CITY OF UNALASKA
UNALASKA, ALASKA

ORDINANCE 2021-06

AN ORDINANCE OF THE UNALASKA CITY COUNCIL AMENDING TITLE 11 OF THE UNALASKA CODE OF ORDINANCES TO ESTABLISH AN ENHANCED 911 SYSTEM AND ESTABLISH ENHANCED 911 CUSTOMER SURCHARGES.

BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF UNALASKA, as follows:

Section 1: Classification. This Ordinance is a Code Ordinance.

Section 2: Amendment of Title 11. Title 11 of the Unalaska Code of Ordinances is hereby amended by adding a new Chapter 11.32 to read as follows:

Chapter 11.32
ENHANCED 911 SYSTEM

Sections

11.32.010 Enhanced 911 Emergency Reporting System

A. Any local exchange telephone company or wireless telephone company providing service within the city shall cooperate with the City in the establishment of an enhanced 911 emergency reporting system to serve the entire City of Unalaska.

B. The city council designates the entire city as the enhanced 911 service area for the City of Unalaska.

11.32.020 Definitions

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

A. "911 service area" or "enhanced 911 service area" means the entire city that has been designated to receive an enhanced 911 system.

B. "Enhanced 911 equipment" means any equipment dedicated to the operation of, or use in, the establishment, operation or maintenance of an enhanced 911 system, including customer premises equipment, automatic number identification or automatic location identification controllers and display units, printers, cathode ray tubes, recorders, software, and other essential communication equipment.

C. "Enhanced 911 system" or "system" means a telephone system consisting of network, database and enhanced 911 equipment that uses the single three-digit number, 911, for reporting a medical, fire, police, or other emergency situation, and which enables the users of a public telephone system to reach a public safety answering point to report emergencies by dialing 911. An enhanced 911 system includes the personnel required to acquire, install, operate, and maintain the system.

D. "Local exchange access line" means a telephone line that connects a local exchange service customer to the wireline telephone company switching office and that has the capability of reaching local public safety agencies, but does not include a line used by a carrier to provide inter-exchange services. However, the local exchange access lines shall not include public pay phones, inter-office trunks, toll trunks, and direct inward dialing trunks.

E. "Local exchange service" means the transmission of two-way interactive switched voice communications furnished by a local exchange telephone company within the City of Unalaska including access to enhanced 911 systems.

F. "Local exchange Telephone Company" or "wireline Telephone Company" means a telephone utility certified to provide local exchange service or wireline telephone service in the City of Unalaska by the Regulatory Commission of Alaska.

G. "Public safety answering point" means a 24-hour local communications facility that receives 911 service calls and directly dispatches emergency response services or that relays calls to the appropriate public or private safety agency.

H. "Surcharge" means an enhanced 911 system surcharge imposed on wireline and wireless telephones for support of an enhanced 911 system.

I. "Wireless Telephone Company" means any telephone company that provides wireless telephone service through cellular, satellite, broadband, radio-based telephone or data transport service, and bills or sells wireless telephone service to a customer with an address within the City of Unalaska.

J. “Wireless telephone” means any telephone that is not a wireline telephone that is capable of communication with another device by use of radio waves or satellite signal, which includes cellular, mobile, radio-based, and broadband telephones. Each wireless telephone number is considered a separate wireless telephone for purposes of the surcharge.

K. “Wireline telephone” means any telephone that uses a local exchange access line.

11.32.030 Designation of Selective Router Demarcation Point

The City of Unalaska hereby designates 29 Safety Way in the City of Unalaska as the 911 PSAP selective router demarcation point solely for the purposes of 911 call delivery by telecommunications carriers.

11.32.040 Enhanced Emergency Reporting Equipment or Services

A. The city may purchase, lease or contract for any enhanced 911 equipment or services reasonably necessary to further enhance the existing 911 system at public safety answering points.

B. If the enhanced 911 system is to be provided for an area that is included in more than one telephone company service area, the City of Unalaska Department of Public Safety, with the approval of the City Manager, may enter into agreements necessary to establish and operate the system.

11.32.050 Enhanced 911 Customer Surcharge

1. A surcharge in the amount of $2.00 per month, shall be levied on each local access line and each wireless telephone number that is billed or sold to a customer with an address within the City of Unalaska.

2. The Finance Director shall annually review this surcharge to determine whether the level of surcharge is adequate, excessive or insufficient to meet the anticipated enhanced 911 system needs.

