

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Allen	FYA project	Install the FYA display at 38 intersections.	City of Allen	Reduce fuel use, improve arterial operations and mobility	\$300K	No	Partial	Short-Term	
Allen	Fiber Optic Communication Ring	Construct a fiber optic ring for communication.	City of Allen	Multi-City department use. Improve traffic operations and reliability.	\$5M	Yes	No	Short-Term	
Allen	Upgrade wireless communication network	This project will replace the local controller communication to the backhaul network with modern equipment.	City of Allen	This project will enhance the communication network to the local signal controllers and improve reliability to the system.	\$200K	Yes	Partial	Short-Term	
Allen	Upgrade traffic signal controller cabinet	This project will replace 50 intersections to TS-2 cabinets.	City of Allen	This project will provide enhanced diagnostics, and will openly support the FYA display operation for improved traffic mobility.	\$1M	No	Partial	Short-Term	
Allen	CCTV camera	This project will construct up to 60 CCTV cameras at strategic locations. Priority will be on major arterials.	City of Allen	This project will enhance first response teams, traffic engineering, and regional incident management.	\$400K	Yes	No	Short-Term	
Allen	BBUs	This project will replace 10 and install 20 battery backup units.	City of Allen	Provide real-time signal control during power outages. This will improve safety, increase operations, and keep mobility in tact during power outage or signal maintenance times.	\$150K	No	No	Short-Term	
Allen	TMC construction	This project will update the traffic management center.	City of Allen	This project will provide a central point for traffic management operations.	\$0.5M	Yes	No	Mid-Term	
Arlington	Install PTZ Cameras	Install traffic monitoring cameras at 68 locations in the city as part of the City's advanced transportation management system for congestion/incident detection, verification and mitigation.	City, TxDOT, NCTCOG	Improved congestion/incident verification and mitigation	\$1M	Yes	No	Short-Term	
Arlington	Install Arterial DMS	Install arterial dynamic message signs at 31 locations citywide as part of the City's advanced transportation management system.	City, TxDOT, NCTCOG	Providing motorists information regarding congestion, roadway condition, construction or incidents before they encounter it would enable them to make critical decisions that would reduce travel time and minimize congestion.	\$9.3M	Yes	No	Short-Term	
Arlington	Adaptive Control	Install software and traffic signal infrastructure required for adaptive control at critical and saturated intersections that allows the traffic signal controller to dynamically adjust the splits based on real-time traffic conditions.		Provides a more equitable distribution of green time. Reduces accidents and delay by reducing traffic backups. Improves efficiency & operations at traffic signal intersections.	TBD	No	No	Mid-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Arlington	ATMS Upgrade	This project will upgrade the central traffic management system to allow for the incorporation of additional various traffic data streams - adaptive signal timing, advanced pre-emption response, arterial DMS sign control, city wide ptz camera controls, reversible lane control, school zone flasher controls, waze road closures, connected and automated vehicles and others.	City, TxDOT, NCTCOG	This project will enhance the capabilities of the Traffic Management Center and provide for better coordination between police, fire, and traffic control. It will improve the performance of the overall traffic system providing numerous benefits to residents including reduced congestion, reduced travel time, incident management, and advanced warnings.	\$2M	No	No	Short-Term	
Arlington	Matlock Reversible Lanes Arterial Management	Install Reversible Lane system including installation of detection, communications, DMS, CCTV and dynamic lane assignment signs on the Matlock Road corridor to allow for reversible lane operations to accommodate peak hour traffic and mitigate incidents and congestion.	City, TxDOT, NCTCOG	Providing motorists with additional lanes based on time of day and direction of travel to accommodate heavy traffic volumes which in turn would reduce travel time and minimize congestion during the peak travel hours of the day. Allows for increased capacity within constrained ROW limits.	TBD	No	No	Mid-Term	
Arlington	Roadside Units for Connected Vehicles	Install roadside units for connected vehicles (V2X) at approximately 250 locations on selected corridors in the city.	City, TxDOT, NCTCOG	Enables implementation of V2V and V2I in the city as the technology matures and becomes affordable. Motorists will derive the associated safety benefits from this implementation.	\$1.5M	Yes	No	Mid-Term	
Burleson	ATMS Central Software and Signal Control Upgrades	This project will install a central system software with licenses up to 50 signalized intersections, replace 41 legacy controllers, and install a cellular communications network. The City currently does not have an ATMS and will be taking over control of TxDOT maintained signals.	City, TxDOT, NCTCOG	This project will advance the level of control of intersection operations, collect performance measures, and improve arterial mobility along SH 174.	\$950K	Yes	Partial	Short-Term	
Burleson	Communication to regional network (TxDOT)	This project will establish wireless to fiber optic communication link to TxDOT at the intersection of SH 174 at Summercrest. This is where TxDOT's fiber stops. This link will provide a C2C connection between the ATMS and TxDOT through partner firewall and network router.	City, TxDOT, NCTCOG, Adjacent Cities	This project will enhance the communication network to the local and regional signal controllers and improve reliability to the system.	\$300K	Yes	Partial	Short-Term	
Burleson	Upgrade Vehicle Detection (Phase 1 "On-System")	Upgrade detection along SH 174 at 13 signalized intersections with advanced vehicle detection technologies.	City, TxDOT	Improves vehicle detections by capability of monitoring the performance of vehicle detection, adjustment of detection zones and ability to conduct vehicle and turning movement counts.	\$330K	Yes	No	Mid-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Burleson	Upgrade Vehicle Detection (Phase 2 "Off-System")	Replace existing loop detectors at 15 signalized intersections with advanced vehicle detection technologies.	City, TxDOT	Improves vehicle detections by capability of monitoring the performance of vehicle detection, adjustment of detection zones and ability to conduct vehicle and turning movement counts.	\$380K	Yes	No	Mid-Term	
Burleson	Install Arterial DMS	Install arterial dynamic message signs at 2 locations citywide as part of the City's advanced transportation management system.	City, TxDOT	Providing motorists information regarding congestion, roadway condition, construction or incidents before they encounter it would enable them make critical decisions that would reduce travel time and minimize congestion	\$265K	Yes	No	Long-Term	
Burleson	Install PTZ Cameras (Phase 1)	Install 18 PTZ cameras at SH 174 intersections to monitor traffic congestion and incidents near intersections	City	This project will enhance first response teams, traffic engineering, and regional incident management.	\$150K	Yes	Partial	Short-Term	
Burleson	Install PTZ Cameras (Phase 2)	Install 18 PTZ cameras at other City intersections to monitor traffic congestion and incidents near intersections.	City	This project will enhance first response teams, traffic engineering, and regional incident management.	\$150K	Yes	Partial	Short-Term	
Burleson	Adaptive Control/Performance Measures/Travel Time Analytics	Install software to compliment the ATMS central software for adaptive control, performance measures, and travel time analytics along SH 174. This is an integrated software to compliment the ATMS for 13 signalized intersections along SH 174.	City	Infrastructure and software to promote performance based traffic signal system management. Allow performance based corridor management. Detect changes in travel times and travel time reliability allowing staff to proactively adjust the traffic signals.	\$380K	Yes	No	Mid-Term	
Burleson	ATMS Video Wall and TMC	Install video display wall and video management software at TMC to disseminate video feeds across City Departments. Integrate 36 cameras listed above and allow for future growth of the camera network.	City	Increase the ability to monitor and identify problem areas in traffic flow and incidents. Potentially integrated into C2C for regional information sharing. Looking for COTS VMS solution.	\$500K	Yes	No	Mid-Term	
Carrollton	Intersection Vehicle Detection	This project identifies intersections on regionally significant arterials to upgrade video or radar detection with ability to remotely view intersection video and/or provide traffic count data.	City of Carrollton	Reduce fuel use, improve arterial operations and mobility, provide traffic count information for improved signal timing and Arterial management	\$350K	Yes	No	Short-Term	
Carrollton	Central Traffic Management Software	This project will upgrade Carrollton's Central Traffic Management Software.	City of Carrollton	Project improves abilities to remotely manage signal timing by replacing end of life Central Traffic Management software (Actra). Reduce fuel use, improve arterial operations and mobility.	\$200K	Yes	No	Short-Term	
Carrollton	Signal Controller Battery Backup Units	Installation of Battery Backup Units for Signals along regionally significant arterials.	City of Carrollton	Increased reliability of local signals. Provide power during storms and/or power loss situations	\$150K	No	No	Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Carrollton	Adaptive Signal Control	Installation of an Adaptive Signal Control System along one regionally significant arterial section.	City of Carrollton	Reduce fuel use, improve arterial operations and mobility	\$200K	Yes	No	Short-Term	
Carrollton	Communication to regional network (NTTA)	This project will construct a wired or wireless communication link among several regional agencies, including NTTA.	City of Carrollton, NTTA, Adjacent Cities	This project will enhance the communication network to the local and regional signal controllers and improve reliability to the system		Yes	No	Short-Term	
Carrollton	ATMS Upgrade	This project will upgrade communications with signals citywide for coordination of signals along regionally significant arterials.	City of Carrollton	This project will enhance the communication network to the local signal controllers and improve reliability to the system		Yes	No	Short-Term	
Coppell	Regional data sharing	This project will provide center-to-center communications between regional agencies for the purpose of sharing data between TMC's.	TxDOT, NTTA, Cities of Coppell, Lewisville, Irving, Grapevine, Carrollton, Dallas	Improved coordination to provide traveler information on local corridors	\$0.5M	Yes	No	Long-Term	
Coppell	Conversion of Traffic Signals to new standard	This project will convert the City's existing NEMA TS1 120V cabinets to ATC 48V for the purposes of reduced power consumption and enhanced safety.	City of Coppell	Power savings	\$0.7M	No	No	Long-Term	
Coppell	Enhance traffic operations on strategic regional facilities	This project will provide regional traffic management along the Denton Tap/ S. Belt Line Corridor, Freeport Parkway, MacArthur, and Sandy Lake roadways. This project will include enhanced traffic operations strategies to reduce congestion, enhance mobility, reduce emissions, and reduce fuel usage.	Cities of Coppell, Lewisville, Irving, Dallas	Improved coordination along corridor	\$2.5M	No	Partial	Short-Term	
