



911 SURCHARGE
ADVISORY COMMITTEE
MASTERPLAN

July 23, 2018

Introduction

A mature, robust and reliable public safety communications center (“communications center”) is the heart of any community’s public safety infrastructure. Adequate funding is necessary to ensure the proper technology is in place to not only support the public safety user but the community as a whole. The public safety communications center is supported by two ongoing revenue sources: (1) an ad valorem tax levied upon property within Douglas County pursuant to a May 1990 tax override election by the community; (2) a monthly surcharge imposed upon telephone service lines pursuant to Title 3 of the Douglas County Code and in accordance with Chapter 244A of the Nevada Revised Statutes.

Any expenses that are not paid by the foregoing revenue sources are paid by the emergency service providers who utilize the communications center’s services. Specifically, the communications center provides public safety communications services to the following emergency services providers: Douglas County Sheriff’s Office, Alpine County California, Washoe Tribal Police, East Fork Fire Protection District, and Tahoe Douglas Fire Protection District. The majority of the calls for service processed by the communication center are generated for the Douglas County Sheriff’s Office.

This Masterplan has been developed in compliance with the requirements Chapter 244A of the Nevada Revised Statutes. The Masterplan sets forth projected expenses that are necessary to support the development and maintenance of the Douglas County public safety communications center.

Vision

The vision of this document is to ensure the Douglas County 911 system will remain accredited, reliable, efficient and current so that all citizens and visitors of Douglas County may connect to a highly qualified representative at 911 emergency services by using any device from any location within the County.

Mission

The mission of the 911 Surcharge Advisory Committee is to develop a 5-year master plan for the enhancement or improvement of the telephone system for reporting emergencies in Douglas County and to oversee 911 surcharge funds in accordance with **Ordinance No. 2007-1212**.

Goals

During the development of this Masterplan, the goals of the 911 Surcharge Advisory Committee were:

- To assess the regular, technical needs of the 911 system.
- To ensure the 911 equipment is meeting an adequate and proper level of service.
- To ensure the technology is supporting the operations within the communications center and meeting the needs of those using the equipment.
- To ensure the proper use of funds collected under the surcharge.

Review and Update

This plan will be reviewed and updated annually and at other times the committee deems appropriate. The 911 Emergency Services Director is responsible for making recommendations to the committee as they relate to the 911 system and surcharge.

Revenues / Expenditures

As noted above, one ongoing revenue stream for the 911 Emergency Service Communications Center is a surcharge on telephone access lines and trunk lines collected pursuant to Title 3 of the Douglas County Code and Chapter 244A of the Nevada Revised Statutes. As of July 2018, the County collects a monthly \$0.25 surcharge per telephone access line and a \$2.50 surcharge per trunk line. In accordance with NRS 244A.7643, revenue collected from the telephone surcharges may be used only for (1) the enhancement of a telephone system for reporting an emergency; and (2) the purchase and maintenance of event recording devices by law enforcement.

For Counties with populations exceeding 45,000, a surcharge collected to enhance the telephone system for reporting emergencies may be used only for the following purposes:

- I. Paying recurring and nonrecurring charges for telecommunication services necessary for the operation of the enhanced telephone system;
- II. Paying costs for personnel and training associated with the routine maintenance and updating of the database for the system;
- III. Purchasing, leasing or renting the equipment and software necessary to operate the enhanced telephone system, including, without limitation, equipment and software that identify the number or location from which a call is made; and
- IV. Paying costs associated with any maintenance, upgrade and replacement of equipment and software necessary for the operation of the enhanced telephone system.

NRS 244A.7645(3)(a)(1) (2018).

For reference, as defined in NRS Chapter 244A, a “telephone system” means:

a system for transmitting information between or among points specified by the user that does not change the form or content of the information regardless of the technology, facilities or equipment used.

A telephone system may include, without limitation:

- a) Wireless or Internet technology, facilities or equipment; and
- b) Technology, facilities or equipment used for transmitting information from an emergency responder to the user or from the user to an emergency responder.

NRS 244A.7641(4) (2018).

