



JON HUNTSMAN Jr.  
*Governor*  
GARY HERBERT  
*Lieutenant Governor*

State of Utah  
Department of Commerce  
Division of Public Utilities

FRANCINE GIANI  
*Executive Director*

THAD LEVAR  
*Deputy Director*

CONSTANCE B. WHITE  
*Director, Division of Public Utilities*

June 20, 2006

**TO: PUBLIC SERVICE COMMISSION**

**FROM: DIVISION OF PUBLIC UTILITIES**

Constance B. White, Director  
Wes Huntsman, Manager, Telecommunications  
Casey J. Coleman, Technical Consultant  
Chris Luras, Utility Analyst

**Re: In the Matter of Extended Area Service for Sanpete County, Docket No. 05-046-01**

**RECOMMENDATION:**

The Division recommends that the Commission approve the costs submitted by the companies January 12, 2006. The Division conducted the customer survey according to R746-347-5 and found that customers in Sanpete County are generally in favor of the Extended Area Service.

**BACKGROUND:**

On April 5, 2005 Manti Telephone Company filed a letter with the Commission requesting the Commission begin a proceeding to determine if there was sufficient interest for an Extended Area Service ("EAS") in Sanpete County.

Since the letter was filed with the Commission, the Division has been working with Central Utah Telephone, Skyline Telecom, Manti Telephone Company, and Gunnison Telephone Company to establish costs for the EAS routes.

On January 12, 2006 the companies filed cost studies with the Commission. Those costs were reviewed by the Commission and, as required, the Division conducted the customer survey during the Month of May.

The rule that establishes the method for conducting the customer survey for EAS is as follows:

### **R746-347-5. Customer Survey for New or Expanded EAS.**

A. When to Conduct Survey -- Upon approval by the Commission of the proposed prices pursuant to Section R746-347-4, a survey shall be conducted of residential telephone subscribers of the incumbent telephone corporation in each petitioning and each non-petitioning local exchange area proposed to be included in the new or expanded EAS. The Division, Committee and involved incumbent telephone corporations shall arrange to conduct a poll within the affected local exchange areas.

B. Who to Survey -- A statistical sample of residential subscribers, sized to produce a final result with at least a ten percent level of significance with a plus or minus five percent margin of error shall be surveyed.

C. Public Interest -- The Commission will presume that the proposed EAS is in the public interest if:

1. the survey results indicate that at least 67 percent of the customers of the incumbent telephone corporation in each petitioning local exchange area desire EAS at the price represented in the survey questionnaire, and

2. the survey results further show that at least 30 percent of customers of the incumbent telephone corporation in each non-petitioning local exchange area desire EAS at the price represented in the survey questionnaire.

### **General Parameters for Customer Survey**

Because there are three companies asking for EAS in Sanpete County, this presented a few unique challenges to the survey. One challenge was that each exchange would be considered a “petitioning” exchange. Instead of one exchange needing to be at the 67% approval, all of the exchanges would need that level of assent from the customers for EAS to be established. The Division also realized that with the way the costs were developed it would be necessary for all customers in each company to agree to EAS for the service to be established.

### **Calculation of Sample Size and Random Sample Lists according to R746-347-5(B)**

To determine the appropriate sample size for each territory, the Division employed the following formula:

$$n = \frac{Nz^2(pq)}{z^2(pq) + d^2(N - 1)}$$

Because of the parameters of R746-347-5 and the requirement to determine the statistically valid sample size, a z statistic of 1.645 was employed, along with a “p” value of .636 (.67-(.67\*5%)) and a “q” value of .363 (1-.636). The Ns for Central Utah, Gunnison, and Manti were 3385, 1132, and 1971, respectively. Lastly, the “d” value employed was the product of 5% and the “p”

value, .636. The consequent sample sizes (“n”) for Central Utah, Gunnison, and Manti were 523, 400, and 471, respectively.

After the sample size was ascertained for each company, the Division assigned every customer a random number between 1 and the size of their respective N value. To exemplify, for Central Utah, an evenly distributed random number between 1 and 3385 was generated for all customers.

### **Creation of Customer Lists to Contact**

Subsequently, from the aforementioned random number list, the Division selected customers to contact that were assigned numbers between 1 and its respective sample size. In addition, the Division applied a nonresponse error factor, whereby increasing the sample size, or the “n”, by 15%. The error factor was applied due to the possibility of busy lines, potential business customers, disconnections or, simply, the unavailability of customers. Resultantly, the customers selected possessed numbers between 1 and the product of 1.15 and the respective sample size. For instance, the Central Utah customers selected contained numbers between 1 and 619 (approximately  $523 * 1.15\%$ ). In other words, 619 customers were randomly selected to contact in Central Utah’s calling area.