Coppell	Local Traffic Signal Control Upgrade	This project will upgrade 35 traffic signal controllers, central management software, and network communication hardware	City of Coppell	This project will include performance metrics and the ability to provide data for regional data sharing.	\$0.5M	Yes	Partial	Short-Term	
Coppell	Construct CCTV cameras at strategic locations along routes of regional significance	Install approximately 20 CCTV Cameras along IH 635, SRT (Hwy 121) Beltline and other similar routes	City of Coppell, TxDOT, City of Irving	This project will provide real-time surveillance	\$150K	Yes	No	Mid-Term	
Coppell	Hazardous weather traffic management	This project will install RWIS throughout the city for the purpose of collecting real-time weather data.	City of Coppell	This project will provide coordinate with the City's snow removal staff	\$300K	Yes	No	Long-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Denton	Fiber Optic ITS Deployment Phase 1	Construction of fiber optic based ITS communication network	City, TxDOT, NCTCOG	Phase 1 deployment to connect 36 of the City's 116 existing traffic signals, video to TMC, TxDOT fiber and participate in NCTCOG's fiber sharing framework. TMC to traffic signal communications with video will enhance the safety of the public, streamline incident response, and assist responders.	\$1.57M	Yes	Yes (TIP project NP-IT036)	Short-Term	
Denton	Fiber Optic ITS Deployment Phase 2	Construction of fiber optic based ITS communication network	City, TxDOT, NCTCOG	Fills in network gaps after Phase 1 ITS system completion, connecting to additional traffic signals, enhanced management capability, and allowing video, detector, travel time, and other data to be transferred to City's TMC. Phase 2 is considered a medium-term deployment and will consist of approximately 37 miles of fiber optic cable which will connect most of Denton's urban arterial network to the ITS network.	\$6M (preliminary estimate)	Yes	No	Mid-Term	
Flower Mound	Center-to-Center Communications	Communications between TMC's	TxDOT, Town	Improved coordination to provide traveler information on system roadways within the Town	TBD	Yes	No	Mid-Term	
Flower Mound	ATC Controller Upgrade	Replace/Upgrade 65 Controllers to latest technology.	Town	Latest technology, better performance, ability to use unique phasing and timing techniques	\$162.5K	Yes	Yes	Short-Term	
Flower Mound	MMU Communication	Replace 35 MMU's	Town	Real Time Comm switch MMU's. Ability to pull history logs instantly from central location	\$42K	No	Yes	Short-Term	
Flower Mound	Fiber Backbone Installation	Install initial Fiber Backbone along Major Streets and connect into the Town Network and connection to some major intersections/corridor.	Town (Public Works and PD), Real Time Traveler Information Network	Set the ground work for Increase Bandwidth, Provide ability for PD to monitor for Incidents and pass along to Regional Traveler Information System	\$0.6M	Yes	Yes	Short-Term	
Flower Mound	Fiber Links to all Intersections		Town (Public Works and PD), Real Time Traveler Information Network	Same as backbone with the ability to add more equipment to monitor traffic and roadway conditions in real time	TBD	Yes	No	Long-Term	
Flower Mound	PTZ Cameras	Install PTZ Cameras at 40 locations.	Town (Public Works and PD), Real Time Traveler Information Network	Increase the ability of the Police Department and Public Works for Traffic Incident Management and then be able to pass along that information to the Regional Traveler Information System	\$125K	Yes	No	Short-Term	
Flower Mound	ATMS Video Wall and TMC	Install Video Display Wall and software at TMC.	TxDOT, Town	Increase the ability to monitor and identify problem areas in traffic flow and incidents. Potentially integrated into C2C for regional information sharing	\$200K	Partial	No	Short-term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Flower Mound	ATMS Video Wall at PD	Install Video Display Wall and software at Police Department.	TxDOT, Town	Increase the ability to monitor for traffic incidents. Provide information to Regional Traveler Information System. Funding assumes that TMC already has video management software purchased	\$150K	Partial	No	Mid-Term	
Flower Mound	ATMS Video Wall at New EOC (part of New building construction)	Install Video Display Wall and software at new EOC	TxDOT, Town	Increase the ability to monitor for traffic incidents. Provide information to Regional Traveler Information System. Funding assumes that TMC already has video management software purchased. Keep top management aware in case of emergencies including FD	\$200K	Partial	Yes	Mid-Term	
Flower Mound	Video connection and/or AVL for the EMS between accident scene and surrounding hospitals	Allow for a system integration between emergency services and participating hospitals to provide advance knowledge to hospital to reduce amount of time spent between arrival of EMS and treatment.	Town, Emergency Services, Participating Hospitals	Provide on scene video information to attending emergency room prior to arrival of EMS to the hospital, preparations for better care can begin prior to patient arriving at the ER. AVL would provide a visual on how far out EMS is before arriving at the hospital. Could be used with CareFlight as well.	TBD	No	No	Long-Term	
Flower Mound	Road Weather Sensors at critical bridges	Provide communication and equipment to provide road weather information, especially icy conditions, back to TMC and provide alerts to PW staff and traveling public.	TxDOT, Town	Provide information through C2C to update Road conditions. Provide near real time pavement conditions to Public Works for deployment of sanding and other response vehicles.	TBD	Yes	No	Long-Term	
Flower Mound	Portable Dynamic Message Boards with wireless communication capabilities	Provide communication to the traveling public on roadway hazards such as road closures etc.	TxDOT, Town, Other Communities	Provide communication to the traveling public of road hazards. Could be used by other communities when not in use by the Town for emergency situations, i.e. flooding situation elsewhere.	\$60K	Yes	No	Mid-Term	
Flower Mound	Travel Time Vehicle Probe Data	Allow for travel time data collection.	TxDOT, Town	Provide a way to monitor travel time information for performance measures and incident management.	TBD	Yes	No	Long-Term	
Flower Mound	FYA project	Install the FYA display at 40 intersections.	Flower Mound	Reduce fuel use, improve arterial operations and mobility	\$320K	No	Partial	Mid-Term	
Flower Mound	Preemption	GPS based preemption for emergency services.		System will better clear queued traffic reducing response times. Also can improve traffic operations by adjusting the traffic signal's response to an emergency vehicles based on the route of the emergency vehicle.	\$400K	No	Partial	Mid-Term	
Fort Worth	Central System Software	Advanced Traffic Management System that enables staff remote monitoring and management of traffic, equipped with Adaptive Traffic Control, Transit Priority, Video Management, etc.	TxDOT, NTTA, City, DFW 511	Improved coordination to provide traveler information on interstate corridors.	\$2.5M	Yes	No	Short-Term	
Fort Worth	Communication Network Expansion	Communication between TMC and signalized intersections.	TxDOT, NTTA, City, DFW 511	Ability to monitor and manage traffic in real-time and sharing of video and data with other agencies.	\$15M	Yes	Yes	Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Fort Worth	Signal Controller and Cabinet upgrade - CBD	Upgrade signal controllers & cabinets to be compatible with new system.	TxDOT, City, Trinity Metro	The new controllers and cabinets would be compatible with the new central system; capable of identifying signal failure.	\$2M	Yes	Yes	Short-Term	
Fort Worth	Communication and ITS Device Expansion along Rosedale (ITS-8)	Implementation of communication between TMC and signals along Rosedale and deployment of ITS devices.	TxDOT, NTTA, City	Monitor and manage traffic in real-time, share video and data with other agencies.	\$1M	Yes	Yes	Short-Term	
Fort Worth	CCTV installation	Install PTZ cameras at 500 locations to improve responsiveness to emergencies, events, and incidents.	TxDOT, NTTA, City, Trinity Metro, DFW 511	Monitor and manage traffic in real-time, share video and data with other agencies.	\$2M	Yes	Partial	Short-Term	
Fort Worth	LED Upgrade	To replace existing incandescent signal indications with new LED technology.	TxDOT, City, Trinity Metro	Visibility and energy savings	\$300K	No	Partial	Short-Term	
Fort Worth	Traffic Signal Detection Upgrade	Upgrade locations lacking detections and/or on "re-call" mode enabling signals to operate in actuated mode enhancing signal operation.	TxDOT, City, Trinity Metro	Minimized stops and delays, reduced fuel consumption, improved air quality, addressing public expectation, and minimizing or eliminating frustrated drivers running the Red light.	\$2M	Yes	Partial	Short-Term	
Fort Worth	Signal Controller and Cabinet upgrade - diamond interchanges	Replace and consolidate to one controller/cabinet at closely spaced signalized intersections.	TxDOT, City, Trinity Metro	The new controllers and cabinets would be compatible with the new central system; optimize signal timing	\$1M	Yes	No	Short-Term	
Fort Worth	FYA project	Install the FYA display at 25 intersections annually for next 5 years.	City of Fort Worth	Reduce fuel use, improve arterial operations and mobility.	\$900K	No	Partial	Short-Term	
Fort Worth	Upgrade traffic signal controller cabinet	This project will replace 100 intersections to ITS cabinets.	City of Fort Worth	This project will provide enhanced functionality to operation for improved traffic mobility.	\$2M	No	Partial	Short-Term	
Fort Worth	TMC construction	This project will build the city's traffic management center in a dedicate space within traffic management division building. This project will finish out the space, procure consoles, install a video wall, procure Video Management System and provide other materials/equipment to make the TMC operational.	City of Fort Worth, TxDOT	This project will provide a central point for traffic management operations.	\$0.6M	Yes	Yes	Mid-Term	
Fort Worth	Performance Measures	Provide support for the installation or development of performance measures application based on our signal data from central system. Provide funding for the purchase of the hardware and development cost to utilizing high-resolution traffic signal data.	City of Fort Worth	Allows for the expansion of performance based traffic signal system management. Allows staff to maintain a high level of signal system performance instead of letting the performance decay and then optimizing the signals system performance every 3 to 5 years.	\$500K	Yes	No	Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Fort Worth	Railroad Crossing Supervisory System	Know when the gates are down at a railroad crossing and monitor interconnection between cabinet and bungalow for safe and efficient operation at rail crossing.	City of Fort Worth, UPRR, FWWR	Provide efficient and safer railroad crossing signal operation at 21 signalized railroad crossing locations. Using dynamic gate down function will improve signal operation. Continuously monitoring interconnection between signal and railroad bungalow will help to put the signal on flash when communication is broken. Adding dynamic prohibit turn signs will improve safety for turning traffic during railroad preemption.	\$400K	Yes	Yes	Short-Term	
