Introduced by: Mayor Cleworth Introduced: November 19, 2012

#### **RESOLUTION NO. 4547**

## A RESOLUTION STATING THE CITY'S CAPITAL PRIORITIES FOR THE STATE 2013-14 FISCAL YEAR

WHEREAS, the City is very grateful for the funding provided by the State of Alaska which has added significantly to the City's ability to provide essential services; and

WHEREAS, the support given last year will greatly enhance vitally important road maintenance work and enhance additions to our Public Works and Police Station facilities; and

WHEREAS, the City has identified current and future capital priorities, and the public had the opportunity to speak to this Resolution at the November 19, 2012, City Council meeting,

# NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF FAIRBANKS RESOLVES AS FOLLOWS:

The legislative priorities of the City of Fairbanks are stated on the attached list. In summary, the projects are ranked as follows:

- 1. South Cushman Reconstruction
- 2. Rickert Subdivision
- 3. Local Road Improvements
- 4. Heavy Rescue Vehicle
- 5. Energy/LED Lights-Fairbanks Police Department
- 6. Voice Over IP
- 7. Chest Compression System for CPR

PASSED and APPROVED this 19th day of November 2012.

Jerry Cleworth Mayor City of Fairbanks

AYES:

Hilling, Eberhart, Walley, Matherly, Gatewood

NAYS:

None

ABSENT:

Staley

APPROVED:

November 19, 2012

ATTEST:

APPROVED AS TO FORM:

Janey Hoy<del>gn</del>den, C

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Paul Ewers

City Attorney

## City of Fairbanks Proposed Projects

# 1. \*South Cushman Reconstruction: Option A-\$20,560,000 Option B-\$3,600,000

South Cushman Street from Airport Way to the Mitchell has the highest average daily traffic (approximately 9,900) of any City public right of way. There are approximately 90 commercial properties fronting this 5,350 foot segment of the South Cushman Corridor, which extends from Airport Way south to Van Horn Road and beyond. Constructed in 1979, the 33 year old asphalt concrete driving surface is extensively pot-holed, oxidized and degraded to a condition that is well below the City's ability to effectively patch and maintain. The narrow concrete sidewalks have significantly deteriorated and do not meet Americans with Disabilities Act standards; and much of the alignment does not have a storm water drainage system.

Reconstruction of this segment of South Cushman has been in the planning phases since 1985 and currently \$5 million of FMATS funding has been obligated. This project can be advanced under the following two scenarios:

A) Complete Reconstruction with Utility Improvements: Based upon the costs of the current Illinois Street Reconstruction Project, we estimate the cost to completely reconstruct South Cushman at \$25,560,000, thus based on current FMATS funding the City will need an additional \$20,560,000 for the project. Like the Illinois Street project, this project would allow for extensive utility relocation and drainage upgrades, which increase the complexity and cost per square foot compared to recent "pavement only" projects. In the past, there had been consideration of widening South Cushman; that is no longer within the scope of this project so there will be no right of way issues.

Total Project Cost \$ 25,560,000 Funding Already Secured (\$ 5,000,000) FY2014 State Funding Request \$ 20,560,000

B) Rehabilitation with Limited Utility Improvements: This limited approach would reconstruct sidewalks, paved driving surfaces and upgrade sewer and water mains and services where applicable. However, this project will not address the aged poles that are in conflict with sidewalks and driveway accesses to businesses and aerial overhead power and communications line crossings and service drops that do not meet current minimum height requirements, nor will it improve pedestrian facilities and inadequate driveway accesses to businesses. Our estimate to rehabilitate South Cushman is \$8,600,000, of which \$5 million has been previously been made available.

Total Project Cost \$ 8,600,000 Funding Already Secured (\$ 5,000,000) FY2014 State Funding Request \$ 3,600,000

The City of Fairbanks manages 343 lane miles of driving surface within the City limits, plus sidewalks, streetlights, traffic signals and an extensive storm water management system with 95 miles of storm drain piping. No other City-maintained street is as heavily used as South Cushman. See attachment.

\* This project has also been submitted for inclusion in the Governor's Budget.

## 2. Rickert Subdivision: \$3,554,850

17,742 linear feet of City streets (3.36 miles) including 14<sup>th</sup> Avenue, 15<sup>th</sup> Avenue, 16<sup>th</sup> Avenue, 17<sup>th</sup> Avenue, 18<sup>th</sup> Avenue, Schaible Street, Laurene Street, Turner Street, Mary Ann Street, Rickert Street, Stacia Street (excluded Cushman Street, Airport Way, Gillam Way, Barnette Street, Gaffney Road). Construction comprises 26 to 30 foot typical section with drainage improvements, no sewer or water upgrades.

This is the only road project that was not funded in the capital budget requests last year.

