

Project Worksheet

Regional Mobile Command Platform

INVESTMENT JUSTIFICATION

Regional History

The Capital Area Council of Governments (CAPCOG) is considered the *Capital Region* and is comprised of ten counties surrounding the state capital city; Austin, Texas. These counties are Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, and Williamson. The Capital Area Trauma Council region (TSA-O) is made up of the ten counties above in addition to San Saba County. There are a total of 254 Texas counties grouped into 24 regions or *councils of governments* (COG's); 22 Trauma Service Areas; and 24 Emergency Management Disaster Districts. Not all of these regional or district boundaries are congruent.

The CAPCOG region has diverse and wide ranging topography. The Texas hill country on the western side of the region is covered with live oak, mesquite, and ash-juniper stands on rolling country and difficult rocky terrain rising up to the plateau portion of the central corridor. This gives way to black land prairies, pine forest woods and coastal prairies to the east and southeastern portions of the region.

Several critical hydrological areas are also located within the region. These waterways consist of rivers, streams, and lakes that serve as flood mitigation systems with several hydro-electric dams, power generation plants, and water supply reservoirs for irrigation and consumption.

The majority of the regional land mass is considered rural with widespread farm and ranch areas. Population centers vary widely in the CAPCOG region. High density urban centers are located along the major thoroughfares and IH-35 corridor counties while numerous suburban cities and smaller communities are spread diversely throughout the region.

Several critical transportation corridors traverse the region such as IH-35, IH-10, US 281, US 290, US 183, US 79 and several state highways and toll roads. Austin-Bergstrom International Airport is located in the southern portion of the region and several major railroads also cross the area; several of which carry hazardous materials.

Being the Capital Region, there are numerous key facilities and critical infrastructures requiring security, redundancies, emergency response and operations plans, mitigation requirements, and recovery plans. The region is considered a prosperous area of Texas and has many successful financial, industrial, agricultural, large educational and health care markets and facilities.

Historical Threats

Weather related threats require constant monitoring. Severe thunderstorms with large hail are frequent along with powerful winds during spring and early summer months. The region has been struck many times by tornadoes of all classifications including catastrophic F5 storms. The region also

falls victim to annual ice storms causing transportation issues, power outages, and local emergencies. The terrain also lends itself to severe flooding events that have resulted in state and federally declared disasters in the recent past.

The eastern portion of the region lies within 75 miles of the Texas gulf coast with the central portion of the region and the IH-35 corridor within 150 miles. This proximity to the coast places the Capital region in unique situations during hurricane season. Hurricanes and tropical storms striking the gulf coast in strategic areas can traverse the Capital Region spawning severe thunderstorms, tornadoes, and wide spread flooding. In addition to storm management, the region is also a hurricane shelter hub and has a point-to-point shelter agreement with the City of Galveston and Galveston County, Texas. The region also receives thousands of Houston-Galveston area self-evacuees driving west on IH-10 and US 290 through the Capital region.

This proximity to the coast also places the Capital Region emergency service providers and Type III Incident Management Team high on the list of mutual aid resources for rescue and recovery operations along the middle and upper Texas coast. During the 2008 hurricane season, the lower and upper Texas coastal regions were struck by hurricanes Dolly, Gustav, Ike, and Tropical Storm Eduardo. Capital region emergency service providers, incident management personnel, and numerous assets were deployed to these areas for over 45 days from July through September of 2008.

CAPCOG has also found itself in a severe drought for the past several years. The severity of the drought has forced local counties to petition the state to declare a disaster and request federal drought mitigation assistance for agricultural, financial, and fire suppression resources. Several of the regional counties have received disaster declarations.

The severe drought conditions has not only caused crippling financial, agricultural, and ranching losses; but the frequency and acuity of large complex wild land-urban interface fires has dramatically increased in the last few years. The population growth within the Capital Region should be considered when discussing this particular threat. The regional 2000 census count was 1,346,833. In January 2008, the population had risen to 1,702,636; a dramatic 26% increase. Williamson County specifically, grew an alarming 53% rising from 249,967 to 381,461. The projected 2010 census is expected to follow these same trends. A good portion of this growth is occurring in the suburban and semi-rural areas of the region and not in the traditional core or "downtown" areas. For example, the City of Cedar Park, a suburban community in Williamson County that borders the City of Austin, grew an alarming 103% (26,049 to 52,809). The City of Leander (bordering Cedar Park) has posted an amazing 218% increase; 7,596 to 24,135. What were once large areas of rural farm and heavily wooded hunting lands are now quickly becoming suburban areas with minimal defensible spaces and little to no *FireWise* landscaping techniques being employed in these housing developments. This is not just specific to Williamson County. Unfortunately these practices are occurring across the Capital region. With this type of growth in these terrain features, and taking the severe drought conditions into account, wild land-urban interface fires will continue to threaten communities for the unforeseeable future. In the last six months alone, there have been hundreds of small (<500 acres) wild land-urban interface fires. However, several fires grew to a 1,000 acres or more requiring multiple operational periods, evacuations, state

and federal resources, with dozens of homes and commercial structures lost. Two recent fires, the Florence CR 233 fire and the Bastrop Wilderness Ridge fire, received disaster declarations and totaled nearly 6,000 acres between the two.

