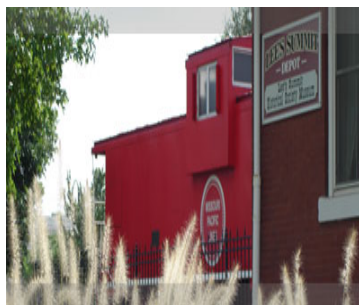
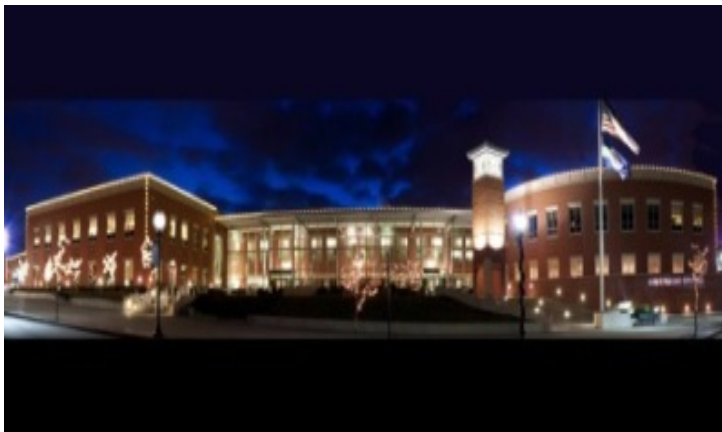


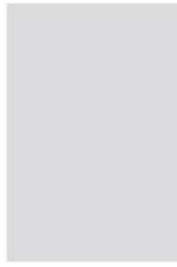
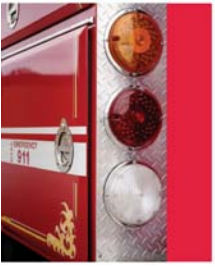


**tusa** | Consulting Services  
*Raising the Bar in Radio Communications*

## Proposal for Wireless Communications Consulting Services for Joining the Metropolitan Area Regional Radio System (MARRS)

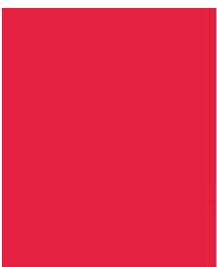
Lees Summit, MO.  
 January 6, 2017





# Tab I

## Introduction





**tusa** | Consulting Services  
*Raising the Bar in Radio Communications*

Chief Travis Forbes  
Lee's Summit Police Department  
10 NE Tudor  
Lee's Summit, MO. 64086

Reference: Proposal for Wireless Communications Consulting Services for Joining the Metropolitan Area Regional Radio System (MARRS)

Chief Forbes,

It is my pleasure to submit Tusa Consulting Services' (TCS) proposal to provide the City of Lee's Summit with consulting support services for the design, procurement and implementation to the MARRS network. TCS understands your requirements and expectations for this proposal and we believe our knowledge, approach, and capabilities are well suited to meet the needs.

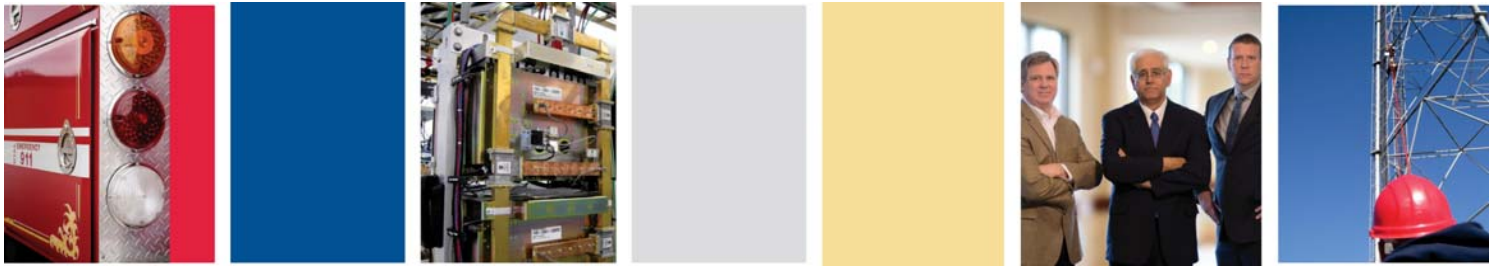
We are grateful for the opportunity to support the City in joining MARRS. As you are aware, MARRS was facilitated by the Mid America Regional Council (MARC) from the conceptual report completed by TCS in November 2007. Since that time, TCS has contracted with many counties and municipalities in the MARC region to expand the MARRS network to 47 sites and 24 PSAPS. TCS is currently under contract with MARC providing services for the MARRS network. With our extensive experience in the nation and especially in the MARC region, the Tusa Consulting team can help Lee's Summit meet the needs of its first responders with a robust, reliable public safety grade system on a known budget and on schedule. We take the expenditure of public funds very seriously, second only to the safety of our first responders.