- Survey, Engineering Design and Construction Management: \$450,000
- Construction: \$175/linear foot by 17,742 linear feet = \$3,104,850.

## 3. Local Road Improvements: \$1,000,000

The City of Fairbanks manages 343 lane miles of driving surface within the City limits in addition to sidewalks, the streetlight and traffic signal system, and an extensive storm water management system that includes 95 miles of storm drain piping, 500 manholes, 2,516 catch basins, and 77 outfalls to the Chena River or Noyes Slough. Many of the streets we currently maintain have been taken over from the State of Alaska, relieving them of ongoing maintenance and snow removal.

The majority of local City streets were constructed in the mid-1970s, thus average age of the local neighborhood streets within the City limits is now approximately 35 years. Due to the age and extreme climactic conditions, many of these local streets are extensively pot-holed and the asphalt surfaces have oxidized and degraded to a condition that is beyond the City's ability to effectively patch and maintain.

The City has budgeted each year for road upgrades and maintenance, and we have focused on a goal of trying to retain a maintenance schedule that will at least stay current with our needs and not go backwards. Unfortunately, too many lane miles are nearing the end of their lives at the same time causing us real concern.

Two years ago, we were fortunate enough to receive \$3.5 million from the State. These funds were used for two areas of town that needed serious work, Aurora Subdivision and parts of Hamilton Acres. We are extremely proud of the work we did with very minimal overhead and are constantly looking for ways to make a dollar stretch.

## Citywide Collector Street Improvements \$1 Million

Our request is aimed at collector streets within the various subdivisions in the City of Fairbanks which are vital to the infrastructure within the City. These collector streets carry a significantly higher volume of daily traffic than local neighborhood streets, support busses and higher numbers of service vehicles, and thus incur significantly more wear, develop high numbers of pot holes, require more intensive storm drain maintenance, annual striping and frequent sign maintenance.

The City Public Works Department can handle local neighborhood streets that have light traffic by simply doing a pavement overlay, which we budget for each year. Overlay technique will not work

on the majority of collector streets due to curb, gutter pan, storm drain inlet elevations that cannot change. In addition, the reconstruction of a collector street requires a much more intensive and involved traffic control plan than do local roads.

Collector streets that are viable candidates to be addressed under this type of project would include Aurora Drive; portions of Ivy Drive, Sunset Drive, Park Drive and Coppet Street; Lathrop Street, 17<sup>th</sup>/19<sup>th</sup> Avenues between Cowles Street and South Cushman Street; Farewell Avenue; 5<sup>th</sup> Avenue from Barnette to Noble Streets; D Street, Joyce Drive, Hanson Road, and Moore Street.

## 4. Heavy Rescue Vehicle: \$625,000

Replace current first line light duty rescue vehicle with a heavy duty rescue apparatus. The new apparatus will enhance crew safety, increase pay load, add more storage, and be easier to maintain with a hinged cab.

Total Project Cost \$ 775,000 Funding Already Secured (\$150,000) FY2014 State Funding Request \$ 625,000

#### Details:

Project costs \$775,000: this is based on the lowest of the three estimates obtained last year, based on list price.

Funding already secured: the Fairbanks Fire Department has the \$150,000 match in its Capital Account dedicated to rescue vehicle replacement.

# Detailed Project Description and Justification:

The City of Fairbanks Fire Department is requesting grant funding to replace its current light duty fire rescue vehicle with a heavier duty fire rescue vehicle. Our current rescue rig is out of room for additional equipment to be carried and is 5% over its gross vehicle weight rating. We do have additional rescue equipment that should be carried on our primary response vehicle that is either in storage or on other apparatus. If we are awarded this grant we will be able to obtain a modern apparatus capable of carrying the proper compliment of fire and rescue equipment without worries of limited space or weight restrictions. The additional compartment space will enable us to properly store our equipment in safe and secure locations. The new unit will be built in compliance with National Fire Protection standards (NFPA 1901 Standard for Automotive Fire Apparatus 2009 Edition) and will meet all safety standards and comply with all environmental emission standards.

The present light duty rescue vehicle in service today was originally a 1985 army rescue vehicle that was surplussed by them in 1995 and obtained by the City of Fairbanks to replace its 1974 small rescue vehicle. In 1999 the engine compartment caught fire and totaled the chassis, which was replaced by the City in 2000. The original rescue body is now 28 years old and showing its age. Although the maintenance on this vehicle has been acceptable, it has almost tripled during the last five years, compared to the previous five years. See attachment for a comparison of our current vehicle to a vehicle similar to the one we are requesting to purchase under this grant.

