REPORT ON EMERGENCY CALLING FOR PERSONS WITH DISABILITIES
SURVEY REVIEW AND ANALYSIS
2011

PRESENTED BY:
THE EMERGENCY ACCESS ADVISORY COMMITTEE

PRESENTED TO:
FEDERAL COMMUNICATIONS COMMISSION
JULY 21, 2011
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I. SUMMARY

This report, presented by the Emergency Access Advisory Committee (EAAC) established by the Federal Communications Commission (FCC or Commission), contains the findings of an in-depth review and analysis of a national survey of persons with disabilities conducted by the EAAC in accordance with The Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), signed into law by President Obama on October 8, 2010.1

II. BACKGROUND

Statute. The CVAA requires the Commission to take various steps to ensure that people with disabilities have access to emerging communications technologies in the 21st century. The Commission established the EAAC in accordance with the CVAA, which directs that an advisory committee be established within 60 days after the date of enactment,2 for the purpose of achieving equal access to emergency services by individuals with disabilities as part of our nation’s migration to a national Internet protocol-enabled emergency network, also known as the next generation 9-1-1 system (“NG9-1-1”).3 Section 106 of the CVAA is provided in Appendix A.

Timeline and activities creating and operating the EAAC. The FCC released a Public Notice on October 9, 2010 requesting nominations for membership in the EAAC.4 The Public Notice seeking nominations is provided in Appendix B. The Commission announced the members and co-chairs of the EAAC by Public Notice released December 7, 2010.5 The public notice announcing the selection of members and co-chairs is provided in Appendix C. Monthly meetings of the EAAC began January 14, 2011. The EAAC is composed generally of state and local government representatives responsible for emergency management, representatives of emergency responders and national organizations representing people with disabilities and senior citizens, subject matter experts, and others, as described below. The Federal Advisory Committee Act (5 U.S.C. App. 2) does not apply to the Advisory Committee.6

To fulfill its mission to determine the most effective and efficient technologies and methods by which to enable access to NG9-1-1 emergency services by people with disabilities, the CVAA directs that within one year after the EAAC’s members are appointed, the Committee shall conduct a national survey, with the input of groups represented by the Committee’s membership, after which the Committee shall develop and submit to the Commission recommendations to implement such technologies and methods. These recommendations shall take into account what is technically and economically feasible, and include the following:7

(1) actions needed for the migration to a national Internet protocol-enabled network to achieve reliable, interoperable communication that will ensure access to emergency services by people with disabilities;


2 PL 111-260, signed into law on October 8, 2010.

3 PL 111-260, § 106.


6 PL 111-260, § 106(f).

7 PL 111-260, § 106(c).
(2) protocols, technical capabilities, and technical requirements to ensure the reliability and interoperability necessary to ensure access to emergency services by people with disabilities;

(3) technical standards for use by public safety answering points, designated default answering points, and local emergency authorities;

(4) technical standards and requirements for communication devices and equipment and technologies to enable the use of reliable emergency access;

(5) procedures to ensure that IP-enabled network providers do not install features, functions, or capabilities that would conflict with technical standards needed to achieve 9-1-1 emergency access by people with disabilities;

(6) deadlines by which interconnected and non-interconnected VoIP service providers and manufacturers shall achieve the actions required in the above paragraphs, where achievable, and for the possible phase out of current-generation TTY technology to the extent that this technology is replaced with more effective and efficient technologies and methods to enable access to emergency services by people with disabilities; and

(7) rules to update the Commission's telecommunications relay services regulations with respect to 9-1-1 services, as new technologies and methods for providing such relay services are adopted by providers of such relay services.

Overview of Development of the EAAC national survey. Although EAAC had limited resources to develop questions and administer the survey, the EAAC conducted facilitated discussions in person and via teleconferences to develop two subcommittees for this purpose: a Target Population Subcommittee and a Survey Questions Subcommittee. The Target Population Subcommittee constructed a list of potential population groups of persons with disabilities and seniors to whom the survey questions would be addressed and from whom the EAAC would seek participation. Target population groups included those with memberships of or advocacy for persons with hearing, vision, cognitive and/or developmental disabilities. The Survey Questions Subcommittee initially developed an outline that was presented on a “wiki” on which the full EAAC and co-chairs developed the draft EAAC survey. The EAAC survey was then prepared as a SurveyGizmo product. Upon finalizing the EAAC survey questions, video clips in American Sign Language (ASL) were prepared and added to the American English version of the EAAC survey. A Spanish translation of the EAAC survey was also prepared. On March 16, 2011, the FCC released a Public Notice announcing the launch of the EAAC survey. Following the initial release, an “Easy to Read” version of the EAAC survey was prepared to ensure that persons with cognitive, intellectual and developmental disabilities, as well as persons with low reading levels, had access to the EAAC survey. Additionally, the EAAC survey was made available upon request in Word document or “pdf” formats. The EAAC survey is provided in Appendix D. The EAAC survey was closed April 25, 2011.

