Introduced by: Mayor Eberhart Introduced: December 2, 2013

RESOLUTION NO. 4597, AS AMENDED

A RESOLUTION STATING THE CITY'S CAPITAL PRIORITIES FOR THE STATE 2014-15 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 improve the condition of the roads within the City and the Heavy Duty Rescue Apparatus is currently being manufactured for use in our community, thereby increasing the Fire Department's rescue capabilities; and

WHEREAS, the City has identified current capital priorities, and the public had the opportunity to speak to this Resolution at the December 2, 2013, 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. Ambulance Replacement to Include Cardiac Emergency Equipment Upgrades \$269,000
- 2. Microwave Communications: Police-Fire-Public Works Departments \$195,000
- 3. Heavy Duty Dump Trucks \$275,000
- 4. Voice Over Internet Protocol (VoIP) \$600,000
- 5. Continuity of Operations (COOP): Data Back-Up and Server Room \$1,400,000
- 6. Rickert Subdivision Street Reconstruction \$3,570,750
- 7. Downtown Parking Garage Repairs \$675,900

Project requests total: \$6,985,650

PASSED and APPROVED this 2nd day of December 2013.

John Eberhart Mayor City of Fairbanks

AYES:

Gatewood, Staley, Hilling, Matherly

NAYS:

None

ABSENT:

Anderson, Walley

APPROVED:

Desember 02, 2013

ATTEST:

APPROVED AS TO FORM:

ey Howenden, CMC

Paul Ewers

City Attorney

City of Fairbanks Proposed Projects

1. Ambulance Replacement to Include Cardiac Emergency Equipment Upgrades \$269,000

Replacement Ambulance \$ 175,000

Project Description: Replacement of 2003 Ambulance. This is the oldest of our four ambulances and when replaced will allow us to place our 2005 third line ambulance into reserve status.

Project Purpose and Importance to Jurisdiction: This ten year old vehicle is showing its age with 66,327 miles and many cold-weather idling hours. This replacement ambulance will become our primary ambulance which will handle the majority of our ambulance calls, which exceeded 3500 in 2012. This new ambulance going into service will permit our 2011, 2007 and 2005 ambulances to see less service in the future. During 2012 there were 527 times when we had calls for more than one ambulance at a time, resulting in two or more of our ambulances being in service at the same time. It is also important to keep a reserve ambulance (our fourth vehicle) as it is not uncommon to have two ambulances down for repair at the same time. The City of Fairbanks will furnish this vehicle with over \$60,000 worth of equipment once it is placed in service.

Cardiopulmonary Resuscitation (CPR) Machines (2) \$ 30,000

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

Project Purpose and Importance to Jurisdiction: The Department is requesting funding to purchase two 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 than struggling to maintain their balance while bending over the patient to perform compressions in a moving ambulance.

Upgrade Cardiac Monitors/Defibrillators (3) \$ 64,000

Project Description: Purchase three cardiac monitors with 12-lead, blood pressure, SpO2, pacing, temperature sensor, batteries, battery chargers and support equipment.

Project Purpose and Importance to Jurisdiction: The department wishes to replace our current cardiac monitors. The department's current cardiac monitors are outdated. We are unable to take advantage of current technology such as "Blue Tooth" connectivity and carbon dioxide monitoring. Our community hospital has recently retained the services of two cardiologists and has built a heart center which allows for the immediate catheterization of heart attack victims; thereby reducing injury and morbidity to the citizens we serve. The replacement of our current cardiac monitors will allow for the transmission of critical diagnostic information directly from the incident scene to the cardiologist in order to decrease the time between injury and definitive care. In addition, the new monitors will have the ability to import information directly into our patient care report system, thereby limiting errors and increasing the overall accuracy of our reports. Enhancements to diagnostic software will provide for more accurate analysis of patient conditions in the field, and allow our paramedics to provide improved field-based definitive care in a timely manner.

2. Microwave Communications: Police-Fire-Public Works Departments \$ 195,000

Project Description: Purchase of licensed 1000 megabits per second (Mbps) microwave data connections between Public Works, Fire Station 1 and the Fairbanks Emergency Communication Center adjacent to City Hall. These microwave connections will provide needed bandwidth to relieve current congested circuits. This project will also allow paired 10Mbps metro-e data connections to provide the City with in-house network resources (including VoIP and a data archive) at our Public Works facility. This project is in line with the City's established Continuity of Operations (COOP) and Emergency Operations Plan (EOP) to be able to continue City operations in the event of relocation due to disaster.