This vehicle would be the first of its kind in the interior of Alaska. It will not only provide additional weight carrying capacity with a much needed increase in storage space, but also provide for a crew space for rescuers to change into survival suits for ice and water rescue. The elevated light tower

would provide much needed emergency scene lighting not only for rescue events, but at fire scenes. Another benefit to this vehicle will be to store our confined space rescue equipment on this vehicle instead of a separate trailer that must be brought to the scene after the initial response. We would be remiss if we did not point out that this new rescue vehicle will be state of the art and include all safety features to allow our firefighters to respond safely and arrive with all the necessary tools to affect a rescue, not only for City of Fairbanks residents, but also the rest of the population within the interior of Alaska.

# 5. Energy Improvement/Conservation Projects-Multiple Facilities: \$817,500

The City of Fairbanks recently obtained an "Investment Grade" Energy Audit for all of it major facilities. The Energy Audit identifies the most critical energy improvements for each building, with emphasis on reduction of energy costs and rapid rate of return on investment. In addition to the Audit, building HVAC systems were reviewed for energy improvements by a building controls consultant.

The following energy retrofit projects are recommended for funding:

Public Works Facility; 2121 Peger Road	
Digital Controls System	\$175,000
Heat Recovery Exchanger	\$ 25,000
Replace Fuel-oil Boilers with Natural Gas boilers	\$ 65,000
Complete Upgrade to LED Lighting	\$169,000
Public Works Energy Upgrade Total	\$434,000
City Police Station; 911 Cushman Street	
HVAC Air Change Sensors and Variable Drives	\$ 55,000
Complete Upgrade to LED Lighting	\$159,000
Police Station Energy Upgrade Total	\$214,000
Fire Station Headquarters; 1101 Cushman Street	
Upgrade HVAC Air Change Sensors	\$ 18,000
Complete LED Lighting Upgrades	\$114,500
Fire Station Headquarters Energy Upgrade Total	\$132,500
Fire Station No. 3; 1033 Aurora Drive	
Complete LED Lighting Upgrades	\$ 12,000
Upgrade Heating System	\$ 25,000
Fire Station No. 3 Energy Upgrade Total	\$ 37,000

## 6. Voice Over IP: \$625,700

## **Brief Project Description:**

Replace antiquated, proprietary Centrex telephone service with a Voice Over Internet Protocol (VoIP) telephone system. The new system offers improved availability, control, integration, and functionality over the existing phone service, while reducing the City's overall dependency on third party vendors for changes, additions and moves.

## **Detailed Project Description and Justification:**

The City of Fairbanks Information Technology Department is requesting funds for a Voice Over Internet Protocol (VOIP) telephone system upgrade in the amount of \$625,700. The project would replace a legacy Centrex telephone serviced by installing switching equipment in-house. This will greatly increase the survivability of our internal communications compared to Centrex. Most operations can be easily performed in-house increasing self-reliance, agility and unlocking many functions that are currently controlled by the service provider but takes considerable time due to system complexity. The ability to control our own system at this level will be invaluable in the event of a disaster or the need to establish communications/operations quickly in an alternative workspace.

#### **Problem/Needs Statement:**

With our current configuration, a failure at the telephone company central office would completely cripple our ability to communicate even amongst ourselves since we have no on-site switching equipment. Emergency management and Continuity of Operations Planning (COOP) are extremely important in planning for natural and manmade disasters and communications are key to implementing any plan.

The City of Fairbanks' day-to-day and emergency operations depend upon the ability to communicate among its departments and outside agencies to meet its objectives. Directly calling someone is sometimes preferable to email and various City departments have significant distances separating them.

We have used all available pairs at City Hall for our required lines and are at the point of needing new main cables from the central office to accommodate any possible future growth. Our current service uses a main cable which contains several bad pairs resulting in occasional noisy lines and static issues.

#### History:

The City of Fairbanks was the former owner of the Fairbanks Municipal Utilities System which included the telephone system. Since the City owned the phone company, it made sense at the time not to purchase any PBX or "key" systems for City facilities but rather to utilize Centrex services with all lines at every desk coming directly from the telephone Central Office. After the City divested itself of FMUS, we continued to utilize this type of service. It would be more desirable and efficient for us to have our own internal telephone switching equipment.

#### **Technology Overview:**

Voice Over Internet Protocol introduced an innovation in telecommunications: the ability to transmit voice over a data network. Traditional phone systems rely on completely separate and dedicated wiring. VOIP eliminates this conventional telephone wiring. The system converts the analog voice signal to digital data packets which are then transmitted over the organization's existing data network. An in-house VOIP system then connects to the Public Switched Telephone Network (PSTN), allowing calls to and from outside lines.

#### **Technology Benefits:**

This project will leverage the City's recent and substantial investment to upgrade its network

infrastructure to support gigabit transfer speeds by consolidating voice and data traffic onto a single modern network. Utilizing existing network infrastructure simply offers more agility than traditional phone systems, resulting in productivity gains thanks to improved access, greater flexibility, and a more advanced feature set.