EAAC survey results. The EAAC received and analyzed a total of 3,149 fully completed EAAC surveys for this report. There were also partially complete surveys that, when added to the fully completed survey numbers, showed access to the survey on line by more than 12,766 people.

The reader should note that the EAAC survey may result in an oversampling of individuals with disabilities who are familiar with and currently have access to Internet services because the survey was primarily distributed and promoted via e-mail and across various websites and Internet-based services.

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*8 A wiki ([/wɪki/ˈwɪkɪ]) is a website that allows the creation and editing of any number of interlinked web pages via a web browser. Wikis are typically powered by wiki software and are often used collaboratively by multiple users. See [http://en.wikipedia.org/wiki/Wiki](http://en.wikipedia.org/wiki/Wiki) (accessed 31 May 2011).*
Outreach. Following the launch of the web-based EAAC survey, EAAC members conducted outreach to many organizations representing persons with disabilities. Organizations such as, but not limited to the following, were enlisted to spread the word about the EAAC survey:

- EAAC members and their affiliated organizations;
- Coalition of Organizations for Accessible Technology (COAT)
- National Association of the Deaf (NAD)
- American Foundation for the Blind (AFB)
- American Council of the Blind (ACB)
- Telecommunications for the Deaf (TDI)
- Helen Keller National Center for the Deaf-Blind
- American Association of People with Disabilities (AAPD),
- Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities (ICC);
- National disability-related Internet listservs, such as ACCESSINFO.gov and Disability.gov; and other disabilities’ listservs operated by disability organizations.

Data presentation. For each question, the data are presented in table or graphic form followed by a text presentation of the data. For some questions, committee members highlighted a need for breakouts by disability. For those questions, the report provides a summary of breakout information after the text presentation of the composite data. The disability breakout data are presented differently in some cases based on the information acquired by that question. A supplemental analysis by disability of all of the questions is also available; however, due to its extreme length it is provided separately from this report. See section “III.6 Disability specific analyses” of this report for details of this more in-depth analysis.
III. NATIONAL SURVEY

III.1. Demographics of survey respondents

III.1.a. Survey Question #1

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 13 and 19 years</td>
<td>110</td>
<td>3.5%</td>
</tr>
<tr>
<td>old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between 20 and 24 years</td>
<td>125</td>
<td>4.0%</td>
</tr>
<tr>
<td>old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between 25 and 34 years</td>
<td>366</td>
<td>11.7%</td>
</tr>
<tr>
<td>old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between 35 and 44 years</td>
<td>472</td>
<td>15.1%</td>
</tr>
<tr>
<td>old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between 45 and 54 years</td>
<td>696</td>
<td>22.2%</td>
</tr>
<tr>
<td>old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between 55 and 64 years</td>
<td>790</td>
<td>25.2%</td>
</tr>
<tr>
<td>old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between 65 and 74 years</td>
<td>398</td>
<td>12.7%</td>
</tr>
<tr>
<td>old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75 and older</td>
<td>162</td>
<td>5.2%</td>
</tr>
<tr>
<td>I prefer not to answer</td>
<td>13</td>
<td>0.4%</td>
</tr>
<tr>
<td>Total Responses</td>
<td>3,132</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Question #1 asked respondents to identify how old they were.

Of the 3,149 survey takers, 3,132 or 99% responded to this question as follows:
- 110 or 3.5% between the ages of 13 and 19;
- 125 or 4% between 20 and 24;
- 366 or 11.7% between 25 and 34;
- 472 or 15.1% between 35 and 44;
- 696 or 22.2% between 45 and 54;
- 790 or 25.2% between 55 and 64;
- 398 or 12.7% between 65 and 74;
- 162 or 5.2% 75 years of age or older; and
- 13 or 0.4% preferred not to answer.
III.1.b. Survey Question # 2

Question #2 asked respondents to select a description that best fits them and listed several categories of disabilities. Responders were able to check one or more of 12 options. Of the 3,149 survey takers, 3,090 or 98% responded to this question as follows:

- 331 or 10.7% cognitive (e.g., autism, dementia, Down Syndrome, dyslexia, learning, tbi);
- 1,210 or 39.2% deaf;
- 649 or 21% hard of hearing and 158 or 5.1% late-deafened
- 170 or 5.5% mobility disability that affects my ability to use communication devices;
- 455 or 14.7% mobility disability that does not affect my ability to use communication devices;
- 134 or 4.3% speech disability
- 168 or 5.4% blind and 140 or 4.5 legally blind;
- 170 or 5.5% low vision or partially sighted;
- 42 or 1.4% color blind; and,
- 344 or 11.1% checked “other,” and were provided an opportunity to elaborate.