Based upon the foregoing, the collected surcharge funds can only be used for a portion of the emergency services communications center’s overall budget. The 911 Surcharge Advisory Committee has identified a number of expenses, which are necessary to the successful operation of the emergency services communications center, and which may be funded by the surcharge.

For context, the total expenses of the emergency services communications center for FY 18/19 are \$2,335,752. Thus, for FY 18/19, there are expenses in the amount of \$2,040,480, which cannot be paid by the surcharge, and which must be paid by the ad valorem tax and contributions by emergency service providers. The ad valorem tax for FY 18/19 is estimated to equate to \$1,333,075.

Notably, for fiscal year 2018/2019, the list of expenses does not include radio infrastructure—which is utilized for the purpose of transmitting information between emergency responders and users of the 911 telephone system—because this expense was budgeted under a different account for fiscal year 2018/2019.

It is critical to this plan that there are accurate funding projections to build a budget on. At each meeting of the Committee the 911 Emergency Services Director will provide to the Committee a current budget indicating the revenue that has been collected and the expenses that have been charged against this revenue fund. The projected use of these funds is listed below for a five year period.

ACTUAL EXPENSES

Budget Year Use of Funds by Priority

Actual Expenses

FY 2016/2017	911 AT&T ANI/ALI (per month @ \$7,040)	\$ 84,400
	911 Frontier ANI/ALI (per month @ \$3,228)	38,736
	Software Maintenance (per month 6 seats @ \$3,600)	43,200
	911 Incoming Wireless Charge (\$250 per month)	3,000
	911 AT&T Circuit Charges (per month @ \$2,320)	<u>27,840</u>
	Total Expenses:	<u>\$ 197,176</u>

Budget Year Use of Funds by Priority

Actual Expenses

FY 2017/2018	E911 Trunks (T-1) per termination (4)	\$ 7,440
	ANI, per 100 main stations served (32)	9,600
	ALI, per 1000 main stations served (32)	45,312
	Selective routing, per 1000 main stations (32)	5,760
	Wireline trunks (plus mileage) (4)	5,280
	Per trunk - per 1st quarter mile (8)	6,144
	Per trunk, additional quarter mile (112)	4,032
	AT&T Hosted E911 Service - DC per pos (6)	90,000
	CM11 mobile laptop (position 7 in center)	3,588
	Text-to-911	2,400
	Frontier ANI/ALI storage maintenance	36,000
	Frontier Intra-state mileage fee (to Reno)	26,316
	Frontier centrex business lines (12)	<u>8,400</u>
	Total Expenses:	<u>\$ 250,272</u>

PROJECTED EXPENSES

<u>Budget Year Use of Funds by Priority</u>	<u>Projected Expenses</u>
FY 2018/2019 E911 Trunks (T-1 per terminations (4)	\$ 7,440
ANI, per 1000 main stations served (32)	9,600
ALI, per 1000 main stations served (32)	45,312
Selective routing, per 1000 main stations (32)	5,760
Wireline trunks (plus mileage) (4)	5,280
Per trunk - per 1st quarter mile (8)	6,144
Per trunk, additional quarter mile (112)	4,032
AT&T Hosted E911 Service - DC per pos (8)	135,000
CM11 mobile laptop (position 7 in center)	3,588
Text-to-911 (4 seat license)	2,400
Frontier ANI/ALI storage maintenance	36,000
Frontier Intra-state mileage fee (to Reno)	26,316
Frontier centrex business lines (12)	<u>8,400</u>
Total Expenses:	<u>\$ 295,272</u>

<u>Budget Year Use of Funds by Priority</u>	<u>Projected Expenses</u>
FY 2019/2020 E911 Trunks (T-1 per terminations (4)	\$ 7,440
ANI, per 1000 main stations served (32)	9,600
ALI, per 1000 main stations served (32)	45,312
Selective routing, per 1000 main stations (32)	5,760
Wireline trunks (plus mileage) (4)	5,280
Per trunk - per 1st quarter mile (8)	6,144
Per trunk, additional quarter mile (112)	4,032
AT&T Hosted E911 Service - DC per pos (8)	135,000
CM11 mobile laptop (position 7 in center)	3,588
Text-to-911 (4 seat license)	2,400
Frontier 5% annual increase in charges	3,536
Frontier ANI/ALI storage maintenance	36,000
Frontier Intra-state mileage fee (to Reno)	26,316
Frontier centrex business lines (12)	8,400
Motorola Radio debt service	65,267
Motorola Radio license/maintenance	<u>34,015</u>
Total Expenses:	<u>\$ 398,090</u>