Fort Worth	Transit Priority	Provide partial and/or full priority to transit vehicles.	Trinity Metro, City of Fort Worth	Provide varying levels of priority based on occupancy and schedule adherence. Integrate with the transit authority's vehicle information system.	\$500K	Yes	No	Long-Term	
Fort Worth	Preemption	Line of sight based preemption for emergency services.		System will better clear queued traffic reducing response times. Also can improve traffic operations by adjusting the traffic signal's response to an emergency vehicles based on the route of the emergency vehicle.	\$700K	No	Partial	Short-Term	
Fort Worth	Asset Management	Asset management system for the traffic signal system infrastructure.	City of Fort Worth	Track traffic signal system assets. Support performance measures. Better positioned to keep traffic signal equipment running well and safe.	\$350K	No	Yes	Mid-Term	
Fort Worth	Traffic Data	Automate traffic data reporting	City of Fort Worth, TxDOT, NCTCOG	Install detection systems to collect traffic volume data. Data from different intersections is aggregated. Then develop an automated system to transmit that data to the NCTCOG.	\$0.5M	Yes	No	Mid-Term	
Fort Worth	School Flashers	Upgrade school flasher controllers	City of Fort Worth	Purchase flashers that have two-way communication and provide detailed maintenance data. Allow staff to verify when a school flasher is on and proactively maintain the equipment before problems occur.	\$500K	No	Yes	Short-Term	
Fort Worth	Connection for sharing data with regional partners	Install communication link and infrastructure to allow the exchange of video and traffic data.	City of Fort Worth, TxDOT, NCTCOG	Center-to-center video and signal information exchange. Cities can verify the operation of the neighboring traffic signals.	\$350K	Yes	No	Long-Term	
Fort Worth	Strategically deploy automated Travel Time Data for arterials	Purchase equipment to read Wi-Fi or Bluetooth signals to obtain continuous real-time travel time and origin-destination data.	City of Fort Worth, TxDOT, NCTCOG	Allow performance based corridor management. Detect changes in travel times and travel time reliability allowing staff to proactively adjust the traffic signals during events or incidents.	\$150K	Yes	Partial	Short-Term	
Fort Worth	Roadside Units for Connected Vehicles	Test deployment of roadside units for connected vehicles (V2X) technology on selected corridors in the city.	City, TxDOT, NCTCOG	Implementation of V2V and V2I in the city as a pilot project to identify technology requirements and determine safety implications for our current system.	\$150K	Yes	No	Mid-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Frisco	Dynamic Left Turn Lanes	Change the number of left turn lanes open by time of day. Either two lanes or one lane is open based on traffic conditions.	City, NCTCOG	Safety and mobility benefits. Two lane left turn lanes when needed (safer but more delay). One lane left turn other times (safety benefit of offset lefts and lower delay)	\$500K		No	Short-Term	
Frisco	Network Equipment	Ethernet switches to support Cybersecurity requirements, fiber optic communication, and IoT devices in the signal cabinet.	City, NCTCOG	Enhanced cybersecurity for traffic signal system (critical asset) and better traffic signal communication.	\$800K		No	Short-Term	
Frisco	Fiber Optic Communication	Install fiber optic communication for Smart City and Traffic Signal System.	City, NCTCOG	Redundant, robust traffic signal communication and installs communication infrastructure needed to support emerging Smart City applications.	\$10M		No	Short-Term	
Frisco	Video Analytics for Traffic Safety	Post process traffic video from signalized intersection to identify poor decisions made by users (vehicles, pedestrians, bicyclists).	City, NCTCOG	Call attention to where road users are making poor choices. Empowers changes before near misses become crashes.	\$1M		No	Short-Term	
Frisco	ATSPM data analytics	Process high resolution data and identify programming changes to traffic signals.	City, NCTCOG	Turns the ATSPM data into information. Calls attention to traffic signal needing programming changes provide more efficient mobility.	\$1M		No	Short-Term	
Frisco	ATSPM Generation 2: Vehicle Trajectories	Utilize crowd sourced vehicle trajectories to provide the data needed for the next generation of ATSPM reports.	City, NCTCOG	Provides insight into the performance of a traffic signal system not previously available. Has the potential to replace the data gathered by advance detection.	\$1M		No	Short-Term	
Frisco	Passive Pedestrian Detection	Determine the effectiveness of sensors or video analytics to detect pedestrians at or in the intersection.	City, NCTCOG, UTA	Safety travel for pedestrians. Able to determine if pedestrians are being accommodated and compliments traffic signa operational changes to reduce pedestrian/vehicle conflicts.	\$200K		No	Short-Term	
Frisco	Video Sharing / Data Sharing	Share video and data with other agencies.	City, NCTCOG, NTTA	Data sharing will enhance regional traffic performance evaluation, regional traffic management, and incident management.	\$300K		No	Short-Term	
Frisco	Adaptive Queue Clearance	Automatically trigger changes to signal timing when traffic backs up along a frontage road onto the DNT.	City, NCTCOG, NTTA	Safety, reduces the likelihood of stopped traffic on the DNT [freeway].	\$300K		No	Short-Term	
Frisco	Performance Measures	Upgrade traffic signal detection required to collect performance measurement data.	City, NCTCOG	Allows for the expansion of performance based traffic signal system management. Allows staff to maintain a high level of signal system performance instead of letting the performance decay and then optimizing the signals system performance every 3 to 5 years.	\$500K	Yes		Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Frisco	Connected Vehicle	Provide SPaT data to application developers.	All (Regional)	Regional step toward attracting application developers to the region. Providing a data stream to researchers and developers will yield safety and mobility benefits. May be able to monetize getting the data - perhaps a flat fee. There would be value to collecting the regions data and having a single data stream with the regions data for the researcher and developer.	\$5M	Yes		Mid-Term	
Frisco	Connected Vehicle	Provide SPaT data to the automotive manufacturers via a third party developer.	All (Regional)	Regional step towards building a connected vehicle environment. Provides traffic signal information to the driver establishing a foundation for additional connected vehicle technology	TBD	Yes		Short-Term	
Frisco	Adaptive Control	Install adaptive software at overcapacity intersections that allows the traffic signal controller to dynamically adjust the splits based on real-time traffic conditions.	City, NCTCOG	Provides a more equitable distribution of green time. Reduces accidents and delay by reducing traffic backups.	\$1M	Yes		Short-Term	
Frisco	Car Share	Provide cars that can be shared by many.	City, NCTCOG	People could take transit to a destination and then use car share for short trips around the area.	\$5M	No		Mid-Term	
Frisco	Railroad Crossing	Know when the gates are down at a railroad crossing.	City, NCTCOG	Provide notification to emergency services so drivers take an alternate route. Modify the operation of near-by traffic signals.	\$100K	Yes		Short-Term	
Frisco	Freight Priority	Connect trucks to the traffic signal infrastructure.	City, Private Sector Partners, NCTCOG	Provide early green and extended green for trucks. Reduce truck stops which improves the flow of commerce, improves traffic flow, and increases roadway safety. Development of a data exchange between the truck, central system, and intersection controller.	\$500K	No		Long-Term	
Frisco	Pedestrian Signals	Pedestrian Hybrid Beacons (HAWK) or Rectangular Rapid Flashing Beacon (RRFB)	City, ISD, NCTCOG	Provide supplemental warning for drivers of a pedestrian crosswalk. Increases multimodal trips and pedestrian safety.	\$150K	No		Short-Term	
Frisco	Preemption	GPS based preemption for emergency services.	City, NCTCOG	System will better clear queued traffic reducing response times. Also can improve traffic operations by adjusting the traffic signal's response to an emergency vehicles based on the route of the emergency vehicle.	\$400K	No		Mid-Term	
Frisco	Pedestrian App	Provide pedestrians real time information about the traffic signal. The pedestrian would get information as to how long she would have to wait for the WALK.	City, NCTCOG	Improve mobility; increase pedestrian trips. Provide better mobility for disabled. Improve safety by increasing compliance with pedestrian signals.	\$400K	No		Mid-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Frisco	Pedestrian - Traffic Signal Controller Software	Provide funds to develop traffic signal controller software to provide better accommodation for pedestrians. Early WALK, use multiple phases for the pedestrian phase, and modify flashing yellow arrow overlap to protect pedestrians. Item maybe needed to purchase software licensees for traffic signal controller software modules.	City, NCTCOG	Improving the traffic signal controller software would improve how pedestrians are treated and how well pedestrians are protected from motor vehicles.	\$250K	No		Short-Term	
Frisco	Asset Management	Asset management system for the traffic signal system infrastructure.	City, NCTCOG	Track traffic signal system assets. Support performance measures. Better positioned to keep traffic signal equipment running well and safe.	\$350K	No		Mid-Term	
Frisco	Traffic Data	Automate traffic data reporting.	City, NCTCOG	Install detection systems to collect traffic volume data. Data from different intersections is aggregated. Then develop a automated system to transmit that data to the NCTCOG.	\$0.5M	Yes		Mid-Term	
Frisco	Traffic Signal Cabinet	Upgrade traffic signal cabinets to take full advantage of new advanced traffic signal controllers. 175 locations.	City, NCTCOG	Flexibility to implement innovations in signal timing such as flashing yellow right turn arrows and right turn overlaps. Safer for signal technicians. Easier to troubleshoot and maintain. Consider convert traffic signal from AC to DC power.	\$2.5M	No	No	Mid-Term	
Frisco	Training	Provide training opportunities for agency staff to gain the expertise required to maintain ITS assets. Include in projects or provide subsidies for stand alone trips. Training would need to occur beyond a project as equipment and staff change.	All (Regional)	Cities need expertise on Staff to maintain ITS equipment. This would prevent regional/agency investments in ITS from becoming unusable. The NCTCOG could play a key role in providing subsidies to agencies for staff training.	\$100K	No		Short-Term	
Frisco / Plano	Network Connection	Install communication link and infrastructure to allow the exchange of video and traffic data.	City, Plano, NCTCOG	Video sharing to emergency services to identify the location of an incident along SH 121: identify traffic backups in neighboring City; center-to-center information exchange. Cities can verify the operation of the neighboring traffic signals.	\$300K	Yes		Short-Term	