For the past twenty plus years, TCS has been active in numerous modernization projects involving VHF/UHF conventional designs, 700/800MHz trunked radio, analog and digital systems, microwave, fiber optics, and Project 25 technologies. Included in this experience was TCS being the architect for the MARRS network and also assisting Lee's Summit with their current UHF radio network. Rest assured, no matter the technology, TCS has the expertise to help guide our customers toward a successful conversion.

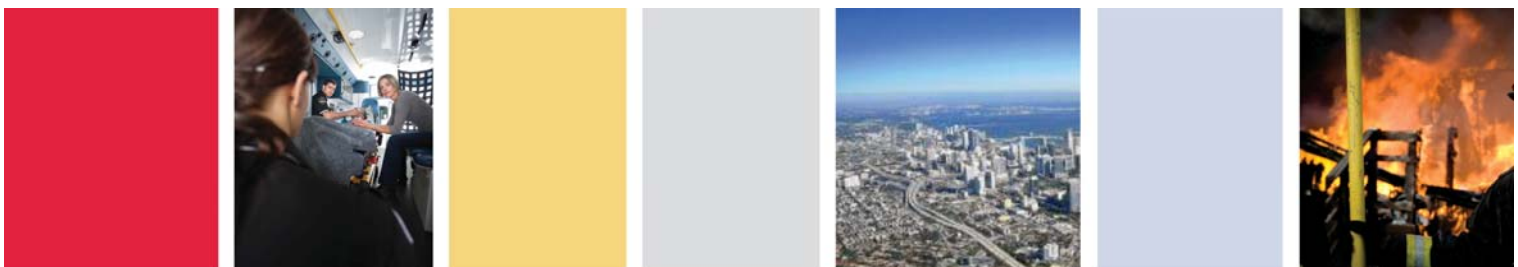
Please understand that Tusa Consulting provides consulting, design and project management services only. TCS has no affiliation with any radio equipment vendors and have always believed that an open procurement is the best approach to maximize the use of funding, while achieving guaranteed performance. As a result, our solutions are structured solely to assist you in evaluating viable options, receiving what was agreed upon, and assuring the satisfaction of the radio user's needs.

With regard,

Dean Hart  
Tusa Consulting Services



**Tab II**  
**Statement of Work**



## Understanding the City's Needs

Lee's Summit, Missouri operates on a Motorola conventional UHF simulcast system with 2TX/5RX sites. The current system was upgraded in 2011 by the City but doesn't have direct interoperability with MARRS.

Lee's Summit Police and Fire currently operate two dispatch centers. The city is investigating the consolidation of these centers.

Lee's Summit is requesting consulting services to review the current system and provide recommendations with costs to join the MARRS network.

## Phase 1: Join MARRS Assessment

Tusa Consulting understands the requirements of the city and is providing the necessary tasks to complete this objective. A general description of each task in the TCS Project Work Plan follows.

### Task 1.1: Project Initiation – Kickoff Meeting

During this task, TCS will meet with the designated project management team and other key personnel to confirm the project's organization and the roles and responsibilities of the project participants. Areas we intend to cover include:

- Introduction of TCS team members
- Review of contracted work plan, milestones, deliverables and schedule

### Task 1.2: User Equipment Inventory and Analysis

As part of this task, TCS will work closely with the city to understand the current subscriber (mobile, portable, and control station) inventory and provide analysis on providing similar models that support the city's and MARRS requirements.