<u>Budget Year Use of Funds by Priority</u>	<u>Projected Expenses</u>
FY 2020/2021	
E911 Trunks (T-1 per terminations (4)	\$ 7,440
ANI, per 1000 main stations served (32)	9,600
ALI, per 1000 main stations served (32)	45,312
Selective routing, per 1000 main stations (32)	5,760
Wireline trunks (plus mileage) (4)	5,280
Per trunk - per 1st quarter mile (8)	6,144
Per trunk, additional quarter mile (112)	4,032
AT&T Hosted E911 Service - DC per pos (8)	135,000
CM11 mobile laptop (position 7 in center)	3,588
Text-to-911 (4 seat license)	2,400
Frontier 5% annual increase in charges	6,591
Frontier ANI/ALI storage maintenance	36,000
Frontier Intra-state mileage fee (to Reno)	26,316
Frontier centrex business lines (12)	8,400
Motorola Radio debt service	65,267
Motorola Radio license/maintenance	<u>34,672</u>
Total Expenses:	<u>\$ 401,802</u>

<u>Budget Year Use of Funds by Priority</u>	<u>Projected Expenses</u>
FY 2021/2022	
E911 Trunks (T-1 per terminations (4)	\$ 7,440
ANI, per 1000 main stations served (32)	9,600
ALI, per 1000 main stations served (32)	45,312
Selective routing, per 1000 main stations (32)	5,760
Wireline trunks (plus mileage) (4)	5,280
Per trunk - per 1st quarter mile (8)	6,144
Per trunk, additional quarter mile (112)	4,032
AT&T Hosted E911 Service - DC per pos (8)	135,000
CM11 mobile laptop (position 7 in center)	3,588
Text-to-911 (4 seat license)	2,400
Frontier 5% annual increase in charges	9,882
Frontier ANI/ALI storage maintenance	36,000
Frontier Intra-state mileage fee (to Reno)	26,316
Frontier centrex business lines (12)	8,400
Motorola Radio debt service	65,267
Motorola Radio license/maintenance	<u>35,280</u>
Total Expenses:	<u>\$ 405,701</u>

Budget Year Use of Funds by Priority

Projected Expenses

FY 2022/2023	E911 Trunks (T-1 per terminations) (4)	\$ 7,440
	ANI, per 1000 main stations served (32)	9,600
	ALI, per 1000 main stations served (32)	45,312
	Selective routing, per 1000 main stations (32)	5,760
	Wireline trunks (plus mileage) (4)	5,280
	Per trunk – per 1 st quarter mile (8)	6,144
	Per trunk, additional quarter mile (112)	4,032
	AT&T Hosted E911 Service – DC per pos (8)	135,000
	CM11 mobile laptop (position 7 in center)	3,588
	Text-to-911 (4 seat license)	2,400
	Frontier 5% annual increase in charges	13,195
	Frontier ANI/ALI storage maintenance	36,000
	Frontier Intra-state mileage fee (to Reno)	26,316
	Frontier centrex business lines (12)	8,400
	Motorola Radio debt service	65,267
	Motorola Radio license/maintenance	<u>36,060</u>
	Total Expenses:	<u>\$ 409,794</u>

If revenues exceed expenses, funds may be held in reserve to cover the cost to replace necessary equipment and radios, upgrade software, pay increasing rates to telecommunication service providers, and otherwise enhance the telephone system for reporting emergencies.

Recommendation:

Increase Surcharge in an amount sufficient to cover the permissible expenses, for equipment and services which are necessary for the successful operation of the communications center.