Frisco / Plano	Bicycle App	Work with an existing bicycle app (i.e. Kimley-Horn KITS) to exchange information with the traffic signal system. The rider receives feedback when detected. The app places a call and extensions to the traffic signal controller. App could also be used to know the routes bicyclists are using.	City, Plano, NCTCOG	Bicycles are detected at traffic signal and given feedback so riders do not run red lights. Bicyclist can receive extended green light. Information about bicyclist routes will provide great benefit as investments in bicycle facilities are considered.	\$400K	No		Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Frisco / Plano	Performance Measures/Adaptive Control	Install software and traffic signal infrastructure required for adaptive control.	City, Plano, NCTCOG	Infrastructure allows for the expansion of performance based traffic signal system management. Fills gaps between and expands planned adaptive control systems.	\$800K	Yes		Mid-Term	
Frisco / Little Elm	Network Connection	Install communication link and infrastructure to allow the exchange of video.	City, Little Elm, NCTCOG	Sharing video allows emergency services to identify the location of an incident. Sharing video allows Little Elm to view traffic monitoring video cameras installed on traffic signals within their city but operated by another agencies.	\$300K	Yes		Short-Term	
Frisco / McKinney	Network Connection	Install communication link and infrastructure to allow the exchange of video and traffic data.	City, McKinney, NCTCOG	Video sharing to emergency services to identify the location of an incident; identify traffic backups in neighboring City; center-to-center information exchange. Cities can verify the operation of the neighboring traffic signals.	\$300K	Yes		Short-Term	
Frisco / Prosper	Network Connection	Install communication link and infrastructure to allow the exchange of video and traffic data.	City, Prosper, NCTCOG	Video sharing to emergency services to identify the location of an incident; identify traffic backups in neighboring City; center-to-center information exchange. Cities can verify the operation of the neighboring traffic signals.	\$300K	Yes		Medium-Term	
Frisco / TxDOT	Network Connection	Install communication link and infrastructure to allow the exchange of video and traffic data.	City, TxDOT, NCTCOG	Video sharing to emergency services to identify the location of an incident along US 380; identify traffic backups in neighboring City; center-to-center information exchange. Cities can verify the operation of the neighboring traffic signals.	\$0.5M	Yes		Short-Term	
Frisco/NTTA	Dynamic Freeway Lanes	Install lane control signs upstream of tollway on-ramps.	City, NTTA, TxDOT, NCTCOG	Implement system of dynamic signs over tollway lanes before on-ramps. Signs would display a green arrow when the lane was open and a red X when the lane is closed. The right lane on the DNT could be closed after an event at Toyota Stadium providing on-ramp traffic an exclusive lane. Event traffic would not have to yield to traffic already on the DNT.	\$0.75M	No		Mid-Term	
Garland	Traffic and incident monitoring on ROS	Expansion of current CCTV system from 17 intersections to 120 intersections.	TxDOT, City and adjacent cities	Improve arterial traffic flow, congestion management and incident management.	\$300K	Yes	Yes	Short-Term	
Garland	Central system and local controller hardware/software upgrade	Replace central traffic control system and local controller software/hardware due to equipment and software end of life. Current system is no longer supported by vendor.	TxDOT, City and adjacent cities	Improve arterial signal timing and coordination.	\$.75M - \$1M	Yes	No	Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Garland	Roadway flood warning system	Install remote sensors to identify upstream rising creek levels and predict possible roadway flooding.	City and possibly adjacent cities	Monitor water level of flood prone areas to identify flooding possibility and to determine advance need for road closures, thereby increasing motorists safety.	\$250K - \$350K	Yes	No	Short-Term	
Grand Prairie	Re-establish video and data exchange with TXDOT FTW, establish new video & data sharing with TXDOT Dallas and NTTA via C2C	This project will facilitate video and data exchange between City of Grand Prairie (TMC) and TXDOT (FTW and Dallas) including NTTA.	TXDOT, NTTA, City	This project would provide the capability for the city to monitor freeway segments (IH20, IH30, SH360, and SH161) which passes through the City and adjust timing plans of traffic signals along arterial system parallel to the freeway in case of a freeway incident to mitigate congestion.	\$413K	Yes	Yes	Short-Term	
Grand Prairie	Local / incident traffic and railroad crossings monitoring and alert motoring public of traffic conditions	This project will provide the infrastructure necessary for monitoring of local and traffic diverted from IH 30 during incident or freeway construction including Rail road crossings monitoring by installation of 7 CCTV cameras and alert motoring public of traffic conditions by installation of 3 DMS at strategic locations along SH 180 (Main St.) from SH 180 at MacArthur St. to SH 180 at NW 23rd St. within the City of Grand Prairie.	TXDOT, City	This project improves traffic flow monitoring and incident detection and response. Also, it provides real time congestion related and traffic condition information to road users.	\$0.525M	Yes	No	Short-Term	
Grand Prairie	Install CCTV cameras	Project will install CCTV cameras at 50 major intersections.	TXDOT, City	Provides real-time monitoring of traffic signal operations and facilitate timing adjustment during event and incidents.	\$400K	Yes	No	Mid-term	
Grand Prairie	Arterial DMS installation	Install 20 Arterial DMS at critical locations city wide.	TXDOT, City	DMS will be used to inform motoring public of roadway constructions, traffic conditions, and incidents.	\$750K	Yes	No	Mid-term	
Grand Prairie	Travel time vehicle probe	Install BlueToad at critical intersections along major arterials to obtain real time travel time and origin-destination data.	TXDOT, City	Provides travel time information for performance measure and incident management.	TBD	Yes	No	Long-term	
Grand Prairie	Adaptive control	Install software and traffic signal infrastructure required for adaptive control at critical and saturated intersections.	TXDOT, City	Improve efficiency & operations at traffic signal intersections. Also, reduces accidents and delay by reducing traffic backups.	\$100K	Yes	No	Mid-term	
Grand Prairie	Install battery backups	This project will install Battery backup unit at critical intersections.	TXDOT, City	Provides real time command and control during power outages. This will improve safety, and operations during power outages.	TBD	No	No	Mid-term	
Grand Prairie	Upgrade vehicle detection	Replace existing loop detectors at signalized intersections with advanced vehicle detection technologies.	TXDOT, City	Improves vehicle detections by capability of monitoring the performance of vehicle detection, adjustment of detection zones and ability to conduct vehicle and turning movement counts.	TBD	No	No	Mid-term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Grapevine	Center-to-Center Communications	Communications between TMC's	TxDOT, DART, Trinity Metro, City of Grapevine	Improved coordination to provide traveler information on freeway corridors	\$0.5M	Yes	Partial	Short-Term	
Grapevine	TMC Construction	Construction of TMC and purchase of hardware and software	TxDOT, DART, Trinity Metro, City of Grapevine	Improved coordination to provide traveler information on freeway corridors	\$0.75M	Partial	Yes	Short-Term	
Grapevine	Frontage Road Timing Plans	Incident Management Timing Plans for freeway lane closures.	TxDOT, City of Grapevine	Coordinated frontage road timing plans to minimize freeway congestion interstate corridors	\$250K	No	Yes	Short-Term	
Grapevine	Northwest Hwy Fiber	Install Fiber optic cable in Northwest Hwy corridor from Main to SH 114 and along SH 114 frt rd to SH 26.	TxDOT, City of Grapevine	Traffic management via CCTV and coordinated timing plans along NW Hwy	\$0.75M	Yes	Yes	Mid-Term	
Grapevine	SH 26 / FM 2499 Fiber	Install Fiber optic cable in SH 26 / FM 2499 corridor from Main to Riverwalk.	TxDOT, City of Grapevine, Town of Flower Mound	Traffic management via CCTV and coordinated timing plans along SH 26 / FM 2499	\$1.5M	Yes	Yes	Mid-Term	
Irving	ATMS upgrade	This project will upgrade the central system software, replace legacy controllers, and upgrade the communications network.	City of Irving, TxDOT, NCTCOG	This project will advance the level of control of intersection operations, collect performance measures, and improve arterial mobility	\$4.1M	Yes	Yes	Short-Term	
Irving	Deploy CCTV cameras, phase II	This project will construct and install additional 50 CCTV cameras at strategic locations within the city.	City of Irving, EOC, TxDOT, DART	This project will provide surveillance of arterial operations, assist in incident management, and provide valuable data to first response teams	\$0.2M	Yes	Yes	Short-Term	
Irving	Install battery backup units (BBU)	This project will install battery backup units at approximately 205 intersections.	City of Irving	This project will maintain signal operations during emergency power outages.	\$1M	No	Yes	Short-Term	
Irving	Upgrade vehicle detection systems	This project will upgrade the existing vehicle loop detections to video and/or radar detection system for all traffic signals. Upgraded detection will support the signal performance measures data collection and performance reporting.	City of Irving, TxDOT	This project will improve day to day traffic operation allowing improved vehicle detection, minimize detection maintenance effort, allow remote troubleshooting, and enable SPM performance reporting.	\$3.2M	Yes	Partial	Mid-Term	
Irving	Upgrade traffic signal cabinets	This project will upgrade the existing 332 cabinets to ATC standard cabinet.	City of Irving, TxDOT	The project will upgrade signal control standard to full ATC (controller and cabinet) and improve signal operations and maintenance.	\$4M	Yes	No	Long-Term	
Irving	Regional data sharing	This project will enable signal and video data sharing.	City of Irving, Regional Partners, NCTCOG, TxDOT	Data sharing will enhance regional traffic performance evaluation, regional traffic management, and incident management.	\$0.3M	Yes	No	Mid-Term	
Irving	Regional interconnectivity	This project will install the necessary communication linkage and field network gear with neighboring city of Coppell.	City of Irving, City of Coppell	This project will enhance regional signal operations and mobility by sharing valuable data		Yes		Mid-term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Mansfield	Traffic Management Center	City wide operation of traffic signal system.	City of Mansfield	City wide communication between traffic signals and the ability to monitor and adjust remotely also will have the ability to see video.	\$0.95M	Yes	Yes	Mid-Term	
McKinney	Traffic Signal Controller Upgrade	Update 80 Traffic Signal Controllers to modern units.	City of McKinney, NTTA, TxDOT	This project will enhance intersection operations, collect performance measures, and improve arterial mobility	\$0.4M	Yes	Yes	Short-Term	
McKinney	Traffic Signal System Upgrade	Upgrade central management software to provide for data sharing, adaptive signal control, and support ATSPM.	City of McKinney, NTTA, TxDOT, region	The benefits of this project is: ability to share data within the region, reducing motorist delay, enhanced management of signal system, and reporting of performance.	\$0.9M	Yes	No	Mid-Term	
McKinney	Install Ethernet Switch Gear	Install ethernet switches at all signalized intersections.	City of McKinney, NTTA, TxDOT, region	This project will provide the City with a fully managed network topography. This will foster data collection, data sharing, support for connected vehicles, increase security.	\$0.7M	Yes	No	Mid-Term	