Examples of responses to "Other" for question #2: “What describes (fits) you best?”

The reader should note that this survey was not carried out in a manner that would result in proportional representation across disabilities and therefore the relative number of people with different disabilities in this “Report On Emergency Calling For Persons With Disabilities” is not consistent with current United States Census Bureau statistics. see 2009 American Community Survey 1-Year Estimates, S1810. Disability Characteristics, U.S. Census Bureau, available at http://factfinder.census.gov/servlet/STTable?_bm=y&-qr_name=ACS_2009_1YR_G00_S1810&-geo_id=01000US&-ds_name=ACS_2009_1YR_G00 &-lang=en-&-format=&-CONTEXT=st The descriptive numbers here should not be taken to represent the size of different disability populations in the US – but rather just the size of the different disability groups that took this survey.
364 people or 11.1% checked “Other” for this question. Most of the responses listed other disabilities, including, but not limited to, ADHD, aphasia, Asperger’s Syndrome, autism, bipolar, brain injury, cerebral palsy, cochlear implant, deaf-blind, dyslexia, diabetes, epilepsy, fibromyalgia, glaucoma, learning disability, mental health, paralysis, Parkinson’s Disease, and spina bifida. 18 listed themselves as parents. 10 listed no disability or none. A complete listing can be found at http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q02
III.1.c. Survey Question # 3

Question # 3 asked respondents to identify their primary language.

Of the 3,149 survey takers, 3,109 or 99% responded to this question as follows:

- 2,224 or 71.5% English;
- 56 or 1.8% Spanish;
- 777 or 25% ASL;
- 4 or 0.1% A sign language used in a Spanish speaking country; and
- 48 or 1.5% primary language was not listed, and were provided an opportunity to elaborate.

Examples of responses to "Other" for question #3: “What is your first (primary) language?”
48 people or 1.5% answered “Other” to this question. For example, 11 listed a combination, such as English and ASL. Other spoken languages listed included Cantonese, Chinese, Czech, French, German, Hebrew, Japanese, Kituwagi, Korean, Portuguese, Russian Swedish, and Tagalog. Signed Languages listed included ASL, SEE, PSE, Tactile ASL, Hong Kong SL, and Swedish SL. Other entries included Braille and cued English. A complete listing can be found at [http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q03](http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q03)
Question # 4 asked respondents to identify their second language.

Of the 3,149 survey takers, 3,053 or 97% responded to this question as follows:
- 809 or 26.5% English;
- 102 or 3.3% Spanish;
- 615 or 20.1% ASL;
- 1 or 0.0% A sign language used in a Spanish speaking country;
- 129 or 4.2% second language was not listed, and were provided an opportunity to elaborate; and
- 1,397 or 45.8% did not use a second language.

Examples of responses to "Other" for question #4: “What is your second language?”
129 people or 4.2 % answered OTHER to this question. For example, 6 listed a combination, such as English and ASL. A wide range of other spoken languages (35) were listed along with different sign languages, Braille, lip reading and written languages. A complete listing can be found at http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm#Q04
III.2. Technologies respondents use to communicate

The questions in this section of the report cover the use of various communication technologies by persons with disabilities today.

III.2.a. Survey Question # 5

<table>
<thead>
<tr>
<th>What kinds of assistive devices or programs do respondents use now?</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistive listening device such as Pocketalker, neckloop or silhouette</td>
<td>3.3%</td>
<td>5.6%</td>
<td>6.3%</td>
<td>84.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Augmentative alternative communication devices such as Bliss, DynoVox, LightWRITER, Pathfinder, or Pictograms</td>
<td>2.1%</td>
<td>1.5%</td>
<td>2.2%</td>
<td>94.2%</td>
<td>100%</td>
</tr>
<tr>
<td>Braille devices such as DeafBlind Communicator, DB-BrailleNote, Telebraille</td>
<td>1.6%</td>
<td>1.0%</td>
<td>1.4%</td>
<td>96.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Screen reader</td>
<td>11.2%</td>
<td>3.2%</td>
<td>4.6%</td>
<td>81.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Hearing aids or cochlear implants</td>
<td>36.9%</td>
<td>5.0%</td>
<td>3.7%</td>
<td>54.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Computer accessibility features</td>
<td>33.7%</td>
<td>11.5%</td>
<td>7.8%</td>
<td>47.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Screen magnification software such as Dolphin, Lunar, MAGic, PnC Net, SuperNova or ZoomText</td>
<td>4.2%</td>
<td>3.6%</td>
<td>4.2%</td>
<td>87.9%</td>
<td>100%</td>
</tr>
<tr>
<td>Speech-related device or service such as Hearing Carry Over, STS Relay Service, or speech synthesizer</td>
<td>4.9%</td>
<td>3.6%</td>
<td>3.8%</td>
<td>87.7%</td>
<td>100%</td>
</tr>
<tr>
<td>Text-to-speech such as IntelliTalk, Kurzweil, WordQ, Writing Aid or WYNN</td>
<td>4.4%</td>
<td>3.4%</td>
<td>4.5%</td>
<td>87.6%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Question # 5** asked survey takers which assistive devices or programs they use now. Nine categories of devices were listed. For each category of device, respondents were provided a choice of four answers: (1) almost every day, (2) fairly regularly, but not daily, (3) on rare occasions, and (4) never.