#### Access:

VOIP allow City employees to take their office with them wherever they go, accessing the system via any broadband Internet connection. This anytime, anywhere access is crucial for our mobile workforce, accommodating our public safety employees in the field. With VOIP, these critical employees can check voicemail and e-mail, access project data, and place calls over a data network utilizing a single communication device.

## Flexibility:

VOIP scales immediately to meet the business needs of the City. Employees will be empowered, via online interface, to setup call-routing preferences, install new phones, and add additional functionality without the aid of the Information Technology Department. Rearranging desktop phones is simply a matter of unplugging and moving them to another outlet, there's no back-office re-wiring necessary.

#### **Functionality:**

Many advanced functions that are either a luxury or unavailable on legacy PBX systems come standard with VOIP. These features include advanced call forwarding and electronic messaging, custom auto-attendant, three-way conferencing, video-conferencing, and advanced call distributions functions such as skill-based call routing.

#### **Lower Costs:**

A streamlined communications infrastructure has the potential to reduce maintenance costs. Aside from the inherent benefit of consolidating communications into a single network, a data network is more flexible and cheaper to maintain than circuitry and phone lines.

# 7. Chest Compression Systems for CPR: \$45,000

**Brief Description of the Project:** Purchase of three chest compression systems will allow us to place one in each of our three active ambulances. These devices will enhance advanced life support care provided to cardiac arrest patients and reduce risk of injury to personnel while performing CPR.

Total Project Cost (3 @ \$15,000) \$45,000.

#### Details:

- Project cost: \$45000, this is based on the current market information available.
- Funding already secured: None
- FY14 State Funding Request: \$45,000. This amount is based on our estimated cost.
- Other Funding Requests: There are no other requests in for this equipment.
- Additional Funding Required: There will be no additional funding requests for this project.

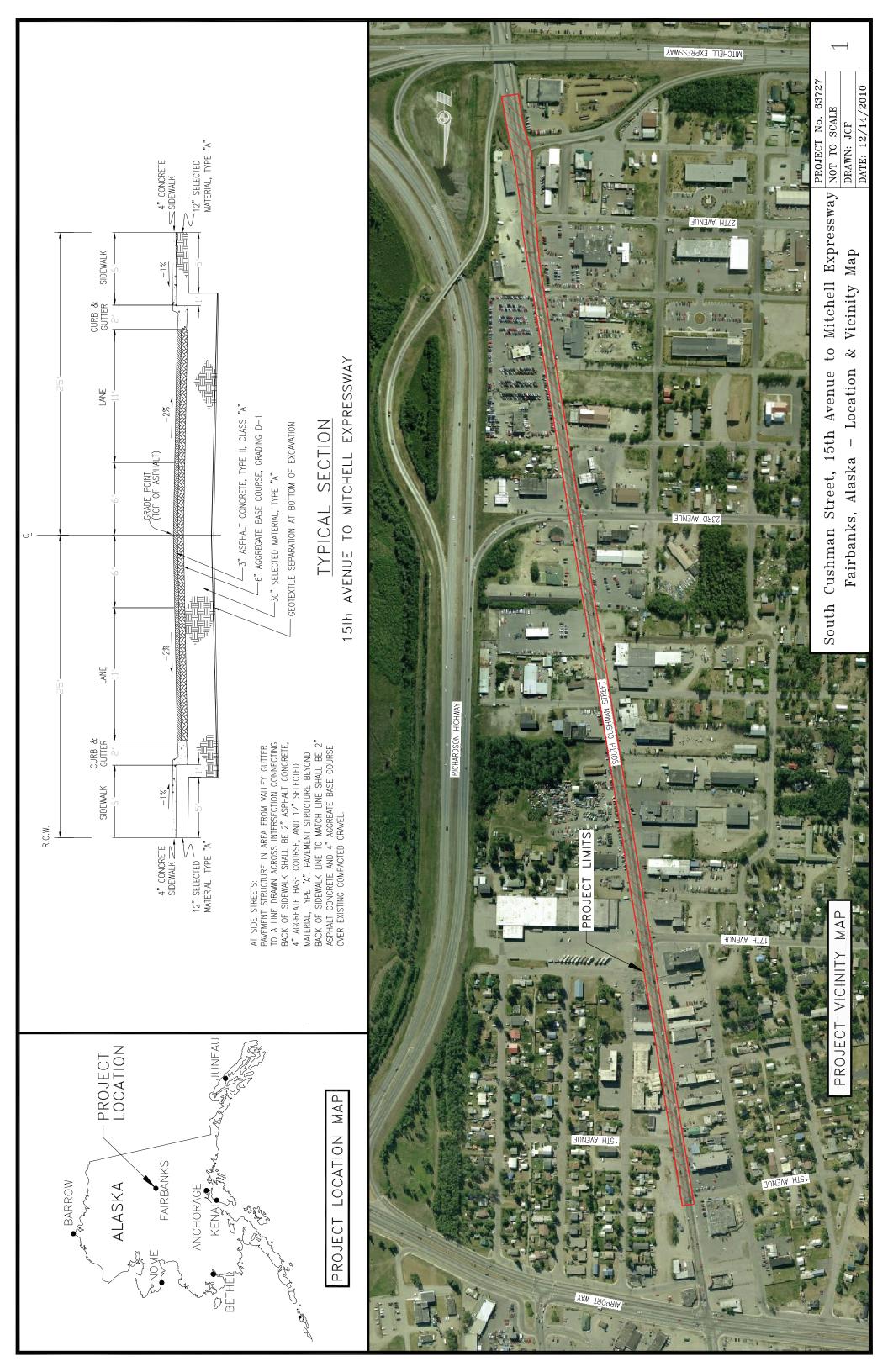
## **Detailed Project Description and Justification:**