McKinney	Traffic Control Cabinet upgrade	Update 54 signal control cabinets to modern technology.	City of McKinney, NTTA, TxDOT, region	This project will replace legacy TS-1 traffic control cabinets with modern TS-2 cabinets. The benefits are: simplified maintenance, more reliability, and availability of parts.	\$0.8M	Yes	No	Mid-Term	
McKinney	Enhanced Performance Measures	Install software to collect and report ATSPM data. Install robust dashboard for the assessment of arterial performance in real-time.	City of McKinney, NTTA, TxDOT, region	This project will install specialized software that will collect field data log files, compile within a database, and possess the ability to produce reports. This project will deploy a dashboard used to convey arterial performance.	\$0.35M	Yes	No	Mid-Term	
McKinney	Upgrade Battery Backup Units	This project will upgrade the battery backUP units at approximately 40 intersections.	City of McKinney, NTTA, TxDOT	This project improve the reliability of signal operations during emergency power outages.	\$0.4M	No	Partial	Short-Term	
McKinney	CCTV with PTZ Deployment	Install 50 PTZ cameras at strategic intersections in order to monitor traffic congestion and incidents near intersections.	City of McKinney, NTTA, TxDOT,	Provide real-time monitoring; Improve traffic flow and responses to incidents.	\$0.75M	No	Yes	Short-Term	
McKinney	Expand Fiber Ring	Installation of Fiber optic cable needed for reliable, robust, high bandwidth communication network.	City of McKinney, NTTA, TxDOT	Expand the existing fiber ring to enhance communications to the signal system. Benefits are high reliability, high bandwidth, and create redundancy	\$1.2M	Yes	No	Mid-Term	
McKinney	Install Fiber Optic communication along Eldorado Parkway	Install fiber optic cable and integrate signal controllers along Eldorado Parkway.	City of McKinney, NTTA, TxDOT	Expand the existing fiber ring to enhance communications to the signal system. Benefits are high reliability, high bandwidth, and redundancy	\$0.75M	Yes	No	Mid-Term	
McKinney	Install Fiber Optic communication along Key arterials	Install fiber optic cable and integrate approximately 30 signal controllers along key arterials.	City of McKinney, NTTA, TxDOT	Expand the existing fiber ring to enhance communications to the signal system. Benefits are high reliability, high bandwidth, and redundancy	\$1.75M	Yes	No	Mid-Term	
McKinney	DMS for Corridor Management	Install DMS signs on key corridors to provide motorists real time traffic information.	City of McKinney, NTTA, TxDOT	This project will benefit the traveling public by providing real-time traffic information.	\$1.75M	Yes	No	Long-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
McKinney	Virtual DMS for Corridor Management	Upgrade the central system software to support Virtual DMS that can be used citywide. This project will support the Work Zone Data Exchange program (WZDx).	City of McKinney, NTTA, TxDOT	Provide enhanced traveler information system, supports future construction along US75 and all city arterials.	\$0.7M	Yes	No	Long-Term	
McKinney	Support for Connected Vehicles	Install dedicated CV2x technology at every intersection for communication to connected vehicles.	City of McKinney, region	This project will provide connectivity between vehicles and the infrastructure. This project will provide safety. This project can provide data on roadway conditions, signal efficiency, and other valuable information.	\$0.5M	Yes	No	Long-Term	
McKinney	Public Facing Traffic Webpage	The City will develop a webpage for visitors and residents to view traffic video, see traffic conditions, and see construction/event notices.	City of McKinney, Traveling public	Provides residents and visitors information needed to make good route choices. Will result in reduced congestion by disturbing trips throughout the network.	\$200K	No	No	Mid-Term	
McKinney	Automated Travel Time Data	Purchase equipment to read Wi-Fi or Bluetooth signals to obtain continuous real-time travel time and origin-destination data.	City of McKinney and regional travelers.	Allow performance based corridor management. Detect changes in travel times and travel time reliability allowing staff to proactively adjust the traffic signals.	\$100K	Yes	Partial	Short-Term	
McKinney	Bicycle App	Work with an existing bicycle app (i.e. Kimley-Horn KITS) to exchange information with the traffic signal system. The rider receives feedback when detected. The app places a call and extensions to the traffic signal controller. App could also be used to know the routes bicyclists are using.	City of McKinney and area bicycle enthusiasts	Bicycles are detected at traffic signal and given feedback so riders do not run red lights. Bicyclist can receive extended green light. Information about bicyclist routes will provide great benefit as investments in bicycle facilities are considered.	\$400K	Yes	No	Long-Term	
Mesquite	Video detection and PTZ Cameras on Belt Line Road between South City Limits and Northwest Drive	Replace loop detectors with VIVDS; install incident cameras with PTZ ability and bring back to the TMC.	City of Mesquite, adjacent cities	Coordinated traffic flow between south City limits of Mesquite to IH 30 and Broadway in Garland, and Sunnyvale.	\$240K	Yes	No	Short-Term	
Mesquite	Installation of UPS battery back-up systems	Installation of UPS battery back-up systems at three signals on TxDOT ROW, near UPRR crossings, along SH 352 at Florence, Galloway, and at Gross.	City of Mesquite, TxDOT, UPRR	Required due to implementation of Quiet Zone at all its UPRR crossings.	\$21K	Yes	No	Short-term	
Plano	Adaptive Signal Control	Provide real time traffic signal adjustments throughout the day to maximize the traffic throughput.	City of Plano, TxDOT, NTTA	Improve traffic flow and traffic safety	Unknown	Yes	No	Long-Term	Project expanded to include other parts of Plano.
Plano	Traffic Signal Controller Hardware and Software Upgrade	Update 240 Traffic Signal Controllers to latest standards which can provide performance measures and reports in order to improve traffic flow.	City of Plano, TxDOT, NTTA	This project will enhance intersection operations, collect performance measures, and improve arterial mobility	\$1.5M	Yes	Partial	Short-Term	Currently developing procurement documents.
Plano	Install PTZ Cameras	Install 160 PTZ cameras at intersections to monitor traffic congestion and incidents.	City of Plano, NTTA, TxDOT, and Cities of Frisco, Dallas, and Richardson.	Improve traffic flow and traffic safety	\$1.86M	Yes	Yes	Short-Term	Currently in design with an anticipated August 2022 completion date.

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Plano	Incident Management Alternative Timing Plans	Develop incident management timing plans.	City of Plano, TxDOT, NTTA	Improve traffic flow	\$600k	Yes	No	Mid-Term	Looking for NCTCOG to fund.
Plano	"Centralized" Emergency Vehicle Preemption	Install traffic signal rerouting system for emergency vehicle preemption within the city and across city boundaries.	City of Plano and adjacent cities	Improve emergency vehicle response times	Unknown	Yes	No	Short-Term	
Plano	Utilization of Crowd-Source data	Subscribe to Crowd-Source data for local and regional data analytics.	City of Plano	Improve traffic flow	Unknown	Yes	No	Short-Term	
Plano	Center to center communication and agency data sharing	Share information and data amongst agencies to improve traffic flow.	City, NCTCOG, TxDOT, NTTA, other cities	Improve traffic flow	Unknown	Yes	No	Long-Term	
Plano	Parking management systems	Install displays to inform traffic of parking availability and enforcement.	City of Plano	Improve parking management	Unknown	Yes	No	Long-Term	
Plano	Upgrade traffic signal controller cabinet	This project will replace 240 intersection cabinets to ITS cabinets.	City of Plano, NTTA, TxDOT	This project will provide enhanced functionality to operation for improved traffic mobility. The benefits are: simplified maintenance, more reliability, and availability of parts.	\$5.1M	Yes	Partial	Short-Term	Currently developing procurement documents.
Plano	Enhanced Performance Measures	Install software to collect and report ATSPM data. Install robust dashboard for the assessment of arterial performance in real-time.	City of Plano, NTTA, TxDOT	This project will install specialized software that will collect field data log files, compile within a database, and possess the ability to produce reports. This project will deploy a dashboard used to convey arterial performance.	\$0.5M	Yes	No	Mid-Term	
Plano	Upgrade Battery Backup Units	This project will upgrade the battery back units at approximately 120 intersections.	City of Plano, NTTA, TxDOT	This project will improve the reliability of signal operations during emergency power outages.	\$0.75M	Yes	Partial	Short-Term	
Plano	Install Fiber Optic communication along Key arterials	Install fiber optic cable and integrate approximately 120 signal controllers along key arterials.	City of Plano, NTTA, TxDOT	Expand the existing fiber ring to enhance communications to the signal system. Benefits are high reliability, high bandwidth, and redundancy	\$4.9M	Yes	Partial	Mid-Term	
Plano	Install PTZ Cameras	Install traffic monitoring cameras at an additional 80 locations for congestion/incident detection, verification and mitigation.	City of Plano, NTTA, TxDOT, and Cities of Frisco, Dallas, and Richardson	Improve traffic flow and traffic safety	\$1.1M	Yes	No	Short-Term	
Plano	ATMS Upgrade	This project will upgrade the central traffic management system software to allow for the incorporation of additional various traffic data streams - adaptive signal timing, advanced pre-emption response, arterial DMS sign control, city wide PTZ camera controls, reversible lane control, school zone flasher controls, waze road closures, connected and automated vehicles and others.	City of Plano, NTTA, TxDOT	This project will enhance the capabilities of the Traffic Management Center and provide for better coordination between police, fire, and traffic control. It will improve the performance of the overall traffic system providing numerous benefits to residents including reduced congestion, reduced travel time, incident management, and advanced warnings.	\$1.8M	Yes	Partial	Short-Term	Currently developing procurement documents.

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Plano	Roadside Units for Connected Vehicles	Install roadside units for connected vehicles (V2X) at approximately 250 locations on selected corridors in the city	City of Plano, NTTA, TxDOT	Enables implementation of V2V and V2I in the city as the technology matures and becomes affordable. Motorists will derive the associated safety benefits from this implementation.	\$1.5M	Yes	No	Mid-Term	
Plano	Upgrade vehicle detection systems	This project will upgrade the existing 15+ year old video detection system with the latest technology for all traffic signals. Upgraded detection will support the signal performance measures data collection and performance reporting.	City of Plano, NTTA, TxDOT	This project will improve day to day traffic operation allowing improved vehicle detection, minimize detection maintenance effort, allow remote troubleshooting, and enable SPM performance reporting.	\$8M	Yes	Partial	Mid-Term	
Plano	Automated vehicle shuttle program	Provide on-demand AV local shuttles in the Legacy and downtown business areas	City of Plano, Legacy TMA	Reduce congestion and improve mobility	\$4.5M	Yes	No	Short-Term	Looking for NCTCOG to fund.