Of the 3,149 survey takers, 2,463 or 78.2% responded to the category **assistive listening device** such as Pocketalker, neckloop or silhouette. Of those 2,463 respondents,
- 82 or 3.3% selected almost every day;
- 138 or 5.6% selected fairly regularly, but not daily;
- 155 or 6.3% selected on rare occasions; and
- 2,088 or 84.8% selected never.

Of the 3,149 survey takers, 2,412 or 76.6% responded to the category **augmentative alternative communication devices** such as Bliss, DynoVox, LightWRITER, Pathfinder, or Pictograms. Of those 2,412 respondents,
- 51 or 2.1% selected almost every day;
- 35 or 1.5% selected fairly regularly, but not daily;
- 54 or 2.2% selected on rare occasions; and
- 2,272 or 94.2% selected never.
Of the 3,149 survey takers, 2,399 or 76.2% responded to the category **Braille devices** such as DeafBlind Communicator, DB-BrailleNote, Telebraille. Of those 2,399 respondents,
- 39 or 1.6% selected almost every day;
- 25 or 1.0% selected fairly regularly, but not daily;
- 33 or 1.4% selected on rare occasions; and
- 2,302 or 96.0% selected never.

Of the 3,149 survey takers, 2,467 or 78.3% responded to the category **screen reader**. Of those 2,467 respondents,
- 276 or 11.2% selected almost every day;
- 78 or 3.2% selected fairly regularly, but not daily;
- 114 or 4.6% selected on rare occasions; and
- 1,999 or 81.0% selected never.

Of the 3,149 survey takers, 2,716 or 86.2% responded to the category **hearing aids or cochlear implants**. Of those 2,716 respondents,
- 1,001 or 36.9% selected almost every day;
- 135 or 5.0% selected fairly regularly, but not daily;
- 100 or 3.7% selected on rare occasions; and
- 1,480 or 54.5% selected never.

Of the 3,149 survey takers, 2,643 or 83.9% responded to the category **computer accessibility features**. Of those 2,643 respondents,
- 891 or 33.7% selected almost every day;
- 304 or 11.5% selected fairly regularly, but not daily;
- 206 or 7.8% selected on rare occasions; and
- 1,242 or 47.0% selected never.

Of the 3,149 survey takers, 2,449 or 77.8% responded to the category **screen magnification software** such as Dolphin, Lunar, MAGic, PnC Net, SuperNova or ZoomText. Of those 2,449 respondents,
- 104 or 4.2% selected almost every day;
- 89 or 3.6% selected fairly regularly, but not daily;
- 104 or 4.2% selected on rare occasions; and
- 2,152 or 87.9% selected never.

Of the 3,149 survey takers, 2,424 or 77.0% responded to the category **speech-related device or service** such as Hearing Carry Over, STS Relay Service, or speech synthesizer. Of those 2,424 respondents,
- 118 or 4.9% selected almost every day;
- 88 or 3.6% selected fairly regularly, but not daily;
- 93 or 3.8% selected on rare occasions; and
- 2,125 or 87.7% selected never.

Of the 3,149 survey takers, 2,447 or 77.7% responded to the category **text-to-speech** such as IntelliTalk, Kurzweil, WordQ, Writing Aid or WYNN. Of those 2,447 respondents,
- 108 or 4.4% selected almost every day;
- 84 or 3.4% selected fairly regularly, but not daily;
- 111 or 4.5% selected on rare occasions; and
- 2,144 or 87.6% selected never.
### III.2.b. Survey Question # 6

<table>
<thead>
<tr>
<th>Which types of telephones do respondents use now?</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular landline (voice) phone</td>
<td>37.6%</td>
<td>11.9%</td>
<td>13.3%</td>
<td>37.2%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>1,002</td>
<td>318</td>
<td>356</td>
<td>991</td>
<td>2,667</td>
</tr>
<tr>
<td>Amplified telephone</td>
<td>13.7%</td>
<td>5.5%</td>
<td>7.2%</td>
<td>73.6%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>323</td>
<td>130</td>
<td>169</td>
<td>1,738</td>
<td>2,360</td>
</tr>
<tr>
<td>Telephone with large display and/or large buttons</td>
<td>9.5%</td>
<td>3.8%</td>
<td>6.0%</td>
<td>80.7%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>218</td>
<td>88</td>
<td>137</td>
<td>1,850</td>
<td>2,293</td>
</tr>
<tr>
<td>Captioned telephone</td>
<td>8.0%</td>
<td>5.0%</td>
<td>7.1%</td>
<td>79.9%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>187</td>
<td>117</td>
<td>166</td>
<td>1,874</td>
<td>2,344</td>
</tr>
<tr>
<td>Wireless mobile devices such as a cell phone or</td>
<td>62.9%</td>
<td>11.9%</td>
<td>7.3%</td>
<td>17.9%</td>
<td>100%</td>
</tr>
<tr>
<td>smart phone</td>
<td>1,795</td>
<td>340</td>
<td>208</td>
<td>512</td>
<td>2,855</td>
</tr>
</tbody>
</table>