Terrorism

The Austin-Round Rock Metropolitan Statistical Area (MSA) lies completely within the region and is in its second year of Tier II UASI (urban area security initiative) status. The region remains vigilant in recognizing, mitigating, and responding to suspected terrorism related incidents. To date, the main response efforts have been focused on isolated domestic incidents.

Regional Response Capabilities

The Capital Region has done well in receiving and distributing various grant funds over the past several years. The majority of these funds have purchased much needed “big ticket” capitol assets such as hazardous materials equipment and apparatus, specialized law enforcement items for explosive ordnance disposal and SWAT, improving regional interoperability to the highest defined level and funding two mobile communications platforms. Several of these assets combined form the four regional CBRNE Task Forces (chemical, biological, radiological, nuclear, and explosive).

Williamson County/ CAPCOG Regional Need: Regional Mobile Command Platform

Across the region, there are several small vehicles such as pickup trucks or sport utility vehicles that are used for mobile command posts within their respective jurisdictions. Williamson County and Cities provide mobile command post operations in the same fashion. Some Williamson County public safety agencies, such as the Sheriff’s Office, have no sport utility or similar vehicle to provide any mobile command post operations. The only reliable Williamson County mobile platform capable of providing some type of mobile command post operations is the communications trailer. Even so, the communications trailer was not designed to function as a command post and lacks many key features and capabilities necessary for successful command post operations. Some agencies deploy tents or other shelter devices for command post operations when needed. However, there is no mobile asset in the region that meets the requirements of a purpose built dedicated regional mobile command platform to support the Williamson County Type IV Incident Management Team (0-72 hours); or the Type III regional (24-96 hours) or larger incident with capacity to support operations, planning, or logistical sections of an incident management team; or for that matter a simple field command post for local Type IV incidents. Williamson County and the entire Capital Region is currently deficient in this area. In Williamson County specifically, the ability to manage moderate to large scale county-wide incidents is severely hampered due to a lack of resources. The coordination and management of Type IV, III or larger incidents within the region; or incident management operations while deployed outside the region such as the coastal areas for hurricane support, would be more efficient with a properly designed, supported, and maintained mobile command post platform. In the last twelve (12) months, there have been over twenty (20) requests for a mobile command or communications response to support field operations in law enforcement or fire services in Williamson County alone. In addition, Williamson County has been

requested to respond and support on-scene command or communications in neighboring counties on five (5) separate occasions.

The current Williamson County Mobile Command Post bus is a used and re-purposed vehicle originally purchased as a mass transit bus from Capitol Metro and subsequently re-furnished with grant funds nearly five (5) years ago. Since being placed into service, the bus has responded to incidents as requested when available. Unfortunately, the vehicle requires intensive maintenance and at times is out of service for extended periods of time. Even when operable, the vehicle cannot be configured to successfully support an ALL-Hazards mission requirement for law, fire, EMS, or incident management purposes.

Solution

Williamson County, in partnership with the Williamson County Fire Chief's Association (WCFCFA), and the Capital Area Trauma Council (CATRAC) created a working group and has accumulated funds and equipment to design, purchase, equip, and operate a purpose built Type I Mobile Command Post/EOC. The platform selection, design, and operational parameters are deeply rooted in lessons learned from numerous Type III and larger deployments of the Williamson County Type I Regional Mobile Communications Platform and numerous smaller command vehicles. These recent missions have included numerous large wildfires, three hurricanes, and several law enforcement incidents. The work group developed the requirements used to design the platform and defined the minimum critical mission capabilities/needs.