3. A wireline telephone or wireless telephone customer may not be subject to more than one 911 surcharge per local exchange access line and wireless telephone. A customer that has more than 100 wireline access lines from a wireline telephone company in the city is liable for the 911 surcharge only on 100 wireline access lines.

4. The local exchange telephone company and the wireless telephone company, shall bill and collect the 911 surcharge. The 911 surcharge billed shall be accounted for separately from other charges.

5. The local exchange telephone company and the wireless telephone company, shall remit that portion of the surcharge receipts allocable to the City of Unalaska no later than 60 days after the end of the month in which the amount was collected. From each remittance made in a timely manner, the company is entitled to deduct the greater of one percent of the amount collected or a total of $150 per month as the cost of administration for collecting the 911 surcharge. In addition, a wireless telephone company is entitled to full recovery of the recurring and nonrecurring costs associated with implementation and operation of Phase I E911 service as allowed under Federal Communications Commission proceedings entitled "Revision of the Commission's Rules to Ensure Compatibility with Enhanced 9-1-1 Emergency Calling Systems" (CC Docket No. 94-102; RM-8143). The local exchange telephone company and the wireless telephone company shall annually furnish a complete list of amounts due for nonpayment of surcharges, together with the names and addresses of those customers who carry a balance of what can be determined by the company to be for nonpayment of the surcharge.

6. The City of Unalaska may, at its own expense, require an annual audit of a telephone company's books and records concerning collection and remittance of the surcharge.

7. A wireline or wireless telephone customer is liable for payment of the enhanced 911 surcharge in the amounts billed by the telephone company until the amounts have been paid to the telephone company. A local exchange telephone company or wireless telephone company is not obligated to take legal action to enforce collection of the 911 surcharge. However, if a company is attempting to collect an unpaid debt from a customer, the company shall also attempt to collect any unpaid 911 surcharge that the customer owes. If a customer pays a portion of a bill that includes a 911 surcharge, the amount paid shall be prorated between the company and the 911 surcharge.

11.32.060 Remittance

A. On or before 60 days following the end of the month in which the surcharge was billed, the local exchange telephone company and the wireless telephone company shall submit to the City of Unalaska a return, upon forms provided by the city, and submit payment for the surcharge due the City of Unalaska.

B. The return shall be signed by the agent of the company and include:

a. the name and address of the company;

b. the name and title of the person preparing the return;

c. the month being reported for which the surcharges were billed;

d. the amount of gross surcharges billed for the month of the return;

e. the deduction claimed for the surcharges previously billed and remitted, but charged off as uncollectible during the month being reported;

f. the prorated recoveries representing the month's collection of surcharges previously written off as uncollectible;

g. the amount of deduction claimed for the company's administrative costs to collect the surcharges, which may be the greater of $150 or one percent of amounts collected;

h. the net amount of remittance due to the City of Unalaska; and

i. other information and supporting documentation which may be required by the city

Section 2: Effective Date. This ordinance shall take effect on 1 July 2021.

PASSED AND ADOPTED by a duly constituted quorum of the Unalaska City Council on Month DD, YYYY.

_____
Vincent M. Tutiakoff, Sr.
Mayor

ATTEST:

_____
Roxanna Winters, CMC
Acting City Clerk

MEMORANDUM TO COUNCIL

To: Mayor and City Council Members
From: Director J.E. King #2235, Public Safety
Through: Erin Reinders, City Manager
Date: 7 April 2021
Re: Ordinance 2021-06: Amending Title 11 of the Unalaska Code of Ordinances to Establish an Enhanced 911 System and Establish Enhanced 911 Customer Surcharges

SUMMARY: The City of Unalaska does not have a Computer Aided Dispatch (CAD) System that allows for the integration of Enhanced 911 capabilities. This downfall results in lengthy call taking times and pushes back the dispatch times for emergency services. It is the recommendation that Public Safety upgrade its Public Safety Answering Point capability to include Enhanced 911 and to assist with the cost of the implementation, maintenance and operation of the Enhanced 911 System, the City Council should enact an Ordinance that would impose a 911 Surcharge in compliance with current Alaska State Statute.

PREVIOUS COUNCIL ACTION: Council discussed this years ago as a potential funding source for projects currently underway to improve our 911 system. Council discussed this ordinance during their March 23, 2021 Work session. The power point shared in this Work Session is included in the packet for your reverence again tonight, it is full of useful information.