**Question # 6** asked survey takers which types of telephones they use now. Five categories of telephones were listed. For each category of telephone, respondents were provided a choice of four answers: (1) almost every day, (2) fairly regularly, but not daily, (3) on rare occasions, and (4) never.

Of the 3,149 survey takers, 2,667 or 84.7% responded to the category **regular landline (voice) phone**. Of those 2,667 respondents,
- 1,002 or 37.6% selected almost every day;
- 318 or 11.9% selected fairly regularly, but not daily;
- 356 or 13.3% selected on rare occasions; and
- 991 or 37.2% selected never.

Of the 3,149 survey takers, 2,360 or 74.9% responded to the category **amplified telephone**. Of those 2,360 respondents,
- 323 or 13.7% selected almost every day;
- 130 or 5.5% selected fairly regularly, but not daily;
- 169 or 7.2% selected on rare occasions; and
- 1,738 or 73.6% selected never.

Of the 3,149 survey takers, 2,293 or 72.8% responded to the category **telephone with large display and/or large buttons**. Of those 2,293 respondents,
- 218 or 9.5% selected almost every day;
- 88 or 3.8% selected fairly regularly, but not daily;
- 137 or 6.0% selected on rare occasions; and
- 1,850 or 80.7% selected never.

Of the 3,149 survey takers, 2,344 or 74.4% responded to the category **captioned telephone**. Of those 2,344,
- 187 or 8.0% selected almost every day;
- 117 or 5.0% selected fairly regularly, but not daily;
- 166 or 7.1% selected on rare occasions; and
- 1,874 or 79.9% selected never.

Of the 3,149 survey takers, 2,855 or 90.7% responded to the category **wireless mobile devices** such as a cell phone or smart phone. Of those 2,855 respondents,
- 1,795 or 62.9% selected almost every day;
- 340 or 11.9% selected fairly regularly, but not daily;
- 208 or 7.3% selected on rare occasions; and
- 512 or 17.9% selected never.
### III.2.c. Survey Question #7

<table>
<thead>
<tr>
<th>Which types of video devices or video software programs do respondents use?</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop or laptop computer (PC or Mac) with camera (ntouch, P3, Z4)</td>
<td>46.5%</td>
<td>14.1%</td>
<td>9.9%</td>
<td>29.5%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>1,274</td>
<td>387</td>
<td>271</td>
<td>808</td>
<td>2,740</td>
</tr>
<tr>
<td>Mobile videophone (Viable CES2008, Z-340)</td>
<td>6.0%</td>
<td>4.7%</td>
<td>7.4%</td>
<td>81.8%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>144</td>
<td>114</td>
<td>179</td>
<td>1,968</td>
<td>2,405</td>
</tr>
<tr>
<td>Smartphones (Android, iPhone, HTC-EVO) mobile videophone (Z4, FaceTime)</td>
<td>23.5%</td>
<td>6.8%</td>
<td>5.7%</td>
<td>64.0%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>585</td>
<td>169</td>
<td>142</td>
<td>1,592</td>
<td>2,488</td>
</tr>
<tr>
<td>Videophone (Ojo, VP200, VPAD, Z-150)</td>
<td>30.5%</td>
<td>10.1%</td>
<td>3.5%</td>
<td>55.9%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>774</td>
<td>256</td>
<td>89</td>
<td>1,419</td>
<td>2,538</td>
</tr>
<tr>
<td>Video chat (fring, Google Talk, iChat, ooVoo, Qik, Skype, Tango)</td>
<td>12.2%</td>
<td>16.8%</td>
<td>19.4%</td>
<td>51.7%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>308</td>
<td>426</td>
<td>491</td>
<td>1,309</td>
<td>2,534</td>
</tr>
</tbody>
</table>

**Question #7** asked survey takers which types of video devices or video software programs they use now. Five categories of devices or software were listed. For each category of device or software, respondents were provided a choice of four answers: (1) almost every day, (2) fairly regularly, but not daily, (3) on rare occasions, and (4) never.