### Task 1.3: Evaluate Existing Facilities or Conceptual Site Facilities

TCS will evaluate the current UHF simulcast sites and other potential sites for use to support the radio and microwave equipment for MARRS. It is anticipated that some of these sites already exist but TCS will explore all options for the best possible system to support the city.

# Approach

## **Task 1.4 – P25 700/800MHz Conceptual Design**

TCS will use the information from Task 1.3 to perform radio coverage modeling to demonstrate to the city the sites that will support the best coverage for the city and best meet the city's expectations and priorities.

## **Task 1.5 – Police/Fire Dispatch Consolidation Assessment**

TCS will review the current city's public safety dispatch centers and provide recommendations on how these centers could be consolidated. Space, console furniture, power requirements, and connectivity are some of the factors that will be considered in this assessment.

## **Task 1.6 – Backhaul Infrastructure Options (Connectivity to KC Master Site)**

TCS will explore and provide recommendations with cost on the most effective way to connect the radio system and dispatch center(s) to the Kansas City Master Site.

## **Task 1.7 – MARRS Options w/Budgetary Cost – Reports and Presentation**

TCS will prepare a detailed report with regards to radio sites, dispatch centers, subscriber equipment, connectivity, and other considerations necessary to join the MARRS network. Associated budgetary costs and procedures will be outlined to give the city clear vision on what is necessary to participate in the MARRS network.

## **Phase 2: Contract Specifications and Negotiations**

Once the final network configuration desired by the County is firmly established and a suitable funding source has been secured, the Consultant would receive approval to develop procurement specifications. Next, as the formal network procurement steps are concluded, the Consultant would conduct an assessment of vendor proposal submittal and negotiate a contract the City for approval.

The following describes our proposed approach to Phase II process tasks and resultant deliverables.

### **Task 2.1 – System Specifications & RFP**

TCS will combine the required technical and purchasing language into a draft RFP Specifications-Procurement Document. The Specifications would also contain safeguards to assure that the various new systems are constructed in accordance to recognized Industry standards, achieve proposed coverage and service levels, and are completed in a timely, professional fashion.

### **Task 2.2 – RFP Proposal Evaluation & Contract Negotiations**

Multiple resources within the TCS team will review and evaluate the vendor proposal and independently complete and evaluate. TCS will then prepare a summary that identifies the strengths and weaknesses of the proposal as well as any items needing additional clarification.

TCS will assist the city in negotiating the final contract that meets the objectives and expectations at the best cost.

## **Task 2.3 – Site Acquisition Support**

TCS will assist the city in obtaining sites that may be necessary to meet the conceptual design. This could involve negotiations with a tower vendor or obtaining property if needed to meet the coverage design objectives.

## **Task 2.4 – Subscriber RFP**

TCS will combine the required technical and purchasing language into a draft RFP Specifications-Procurement Document for the subscribers. It has been shown that savings can occur by separating the system specifications and subscriber requirements into separate RFP's. Not all P25 subscriber vendors provide system equipment but can provide P25 subscribers at competitive rates.

## **Phase 3: Implementation**

TCS has considered and is providing the tasks that will take place during the implementation stage for the city's network to join MARRS.

The following describes our proposed approach to Phase III process tasks and resultant deliverables.

### **Task 3.1 - Project Kickoff & Design Review**

The vendor will provide a project kickoff and a design review for the system proposed. TCS will participate in this process to ensure all system objectives have been met.

### **Task 3.2 – Factory Staging**

TCS will participate with the city the factory staging of the proposed network to ensure the proposed system is operating according to specifications.

### **Task 3.3 – System Implementation Project Management (12 month schedule)**

The following is a list of tasks normally required of consultants during the implementation of public safety radio communication networks and would likely be included in our scope of services.