Richardson	Automated Turning Movement Counts	Collection of 24/7/365 turning movement counts at strategic intersections. \$18,000 per location, maximum of 50 locations	City, TxDOT, NCTCOG	Fully automated, always on, turning movement and volume counts at regionally significant t intersections.	Up to \$900K	No	No	Short-term	
Richardson	Signal Retiming	Retiming of traffic signals in response to major traffic demand shifts along the northern portions of the City. 52 locations, Campbell Rd., Renner Rd., associated signals.	City, TxDOT, NTTA, Plano, Dallas	Reduce congestion due to freeway reconfiguration and major developments along PGBT Tollway	\$300K	No	No	Short-Term	
Richardson	Advanced Central Traffic Management Software	Collection and integration of all available data sources to produce reports leading to actionable items to reduce both recurring and incident related congestion.	City, NCTCOG	The ability to consolidate and integrate multiple data sources to produce reports of regional significance on traffic patterns, incident response, congestion, and maintenance.	\$500K	Yes	Yes	Short-Term	
Richardson	Advanced Traffic Signal Cabinets	Upgrade traffic signal cabinets to take full advantage of new advanced traffic signal controllers. 130 locations.	City, TxDOT, NCTCOG	Provide a larger number of detector inputs and greater flexibility on outputs, as well as Uninterruptable Power Supply and advanced communications	\$2.25M	Yes	No	Short-Term	
Richardson	V2I Test Deployment	Implement a test deployment of V2I strategies in cooperation with Research Institutes for construction warning and possible Transit applications.	City, DART, TxDOT	Provide advance warning to V2I equipped vehicles of construction ahead. Provide an interface to Transit to enhance Bus operations, passenger information, and V2I information at light-rail crossings.	\$150K	No	No	Mid-Term	
Richardson	Communication Network Expansion	Communication between TMC and signalized intersections.	TxDOT, NTTA, City, DFW 511	Increase available bandwidth for video and AV/CV	\$175K		No	Short-Term	
Richardson	Managed network switches	Upgrade switches to latest managed network switch technology.	City, NCTCOG	Improve traffic safety and IT security	\$800K		No	Short-Term	
Richardson	School Flashers Upgrade	Upgrade the system to allow remote management and CV compatible.	City, NCTCOG	Improve pedestrian safety and compliance	\$200K		No	Short-Term	
Richardson	Install fiber optic communication for traffic signals	Provides reliable and significant improvement to bandwidth.	City, TxDOT, NCTCOG, Cities	Improve traffic response, analytics, AV/CV integration			No	Long-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Richardson	TMC Upgrade	Upgrade to video wall and VMS system	City, TxDOT, NCTCOG	Improve traffic response, analytics, AV/CV integration			No	Short-Term	
Richardson	PTZ Cameras	Upgrade existing non-digital cameras and install new cameras.	City, TxDOT, NCTCOG, Cities	Improve incident and traffic response, analytics			No	Short-Term	
Richardson	Traffic Detection Upgrades	Upgrade loop detection with non-intrusive detection system for 70 intersections.	City, NCTCOG	Improve traffic delay and flow	\$1.5M		No	Short-Term	
Richardson	Traffic Detection V2X Upgrade	Upgrade to FLIR V2X	City, TxDOT, NCTCOG	Use connected technology to improve ped/bike safety, and emergency vehicle response			No	Short-Term	
Richardson	Advanced modelling and adaptive signal timing	Work with UTD researchers to develop a local advanced traffic model with the goal of providing real-time adaptive signal timing.	City, NCTCOG, UT-Dallas	Reduce congestion and provide guidance on future planning efforts.	\$100K	No	No	Mid-Term	
Rowlett	ATMS system software	This project will upgrade the central system software and upgrade the communications to local controllers.	City of Rowlett, adjacent cities	Improve arterial signal timing and coordination.		Yes	Partial	Short-Term	
Rowlett	Install CCTV cameras	This project will construct and install CCTV PTZ cameras at strategic locations within the city.	City of Rowlett, EOC, TxDOT, DART	This project will provide surveillance of arterial operations, assist in incident management, and provide valuable data to first response teams		Yes	No	Short-Term	
Rowlett	Traffic Signal Upgrade	Upgrade controllers, cabinets and detection to provide latest technology and communication with ATMS system - 26 locations.	City of Rowlett	Enhance signal operations, improve corridor progression		Yes	No	Short-Term	
Rowlett	Center to center communication and agency data sharing	Install communication link and infrastructure to allow the exchange of video and traffic data.	TxDOT, NTTA, Adjacent Cities	Allow sharing of data and video		Yes	No	Short-Term	
Rowlett	Install Fiber Optics	Connect to city network and adjoining agencies.	City of Rowlett, TxDOT, adjacent cities	Provide reliable communication system		Yes	No	Short-Term	
Rowlett	Traffic Signal Retiming	Retime signals and prepare alternate timing plans for incident management.	TxDOT, NTTA, Adjacent Cities	Optimize traffic flow along SH 66 as alternate route when IH 30 is congested	\$300K	No	No	Short-Term	
DART	Yard Management	Add yard management system at three of DART Transportation bus and rail yards.	DART	Provide location of buses and Rails at the yards. Save time walking yard, provide better communication to driver in parking vehicle.		Yes	No	Mid-Term	
DART	Spanish/English translation project		DART customers			Yes	No	Long-Term	
DART	Upgrade announcement system for TRE vehicles	Upgrade the obsolete Automatic Train Announcement System on TRE Trains. This system performs train announcements and station stops.	DART customers	Would allow for better integration with other system to provide announcements. Current system is obsolete and parts are unavailable.	\$1.2M	Yes	Yes	Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
DART	Northwest Plano Park and Ride	Relocation of the one existing VMS stanchions for safety reason and 2 other VMS signs need repair to stop intrusion of moisture inside sign enclosure, upgrading of existing cameras to new version of the 360 CCTV, smart parking, charging stations and smart power & lighting technology, install DMS on the exit showing traffic conditions on DNT system.	DART customers	Phase 3 to repair and upgrade existing equipment and add additional smart ITS technology and real time parking data integration to 511DFW.	\$1.1M	Yes	Yes	Short-Term	
DART	D2 TSP project and enhancement of phase I TSP	Provide Signal Priority from D2 tunnel to at-grade intersections and modify TSP at CBD corridor to enhance Phase I TSP.	DART customers	Improve train Operation at the Tunnel at grade intersections. Reduce traffic and light rail delay through enhancement of TSP on the Bryan-Pacific Corridor by integrating the changes in light rail volumes due to D2		Yes	No	Mid-Term	
DART	TRE ten station platform cameras	Add security cameras to TRE Stations. Trinity Metro has a project to cover the five Tarrant County stations. DART needs to cover the five Dallas County stations.	DART customers	Improve customer safety and security along the TRE.	\$0.55M	Yes	Yes	Mid-Term	
DART	Platform extension and impact of three car consist on downtown TSP	Additional simulation and update Downtown TSP system for future 3-car operations in all Red, Orange, Green and Blue line trains.	City of Dallas, DART Customers	Allow DART to operate three car trains without blocking traffic in downtown.	\$175K	No	Yes	Short-Term	
DART	TRE Locomotive & Cab Car Cameras	Install forward and outward facing cameras on the TRE locomotives (9) and cab car (8) fleet.	DART customers, Police	Safety improvements related to employee operations, as well as claims support related to trespasser and grade crossing incidents.	\$1.5M	No	No	Mid-Term	
DART	TRE Coaches Camera Installation	Install camera system on the coaches (17) and interior customer compartments of the cab cars (8)	DART customers, Police	Safety and security improvements for the customers and employees on board the TRE.	\$1.3M	Yes	Yes	Mid-Term	
DART	Enhanced Bus Shelter	Enhanced Bus Shelters have been installed at Wheatland @ West Virginia, Beltline @ Northgate and Forest Lane @ Meadow Knoll. Shelters are solar powered and include lighting, security cameras digital screens. Digital screens will display real-time information.	DART Customers	Security cameras allow DART police to monitor high volume locations. It provides our customers with security. The digital screens will provide customers with real-time bus arrival information. Also, it will provide customers with disruption and safety messages.	\$255K	Yes	Yes	Mid-Term	
DART	Passenger Wi-Fi System in Bus and Rail	Install Wifi access points, Routers in the Bus and Rail vehicles.	DART Customers	Provide free Wi-Fi connections to the riders in the Bus and Train	\$5.7M	No	No	Mid-Term	
DART	VBS PAVMB interface upgrade to Siri SM interface	Replace VBS PAVMB interface with Siri SM interface.	DART Customers	Provide updated train arrival information including service changes to the customer at the LRT stations.	\$634K	Yes	No	Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
DART	Upgrade PAVMB System in LRT station and PID at TRE stations	Upgrade new PAVMB System at LRT stations and PIDs at TRE stations.	DART Customers	Provide customer next train time display at the Rail platforms.		Yes	No	Mid-Term	
DART	TSP full priority	Improve TSP by implementing full priority at CBD.	DART	Improve train Operation at CBD by providing full priority		Yes	No	Mid-Term	
DART	BUS TSP	Improve speed of buses operating on Routes 453, 467, 466 and Route 452 through the use of Traffic Signal Priority (Dallas and Plano).	DART, City of Dallas, Plano	Improved the operating speed of buses operation on several routes in the City of Dallas and Plano through the use of priority requests to extend green time or shorten red time.	\$2.8M	Yes	Yes	Mid-Term	
DART	AV Bus Pilot Test	Procure and test the use of AV 40 foot buses in the operation of Route 524 between Love Field and Inwood Station.	City of Dallas, DART, Love Field	Operate more safely through the use of AV technology on traditional fixed route bus service, and evaluate the customer and driver reaction to the transition to level 4 autonomous bus operation	\$8M	Yes (Partially)	Yes	Mid-Term	
DCTA	Enhanced PTC (Grade Crossing)	Add monitoring of at grade crossings to improve safety, monitor status of crossing and detect vehicles stuck/present on crossing.	FRA, FTA, Cities (Denton, Lewisville, Highland Village)	Improve safety at grade crossings; meet future mandates; 41 crossings represent key risk area to DCTA	\$5M	Yes	No	Mid-Term	
DCTA	Bus Cameras & Security Equipment	Complete bus camera system throughout fleet.	FTA, Cities (Denton, Lewisville, Highland Village)	Improve driver and passenger safety through installation of on-board security equipment	TBD	No	No	Mid-Term	
DCTA	Rail Station Cameras & Security Equipment	Complete camera based security system for rail stations and parking lots.	FRA, FTA, Cities (Denton, Lewisville, Highland Village)	Provide ability to perform forensic review of incidents at stations; provide ability to poll system and check status of facilities real-time from a remote location	TBD	No	No	Short-Term	