Project Purpose and Importance to Jurisdiction: Current communication services are limited by bandwidth constraints for City Departments. This causes dramatic delays in the delivery of critical and essential data to the emergency resources that most need information rapidly.

The City of Fairbanks' operations require the efficient and secure flow of critical information across the data network. The City computer network is utilized for the day-to-day operation of emergency responders and support, (examples: deployment of public safety resources to respond to emergencies, mobilize Public Works crews to clean up after a winter storm, etc.).

The City currently contracts with local vendors to provide 100 Mbps data connections from City Hall to Public Works and Fire Station 1. The standard for connecting a single workstation to a computer network is 1000 Mbps. This means the Information Technology (IT) Department is delivering

network services to dozens of workstations located at Public Works and Fire Station 1 via data circuits that are 90% slower than single workstations' network connection at City Hall or the Police Department. Purchasing additional services from existing vendors has proven cost prohibitive.

3. Heavy Duty Dump Trucks \$275,000

Project Description: The Public Works Department is requesting funding to purchase two new heavy-duty 2-cubic yard end dumps for removal of snow and safety operations within the Public Right-of-Way (ROW). The new end dump trucks would replace our two oldest (1992 vintage) 12-cubic yard end dumps, DT-001 and DT-002.

Project Purpose and Importance to Jurisdiction: The two oldest end dump trucks now require frequent maintenance, including possible engine replacements in the near future at approximately \$60,000 each to continue to operate safely and reliably in the public right-of-way. The 1992-vintage trucks also lack emission controls and major safety features such as heated air line dryers that prevent a brake failure in extreme cold weather and anti-lock brakes systems currently required on all new commercial trucks. When removing and hauling snow from City streets the limiting factor in productivity is the haul time to the snow disposal sites. The longer the round-trip haul time for the trucks, the longer the period of idle time for the snow blower that loads the trucks.

During the month of February 2013, the City rented two 12-cubic yard end dumps to allow repairs on the 1992-vintage trucks, DT-001 and DT-002. Once repairs were made to the 1992 trucks the City continued operating the rental trucks, thus increasing our fleet from ten (10) to twelve (12) trucks. A snow removal operation comprised of one snow blower and ten (10) end dumps operating over a standard 10-hour shift typically hauled approximately 250 to 300 loads depending on the area of town being worked. When we added two (2) additional end dumps to the operation the standard 10-hour shift hauled approximately 380 to 400 loads; and on two occasions the operation hauled 430 and 493 loads. While load counts varied due to the location of the nearest snow dump to which snow was being hauled, the increase in number of loads hauled by adding two additional trucks to the operating fleet was significant and attributed entirely to less idle time for the blower. Thus with the imminent loss of DT-001 and DT-002 from the City fleet, replacing these vehicles now will enable our crews to maintain the high level of efficiency during snow removal operations.

If this request is funded DT-001 and DT-002, worth an estimated \$5,000 each, would be placed in reserve and will be operated only when the newer fleet vehicles were in the shop for routine short-term maintenance, thus allowing the City to retain a full snow removal fleet of twelve (12) operational 12-cubic yard end dumps.

4. Voice Over Internet Protocol (VoIP) \$600,000

Project Description: The City requests funds to design, purchase, and install a Voice Over Internet Protocol (VoIP) phone system. This system would be capable of providing telephone service with a feature set that will reduce complexity, consolidate services, simplify basic phone operations, contain maintenance costs (adds, moves, changes, etc.) and leverage recently added network upgrades already in place (wiring, switches, etc.). This system can easily support more efficient technology to better meet the City's business and public service requirements. It can also be more responsive, resilient, and protected from outage.

Project Purpose and Importance to Jurisdiction: The City's day-to-day and emergency operations depend upon the ability to communicate between departments and outside agencies. The City's current Public Switched Telephone Network (PSTN) is at-capacity and an antiquated collection of cables (which contain many bad cable pairs that have had to be supplemented with connections of lesser quality, resulting in occasional noisy lines and static issues). Our current system has no capability for any future growth.