Projected Increase Amounts by Fiscal Years (911 only)

Below are three options (Using calculations of Revenue – Expense = Total):

- **Increase to .50 cent** (.25 cent increase), resulting in a deficit for FY 2019 – FY 2023.

Fiscal Year	Revenue	Expenses	Total
2018/2019	\$298,000	\$295,272	\$2,728
2019/2020	\$298,000	\$398,090	(\$100,090)
2020/2021	\$298,000	\$401,802	(\$103,802)
2021/2022	\$298,000	\$405,701	(\$107,701)
2022/2023	\$298,000	\$409,794	(\$111,794)

- **Increase to .75 cent** (.50 cent increase), resulting in no deficit.

Fiscal Year	Revenue	Expenses	Total
2018/2019	\$447,000	\$295,272	\$151,728
2019/2020	\$447,000	\$398,090	*\$48,910
2020/2021	\$447,000	\$401,802	\$45,198
2021/2022	\$447,000	\$405,701	\$41,299
2022/2023	\$447,000	\$409,794	\$37,206

- **Increase to \$1.00** (.75 cent increase), resulting in no deficit.

Fiscal Year	Revenue	Expenses	Total
2018/2019	\$596,000	\$295,272	\$300,728
2019/2020	\$596,000	\$398,090	*\$197,910
2020/2021	\$596,000	\$401,802	\$194,198
2021/2022	\$596,000	\$405,701	\$190,299
2022/2023	\$596,000	\$409,794	\$186,206

* Difference due to yearly increase in license/maintenance fees starting in FY 2019/2020.

Projected Increase Amounts by Fiscal Years (Body Camera Project Included)

The Body Camera project increased expenses for each fiscal year below, by \$187,000. The increase is conservative and is derived from the yearly cost of the Body Cameras, excluding salary/benefit adjustments. The \$187,000 yearly cost includes: \$110,000 for software and hardware licenses plus \$77,000 for Mid-point T-1 grade and an estimate of salary and benefits.

Below are three options (Using calculations of Revenue – Expense = Total):

- **Increase to .50 cent** (.25 cent increase), resulting in a deficit for FY 2019 – 2023.

Fiscal Year	Revenue	Expenses	Total
2018/2019	\$298,000	\$295,272	\$2,728
2019/2020	\$298,000	\$585,090	*(\$287,090)
2020/2021	\$298,000	\$588,802	(\$290,802)
2021/2022	\$298,000	\$592,701	(\$294,701)
2022/2023	\$298,000	\$596,794	(\$298,794)

- **Increase to .75 cent** (.50 cent increase), resulting in a deficit for FY 2019 – 2023.

Fiscal Year	Revenue	Expenses	Total
2018/2019	\$447,000	\$295,272	\$151,728
2019/2020	\$447,000	\$585,090	*(\$138,090)
2020/2021	\$447,000	\$588,802	(\$141,802)
2021/2022	\$447,000	\$592,701	(\$145,701)
2022/2023	\$447,000	\$596,794	(\$149,794)

- **Increase to \$1.00** (.75 cent increase), resulting in a deficit for FY 2022/2023.

Fiscal Year	Revenue	Expenses	Total
2018/2019	\$596,000	\$295,272	\$300,728
2019/2020	\$596,000	\$585,090	*\$10,910
2020/2021	\$596,000	\$588,802	\$7,198
2021/2022	\$596,000	\$592,701	\$3,299
2022/2023	\$596,000	\$596,794	(\$794)

* Difference due to yearly increase in license/maintenance fees starting in FY 2019/2020.

Capital and Major Project Timeline

2017 / 2018	Upgraded to Motorola VESTA.
2018 / 2019	Review and plan for implementation of Text-to-911 across all carriers. Add two workstations.
2019 / 2023	Maintain system. Review of 911 equipment operations.

Ordinance No. 2007-1212

SUMMARY

An ordinance establishing an advisory committee and authorizing a telephone line surcharge to be imposed for the enhancement or improvement of existing telephone systems used for reporting emergencies pursuant to NRS 244A.7641 through NRS 244A.7647 inclusive.

