office in each county. Dispatches maintenance vehicles and equipment for maintaining road and ITS equipment owned by TxDOT. There are 10 of these.
TxDOT Maintenance Vehicles	The maintenance vehicles that are dispatch by TxDOT maintenance.
TxDOT San Antonio TMC (TransGuide)	TMC in San Antonio. This element provides/initiates Amber, Blue, Silver, and Endangered Missing Persons Alerts in Texas from the DPS to other TxDOT Districts.
TxDOT Statewide Emergency Management Coordinator	TxDOT representative at State EOC who communicates information to the TxDOT maintenance sections and TxDOT traffic sections.
TxDOT Statewide ITS Website	Website provides real-time traveler information and traffic conditions on instrumented freeways.
TxDOT Traffic Operations Division Crash Data and Analysis	Traffic Department of TxDOT responsible for maintaining the crash records information and data.
TxDOT Traveler Information System	Planned statewide phone based traveler information system.
TxDOT Water Level Sensors and Signs	Sensors to detect water level on low lying roadways. Will be connected to flashers or signs and then be connected to TxDOT District Office in the future.
US CBP Communications Center	This element dispatches US Customs and Border Patrol Vehicles. It also makes simple request/response (e.g. database query) of TxDOT Credential Admin and Safety Information System. Traffic Management at Traffic Checkpoints and the Border Stations.
US CBP Customs Product Manifest System	Would provide load manifest pre-clearance information to Electronic Screening stations. Information would be requested as needed (real-time), and requests for vehicle, carrier, driver histories.
US CBP Electronic Clearance System	Electronic Clearance of commercial vehicles at border.
US CBP Port of Entry	US Customs and Border Patrol Operations Office on the international bridges. International Bridge (Bridge 1) and Camino Real Bridge (Bridge 2)