Of the 3,149 survey takers, 2,740 or 87.0% responded to the category **desktop or laptop computer** (PC or Mac) with camera (ntouch, P3, Z4). Of those 2,740 respondents,
- 1,274 or 46.5% selected almost every day;
- 387 or 14.1% selected fairly regularly, but not daily;
- 271 or 9.9% selected on rare occasions; and
- 808 or 29.5% selected never.

Of the 3,149 survey takers, 2,405 or 76.4% responded to the category **mobile videophone** (Viable CES2008, Z-340). Of those 2,405 respondents,
- 144 or 6.0% selected almost every day;
- 114 or 4.7% selected fairly regularly, but not daily;
- 179 or 7.4% selected on rare occasions; and
- 1,968 or 81.8% selected never.

Of the 3,149 survey takers, 2,488 or 79.0% responded to the category **smartphones** (Android, iPhone, HTC-EVO) mobile videophone (Z4, FaceTime). Of those 2,488 respondents,
- 585 or 23.5% selected almost every day;
- 169 or 6.8% selected fairly regularly, but not daily;
- 142 or 5.7% selected on rare occasions; and
- 1,592 or 64.0% selected never.

Of the 3,149 survey takers, 2,538 or 80.6% responded to the category **videophone** (Ojo, VP200, VPAD, Z-150). Of those 2,538 respondents,
- 774 or 30.5% selected almost every day;
- 256 or 10.1% selected fairly regularly, but not daily;
- 89 or 3.5% selected on rare occasions; and
- 1,419 or 55.9% selected never.

Of the 3,149 survey takers, 2,534 or 80.5% responded to the category **video chat** (Fring, Google Talk, iChat, ooVoo, Qik, Skype, Tango). Of those 2,534 respondents,
- 308 or 12.2% selected almost every day;
- 426 or 16.8% selected fairly regularly, but not daily;
- 491 or 19.4% selected on rare occasions; and
- 1,309 or 51.7% selected never.
III.2.d. Survey Question # 8

<table>
<thead>
<tr>
<th>Which types of TTY devices do respondents use now?</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer-based TTY such as NexTalk VM, NexTalk NTS or web-based TTY</td>
<td>2.3% 56</td>
<td>3.0% 74</td>
<td>8.6% 209</td>
<td>86.1% 2,101</td>
<td>100% 2,440</td>
</tr>
<tr>
<td>TTY (also known as TDD, teletypewriter or text-telephone)</td>
<td>3.9% 97</td>
<td>5.2% 131</td>
<td>17.1% 429</td>
<td>73.8% 1,851</td>
<td>100% 2,508</td>
</tr>
<tr>
<td>TTY with large visual display (LVD)</td>
<td>0.8% 19</td>
<td>0.6% 14</td>
<td>1.5% 37</td>
<td>97.1% 2,324</td>
<td>100% 2,394</td>
</tr>
<tr>
<td>TTY with Braille device</td>
<td>0.3% 6</td>
<td>0.3% 8</td>
<td>0.6% 15</td>
<td>98.8% 2,350</td>
<td>100% 2,379</td>
</tr>
</tbody>
</table>

Question # 8 asked survey takers which types of TTY devices they use now. Four categories of devices were listed. For each category of device, respondents were provided a choice of four answers: (1) almost every day, (2) fairly regularly, but not daily, (3) on rare occasions, and (4) never.

Of the 3,149 survey takers, 2,440 or 77.5% responded to the category computer-based TTY such as NexTalk VM, NexTalk NTS or web-based TTY. Of those 2,440 respondents,
- 56 or 2.3% selected almost every day;
- 74 or 3.0% selected fairly regularly, but not daily;
- 209 or 8.6% selected on rare occasions; and
- 2,101 or 86.1% selected never.

Of the 3,149 survey takers, 2,508 or 79.6% responded to the category TTY (also known as TDD, teletypewriter or text-telephone). Of those 2,508 respondents,
- 97 or 3.9% selected almost every day;
- 131 or 5.2% selected fairly regularly, but not daily;
- 429 or 17.1% selected on rare occasions; and
- 1,851 or 73.8% selected never.

Of the 3,149 survey takers, 2,394 or 76.0% responded to the category TTY with large visual display (LVD). Of those 2,394 respondents,
- 19 or 0.8% selected almost every day;
- 14 or 0.6% selected fairly regularly, but not daily;
- 37 or 1.5% selected on rare occasions; and
- 2,324 or 97.1% selected never.