During the Work Session, a question was posed as to if the surcharge could be utilized for expenditures that have already been incurred. So follow-up conversations were had with the City Attorney to confirm this was the case. Also it was mentioned that with impact of COVID and utility increases possible how much negative impact would be caused to the community financially verses the benefits the service provides to the community. Some discussion took place as to what was the overall expected revenue compared to the cost of implementation, maintenance and operation of the project as a whole.

BACKGROUND: Unalaska has a very diverse community along with the existence of a multi-language community. Typically, the presence of a multi-language often poses unique challenges during normal day to day conversation and interaction. When you add in the stress of an emergency situation and the crucial need to immediately share or convey specific information, the results can be an usually long dialogue resulting in the rapid passage of time. The benefit of having an Enhanced 911 system takes seconds off of the dispatch time of emergency services. These seconds saved can result in the saving of a life. 911 was introduced in the 1960's and Enhanced 911 was introduced in the 1970's. A review of the current shortfalls of the Communications System as it is and the potential integration of existing technology was conducted. The Department of Public Safety has undertaken the process of upgrading its Radio, Repeater Site and CAD Systems. Phase III of this project incorporates the move to VESTA. VESTA is a CAD System that supports the Enhanced 911 features desperately needed to provide a high level of services for the best quality of life for the members of the community.

DISCUSSION: The passage of the Enhanced 911 Surcharge, in accordance to Alaska State Statute, will provide funding to assist with the cost of the implementation, maintenance and operation of the Enhanced 911 System. This fund will go towards sustaining the Enhanced 911 system for the life of the program. This includes the cost of training personnel and the time spent towards handling 911 calls. This fund will cover the cost of Computer Aided Dispatch software which periodically requires upgrades, patches or replacement altogether. This fund will allow for the purchase for various elements of equipment when the needs arise.

This is a much needed service. There are countless situations that have, do and may occur that limit the sharing of verbal communications during emergency situations. Enhanced 911 supports the ability of the Communications Division to dispatch Emergency Services even in the absence of verbal communications in life threatening situations when someone dials 911.

ALTERNATIVES: Four main options exist, and our outlined below.

1. The Council may elect to set a reduced rate for the surcharge at the onset and raise it at a later date upon conducting an analysis of the annual review of the program

2. The Council may elect to pass the Ordinance as written then conduct a review of the program upon the annual review and adjust the surcharge to a lower amount

3. The Council may elect to pass the Ordinance as written then conduct a review of the program upon the annual review and adjust the surcharge to a higher amount by placing the proposal as a ballot measure for the community to vote on in accordance to current Alaska State Statute

4. The Council may elect to refuse the proposed Ordinance and fund the project strictly out of the General Fund

FINANCIAL IMPLICATIONS: City staff reached out to local telecommunication providers to estimate the financial impact of the surcharge. Annually, the expected income from the 911 Surcharge (if set at $2) should generate an estimated $75-$85 thousand dollars. This is outlined below.

Expected Surcharge Revenue

TeleCom 1	2000 Cellular Customers	2000 x $2 x 12 = $48,000.00
TeleCom 2	1300 Wired + 100 Cellular	1400 x $2 x 12 = $33,600.00
TeleCom 3	Projected to pull from existing customer base without additions	
TeleCom 4	Working agreement with partner provider resulting in no additions	

Surcharges would be dedicated to assist with the cost of the implementation, maintenance and operation of the Enhanced 911 System. Related qualifying costs and activities are outlined below.

The CMMP Radio Project is a 3 phase project. This project has a $1,500,000.00 overall budget. The first phase deals with the repeater and console. The second phase focuses on the radio site. Phase III is geared towards the CAD VESTA implementation.

Phase III Project Costs

Avtek Dispatch Console	$98,548.87
ErgoFlex Work Stations	$37,798.00
VESTA CAD Software	$39,531.44
Network Support Server	$38,000.00

Estimated Total $213,878.31

Projected Support Equipment and Man-Hours
(These expenses are associated to the implementation and maintenance of the E-911 System)

Implementation tasks left to be completed include:
COU Planning: Automatic number identification database integration preparation
COU Planning: Automatic location identification database integration preparation

Equipment left to purchase includes:
Public Safety Answering Point backup power systems
911 telecommunications systems
Call answering equipment
Call transfer equipment
Automatic number identification controllers and displays
Automatic location identification controllers and displays
Tele-printers
Logging recorders
Instant playback recorders
Telephone devices for the deaf
Automatic call distributors