The City of Fairbanks Fire Department is requesting grant funding to purchase three units, one for each of our Advanced Life Support (ALS) ambulances. These devices will directly improve patient survivability and reduce risk of paramedic injury for CPR performed in the field and during transport.

The purpose of CPR during a cardiac arrest is to move the blood around to keep organs working and provide oxygen to the brain, improving the likelihood of the return of spontaneous circulation. The American Heart Association has correlated better chest compressions with better patient outcomes. A mechanical chest compression system is becoming part of the gold standard for ALS care, as it provides effective, consistent and uninterrupted compressions. Manual CPR is strenuous physical labor and fatigue soon affects the ability to deliver compressions in a steady and consistent manner at the appropriate rate and depth. Several studies show that the effectiveness of manual chest compressions can drop rapidly due to rescuer fatigue – even within the first few minutes. This requires frequent changes in personnel providing the compressions. Each of those interruptions breaks the cycle and has an impact on the blood flow. Many emergency rooms have these devices as they recognize, even in that controlled environment, the importance of maintaining good blood flow through constant, uninterrupted compressions.

Fairbanks Fire currently dispatches extra personnel to all potential cardiac arrests, in part to support the additional resources needed to perform manual chest compressions during CPR. Ambulances equipped with a mechanical device to provide chest compressions would allow resources to be freed up to perform other elements of the treatment for victims of sudden cardiac arrest, such as intubation for airway management, IV access and medication therapies, and stabilize the patient sooner to initiate quicker transport to the hospital.

A mechanical compression system is incredibly useful to maintaining the blood flow during the movement process, as it is nearly impossible to perform consistent, effective compressions manually as you are walking alongside a patient being moved from the scene into the ambulance for transport. During transport to the hospital, this device is able to continue the delivery of those compressions, unaffected by the moving vehicle. Paramedic safety is significantly increased as they can remain seat-belted in rather that struggling to maintain their balance while bending over a gurney to perform compressions in a moving ambulance.



**Project Title:** Purchase of a Heavy Duty Rescue Apparatus

FY2014 State Funding Request: \$625,000

**Brief Description of the Project:** Replace current first line light duty rescue vehicle with a heavy duty rescue apparatus. The new apparatus will enhance crew safety, increase pay load, add more storage, and be easier to maintain with a hinged cab.

Project Type: Equipment

## **Funding Plan:**

Total Project Cost \$ 775,000.
Funding Already Secured (\$ 150,000.)
FY2014 State Funding Request (\$ 625,000.)
Project Deficit: -0-

#### Details:

- Project costs \$260,000: this is based on the lowest of the three estimates obtained last year, based on list price.
- Funding already secured: the Fairbanks Fire Department has the \$150,000 match in its Capital Account dedicated to rescue vehicle replacement.
- FY14 State Funding Request: \$625,000. This amount is based on our estimated costs less our \$150,000 match.
- Other Funding Requests: There are no other requests in for a heavy rescue vehicle.
- Additional Funding Required: There will be no additional funding requests for this project.

## **Detailed Project Description and Justification:**

The City of Fairbanks Fire Department is requesting grant funding to replace its current light duty fire rescue vehicle with a heavier duty fire rescue vehicle. Our current rescue rig is out of room for additional equipment to be carried and is 5% over its gross vehicle weight rating. We do have additional rescue equipment that should be carried on our primary response vehicle that is either in storage or on other apparatus. If we are awarded this grant we will be able to obtain a modern apparatus capable of carrying the proper compliment of fire and rescue equipment without worries of limited space or weight restrictions. The additional compartment space will enable us to properly store our equipment in safe and secure locations. The new unit will be built in compliance with National Fire Protection standards (NFPA 1901 Standard for Automotive Fire Apparatus 2009 Edition) and will meet all safety standards and comply with all environmental emission standards.