Of the 3,149 survey takers, 2,379 or 75.5% responded to the category TTY with Braille device. Of those 2,379 respondents,
- 6 or 0.3% selected almost every day;
- 8 or 0.3% selected fairly regularly, but not daily;
- 15 or 0.6% selected on rare occasions; and
- 2,350 or 98.8% selected never.
### III.2.e. Survey Question #9

<table>
<thead>
<tr>
<th>Do respondents use a mobile phone, smart phone or computer for media or text messaging?</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail</td>
<td>77.0%</td>
<td>7.4%</td>
<td>3.3%</td>
<td>12.4%</td>
<td>100%</td>
</tr>
<tr>
<td>Instant messaging such as AIM, Jabber, MSN, Skype, or Yahoo Messenger</td>
<td>31.1%</td>
<td>16.7%</td>
<td>19.0%</td>
<td>33.2%</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-media services such as MMS, pictures or pre-recorded video</td>
<td>17.2%</td>
<td>11.7%</td>
<td>15.0%</td>
<td>56.1%</td>
<td>100%</td>
</tr>
<tr>
<td>SMS (Short Message Service, texting)</td>
<td>46.1%</td>
<td>12.6%</td>
<td>7.7%</td>
<td>33.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Social networking services such as Facebook or Twitter</td>
<td>40.5%</td>
<td>16.0%</td>
<td>12.4%</td>
<td>31.1%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Question #9** asked survey takers whether they used a mobile phone, smart phone, or computer for media or text messaging. Five categories of messaging were listed. For each category of messaging, respondents were provided a choice of four answers: (1) almost every day, (2) fairly regularly, but not daily, (3) on rare occasions, and (4) never.

Of the 3,149 survey takers, 2,955 or 93.8% responded to the category **e-mail**. Of those 2,955 respondents,
- 2,274 or 77.0% selected almost every day;
- 218 or 7.4% selected fairly regularly, but not daily;
- 97 or 3.3% selected on rare occasions; and
- 366 or 12.4% selected never.

Of the 3,149 survey takers, 2,765 or 87.8% responded to the category **instant messaging** such as AIM, Jabber, MSN, Skype, or Yahoo Messenger. Of those 2,765 respondents,
- 860 or 31.1% selected almost every day;
- 462 or 16.7% selected fairly regularly, but not daily;
- 526 or 19.0% selected on rare occasions; and
- 917 or 33.2% selected never.

Of the 3,149 survey takers, 2,609 or 82.9% responded to the category **multi-media services** such as MMS, pictures or pre-recorded video. Of those 2,609 respondents,
- 450 or 17.2% selected almost every day;
- 304 or 11.7% selected fairly regularly, but not daily;
- 391 or 15.0% selected on rare occasions; and
- 1,464 or 56.1% selected never.

Of the 3,149 survey takers, 2,761 or 87.7% responded to the category **SMS** (Short Message Service, texting). Of those 2,761 respondents,
- 1,274 or 46.1% selected almost every day;
- 349 or 12.6% selected fairly regularly, but not daily;
- 212 or 7.7% selected on rare occasions; and
- 926 or 33.5% selected never.

Of the 3,149 survey takers, 2,799 or 88.9% responded to the category **social networking services** such as Facebook or Twitter. Of those 2,799 respondents,
- 1,133 or 40.5% selected almost every day;
- 447 or 16.0% selected fairly regularly, but not daily;
- 348 or 12.4% selected on rare occasions; and
- 871 or 31.1% selected never.
### III.2.f. Survey Question # 10

<table>
<thead>
<tr>
<th>What Telecommunications Relay Services do respondents use now?</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Protocol (IP) relay services</td>
<td>14.2%</td>
<td>11.9%</td>
<td>18.4%</td>
<td>55.5%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>353</td>
<td>295</td>
<td>456</td>
<td>1,378</td>
<td>2,482</td>
</tr>
<tr>
<td>Video Relay Services (VRS)</td>
<td>32.8%</td>
<td>12.0%</td>
<td>5.8%</td>
<td>49.4%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>838</td>
<td>305</td>
<td>148</td>
<td>1,261</td>
<td>2,552</td>
</tr>
<tr>
<td>Speech-to-speech relay services</td>
<td>1.5%</td>
<td>1.6%</td>
<td>4.4%</td>
<td>92.5%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>37</td>
<td>104</td>
<td>2,183</td>
<td>2,360</td>
</tr>
<tr>
<td>State relay services (traditional)</td>
<td>4.8%</td>
<td>6.4%</td>
<td>13.8%</td>
<td>75.0%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>117</td>
<td>156</td>
<td>335</td>
<td>1,826</td>
<td>2,434</td>
</tr>
<tr>
<td>Captioned telephony relay services</td>
<td>5.5%</td>
<td>5.2%</td>
<td>6.5%</td>
<td>82.8%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>134</td>
<td>128</td>
<td>158</td>
<td>2,028</td>
<td>2,448</td>
</tr>
</tbody>
</table>

Survey Question # 10 asked survey takers what Telecommunications Relay Services (TRS) they use now. Five categories of TRS were listed. For each category of TRS, respondents were provided a choice of four answers: (1) almost every day, (2) fairly regularly, but not daily, (3) on rare occasions, and (4) never.