Expected Long Term Recurring Costs
Communications Personnel Training Cost (for new employees)
Note: CEU's covered with an annual subscription

ETI	estimated $4500 per employee
ETC	covered by on-site instructor
EFD	estimated $4300 per employee
EMD	estimated $4300 per employee
EPD	estimated $4300 per employee
EFDQAC	estimated $4500 per employee
EMDQAC	estimated $4500 per employee
EPDQAC	estimated $4500 per employee

Communications Personnel Training Cost (every other year per employees)

EFD	estimated $50 per employee
EMD	estimated $50 per employee
EPD	estimated $50 per employee
EFDQAC	estimated $100 per employee
EMDQAC	estimated $100 per employee
EPDQAC	estimated $100 per employee

Salaries can be funded for time spent handling 911 calls

LEGAL: The City Attorney has reviewed this ordinance and adjustments have been made based on his guidance. Additionally, the City Attorney was asked to review Alaska State Statute 29.35.131 as it pertains to the proper use of funds raised by the 911 Surcharge. The City was advised that the funds from the 911 Surcharge can be applied to the costs directly attributed the establishment, maintenance and operation of the E-911 system. This includes costs that have been accrued prior to the enactment of the City Ordinance.

STAFF RECOMMENDATION: Staff recommends adoption of Ordinance 2021-06.

PROPOSED MOTION: I move to adopt Ordinance 2021-06.

CITY MANAGER COMMENTS: I support adoption of this Ordinance, and appreciate Chief King's leadership in these efforts.

ATTACHMENTS:

- Power Point from March 23, 2021 Work Session
- Ordinance 2021-06

Enhanced 9-1-1

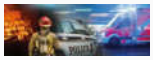
What is 9-1-1

- The first 911 system was installed in Haleyville, Alabama, in February 1968, as a way to quickly connect a subscriber to the local police station.
- It was not until 1999 that the United States Congress directed the FCC to make 911 the universal emergency number in the United States for all telephone services.
- The 911 network is now a vital part of our nation's emergency response and disaster preparedness system.
- Emergency personnel and others often learn about emergencies through 911 calls.

What is 9-1-1

- Dialing 911 quickly connects a caller to a nearby Public Safety Answering Point (PSAP), which is a call center operated by the local government
- At the PSAP, the call is answered by a specially trained official known as a 9-1-1 dispatcher, who routes your call to local emergency medical, fire, and law enforcement agencies.
- 911 lines are designated for emergency calls, such as reporting a crime in progress, reporting a fire, or requesting an ambulance.

What is Enhanced 9-1-1



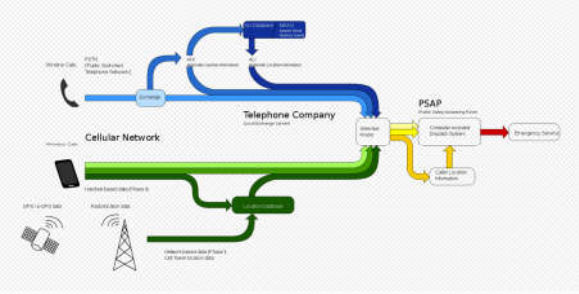
- Enhanced 911, E-911 or E911 is a system used in North America to automatically provide the caller's location to 911 dispatchers.
- A pioneering system was in place in Chicago by the mid-1970s, providing both police and fire departments access to the source location of emergency calls.
- The dispatcher's computer receives information from the telephone company about the physical address (for landlines) or geographic coordinates (for wireless) of the caller.
- This information is used to dispatch police, fire, medical, and other services as needed.

Call Routing

- **Landline routing**
- Calls to 911 over the public switched telephone network (PSTN) are routed to a special router (known as Selective Router, or 9-1-1 Tandem).
- The router looks for the address associated with the caller's telephone number in a database. The caller's phone number is known as an ANI.
- The database relating ANIs to addresses is known as ALI (Automatic Location Identification).
- The router then uses the address to search in the Master Street Address Guide (MSAG) for the Emergency Service Number (ESN) of the appropriate PSAP for that area, and connects the call to it.

Call Routing

- **Wireless routing**
- Calls from cellular phones are received via cell towers by mobile switching centers (MSC).
- The switching center automatically assigns a unique identifier to each cellular 911 call, known as a "pseudo ANI".
- The Selective Router connects the call to a PSAP based on the cell tower's location.



Why ?