The present light duty rescue vehicle in service today was originally a 1985 army rescue vehicle that was surplused by them in 1995 and obtained by the City of Fairbanks to replace its 1974 small rescue vehicle. In 1999 the engine compartment caught fire and totaled the chassis, which was replaced by the City in 2000. The original rescue body is now 28 years old and showing its age. Although the maintenance on this vehicle has been acceptable, it has almost tripled during the last five years, compared to the previous five years. See Attachment A for a comparison of our current vehicle to a vehicle similar to the one we are requesting to purchase under this grant.

This vehicle would be the first of its kind in the interior of Alaska. It will not only provide additional weight carrying capacity with a much needed increase in storage space, but also provide for a crew space for rescuers to change into survival suits for ice and water rescue. The elevated light tower would provide much needed emergency scene lighting not only for rescue events, but at fire scenes. Another benefit to this vehicle will be to store our confined space rescue equipment on this vehicle instead of a separate trailer that must be brought to the scene after the initial response. We would be remiss if we did not point out that this new rescue vehicle will be state of the art and include all safety features to allow our firefighters to respond safely and arrive with all the necessary

tools to affect a rescue, not only for City of Fairbanks residents, but also the rest of the population within the interior of Alaska.

The City of Fairbanks Fire Department is requesting funds for a rescue vehicle upgrade in the amount of \$625,000.

## **Project Management**

The Project Manager is Chief Warren Cummings. He has been with the City of Fairbanks Fire Department for over 40 years and has been the head of the department for the past 18 years. Chief Cummings has been the project manager on a variety of state and federal grants. He is responsible for the annual budget as well as 44 full-time employees. In 2007, Chief Cummings completed a two year term as President of the Alaska Fire Chiefs Association. He served as the Alaska Vice President for the Western Fire Chiefs Association for three years which covers a 10 state region. He is now serving on the International Association of Fire Chiefs and is a member of the Constitution, Bylaws and Resolution Committee. He reports to the Mayor and as needed the Chief of Staff.

## **Project Staff**

The City of Fairbanks manages over 50 federal and state grants every year. The City has an experienced staff that is familiar with state and federal grant guidelines and has completed the required audits with no findings identified. The City of Fairbanks has established and maintained a financial management system to ensure:

- there are accurate, current, and complete disclosure of the financial results of the grant;
- there are effective controls over and accountability for all grant funds and property acquired with grant funds;
- there are accurate comparison of actual and budgeted amounts;
- that the accounting records, which are supported by source documentation, adequately identify the nature and use of, grant funds;
- there are separate financial records for the accounting of funds related to the grant;
- there are procedures to ensure timely reporting and receipt of grant funds; and
- that an audit is conducted every year in accordance with generally accepted auditing standards.

The Fairbanks Fire Department has experience with emergency services grants awarded through various agencies such as the U.S. Department of Homeland Security and the State of Alaska. The department has experience with financial and programmatic requirements of grantors and has been successful in achieving their goals. The following individuals will also be working on the project:

Specifications Committee: The committee is comprised of two individuals, Battalion Chief Brian Davis and Captain Scott Raygor. BC Davis and Captain Raygor have a combined 29 years of experience with the Fairbanks Fire Department. Both men attended a seminar on apparatus specifications. The committee is part of the Fairbanks Fire Department and will assist in the development of the bid and selection of the vendor. The committee will report directly to the Project Manager.

Grants Administration: Margarita Bell, CPA, CMA began her position as the grants administrator at the City in 2008. Prior to that time she worked in a non-profit organization and was responsible for managing and administering federal grants. Margarita works in the finance department and is responsible for the timely financial grant reporting and enforcing grant conditions. She works closely with the project managers and department administrators to accomplish the goals of each grant. She also maintains the capital assets list for the City of Fairbanks which includes all assets,

whose value exceeds \$5,000, that were purchased using grant funds. She reports directly to the Chief Financial Officer, and as needed, the Mayor and the Chief of Staff.

See Attachment B - Organizational Structure Charts.

## **Executive Summary**

The City of Fairbanks' goal is to increase public safety by purchasing a fire rescue vehicle capable of providing efficiency in rescue incidents for residents. Considerable work has gone into the planning and preparation of this project, which positions us for quick implementation of the project should it be funded.

