

911 COMMUNICATIONS & EMERGENCY OPERATIONS CENTER

September 9, 2008 Prepared By: Mark Peck

- The 911 Center & Emergency Operations Center project is part of a four pronged approach to enhancing our emergency response capabilities and investment in the future of public safety in the Flathead Valley. This approach entails:

- a comprehensive upgrade to the county radio communications system
- a new 911 communication center and emergency operations center
- realignment of major response agencies into one chain of command to include consolidation of the four 911 centers the functions of the office of emergency services into one response and emergency management agency
- construction of adequate facilities

This move will enhance response effectiveness and reduce unneeded duplicity in our current structures. The radio systems enhancement project, 911 Communications Center and consolidation processes are primarily funded utilizing significant state & federal funds and use of current budget dollars. The success of the project significantly rests on the availability of funding and public support for adequate and appropriate facilities. This program will maximize the ability of city and county governments to serve the public, enhance responder safety and most of all...save lives.

- In Dennis Smith's book titled, Report From Ground Zero, a definitive history of the Fire Department New York's response to the 9/11 World Trade Center, he states;

"communications is at the heart of most of the analyses of emergency operations on September 11, and it is the paramount question when considering why such a large number of fire fighters were lost". Whether it is 911, Katrina, the 30 Mile wildland fire in Washington State, or the local response to a stroke victim, the foundation to the success or failure in emergency response is traced back to ineffective quality of communications, both technically and organizationally. Our 911 dispatchers are the "first responders", they take the initial call and are responsible for requesting the right response capabilities (Fire, EMS, Law Enforcement), from the right agency. They must provide them with the best information available to handle our citizen's worst nightmares, while keeping the responders as safe as possible. The 911 communication process is the foundation of emergency response, and like a building, the response is only as sound as its foundation. This daunting task is repeated over 100,000 times a year in the Flathead Valley and growing significantly each year with no increase in dispatchers in at least five years. In 2005 the county 911 center responded to 36,216 events, in 2007 it was 52,023 events. Year to date in 2008 we are currently at 39,002 on target to push the 60,000 event ceiling and these numbers do not include the three city 911 centers. The four centers combined are handling well over 100,000 events per year. The universal use of cellular phones creates even greater call volume and coupled with routine administrative calls, triple the reportable volume. The skyrocketing workload, coupled with inadequate expansion space and antiquated equipment make this project the most significant public safety issue for the Flathead Valley in this generation.

PROJECT TALKING POINTS

-Current Status:

- The County 911 Center dispatches countywide fire, EMS and the Sheriff's deputies. The three city centers dispatch their own police forces. There is currently one primary Public Safety Access Point (PSAP), in the county, where all 911 calls are routed to; it is located at the Sheriff's office. When a call comes in from one of the cities, a county call taker receives the call and information then transfers the call to the appropriate city dispatch center where the process is repeated. The caller is put on hold while the call is transferred and must repeat the information again to a new dispatcher before help gets under way. Imagine yourself in a life threatening situation, calling 911, being placed on hold, transferred to another center and having to repeat your situation to a different dispatcher before help can be dispatched. The added process wastes critical time, creates unnecessary steps and delays response times. When minutes, or seconds may mean life or death, our current capabilities can be deadly.
- Maintaining four centers creates duplication of effort, equipment, support needs and unnecessary call steps.
- No adequate space for expansion to meet current and future needs.
- No direct connection between the 911 communications information and incident management officials who rely on up to date accurate information to make critical decisions
- OES has nearly \$500,000 of countywide response equipment with no central storage capability. Equipment is scattered throughout different locations throughout the county, with inadequate warehouse storage and difficult access.
- Our countywide radio communication system is antiquated, the skyrocketing work load has pushed it to the level of maximum capacity and system shortfalls present a public and responder safety risk.
- We have several "dead zones" throughout the county, limited tower sites and the process for the licensing and development of new sites is not available.
- The Federal Communications Commission (FCC) has mandated that all radio communication systems must be converted to a narrow band system by 01/01/2012, at a cost of several million dollars.
- Call traffic is overloading the current system due to limited channel monitoring capabilities and limited frequencies
- Our outdated and process intensive computer aided dispatch (CAD) system has insufficient mapping capability that marginally integrates with other jurisdictions, no resource tracking capabilities, unit status monitoring or vehicle location tracking capability.
- The system has very limited capabilities for providing dispatchers with critical response information to share with responders, i.e. hazardous materials stored at the response location or history of prior response, to provide better responder safety and response capability.

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-Project Enhancements:

- The new building will allow for the consolidation of the four centers, integration of the 911 communications and the emergency operations center, provide state of the art technology capabilities far into the future. This will provide logical, efficient expansion capabilities for up to 25 years, and beyond, so we are not faced with the same crisis we are currently facing. The consolidation will eliminate the need for transfer of calls between the county and city centers saving critical minutes.
- New state of the art dispatch equipment, increasing the number of stations from four to seven, will integrate with the new trunked radio system greatly enhancing dispatcher efficiency and effectiveness.
- The new building will allow for the consolidation of all emergency management coordination personnel in one location and consolidation of all countywide response equipment into one area with adequate indoor storage for high dollar vehicles and highly technical response equipment.
- In addition to enhanced operational capabilities, combining 911 and OES provides significant management efficiencies. Separate, each department would need a director and administrative support...combined those functions are shared, saving two .5 FTE and an average of \$40,000 to \$50,000 per year. Additional annual savings will be achieved through combining support needs, i.e. copiers, meeting rooms and other anticipated task level job sharing between the two.
- Vacating OES from the Justice Building will free up approximately 1600 sf of critical office space averaging \$20.00 per SF (includes triple net) for a potential annual offset of \$32,000 per year.
- The consolidated center will require fewer staff compared to the combined staffs of the current centers.
- The proposed annual operating budget for the consolidated center is approximately \$100,000.00 per year below the combined budgets of the four centers
- The multi-million dollar radio enhancement project is part of a statewide communications network that of which Flathead County is a significant partner. The Interoperable Montana project is assisting the county by funding a new "trunked" radio system that will address the over utilization of available channels and rebuild a large portion of the communication tower system to include new towers systems on Big Mountain, Blacktail Mountain and the Kalispell City Water tower. This program is primarily funded through state and federal grants.
- The 911 Board has received over \$3.8 million in federal and state funding to complete the transition. The project includes new tower and radio systems on Blacktail Mountain, Big Mountain, Kalispell water tower and a 5 year contract with BNSF to utilize their fiber optic communications system through the HWY 2 East corridor to the county line.