The minimum mission requirements are as follows:

- Designed and able to proficiently support the following mission tasks
 - Fire suppression, hasty evacuations, and recovery activities
 - Hazardous Materials or CBRNE response
 - Swift-Water, Dive/Recovery, Technical Rescue response
 - Law Enforcement operations such as SWAT, Hostage Negotiations, Missing Person/Suspect search operations, Crime Scene/Investigation support
 - Hospital internal/external disaster operations such as Mass Casualty operations, hospital evacuations, surge capacity and patient tracking operations, continuity of operations, and other mobile medical operations center (MOC) needs
 - Broad scope of hurricane or large area disaster (tornado, flood) operations such as mobile EOC for affected city or county governments, continuity of government operations, incident management team support, Public Health operations
- Meets equipment and capabilities criteria for resource typing as a FEMA Type I Mobile Emergency Operations Center; meeting this resource typing criteria also allows the platform and

staff to function in a variety of command or coordination roles including Emergency Operations Center, Multi-Agency Coordination Center, Medical Operations Center, Mobile Command Post

- Durable, maneuverable, and easily maintained by Williamson County Fleet Services as a single-unit diesel chassis truck with an automatic transmission
- Robust towing package with minimum tongue pull capacity of 10,000 lbs. for support trailer
- Operable with a Class C Texas Driver's License
- Deployable with minimum of 2 personnel with ability of up to 6 additional personnel operating at communications and computer workstations while seated and mobile
- Completely self-sufficient for 8 personnel including rations, potable water, shower, toilet, and sleeping areas for up to 96 hours
- Rapidly deployable as an initial attack vehicle for local tactical command post operations when necessary
- Ability to support maximum Command and General Staff element of 12 personnel during peak staffing inside the vehicle
- Ability to support standard ICS structure with internal and external command, tactics, and planning meetings with external staff / personnel surge capacity when needed
- Ability to co-locate and share electronic data and radio communications with the Williamson County Type I Mobile Communications Trailer RMC-3, or other similar apparatus
- Have robust on-board electronic audio/visual devices to display a variety of data to include WebEOC, GIS, weather radar, CAD, ICS forms and charts, video teleconferencing (VTC), and local TV news- these data elements must be available for both real-time analysis of on-board crew and periodic briefings with larger interior or exterior audience

In order to meet the mission requirements defined by the work group, the following vehicle chassis and equipment selections were made (items in **BOLD** are already on hand):

- 2009 Freightliner M2-106 chassis powered by Cummins 8800 diesel engine and automatic Allison transmission
- One onboard 12Kw Onan diesel generator
- One 5000 watt inverter with 2 auxiliary batteries
- Ability to mount and operate external 48' pneumatic mast with radio antenna and hi-res color/thermal/IR camera with remote pan/tilt/zoom controls (networked)

- Reinforced roof for external Ku band 1.2 meter auto-tracking satellite dish system providing broadband IP services
- 39' custom designed operations box with quad slides, full galley, full lavatory with toilet and shower
- Two drop-in tables and seven bench seats w/restraints as workstations in front conference area; three 6' counter-top areas with two seats each in rear area (stationery seats)
- Radio communications package: VHF, UHF, **800**, MSAT G2 in driver compartment; ARES, VHF, UHF, **700, 800, 900**, MSAT G2 in rear area along with one **MIP5000 Motorola console** with Level 4 interoperable patching capabilities (when tethered to RMC-3), **law enforcement Rescue/Throw Phone package with imbedded video and recording capabilities, one 10 unit set of Garmin handheld UHF GPS units**
- Minimum Telephone communications package: Multi-line 24/7/365 live PBX phone system with Tellular/VoIP/POTS/SAT capabilities with Video Teleconference Capabilities, four broadband EVDO REVA air cards for mobile data
- Minimum television package: mobile satellite TV system, stationery analog/HD combo antenna, various sizes of LCD flat panel monitors
- Vehicle mounted weather station with full suite of measurable parameters including time, temperature, relative humidity, altimeter, GPS, wind direction and speed w/gust detection, rain gauge
- Minimum office administration equipment:
 - **One 36" color GIS plotter**
 - **One commercial grade 5-in-1 combo high-speed network color printer**
 - One driver compartment ruggedized mobile laptop w/docking station, GPS, and AVL
 - Three front area laptops w/mounts, six laptop mounts in rear area for generic laptop computers (stationery only)
 - Various office supplies, spare plotter/printer paper, ICS forms, staplers, paper clips, mounted white boards w/supplies
 - One 6' ceiling mounted video projector screen mounted in front area, one ceiling mounted video projector in front area
 - Two *Smart Board* tablet systems networked and projected
- Crew support items: toiletries, towels, soap, etc.