TITLE

An ordinance establishing an advisory committee to develop a 5-year master plan to enhance or improve the telephone system for reporting an emergency and to oversee any money allocated for that purpose, and authorizing a telephone line surcharge to be imposed for the enhancement or improvement of existing telephone systems used for reporting emergencies pursuant to NRS 244A.7641 through NRS 244A.7647 inclusive, and other properly related matters.

Chapter 3.50

Surcharge for Enhancement or Improvement of Telephone System used for Reporting Emergency

Sections:

- 3.50.010 Authority and Purpose.**
- 3.50.020 Definitions**
- 3.50.030 Establishment of an advisory committee to develop a plan to enhance or improve telephone system for reporting emergency.**
- 3.50.040 Chairman, election, and duties.**
- 3.50.050 Rules and regulations.**
- 3.50.060 Quorum.**
- 3.50.070 Meetings.**
- 3.50.080 Creation of special revenue fund; use of money in fund.**
- 3.50.090 Imposition of telephone surcharge.**
- 3.50.100 Penalty for failure to remit surcharges**
- 3.50.010 Authority and Purpose.**

This chapter is enacted pursuant to NRS 244A.7641 through 244A.7647 for the following purposes:

- A. To establish an advisory committee to develop a 5-year master plan for the enhancement or improvement of the telephone system for reporting emergencies in Douglas County and to oversee any money allocated for that purpose.
- B. To impose a surcharge for the enhancement or improvement of the telephone system for reporting an emergency in Douglas County on:
 - 1. Each access line or trunk line of each customer to the local exchange of any telecommunications provider providing those lines in Douglas County; and
 - 2. The mobile telephone service provided to each customer of that service whose place of primary use is in Douglas County.

3.50.020 Definitions.

As used in this chapter, the words and terms defined in this section have the meanings ascribed to them unless the context requires otherwise.

- A. **Incumbent local exchange carrier.** Has the meaning ascribed to it in 47 U.S.C. §251(h)(1), as that section existed on October 1, 1999, and includes a local exchange carrier that is treated as an incumbent local exchange carrier pursuant to that section.
- B. **Mobile telephone service.** Cellular or other service to a telephone installed in a vehicle or which is otherwise portable.
- C. **Place of primary use.** Has the meaning ascribed to it in 4 U.S.C. § 124(8), as that section existed on August 1, 2002.
- D. **Supplier.** A person authorized by the Federal Communications Commission to provide mobile telephone service.
- E. **Trunk line.** A line that provides a channel between a switchboard owned by a customer of a telecommunications provider and the local exchange of the telecommunications provider.

3.50.030 Establishment of an advisory committee to develop a plan to enhance or improve telephone system for reporting emergency.

The board creates a five member advisory committee to develop a 5-year master plan to enhance or improve the telephone system for reporting an emergency in Douglas County and to oversee any money allocated for that purpose (the Committee). The master plan must include an estimate of the cost of the

enhancement or improvement of the telephone system and all proposed sources of money for funding the enhancement or improvement.

- A. Members will serve without compensation.
- B. A member appointed to the Committee must:
 - 1. Be a resident of Douglas County.
 - 2. Possess knowledge concerning telephone systems for reporting emergencies; and
 - 3. Not be an elected public officer.

As Douglas County has a population of less than 100,000, at least one member of the Committee must be a representative of an incumbent local exchange carrier which provides service to persons in Douglas County.

- C. Members will be selected at large by the board at its discretion.
- D. The Board must appoint members for a term of two years except for the initial term, and may reappoint any member to subsequent terms of two years. Any vacancy occurring during a member's term will be filled by the board. A person appointed to fill a vacancy occurring during a term must serve out the unexpired term of the member replaced.

3.50.040 Chairman, election, and duties.

- A. The committee must elect from its membership a chairman and vice-chairman.
- B. The chairman will preside at meetings and be the signatory of any correspondence necessitated by operation of the committee.

3.50.050 Rules and regulations.

The committee may adopt rules and regulations regarding its meetings and procedures.