- Automated Location Information is crucial in situations
  - When a person is suffering a medical emergency and is unable to speak
  - When a person needs assistance but cant hold the phone because they are rendering CPR
  - When a person is the victim of an assault (such as Domestic Violence) and needs help but cannot risk the call being known
  - When a criminal act (Burglary, Robbery, etc.) is taking place and help is needed but the caller cannot risk the call being known

Federal Communications Commission

- The U.S. Federal Communications Commission (FCC) has made several requirements applicable to 911
  - Basic 911: All 911 calls must be relayed to a call center, regardless of whether or not the mobile phone user is already a customer of the network being used.
  - In 1996, the FCC issued an order requiring wireless carriers to determine and transmit the location of callers who dial 911 in two Phases.
  - The Wireless Communications and Public Safety Act of 1999, also known as the 911 Act, mandated the use of E911 and designated 911 as the universal emergency number, including both wireline and wireless phone devices.

Federal Communications Commission

- E911 Phase 1
  - Phase I involved sending the location of the receiving antenna for 911 calls
  - Wireless network operators must identify the phone number and cell phone tower used by callers, within six minutes of a request by a PSAP

Federal Communications Commission

- E911 Phase 2
  - Phase II involved sending the location of the calling telephone for 911 calls
  - 95% of a network operator's in-service phones must be E911 compliant ("location capable") by December 31, 2005. (Numerous carriers missed this deadline and were fined by the FCC).
  - Wireless network operators were to provide the latitude and longitude of callers within 300 meters, within six minutes of a request by a PSAP.
  - Accuracy rates were to meet FCC standards on average within any given participating PSAP service area by 11 September 2012 (deferred from 11 September 2008).

Kari's Law & Ray Baum's Act
August 2019

- Under the provisions outlined in KARI'S LAW, new and upgraded MLTS systems after February 17, 2020 must:
  - Enable the public to dial 911 from MLTS directly, without having to dial additional numbers, such as a "9," to reach an outside line.
  - Require MLTS to send a notification to a location where someone is likely to hear or see it when a 911 call has been made.
  - Establish dispatchable location information requirements for 911 calls from MLTS, fixed telephone services, interconnected Voice over Internet Protocol (VoIP) services, mobile text, and Internet-based Telecommunications Relay Services (TRS)

Official Letter of Notification

TeleCom

- Verbal Communications have been ongoing with local TeleCom providers
- Letters have been drafted for
  - TelAlaska
  - GCI
  - OptiMera

Multi-Line Telephone Systems

- Private Telecommunications Networks
  - Business (i.e. Hotels etc.) with internal switchboard
- **Dispatchable location is defined as:**
  - The street address of the calling party Information such as room number, floor number, or similar information necessary to adequately identify the location of the calling party.

E911 Fund

- Annual Report on the Collection and Use of 911 Fees
  - The New and Emerging Technologies 911 Improvement Act of 2008 (NET 911 Act) requires the Commission to submit an annual report to Congress on the collection and distribution of 911 and Enhanced 911 fees and charges by the states, the District of Columbia, U.S. territories, and Tribal Nations (states and other reporting entities).
  - NET 911 Act requires the Commission to report whether 911 fees and charges collected by states and other reporting entities are being used for any purpose other than to support 911 and Enhanced 911 (E911) services

Why?

- Funding is crucial for:
  - Personnel
  - Training
  - Equipment (hardware & software)
- The implementation and maintenance of the program

Address signage standards

- In addition to upgrading communications systems, most counties and communities in the United States have established ordinances (e.g. IRC section R319.1) requiring property owners to standardize the display of house numbers on buildings and along streets and roadways, to allow emergency personnel to more easily identify a given address day or night, even in poor weather.
- These are normally composed of reflective characters, at least 3 to 6 inches high, on a contrasting reflective background.
- It is necessary for the address number to be affixed to the building or to a separate structure such as a post, wall, fence, or mailbox, provided that such separate structure is located in front of the building and on the building's side of the street.
- Compliant signage systems are often advertised as being "E911 compliant".

International Residential Code for One- and Two-Family Dwellings

- **R319.1 Address numbers.**
- Buildings shall have *approved* address numbers, building numbers or *approved* building identification placed in a position that is plainly legible and visible from the street or road fronting the property.
- These numbers shall contrast with their background.
- Address numbers shall be Arabic numbers or alphabetical letters.
- Numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of $^1/_2$ inch (12.7 mm).
- Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure.