

BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Nebraska ) Application No. 911-019/PI-118
Public Service Commission, on )
its own motion, to implement )
provisions of LB 1222 [2006] and )
to establish a permanent funding )
mechanism for wireless enhanced ) Dated: October 7, 2009
911 service. )

TESTIMONY OF TYLER FROST

Q: PLEASE STATE AND SPELL YOUR NAME FOR THE RECORD

A: Tyler Frost, F-R-O-S-T.

Q: BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A: I am the economist for the Nebraska Public Service Commission.

Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A: The purpose of my testimony is to provide information and respond to questions regarding the Wireless 911 Support Allocation Model (911-SAM) proposed by Commission staff as the permanent funding mechanism required by LB 1222 [2006].

Q: CAN YOU PLEASE PROVIDE THE COMMISSION WITH A GENERAL DESCRIPTION OF THE 911-SAM?

A: The 911-SAM was designed to forecast the future status of the Enhanced Wireless 911 Fund (Fund) and allocate the annual support funds to eligible Public Safety Answering Points (PSAPs)

and Wireless Service Providers (WSPs) for the applicable funding year.

Q: PLEASE DESCRIBE THE FORECASTING PORTION OF THE 911-SAM.

A: The 911-SAM calculates Fund support amounts for each year based upon the existing balance, defined reserve levels, pre-existing payment commitments, Commission administrative costs, and historic surcharge remittance levels.

Intermediate reserve levels facilitate transition to the ultimate reserve level in a coordinated manner that recognizes the Commission's efforts to implement provisions of LB 1222 [2006].

The ultimate reserve level of \$7 million is determined based on a desire to safe guard against; equipment failure, including support discontinuation; natural catastrophic events; current economic conditions; and costs to implement Next Generation 911 (NG911). The \$7 million represents approximately one year of remittance revenue. Staff anticipates, in the near future, requesting the Commission open a docket to investigate the anticipated costs of implementing NG911. Such investigation may impact the reserve levels deemed necessary going forward depending upon the ultimate cost.

Pre-existing payment commitments include those amounts previously approved by Commission order but not yet paid,

including current PSAP maintenance contracts, and intertandem trunking amounts.

Commission costs include overhead amounts necessary for administration of the Fund, such as personnel, operating, and capital expenses.

Remittance amounts are forecast based on historic surcharge remittance levels.

Q: PLEASE DESCRIBE THE METHODOLOGY USED BY THE 911-SAM TO ALLOCATE FUND SUPPORT AMOUNTS.

A: The 911-SAM utilizes cost proxies, representing the costs incurred for the provision of wireless enhanced 911 service, to allocate support to PSAPs and WSPs. Cost proxies are calculated for four cost categories: PSAP, Geographic Information Systems (GIS), local exchange carrier (LEC), and WSP. PSAP, GIS, and LEC cost proxies all represent costs attributable to PSAPs but are viewed as separate cost categories to facilitate analysis.

Generally, cost proxy amounts are determined as functions of independent variables and predefined cost inputs.

The PSAP cost proxy amount is calculated as a function of population and the equipment life cost input. An equipment life value of 4.7 years was selected based on historic payment levels.

The GIS cost proxy amount is calculated as a function of population and the GIS cost inputs; hours per thousand population, a statewide average of historic GIS maintenance levels, and support amount per hour, derived based on historic payment levels.

The LEC cost proxy amount is a function of wireless access lines (WALs), determined as a function of population over the age of 14, and the LEC support per WAL cost input, derived based on historic payment levels.

The WSP cost proxy amount is a function of cellular towers in Nebraska and the WSP support per tower cost input, derived based on historic payment levels.

Cost category proxy amounts are calculated at a PSAP or county level and aggregated to a statewide level. Statewide cost category proxy amounts are further aggregated to determine a total proxy amount. The 911-SAM then calculates each cost category's allocation of the Fund support amount, calculated as the cost category's statewide cost proxy amounts, relative to the total proxy amount.

Q: PLEASE DESCRIBE THE METHODOLOGY USED BY THE 911-SAM TO ALLOCATE COST CATEGORY SUPPORT AMOUNTS.

A: The 911-SAM utilizes cost proxy results, at a PSAP or county level, to allocate cost category support amounts to each eligible PSAP and WSP.

The method of allocating cost category support amounts to eligible PSAPs and WSPs only differs from that used to determine cost category allocations in that the cost inputs have no appreciable effect on the more granular level allocations.

PSAP and county level PSAP, GIS, and LEC support amounts are aggregated to determine eligible PSAP support amounts.

County level WSP support amounts are aggregated, based on the relative number of cellular towers reported by a WSP in each county, to determine eligible WSP support amounts.

Currently, several wireless carriers have chosen not to seek funding. Support amounts allocated to a WSP not seeking funding are assigned to the WSP Grant Program.

Q: PLEASE DESCRIBE THE WSP GRANT PROGRAM.

A: Any WSP support amounts allocated to a WSP not seeking funding is assigned to the WSP Grant Program and made available to all eligible WSPs for recovery of other potentially eligible costs incurred in the provision of wireless enhanced 911 service.

Specifically, Staff recommends the WSP Grant Program be tailored to recover Phase 2 capital costs directly related to

the provision of wireless enhanced 911 service in Nebraska, with a maximum of twenty-five percent (25%) of the total amount allocated to the WSP cost category spent on grant funding, and any remaining amounts returned to the Fund balance for allocation in the following funding year.

Q: PLEASE DISCUSS ANY CHANGES TO THE 911-SAM OR ITS PROPOSAL SINCE ITS INITIAL RELEASE.

A: Based upon the comments received to date, Commission staff has considered changes to the model as originally proposed.

First, the Staff recommendation, as will be discussed in more detail in Sue Vanicek's testimony, that the Commission directly pay LECs a per wireless subscriber rate to recover costs of providing wireless 911 services provided to PSAPs would necessitate revisions to the 911-SAM as initially proposed. However, the modular method in which the 911-SAM was originally designed and constructed provides for the needed flexibility and facilitates well the ability of the Commission to address issues, such as these, in a dynamic environment.

The calculation of a LEC cost proxy would no longer be necessary. Rather, a wireless access line model would be developed to determine, and forecast, LEC support amounts. In this way, LEC support amounts would be treated in the same manner as elements, such as pre-existing payment commitments and

Commission administrative costs, currently utilized in the calculation of annual Fund support amounts available for allocation to PSAPs and WSPs. Therefore, any amounts previously allocated to the LEC cost category, and no longer identified as LEC support amounts, would be included in the Fund support amount and allocated to the PSAP, GIS, and WSP cost categories.

Second, should the Commission elect to implement the 911-SAM on July 1, 2010, as opposed to January 1, 2010, Staff anticipates said shift will result in changes to eligible PSAP and WSP funding amounts, at unappreciable levels.

Finally, Staff believes the Commission's proposed annual PSAP-future-equipment-purchase-retainer, equal to seventy-five percent (75%) of the respective PSAP's PSAP cost category funding amount, calculated based on per occurrence historical equipment, software, and maintenance funding data, and the Commission's fifty-five percent (55%) wireless factor, to be appropriate. Further, Staff believes it appropriate, during the interim, for those eligible PSAPs for which the Commission continues to directly pay previously approved maintenance contracts, to reduce said eligible PSAP's PSAP cost category funding amounts by said maintenance contract amounts, with the remainder retained by the Commission as the respective PSAP's PSAP-future-equipment-purchase-retainer.

Q: WHAT IS THE INTENDED PURPOSE OF THE 911-SAM, BEYOND PROVIDING A PERMANENT FUNDING MECHANISM REQUIRED BY LB1222?

A: The 911-SAM, as released, facilitates a controlled reduction to the Fund balance, while allocating Fund support amounts, in excess of previous funding years, that gradually reach an equilibrium point equal to approximately the amount of annual surcharge remittance. Additionally, it provides WSPs and PSAPs more predictability regarding the funding to be expected for each year.

The 911-SAM allocates funds in an equitable manner, fair to Nebraska ratepayers, and sufficient to address carrier differences.

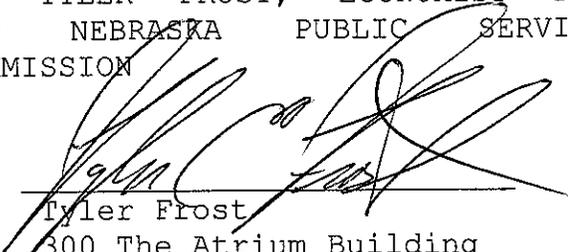
Q: DOES THIS CONCLUDE YOUR TESTIMONY?

A: Yes. I am available for any questions.

Dated: October 7, 2009.

Respectfully Submitted,

TYLER FROST, ECONOMIST FOR  
THE NEBRASKA PUBLIC SERVICE  
COMMISSION

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