The City of Fairbanks Fire Department has the bid specification already developed for a new fire rescue vehicle. If we are successful in being awarded this grant, it will be first presented to the City Council in resolution form to be formally accepted. We then estimate it will take about 30 days to finalize the bid documents and another 60 days to complete the bid process. This would be followed by a 30 day bid review process, and final award by the City Council as this project is over the Mayor's \$500,000 authorization limit. Based on our recent history of new fire vehicle orders, it will take 12 months to build and deliver the new vehicle, followed by 60 days to arrange the equipment on it and train the fire fighters on its proper operation and handling through drivers training.

<u>Problem/Needs Statement</u>: The City of Fairbanks is located in the heart of Alaska's interior on the banks of the Chena River in the Tanana Valley. The city has a population of approximately 32,500 and is the second largest city in the State of Alaska. In addition, residents from the Fairbanks North Star Borough visit the City of Fairbanks daily. When combined with the city population, it brings the total population to 93,779 (Source: 2009 Alaska Population Overview). Large numbers of tourists also visit the City of Fairbanks throughout the summer months (estimated 325,000) as Fairbanks is at the confluence of the Richardson, Parks, Steese and Elliot Highways which connect Anchorage, Canada, and the lower 48 states. This equates to even more traffic flow throughout our community. See Attachment C graphs for total run volume and area EMS activity.

The Fire Department provides fire, rescue, and paramedic level pre-hospital emergency care with transportation via ambulance. The Fire Department is currently using a Ford F-450 for our rescue vehicle and has discovered we are over our gross vehicle weight ratings (GVWR). The GVWR of our current vehicle is 14,000 pounds and that of a heavy rescue vehicle will be 38,600 pounds, which will increase our carrying capacity by 275% for crew, equipment and supplies.

The Fairbanks Fire Department is a member of an area wide mutual aid agreement between all of our surrounding fire departments. This vehicle will be part of the resources available to departments in that agreement. Our mutual aid agreement is with two Federal fire departments, one student based fire department, one airport fire department, five combination/volunteer fire departments and one fire brigade. Within the ten mutual aid fire protection districts we have the Trans Alaska Oil pipeline (of national interest), a university campus, two military installations, two petrochemical plants, three major airports (two military), a railroad yard and many significant target hazards. This vehicle will not only enhance our operations but will also benefit the surrounding community.

The heavy duty rescue will increase crew safety, provide better visibility with the addition of reflective striping on the rear of the apparatus as outlined in NFPA (National Fire Protection Policy Association) 1901 and have increased equipment storage space. To ensure the safety of first responders, staff will be provided commercial vehicle driving classes and road test training on the new vehicle by qualified commercial instructors before placing the vehicle in service.

The U.S. Fire Administration reports that 15% of all fire fighter deaths are responding to and from emergency responses. The NFPA reported a total of 4,965 injuries to fire fighters while

responding to or from emergency calls. Our need is not to add to these national totals but to safely save lives by serving the residents and visitors to the interior of Alaska.

<u>Goals</u>: The Fire Department will endeavor to reduce motor vehicle fatalities by upgrading our rescue vehicle to ensure safety of responders and the public by:

- Improving emergency responder safety through better visibility, up to date safety features, improved equipment access, and up to date training by increasing the GVWR from 14,000 to 38,600 pounds.
- Improving rescue operations by upgrading a light duty rescue to a heavy duty rescue
- Improving response to motor vehicle accidents by reducing maintenance time due to the design of the heavy rescue vehicle.
- Ensuring rescue vehicle availability to respond to motor vehicle accidents and other rescue
  incidents by extending the life of our rescue vehicle by eliminating our gross vehicle weight
  overage.

Implementation Plan: The Project Manager will notify the Mayor and City Council that the grant has been awarded. The Specification Committee will prepare the bid documentation for general posting. Once the bids have been received, the Specification Committee will use the criteria established to award the bid. The vendor selected will have twelve months to construct the rescue vehicle. The Project Manager and/or a Specification Committee member will visit the vendor to inspect the rescue vehicle prior to delivery. Upon receipt, the rescue vehicle will be inspected and the fire fighters will be trained. The rescue apparatus will be placed in service after the appropriate staff has been trailed. The Grants Administrator will report to the State of Alaska as required by the grant award.

<u>Risk Management</u>: The heavy duty rescue apparatus is being used by a number of different agencies throughout the United States. This is not a new type of vehicle and should not be considered untested technology. As for unforeseen risk factors, we will not be taking our current rescue vehicle out of service until the new vehicle is ready for service and our emergency personnel are trained on its operation.

#### **Project Timeline**

The City of Fairbanks Fire Department would develop specifications for this vehicle within 90 days of grant award. The current build time for a heavy duty rescue is 9 to 12 months, which would put delivery for this vehicle in the time frame from July to September 2014.

Entity Responsible for Ongoing Operation and Maintenance of this Project: City of Fairbanks

## **Grant Recipient Contact Info:**

Warren B. Cummings 1101 Cushman Street Fairbanks, AK 99701 907-450-6604 wcummings@ci.fairbanks.ak.us



**Existing Equipment Storage** 



Proposed Area to expand storage



**Existing Rear Storage Area** 

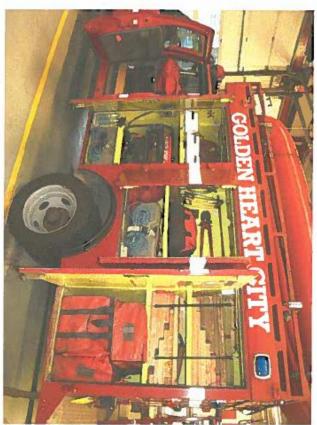


**Proposed Storage Compartments to Expand Capabilities** 

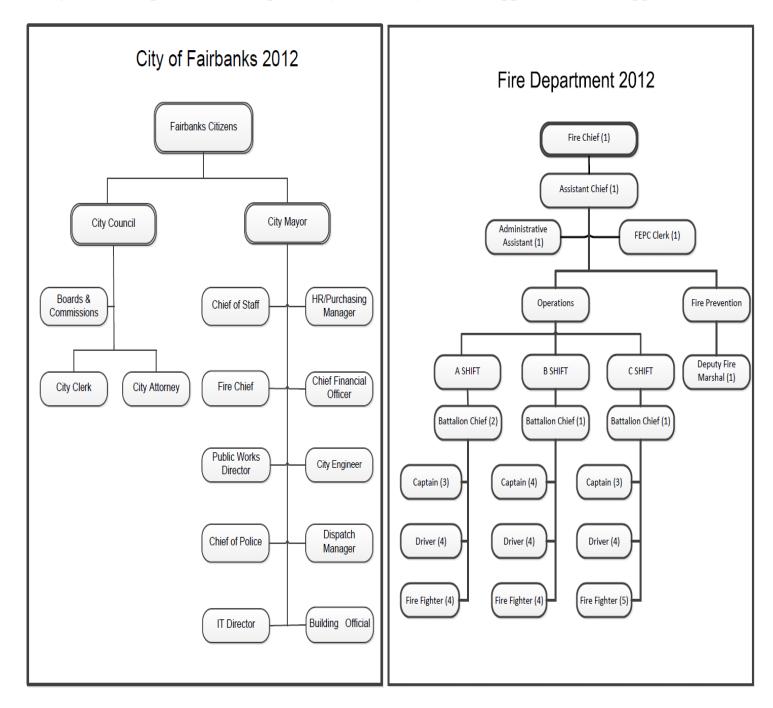




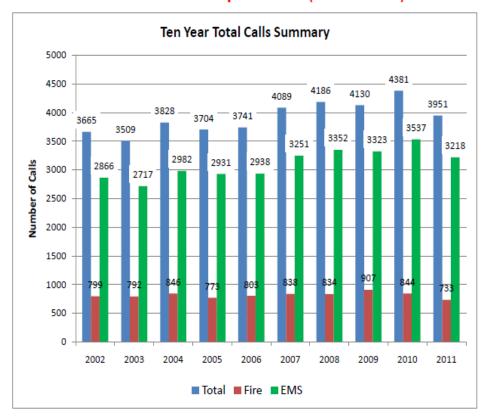




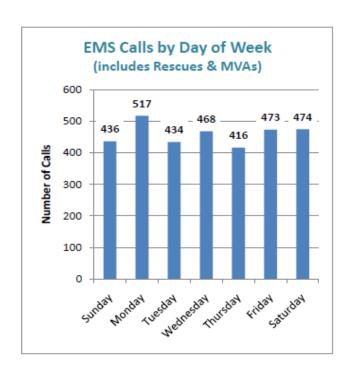
Page 7 of 9



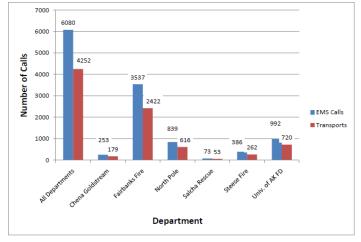
# **Historical Comparisons (2002-2011)**



Fairbanks Fire Department Statistics from our 2011 Annual Report



# Areawide Activity Comparison for EMS 2011 Areawide EMS Activity



	% of Area Call Volume	EMS Calls	Tra
Chena Goldstream	4.15	239	
Fairbanks Fire	55.86	3218	
North Pole FD	16.26	937	
Salcha Rescue	1.18	68	
Steese Fire	6.77	390	
Univ. of AK FD	15.78	909	
All Departments	100.0	5761	

nsports	Transport Ratio
183	76.6%
2426	75.4%
602	64.2%
55	80.9%
327	83.8%
704	77.4%
1297	74.6%