To note, Central Utah selectees were organized based on their area; for instance, Mount Pleasant, Fountain Green, Moroni, and Fairview customers were organized based on their respective NXX in order to specify the correct price adjustments for the new, EAS service.

Within a few days of contacting customers, it became evident that the nonresponse error factor applied was not sufficient. As a result, the Division selected new customers by increasing the sample size by an additional 35% whereby generating, on average, around 105 new customers to contact in each area.

### **Customer Survey Procedures**

Starting on May 10, 2006 and going until June 5, 2006, the Division made phone calls to contact citizens of Sanpete County. As instructed in R746-347, residential customers from all of the different phone companies were called. The Division chose early morning, middle of the day, afternoon, and even late evenings to contact people. The Division was asking people to answer the following questions: (1) If it was economically feasible, would you be interested in a Sanpete County local calling plan that eliminates long distance charges? And, (2) Would you be willing to pay an EAS service fee of XXX, which would be XXX more than your current monthly payment of XXX?

The EAS rates used in the customer survey will vary between communities, as shown on the next page:

	<b>Current EAS Rate</b>	<b>Proposed EAS Rate</b>
Manti Telephone area:	\$2.16	\$4.16
Central Utah Telephone area:	\$5.00 (Fairview/Ftn Green)	\$6.79
	\$4.15 (Mt. Pleasant)	\$6.79
Skyline Telecom area:	\$2.25	\$6.79
Gunnison Telephone area:	\$ .00	\$3.59

The Division wanted to make sure that there was no “bias” in the questions, so each of the surveyors were instructed to make sure both questions were asked and the same wording used for each person. Additionally, the Division made great efforts to make sure that each person was contacted. If someone was not home when the first round of calls was made, it was noted on the call sheet. Those same people were contacted again, sometimes as many as five times, until they were spoken to or we had enough responses to complete the survey.

As stated above, the sample sizes for each of the companies were 400 for Gunnison, 523 for Central Utah, and 471 for Manti. The Division began making calls and saw some early trends. For instance, Manti and Central Utah seemed to generally favor the EAS service, while customers of Gunnison were divided roughly at two customers in favor for every one customer against.

The Division decided to work towards contacting enough people to either have a “solid” yes or “solid” no. Because of the plus or minus five percent error, the Division calculated that there needed to be at least 63 percent of the people in agreement with Sanpete County EAS or 38 percent against the service. Using those benchmarks, the following number of answers needed to be given:

<b>Company</b>	<b>Number of Yes Votes Needed</b>	<b>Number of No Votes Needed</b>
Gunnison	252	148
Central Utah	329	194
Manti	297	174

### **Customer Survey Results**

The results from the surveys for each company are listed on the next page which includes the total number of people contacted.

Gunnison		
Yes	255	63.75%
No	145	36.25%
Total	400	100.00%

Central Utah		
Yes	333	66.47%
No	168	33.53%
Total	501	100.00%

Manti		
Yes	298	76.41%
No	92	23.59%
Total	390	100.00%

The number of “yes” answers only shows customers who agreed to establish EAS with the specific cost for their area. The Division did not tabulate the number of yes or no responses for the first question.

### **Analysis of Survey Results**

In Gunnison, the total number of customers contacted was the entire sample size. This happened because the number of people wanting EAS compared to the number of people against the service was running very close to a 2:1 ratio; Meaning that it was necessary to contact the total sample size to accurately portray the sentiments in Gunnison. As the table above shows, there were 255 people in favor of EAS.

For Central Utah, when you look at the company as a whole, customers generally favored establishing EAS. Approximately 67 percent of the people contacted were supportive of the Commission establishing the service. Customers of Manti telephone were strongly in favor of establishing the service with well over 76 percent of the people wanting the service.

### **CONCLUSION:**

The Division recommends that the Commission establish EAS service for the customers of Sanpete County. Approximately 1,200 customers of the different telecommunications companies were contacted and expressed their interest in the service. The Division asserts that the criteria in R746-347-3 through R746-347-5 have been met by the petitioning exchanges.

Even though the rule allows for the establishment of EAS service once the different criteria has been met, because of the level of interest expressed by different parties in Sanpete County around the EAS service, the Division believes it would be beneficial for the Commission to schedule a public hearing. Furthermore, because this process has taken over a year to complete, the Division asks for an expedited time frame for the hearing and final order.