DCTA	Real-Time Mobility On Demand Technology	Technology application supporting real-time transit services to passengers. (Uber-like service)	FTA, Cities (Denton, Lewisville, Highland Village)	Improves passenger travel by providing a convenient real-time service type.	TBD	No	No	Short-Term	
DCTA	Positive Train Control (PTC)	Implementation of Enhanced Automatic Train Control System (E-ATC). The project is expected to be completed in late 2017.	DCTA	Safety Benefits. Avoidance of potential train to train collisions	\$12M	Yes	Yes	Short-Term	
DFW Airport	Dynamic Message Signs	DMS Boards located near both International Parkway Plaza exits. Compatible technology, equipment w/ TxDOT's ATMS. Software link to DFW 511 and DFW website and mobile apps.	NCTCOG, TxDOT, NTTA, DFW Airport	Provides traveler information: traffic conditions, travel time, weather and emergency events on highway routes from Airport exits to travelers.	\$2M	Yes	No	Short-Term	
DFW Airport	Permanent Count Stations and Roadway Temperature Sensors	Systematic collection of traffic and temperature data utilizing automatic traffic recorders located on various roadways throughout DFW Airport with focus on thoroughfares with connections to state highways.	NCTCOG, DFW Airport, TxDOT, NTTA	Data collected will be used in planning for capacity improvements and assessing pavement and bridge conditions. Vehicle type classification will assist pavement design and environmental analyses.	\$600K	Yes	No	Short-Term	\$20K per 24 locations plus \$100K software

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
DFW Airport	ATMS update	Add components to Airport's ATMS (CSJ: 0918-45-692) to include (1) OptiCom signal pre-emption and (2) radio antenna upgrades for bandwidth increase. (3) Update signal timing to optimize efficiency)	NCTCOG, DFW Airport, TxDOT, NTTA	Provides critical incident management response and increased communication speed and reliability.	\$1M	Yes	No	Short-Term	
DFW Airport	ATMS expansion	Current ATMS coverage is 21 intersections. Expansion will add 7 existing intersections.	NCTCOG, DFW Airport, TxDOT, NTTA, 511	Additional intersections will complete DFW Airport's traffic signal system and provide a link to DFW Regional 511 allowing travelers access to roadway congestion and detour routes.	\$1M	Yes	No	Short-Term	
LBJ Express	Communications between TMCs	This project will construct a wired or wireless communication link among several regional agencies.	TxDOT, NTTA, City	Improved coordination to provide traveler information on interstate corridors	\$1M	Yes	No	Short-Term	
LBJ Express	DriveOn TExpress	Expand DriveOn TExpress to support I-30, 35W, 183 and other TxDOT projects.	TxDOT, LBJ, NCTCOG	Wide use and acceptance of the DriveOn APP	TBD	No	No	Short-Term	
NCTCOG	Regional Network	Facilitate Development of Regional Network for Multi-Agency Communication, Data and Video Sharing	All regional agencies with ITS	Allows sharing of data and video using fiber and wireless network	TBD	Yes	No	Mid-Term	
NCTCOG	511DFW	Regional Traveler Information System	Regional Agencies	Allows collection and public distribution of traffic and transit information	\$1M	Yes	Yes	Short-Term	System developed, currently in M&O, \$1M Annually
NCTCOG	Concept of Operations	Develop Concept of Operations for a regional corridor	Regional Agencies appropriate to selected corridor	Provides a concept of operations document including identification of roles and responsibilities	TBD	No	Yes	Short-Term	
NCTCOG	Center to Center	C2C Plug Ins for Traffic Signal Communications and Control	NCTCOG, Cities and TxDOT	Allows sharing of traffic signal timing plans and other information between agencies	TBD	Yes	Yes	Short-Term	
NCTCOG	Connected Vehicles	Provide devices and communication to support Connected Vehicles	TxDOT, NTTA, CDAs, Cities and Counties	Allows collection, transmission and archiving of data	TBD	Yes	No	Mid-Term	
NCTCOG	Protect Against Theft	Provide protection to copper wire and fiber to reduce theft and vandalism	TxDOT, NTTA, CDAs, Cities and Counties	Reduces device outages and cost of system maintenance	TBD	No	No	Short-Term	
NCTCOG	Regional Traffic Signal Retiming Program (RTSRP)	RTSRP provides data collection and analysis and timing plans	NCTCOG, Cities and TxDOT	Improves progression and air quality on selected arterials	TBD	No	Yes	Short-Term	\$1M/year
NCTCOG	Minor Intersection Improvements	Low Cost Intersection Improvements such as restriping and GPS clocks	NCTCOG, Cities and TxDOT	Provides low cost improvements to intersections	TBD	No	Yes	Short-Term	\$2.5M total FY 17&18
NCTCOG	Major Intersection Improvements	Medium Cost Intersection Improvements	NCTCOG, Cities and TxDOT	Provides medium cost improvements to intersections	TBD	No	No	Mid-Term	
NCTCOG	ITS Security	Identify top 10 regional infrastructure components and develop countermeasures.	NCTCOG, Cities and TxDOT	Recommends security measures to protect regionally significant resources	TBD	No	Yes	Short-Term	
NCTCOG	Critical Infrastructure/Key Resources (CIKR)	Analyzes risks from major catastrophic events and nominates resources to Homeland Security for evaluation.	NCTCOG, Cities and TxDOT	May result in funding to protect resources	TBD	No	Yes	Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
NCTCOG	Severe Weather	Develop Process and mechanism to provide severe weather warnings.	NCTCOG, National Weather Service and TxDOT	Provides warning to travelers about severe weather, including severe thunderstorms and tornadoes	TBD	Yes	Yes	Short-Term	
NCTCOG	Regional ITS Data Quality Implementation	Evaluates data and data collection devices and provides system for data sharing.	NCTCOG and TxDOT	Ensures effective use of ITS devices, including for data collection, provides access or automated data feeds	TBD	Yes	Yes	Short-Term	Ongoing
NCTCOG	Wrong Way Driving	Wrong Way Driving Detection and Crash Reduction	NCTCOG, NTTA and TxDOT	Improves safety	TBD	Yes	Yes	Short-Term	
NCTCOG	Automated Occupancy Verification Technology	Provides automated occupancy verification in vehicles.	NCTCOG and TxDOT	Allows improved enforcement of HOV requirements	TBD	No	Yes	Short-Term	\$2M/yr
NCTCOG	Motorist Assist Patrol Program	Provides assistance to stranded motorists and assists first responders while responding to crashes.	NCTCOG and TxDOT	Improves safety and reduces secondary crashes and associated congestion	TBD	Yes	Yes	Short-Term	Ongoing
NCTCOG	Optimized Freight	Improved traffic signal and other operational aspects of freight.	NCTCOG, TxDOT, various cities, freight industry and carriers	Reduce delays in freight operations	\$5M pending TIP action	No	Yes	Medium Term	
NCTCOG	Integrate Waze data into emergency dispatch	Provide Real Time Data	NCTCOG, TxDOT, various cities, emergency responders	Reduced emergency response time	TBD	No	No	Long Term	
NCTCOG	Roadway Data from AV	Receive data from connected vehicles.	NCTCOG, TxDOT, various cities, emergency responders	Improves safety and reduces secondary crashes and associated congestion	TBD	No	No	Long Term	
Trinity Metro	Traffic Signal Prioritization	Implement TSP to provide better traffic flow for transit and emergency vehicles.	Trinity Metro, City of Fort Worth	Increased on-time performance for transit, better response time for emergency vehicles	\$280K	Yes	No	Mid Term	
Trinity Metro	New Buses	Replace aged and obsolete fixed route buses; buses will be preinstalled with APCs, AVAS, RTPIS hardware and security cameras (next 3 years).	Trinity Metro	Reduced maintenance costs, increased reliability, and increased passenger capacity	\$14.1M	No	Partial	Short-Term	
Trinity Metro	Digital Bus Stop	Small, Solar powered, wireless displays provide up-to-the-minute schedule information and next bus arrival predictions at 46 bus bays within transfer centers and top 50 bus passenger shelters.	Trinity Metro	Increases ridership by reducing passenger's uncertainty about how long its going to be before the next bus comes	\$500,000		Yes	Short-Term	
Trinity Metro	Electric Coach Buses	Premium-level over-the-road coaches for I-35W HIB pilot project. On-board equipment will track speeds in toll-managed lanes, keeping passengers aware of arrival times and enable refund of fares if bus arrives late.	Trinity Metro	Highly optioned buses with features like wi-fi, arrival time displays and reclining seats will theoretically attract choice-riders.	\$13.25M		Partial	Mid-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
Trinity Metro	Real-Time Information System Equipment	Larger, hard-wired displays specifically for the I-35W HIB pilot project provide up-to-the-minute schedule information and next bus arrival predictions at 3 locations.	Trinity Metro	Increases ridership by reducing passenger's uncertainty about how long it's going to be before the next bus comes	\$51,000		Partial	Mid-Term	
Trinity Metro	Intelligent Transit Systems	Computer-Aided Dispatching and Automatic Vehicle Location Systems (CAD-AVL) integrating onboard equipment including Automatic Passenger Counters, Automatic Voice Annunciation and Fareboxes for management and data collection.	Trinity Metro	Ability to manage bus operations, implement detours, send repair crews/replacement vehicles, respond to incidents, collect and report passenger counts, feed data to passenger information systems such as GoPass and arrival information signage.	\$3.0M		Yes	Short-Term	
Trinity Metro	Yard Management	Software for managing bus yard and garage activities	Trinity Metro	Tracks where buses are parked, their state of readiness, whether they are down for maintenance, being cleaned/refueled or available for dispatch. Integrates with CAD-AVL system.	\$1.2M		No	Long Term	
Trinity Metro	Bus Stop Management	Software for managing bus stop maintenance and Inventory	Trinity Metro	Work order system for installation, removal, relocation, cleaning and repair of bus stops and amenities. Feeds bus stop status into passenger information apps for example if a bus stop is closed for construction or detour.	\$150K		Partial		
Trinity Metro	Guaranteed Transit App	Tracks fares purchased for High Intensity Bus Corridor routes operating in toll-managed lanes and issues refunds if the bus arrives late.	Trinity Metro	Helps to attract choice riders to use high capacity express routes rather than drive single-occupant vehicles.	\$186K		Partial		
Trinity Metro	Transfer Center Communications	Implementation of real-time communication with on-site security camera system.	Trinity Metro	Increased security and safety for customers and drivers	\$150K	Yes	No	Short-Term	
Trinity Metro	CCTV Security Camera Replacement	Replace all security cameras at Tarrant County TRE Stations and integrate into Video Management System.	Trinity Metro	Increased security and safety for customers and drivers	\$488		Yes	Short-Term	
TxDOT-Dallas	US67 Wireless ITS Installation from Belt Line to Ward Rd (16.25 mi)	Installation of CCTV, DMS, & Vehicle Detection Units all communicating over a wireless network.	TxDOT, Regional Agencies appropriate to selected corridor	Improve incident response time and reduce congestion	\$1.925M	Yes	No	Short-Term	