- New Computer Aided Dispatch systems are very complex, expensive technology but they increase dispatcher effectiveness, save valuable minute/seconds and ultimately save lives.
- We have been awarded a \$732,000 National Fire Academy, Assistance to Fire Fighter Grant, a \$222,000 COPS Grant, and the 911 Board will provide a \$183,000 match from board capital improvement funds, to purchase a new state of the art CAD system. The new system will address the above issues and provide other significant system improvements and increase dispatcher effectiveness and efficiency.
- The new Computer Aided Dispatch program will:
 - Decrease call times through use of real time GPS unit location
 - Enhance quality of response and responder safety by alerting responders of potentially dangerous/hazardous situations based on prior incidents, warrants, previous medical responses, etc.
 - Provide automatic vehicle locator capabilities to pinpoint response vehicle locations and immediately dispatch closest resource
 - Enhanced E-911 & Cell Phone Call support
 - Enhanced mapping to include pictometry, visual and written response routing directions
 - Resource tracking and unit status management to maximize closest resource dispatch and enhancing response times
 - Instant access to critical law enforcement, fire and medical information

-Cost Analysis:

- Building and Infrastructure: \$6,900,000 (See CTA Projected Budget) ***
- 911 Call Center Equipment: \$530,000 (\$485,000 State Grant)
- Computer Aided Dispatch: \$1,200,000 (\$732,000 AFG/\$222,000 COPS Grant)
- Countywide Radio System: \$4,000,000 (\$3,800,000 State & Federal Grants)
- Estimated Total: \$12,630,000
- Grant Totals: \$ 5,239,000
- Bond Issue: \$ 6,900,000
- 911 Board CIP Funds \$ 491,000 (Includes \$182,000 AFG Match)

*** \$6.9 is a high estimate, the bond issue reads “up to”. We estimated high (worst case) because of unstable material costs and didn’t want fall short. We fully anticipate coming in below the bond request level.

PROJECT BUDGET



CTA Project
Number FC911

Building Area 11774
Perimeter 640
Construction
Months 9
Est ENR (8/08) 4714
Estimate
Updated 8/18/2008

A.	Land, Utilities & Development Fees			
	1. Land Lease (DNRC)		\$	430,000.00
	2. Kalispell Impact Fees (water, sewer, fire, police)		\$	22,235.72
	3. Kalispell Road Impact Fees (anticipated, not yet approved)		\$	18,200.00
	4. City of Kalispell Review & Permit Fees		\$	28,910.00
	5. Late Comers Sewer Fees		\$	1,500.00
	6. Misc Fees (Final Plat, Site Review, Etc.)		\$	5,000.00
	7. Electric & Transformer Service Fees		\$	32,457.00
	8. Gas Service Main Connection Fees		\$	15,000.00
	9. Communication Connection Fees		\$	15,000.00
	Subtotal		\$	568,302.72
B.	Construction Costs			
	1. General Conditions Division 1		\$	300,260.00
	2. Building Divisions 3 - 28		\$	3,193,210.02
	3. Site Divisions 31 - 33		\$	516,645.00
	4. CM/GC Fees	8.00%	\$	320,809.20
	5. Construction Contingency	5.00%	\$	216,546.21
	6. Anticipated VE Savings		\$	(62,000.00)
	Subtotal		\$	4,485,470.43
C.	Contingency Fund			
	1. Escalation (Current ENR 4714, Est. Bid ENR 4949)	5.00%	\$	224,273.52
	2. Project Contingency (Schematic Design)	10.00%	\$	448,547.04
	Subtotal		\$	672,820.56
D.	Design Fees			
	1. Pre Bond Schematic Design Phase		\$	55,247.50
	Post Bond Construction Document & Administration			
	2. Phase	8.00%	\$	358,837.63
	3. Consultants (Geotech Report, EOC Specialist Review)		\$	30,000.00
	Subtotal		\$	444,085.13
E.	Furnishings, Fixtures & Equipment (FF&E)			
	1. Furnishings (14 Offices, 1 Large Conference, 4 Small Meeting)		\$	65,900.00

2.	Equipment (Communication, TV's, Video, Electronics, Etc.)	\$	460,550.00
3.	Appliances (Break Room - Refrigerator, Dishwasher, Microwave)	\$	5,000.00
4.	Communication Tower	\$	125,000.00
Subtotal		\$	656,450.00

F.	Miscellaneous Expenses		
1.	Construction Testing	\$	15,000.00
2.	Commissioning	\$	35,000.00
3.	Legal/Bonding/Advertising	\$	18,000.00
4.	Moving Expenses	\$	4,000.00
Subtotal		\$	72,000.00

TOTAL PROJECT COST	\$ 6,899,128.85
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