- Attend client/vendor Project Kickoff Meeting
- Establish on-site project management team
- Provide continuous monitoring of vendor progress and report, on completed activities and deviations from the project time line
- Assure that tasks falling with the owner's responsibility are completed in accordance with schedule.
- Assist in the development of channels or talk group structures (i.e., code plugs) and

interoperability procedures and structures, supportive of the City's requirements.

- Participate in progress review meetings with vendor/owner. Would provide resolution action to vendor-flagged technical or installation issues that require decisions by the owner.

#### **Task 3.4 – System Functional Acceptance (FATP)**

TCS will participate in the system FATP to ensure the system functions in the field as it did in the staging facility.

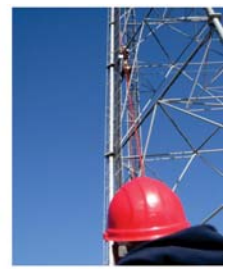
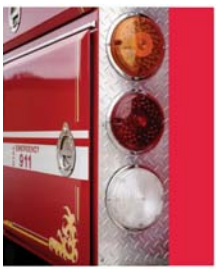
#### **Task 3.5 – System Coverage Acceptance (CATP)**

TCS will participate and evaluate in the system CATP to ensure the system coverage is performing as contracted.

#### **Task 3.6 – Final Acceptance**

TCS will ensure tasks necessary to gain final system acceptance are completed.





**Tab III**  
**Fee Proposal**



## Fee Proposal Summary

<b>Phase 1</b>	<b>MARRS Transition Assessment</b>	<b>\$16,050.00</b>
<b>Phase 2</b>	<b>Contract Specifications and Negotiations</b>	<b>\$18,350.00</b>
<b>Phase 3</b>	<b>Implementation</b>	<b>\$49,850.00</b>

# Lee's Summit, MO - Request for Proposal for Wireless Communications Consulting Services

Phase 1 Task	MARRS Transition Assessment Description	Total Hours	Total Cost	Total Expenses
1.1	Project Initiation - Kickoff Meeting	8	\$1,200.00	\$100.00
1.2	User Equipment Inventory and Analysis	8	\$1,200.00	\$0.00
1.3	Evaluate Existing or Conceptual Site Facilities	16	\$2,400.00	\$250.00
1.4	P25 700/800 MHZ Conceptual Design	24	\$3,600.00	\$0.00
1.5	Police/Fire Dispatch Consolidation Assessment	16	\$2,400.00	\$0.00
1.6	Backhaul Infrastructure Options (Connectivity to KC Master Site)	8	\$1,200.00	\$0.00
1.7	MARRS Options w/Budgetary Costs - Report & Presentation	24	\$3,600.00	\$100.00
<b>Phase 1 Total</b>			<b>\$15,600.00</b>	<b>\$450.00</b>



# Lee's Summit, MO - Request for Proposal for Wireless Communications Consulting Services

Phase 2 Task	Contract Specifications and Negotiations Description	Hours	Cost	Total Expenses
2.1	System Specifications & RFP	40	\$6,000.00	\$0.00
2.2	RFP Proposal Evaluation & Contract Negotiations	40	\$6,000.00	\$250.00
2.3	Site Acquisition Support	24	\$3,600.00	\$100.00
2.4	Subscriber RFP	16	\$2,400.00	\$0.00
<b>Phase 2 Total</b>			<b>\$18,000.00</b>	<b>\$350.00</b>



# Lee's Summit, MO - Request for Proposal for Wireless Communications Consulting Services

Phase 3 Task	Implementation Description	Hours	Cost	Total Expenses
3.1	Project Kickoff & Design Review	16	\$2,400.00	\$250.00
3.2	Factory Staging	48	\$7,200.00	\$3,150.00
3.3	System Implementation Project Management (12 month schedule)	192	\$28,800.00	\$500.00
3.4	System Functional Acceptance (FATP)	8	\$1,200.00	\$100.00
3.5	System Coverage Acceptance (CATP)	32	\$4,800.00	\$250.00
3.6	Final Acceptance	8	\$1,200.00	\$0.00
<b>Phase 3 Total</b>			<b>\$45,600.00</b>	<b>\$4,250.00</b>