- Externally stored folding chairs, tables, power and network cables, air mattress units, various items

The Mobile EOC will have a 14' utility trailer with the following equipment and supplies to support the unit:

- **One 14' Wells Cargo utility trailer with side entrance door and rear cargo ramp**
- **One 10Kw diesel generator with 50 gallon fuel tank and shore line power cable**
- **Cache of radio communications equipment**
- **Two large magnetic portable white boards**
- **Folding tables and chairs**
- **TVI tent for additional long-term shelter if needed**
- **Various tools and mission specific equipment**
- **Rations, potable water, crew gear storage**

To successfully respond and deploy this complex apparatus, the work group will define the minimum personnel requirements based on the following emphasis:

- Demonstrate professional appearance, work ethic, and demeanor in high stress situations
- Demonstrate proficient knowledge of ICS principles and applications
- Ability to be insured as a driver per Williamson County vehicle use policies
- Demonstrate ability to satisfy driver training program developed by work group
- Complete defensive driver and Emergency Vehicle Operations Course (EVOC)
- Demonstrate ability to deploy and operate all on-board systems including power plants, lavatory and sewage systems, radio/telephone/satellite/camera/computer communications systems, and vehicle set-up procedures
- Successfully execute a Type III Incident Management Team Memorandum of Understanding with the State of Texas
- Demonstrate ability to function as part of an ICS organization as a credentialed Command, General Staff, or Unit Leader position after deployment and initial set-up is complete
- Maintain health and fitness standards per the **Authority Having Jurisdiction (AHJ)**

The project partners consisting of Williamson County, Capital Area Trauma Council, and the Williamson County Fire Chief's Association have accumulated funds and equipment totaling approximately \$250,000:

- CATRAC \$150,000
- WCFA \$50,000
- Williamson County approximately \$50,000 in equipment on-hand

It is the intent of Williamson County to use any delta in cash funds after the purchase of the chassis to purchase additional equipment for the platform. Depending on the amount of delta funds, the following systems should be considered for immediate purchase to place the platform into service as soon as possible. Any additional equipment can be purchased with future funding opportunities.

- Minimum Telephone communications package: Multi-line 24/7/365 live PBX phone system with Tellular/VoIP/POTS/SAT capabilities with Video Teleconference Capabilities, four broadband EVDO REVA air cards for mobile data
- Two *Smart Board* tablet systems networked and projected
- One 6' ceiling mounted video projector screen mounted in front area, one ceiling mounted video projector in front area
- One driver compartment ruggedized mobile laptop w/docking station, GPS, and AVL

The following specifications are a guideline to illustrate full Type I capabilities if ALL funds were available today for vehicle acquisition and customization **(items not included in chassis purchase price)**:

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| • 48' heavy duty pneumatic mast | \$10,788 |
| • Comprehensive mast safety package | \$3,395 |
| • Nycoil conduit (per foot) | \$11 |
| • 10' aluminum observation platform | \$5,021 |
| • HD mast camera package: XH-G1 HD camera, 20x zoom lens, remote control system, housing, and QPT20 pan/tilt head | \$10,474 |
| • 1.2 meter SMC Fiberglass Ku band satellite antenna, 2-port w/controller | \$27,590 |
| • Antenna control system with GPS and FLUX gate | \$10,292 |
| • Tracking option for 3000A controller | \$4,340 |
| • Control panel with digital hour meter and 25' wiring harness | \$77 |

- Minimum Telephone communications package: Multi-line 24/7/365 live PBX phone system with Tellular/VoIP/POTS/SAT capabilities with Video Teleconference Capabilities, four broadband EVDO REVA air cards for mobile data \$10,500
- Two *Smart Board* tablet systems networked and projected-Sympodium DT770 \$9,200
- Two *Smart Board* LCD overlay systems \$6,500
- Bridgit Data-Conferencing software \$2,500
- One 6' ceiling mounted video projector screen mounted in front area, one ceiling mounted video projector in front area \$1,400
- One driver comp. ruggedized mobile laptop w/docking station, GPS, and AVL \$6,000
- Six laptop computers with universal laptop mounts, docking station with port replicators, keyboards, and mouse \$14,500
- Two standard 19" electronics racks \$1,800
- Radio communications package: (2) VHF,(2) UHF,(2) 900, \$24,000
- Satellite radio/ telephone package: (2) MSAT G2 \$9,600
- JPS ACU-T Interoperability gateway device \$9,900

Total of all enhancements, minus original equipment and chassis purchase price, assuming total vehicle chassis purchase price was \$200,000: \$167,888

The total request for Homeland Security Grant Funds would not exceed this amount. Any funds provided by Williamson County towards the chassis purchase and enhancements would be deducted from this amount reducing the amount of grant funds requested thru Homeland Security.

Approximate total monthly recurring costs assuming all systems are live 24/7/365 MINUS fuel, insurance, supplies, and maintenance:

- Satellite TV package \$60
 - Satellite broadband/VoIP system \$179
 - (4) EVDO REV A air cards \$200
 - (2) Tellular service cards \$100
- Total: \$539