3.50.060 Quorum.

Three members of the committee will constitute a quorum. The approval of a majority of all members present to vote is necessary on any action the committee desires to take.

3.50.070 Meetings.

The committee must hold a public meeting on a regular day not less than quarterly unless a rule changing the meeting is adopted by the committee. At least three working days prior to any meeting, copies of the proposed agenda must be available to the public in the county clerk's office and must, additionally, be mailed to each member of the committee. Notice of the meetings and the conduct of the meetings of the committee, including the taking of minutes and their transcription and retention, must comply with the provisions of chapter 241 of NRS, Nevada Open Meeting Law.

3.50.080 Creation of special revenue fund; use of money in fund.

- A. The board creates a special revenue fund for the deposit of any money collected pursuant to NRS 244A.7643. The money in the fund must be used only for the following purposes:
 - (1) To enhance the telephone system for reporting an emergency so that the number and address from which a call received by the system is made may be determined, including only:
 - (a) Paying recurring and nonrecurring charges for telecommunication services necessary for the operation of the enhanced telephone system;
 - (b) Paying costs for personnel and training associated with the routine maintenance and updating of the database for the system;
 - (c) Purchasing, leasing or renting the equipment and software necessary to operate the enhanced telephone system; and
 - (d) Pay costs associated with any maintenance, upgrade and replacement of equipment and software necessary for the operation of the enhanced telephone system.
 - (2) To improve the telephone system for reporting emergencies in the county.
- B. If the balance in the fund created pursuant to subsection 1 which has not been committed for expenditure exceeds \$1,000,000.00 at the end of any fiscal year, the board must reduce the amount of the surcharge imposed during the next fiscal year by the amount necessary to ensure that the unencumbered balance in the fund at the end of the next fiscal year does not exceed \$1,000,000.

3.50.090 Imposition of telephone surcharge.

- A. The Board imposes a surcharge for the enhancement of the telephone system for reporting an emergency in Douglas County on:

- (1) Each access line or trunk line of each customer to the local exchange of any telecommunications provider providing those lines in Douglas County; and
 - (2) The mobile telephone service provided to each customer of that service whose place of primary use is in Douglas County.
- B. The surcharge on access lines to the local exchange of a telecommunications provider will be fifty cents per month per line.
 - C. The surcharge on trunk lines to the local exchange of a telecommunications provider will be two dollars and fifty cents per month per line.
 - D. The surcharge for each telephone number assigned to a customer by a supplier of mobile telephone service will be twenty-five cents per month per telephone number.
 - E. A telecommunications provider that provides access lines or trunk lines in Douglas County and a supplier that provides mobile telephone service to customers in Douglas County must collect the surcharge from its customers each month. Except as otherwise provided in NRS 244A.7647, each telecommunications provider and supplier must remit the surcharge it collects to the treasurer of the county in which the surcharge is imposed not later than the 15th day of the month after the month it receives payment of the surcharge from its customers. In accordance with NRS 244A.7647, a telecommunications provider or supplier which collects the surcharge imposed pursuant to this section is entitled to retain an amount of the surcharge collected which is equal to the cost to collect the surcharge.
 - F. Telecommunications providers and mobile telephone service suppliers affected by this ordinance must begin imposing the surcharges described in this section 3.50.090 within 60 days after the Board approves a 5-year master plan for the enhancement or improvement of the telephone system for reporting emergencies in the county commencing with a full monthly billing cycle.
 - G. The county manager may adopt procedures as necessary to effectuate the provisions of this section.

H.

3.50.100 Penalty for failure to remit surcharges

Any telecommunications provider or mobile telephone service supplier that fails to remit surcharges due within 90 days after the date on which the telecommunications provider or supplier must otherwise remit the surcharges to the county treasurer will be subject to a penalty of 5% of the cumulative amount of surcharges owed by the telecommunications provider or supplier.

SECTION II: Imposition of the surcharges described in Section 3.50.090 cannot commence until the board adopts a 5-year master plan for the enhancement or improvement of the telephone system for reporting emergencies in the county. All other provisions of the ordinance are effective upon publication as provided in NRS §244.117(3).