TxDOT-Dallas	US175 Wireless ITS Installation from IH20 to SH34 (22.0 mi)	Installation of CCTV, DMS, & Vehicle Detection Units all communicating over a wireless network.	TxDOT, Regional Agencies appropriate to selected corridor	Improve incident response time and reduce congestion	\$2.6M	Yes	No	Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
TxDOT-Dallas	US75 ITS fiber communication upgrade. Limits: from Exchange Pkwy to US380 (7.33 mi)	Upgrade TxDOT's current infrastructure from wireless transmission of video/data to transmission via fiber optic cable, deployment of additional CCTV.	TxDOT, Regional Agencies appropriate to selected corridor	Video transmitted via fiber optic cable will be significantly clearer and downtime and during inclement weather will be greatly reduced along with maintenance costs.	\$2.5M	Yes	No	Short Term	
TxDOT-Dallas	IH45 ITS fiber communication upgrade. Limits: from IH20 to Dallas/Ellis County Line (12.0 mi)	Upgrade TxDOT's current infrastructure from wireless transmission of video/data to transmission via fiber optic cable, deployment of additional CCTV.	TxDOT, Regional Agencies appropriate to selected corridor	Video transmitted via fiber optic cable will be significantly clearer and downtime and during inclement weather will be greatly reduced along with maintenance costs.	\$3.125M	Yes	No	Short Term	
TxDOT-Dallas	IH35 ITS fiber communication upgrade. Limits: from US380 to Denton/Cooke County Line (13.5 mi)	Upgrade TxDOT's current infrastructure from wireless transmission of video/data to transmission via fiber optic cable.	TxDOT, Regional Agencies appropriate to selected corridor	Video transmitted via fiber optic cable will be significantly clearer and downtime and during inclement weather will be greatly reduced along with maintenance costs.	\$3.375M	Yes	No	Short Term	
TxDOT-Dallas	IH30 ITS fiber communication upgrade. Limits: from Bass Pro Dr to Rockwall/Hunt County Line (16.5 mi)	Upgrade TxDOT's current infrastructure from wireless transmission of video/data to transmission via fiber optic cable.	TxDOT, Regional Agencies appropriate to selected corridor	Video transmitted via fiber optic cable will be significantly clearer and downtime and during inclement weather will be greatly reduced along with maintenance costs.	\$4.525M	Yes	No	Short Term	
TxDOT-Dallas	US80 ITS fiber communication upgrade. Limits: from IH30 to IH635 (2.97 mi)	Upgrade TxDOT's current infrastructure from wireless transmission of video/data to transmission via fiber optic cable.	TxDOT, Regional Agencies appropriate to selected corridor	Video transmitted via fiber optic cable will be significantly clearer and downtime and during inclement weather will be greatly reduced along with maintenance costs.	\$0.75M	Yes	No	Short Term	
TxDOT-Dallas	US175 ITS fiber communication upgrade. Limits: from IH20 to IH45 (9.25 mi)	Upgrade TxDOT's current infrastructure from wireless transmission of video/data to transmission via fiber optic cable.	TxDOT, Regional Agencies appropriate to selected corridor	Video transmitted via fiber optic cable will be significantly clearer and downtime and during inclement weather will be greatly reduced along with maintenance costs.	\$2.312M	Yes	No	Short Term	
TxDOT-Dallas	US67 ITS fiber communication upgrade. Limits: from IH20 to Belt Line (6.02 mi)	Upgrade TxDOT's current infrastructure from wireless transmission of video/data to transmission via fiber optic cable.	TxDOT, Regional Agencies appropriate to selected corridor	Video transmitted via fiber optic cable will be significantly clearer and downtime and during inclement weather will be greatly reduced along with maintenance costs.	\$1.505M	Yes	No	Short Term	
TxDOT-Dallas	DMS Installation Project	Installation of DMS's at locations to fill in gaps in current ITS system.	TxDOT, Regional Agencies appropriate to selected corridor	Installation of new DMS's on corridors that currently have longer than normal spacing between signs.	\$1M	Yes	No	Short-Term	
TxDOT-Dallas	DMS rehabilitation	Removal and replacement of existing DMS's that have reached end of life.	TxDOT, Regional Agencies appropriate to selected corridor	Reliable Traffic Information and management	\$1M	Yes	No	Short-Term	
TxDOT-Dallas	HOV Lane operation	HOV lanes and Managed Lanes with reversible or time of day operations on multiple highways.	TxDOT, Regional Agencies appropriate to selected corridor	Install Video, Communications, DMS's, Toll collection and detection to ensure lanes operate safely and efficiently		Yes	No	Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
TxDOT-Dallas	Toll Lane Operation	Managed Toll Lane Operations on multiple Highways	TxDOT, Regional Agencies appropriate to selected corridor	Install Video, Communications, DMS's, Toll collection and detection to ensure lanes operate safely and efficiently		Yes	No	Short-Term	
TxDOT-Dallas	Dynamic Shoulder Use	Implement Dynamic Shoulder Use to reduce congestion.	TxDOT, NCTCOG, NTTA, Regional Agencies appropriate to selected corridor	Install Video, Communications, DMS's and detection to ensure lanes operate safely and efficiently		Yes	No	Short-Term	
TxDOT-Dallas	Motorist Assist Patrol Program	Provides assistance to stranded motorists and assists first responders while responding to crashes.	NCTCOG and TxDOT	Improves Safety and reduces secondary crashes and associated congestion	\$4.5M Annually	Yes	Yes	Short-Term	
TxDOT-Dallas	Wrong Way Detection	Select a corridor to implement wrong way detection measures.	Dallas/Collin Counties	Safety	\$500K	Yes	No	Short Term	
TxDOT-Dallas	US75 ITS fiber communication upgrade. Limits: from US380 to Rosamond Pkwy (11.03 mi)	Upgrade TxDOT's current infrastructure from wireless transmission of video/data to transmission via fiber optic cable.	TxDOT, Regional Agencies appropriate to selected corridor	Video transmitted via fiber optic cable will be significantly clearer and downtime and during inclement weather will be greatly reduced along with maintenance costs.	\$2.758M	Yes	No	Mid-Term	
TxDOT-Dallas	US287 Wireless ITS Installation from IH45 to Bus287 (west of Waxahachie (24.0 mi)	Installation of CCTV, DMS, & Vehicle Detection Units all communicating over a wireless network.	TxDOT, Regional Agencies appropriate to selected corridor	Improve incident response time along corridor. Provide visual verification to manage traffic on corridor for hurricane evacuation.	\$1.48M	Yes	No	Mid-Term	
TxDOT-Dallas	IH45 ITS fiber communication upgrade. Limits: from IH30 to IH20 (8.83 mi)	Upgrade TxDOT's current infrastructure from wireless transmission of video/data to transmission via fiber optic cable, deployment of additional CCTV.	TxDOT, Regional Agencies appropriate to selected corridor	Video transmitted via fiber optic cable will be significantly clearer and downtime and during inclement weather will be greatly reduced along with maintenance costs.	\$2.775M	Yes	No	Mid-Term	
TxDOT-Dallas	IH45 ITS fiber communication upgrade. Limits: from Dallas/Ellis County Line to Ellis/Navarro County Line (23.4.0 mi)	Upgrade TxDOT's current infrastructure from wireless transmission of video/data to transmission via fiber optic cable, deployment of additional CCTV.	TxDOT, Regional Agencies appropriate to selected corridor	Video transmitted via fiber optic cable will be significantly clearer and downtime and during inclement weather will be greatly reduced along with maintenance costs.	\$6.435M	Yes	No	Long Term	
TxDOT-Fort Worth	Expand ITS Coverage Parker and Palo Pinto Co	Install CCTV, DMS, Sensors and weather stations	TxDOT, Regional Agencies appropriate to selected corridor	Advanced traveler info and incident management	\$1.67M	No	No	Short-Term	
TxDOT-Fort Worth	Expand ITS Coverage Parker and Palo Pinto Co	Install CCTV, DMS, Sensors and weather stations	TxDOT, Regional Agencies appropriate to selected corridor	Advanced traveler info and incident management	\$0.53M	No	No	Mid-Term	
TxDOT-Fort Worth	Expand ITS Coverage Parker and Palo Pinto Co	Install CCTV, DMS, Sensors and weather stations	TxDOT, Regional Agencies appropriate to selected corridor	Advanced traveler info and incident management	\$0.87M	No	No	Long-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
TxDOT-Fort Worth	Expand ITS Coverage Johnson Co	Add CCTV and Sensors to expand coverage	TxDOT, Regional Agencies appropriate to selected corridor	Advanced traveler info and incident management	\$0.69M	Yes	No	Short-Term	
TxDOT-Fort Worth	Expand ITS Coverage Johnson Co	Add CCTV and Sensors to expand coverage	TxDOT, Regional Agencies appropriate to selected corridor	Advanced traveler info and incident management	\$0.57M	Yes	No	Mid-Term	
TxDOT-Fort Worth	Expand ITS Coverage Johnson Co	Add CCTV and Sensors to expand coverage	TxDOT, Regional Agencies appropriate to selected corridor	Advanced traveler info and incident management	\$250K	Yes	No	Long-Term	
TxDOT-Fort Worth	SH 121 Fiber Communication	Install Fiber on SH 121 from DART Rail to Bass Pro Blvd	TxDOT, Regional Agencies appropriate to selected corridor	Create redundant path and local agency connection		Yes	No	Short-Term	
TxDOT-Fort Worth	Toll Lane Operation	Managed Toll Lane Operations on multiple Highways.	TxDOT, Regional Agencies appropriate to selected corridor	Install Video, Communications, DMS's, Toll collection and detection to ensure lanes operate safely and efficiently		Yes	No	Short-Term	
TxDOT-Fort Worth	ITS deployment in Tarrant/Wise County on US 287 to Decatur area	Install CCTV, DMS, Sensors and weather stations.	TxDOT, Regional Agencies appropriate to selected corridor	Advanced traveler info and incident management	\$1.6M	Yes	No	Short-Term	
TxDOT-Fort Worth	ITS deployment in Parker, Wise, and Jack counties on SH 199 from FM 730 to Jacksboro	Install CCTV, DMS, Sensors and weather stations.	TxDOT, Regional Agencies appropriate to selected corridor	Advanced traveler info and incident management	\$2.1M	Partial	No	Short-Term	
TxDOT-Fort Worth	ITS deployment in Johnson and Somervell counties on US 67 from IH 35W to Glen Rose	Installation of CCTV, detection, DMS, and weather station.	TxDOT, Regional Agencies appropriate to selected corridor	Advanced traveler info and incident management	\$1.5M	Partial	No	Short-Term	
TxDOT-Fort Worth	Road Weather Information System	Installation of road weather information systems throughout the District.	TxDOT, Regional Agencies appropriate to selected corridor	Implementation of road weather information systems serves primarily to help maintenance personnel make timely and efficient winter maintenance decisions.	No	Yes	No	Short-Term	
TxDOT-Fort Worth	US 377 connected corridor	Upgrade the US 377 connected corridor (Haltom City, Fort Worth) to a smart connected corridor.	TxDOT, Regional Agencies appropriate to selected corridor	Real time traffic information to drivers	No	Yes	No	Short-Term	

Agency	Project	Brief Description	Potential Stakeholders	Benefits	Cost	ITS Funding Criteria Met	Funding Identified	Timeframe	Comments
TxDOT-Fort Worth	Motorist Assist Patrol Program	Provides assistance to stranded motorists and assists first responders while responding to crashes.	NCTCOG and TxDOT	Improves Safety and reduces secondary crashes and associated congestion	TBD	Yes	Yes	Short-Term	