VoIP provides enhanced features not available in the City's current system. The current system has a dedicated line for each phone set. The new system utilizes trunk lines from the centralized location to all facilities and would require fewer lines to serve the same number of phones. An additional benefit of an internal system is the ability to communicate internally, even in the event of a central office failure. Increased control over feature sets such as voice mail, caller ID displays, phone-tree structures for incoming call routing will be invaluable in making City services efficient. The new VoIP system will be more agile, less reliant on legacy systems and external service providers, and better equipped to handle an unexpected disaster.

5. Continuity of Operations (COOP): Data Backup and Server Room \$1,400,000

Project Description: The City of Fairbanks requests funds to design, procure, build and operate an off-site data storage system. This would include redundant disk arrays (storage) to safeguard records and key operational files for the City's many critical data systems, ranging from financial records, public safety records, city planning records and historical data that would be difficult or impossible to replace if destroyed or lost in a disaster scenario. This data management would integrate and protect information allowing encryption and optimized storage through compression and indexed searching.

Project Purpose and Importance to Jurisdiction: Storage acquisitions are at an all-time high and the need for data management tools to protect this data has become paramount. Backup, archival, restoration, duplication and replication technologies have become necessary in order to ensure that the City's historical, fiscal, legislative and evidentiary records (many of which are being converted to digital or have only ever existed in that format) are preserved for day-to-day operations, long-term projects and planning of future projects. The stored information needs to be highly available, allow for granular recovery and not be subject to permanent loss in the event of disaster.

6. Rickert Subdivision Street Reconstruction \$3,570,750

Project Description: This project would provide for complete reconstruction of residential neighborhood streets with drainage improvements including catch basins and storm drain laterals, grinding, re-profiling, and re-grading of road section, new asphalt concrete pavement and driveway connections.

Project Purpose and Importance to Jurisdiction: This project comprises 17,742 linear feet of City streets (3.36 miles) including 14th Avenue, 15th Avenue, 16th Avenue, 17th Avenue, 18th Avenue, Laurene Street, Turner Street, Mary Ann Street, Schaible Street, Rickert Street, and Stacia Street (excluded are Cushman Street, frontage road to Airport Way, Gillam Way, Barnette Street, and Gaffney Road). Construction comprises 26 to 30 foot typical section with drainage improvements with no sewer or water upgrades unless Golden Heart Utilities elects to fund and upgrade utility mains within this project footprint.

Survey, Engineering Design and Construction Management (15% of Construction) = \$465,750 Construction: \$175/linear foot by 17,742 linear feet = \$3,105,000.

Rickert Subdivision is a mixed use subdivision located in the center of Fairbanks, immediately south of downtown. The subdivision is primarily comprised of residential homes built between the 1950s and 1970s, numerous small businesses, and an array of nonprofit and public facilities such as the Fairbanks Resource Agency Rehabilitation Center, Midnight Sun Council of Boy Scouts of America, Alaska Housing Finance Corporation affordable housing units, American Legion Post 57, and Fairbanks North Star Borough's Mary Siah Recreation Center.

Rickert Subdivision also borders Hunter Elementary School and Lathrop High School. The pavement in this subdivision is over 35 years old, crumbling and beyond a condition to effectively patch. Each summer the City's Public Works Department attempts to repair hundreds of potholes throughout the subdivision, and on some streets the surface is comprised nearly entirely of pothole patches. The subdivision also has inadequate storm drain systems that serve only part of the neighborhood, causing localized flooding issues in areas without storm drains. The subdivision is not only in dire need of new pavement, but also a major expansion of its storm drain system.

7. Downtown Parking Garage Repairs \$ 675,900

Project Description: The requested funds will be used for repair design, testing and contract work. The requested funds will be used to hire design professionals and contractor's labor force in preserving a significant capital investment.

Project Purpose and Importance to Jurisdiction:

The Downtown Transportation Center was completed in 2002 at a cost of approximately \$9,000,000. This parking garage provides 380 covered parking spaces plus public areas and administrative offices. The facility has experienced structural fissures, concrete shrinkage and cracking. Independent experts report to us that these structural events are a normal result of stresses typical of the early years of parking garage life-cycle. However, without prompt repair, future repair costs are predicted to increase to the multi-million dollar level. The City's goal is to protect the public investment in this facility.