Of the 3,149 survey takers, 2,482 or 78.8% responded to the category **Internet Protocol (IP) relay services**. Of those 2,482 respondents,
- 353 or 14.2% selected almost every day;
- 295 or 11.9% selected fairly regularly, but not daily;
- 456 or 18.4% selected on rare occasions; and
- 1,378 or 55.5% selected never.

Of the 3,149 survey takers, 2,552 or 81.0% responded to the category **Video Relay Services** (VRS). Of those 2,552 respondents,
- 838 or 32.8% selected almost every day;
- 305 or 12.0% selected fairly regularly, but not daily;
- 148 or 5.8% selected on rare occasions; and
- 1,261 or 49.4% selected never.

Of the 3,149 survey takers, 2,360 or 74.9% responded to the category **speech-to-speech relay services**. Of those 2,360 respondents,
- 36 or 1.5% selected almost every day;
- 37 or 1.6% selected fairly regularly, but not daily;
- 104 or 4.4% selected on rare occasions; and
- 2,183 or 92.5% selected never.

Of the 3,149 survey takers, 2,434 or 77.3% responded to the category **state relay services** (traditional). Of those, 2,434 respondents,
- 117 or 4.8% selected almost every day;
- 156 or 6.4% selected fairly regularly, but not daily;
- 335 or 13.8% selected on rare occasions; and
- 1,826 or 75.0% selected never.

Of the 3,149 survey takers, 2,448 or 77.7% responded to the category **captioned telephony relay services**. Of those 2,448 respondents,
- 134 or 5.5% selected almost every day;
- 128 or 5.2% selected fairly regularly, but not daily;
- 158 or 6.5% selected on rare occasions; and
- 2,028 or 82.8% selected never.
III.2.g. Survey Question # 11

<table>
<thead>
<tr>
<th>What kind(s) of Internet access do respondents have at home, at work and while traveling or commuting?</th>
<th>Home</th>
<th>Work</th>
<th>Traveling or commuting</th>
<th>Total (any setting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dial-up modem</td>
<td>9.7%</td>
<td>2.1%</td>
<td>4.6%</td>
<td>15.0%</td>
</tr>
<tr>
<td></td>
<td>285</td>
<td>62</td>
<td>135</td>
<td>442</td>
</tr>
<tr>
<td>Broadband (high-speed Internet)</td>
<td>88.8%</td>
<td>38.0%</td>
<td>17.0%</td>
<td>93.2%</td>
</tr>
<tr>
<td></td>
<td>2,613</td>
<td>1,118</td>
<td>501</td>
<td>2,741</td>
</tr>
<tr>
<td>Cellphone with wireless data plan</td>
<td>44.2%</td>
<td>17.8%</td>
<td>31.8%</td>
<td>54.9%</td>
</tr>
<tr>
<td></td>
<td>1,300</td>
<td>524</td>
<td>935</td>
<td>1,614</td>
</tr>
<tr>
<td>Library, community center, cafe, ...</td>
<td>8.6%</td>
<td>4.0%</td>
<td>19.9%</td>
<td>26.9%</td>
</tr>
<tr>
<td></td>
<td>253</td>
<td>119</td>
<td>586</td>
<td>790</td>
</tr>
<tr>
<td>Other</td>
<td>3.9%</td>
<td>1.7%</td>
<td>6.7%</td>
<td>10.3%</td>
</tr>
<tr>
<td></td>
<td>116</td>
<td>51</td>
<td>197</td>
<td>303</td>
</tr>
</tbody>
</table>

Question # 11 asked survey takers what kind(s) of Internet access they have at home, at work and while traveling or commuting. Five categories of Internet access were listed. Respondents were able to check multiple options. Of the 3,149 survey takers, 2,941 or 93.4% responded to this question.

Of those 2,941 respondents, a total of 442 or 15.0% have **dial-up modem** in at least one setting;
- 285 or 9.7% have dial-up modem at home,
- 62 or 2.1% have dial-up modem at work, and
- 135 or 4.6% have dial-up modem while traveling or commuting.

Of the 2,941 respondents, a total of 2,741 or 93.2% have **broadband** (high speed Internet) access in at least one setting;
- 2,613 or 88.8% have broadband access at home,
- 1,118 or 38.0% have broadband access at work, and
- 501 or 17.0% have broadband access while traveling or commuting.

Of the 2,941 respondents to this question, a total of 1,614 or 54.9% have a **cell phone with a wireless data plan** in at least one setting;
- 1,300 or 44.2% have cell phone with a wireless data plan at home,
- 524 or 17.8% have cell phone with a wireless data plan at work, and
- 935 or 31.8% have cell phone with a wireless data plan while traveling or commuting.

Of the 2,941 respondents to this question, a total of 790 or 26.9% use a **library, community center or cafe** for Internet access in at least one setting;
- 253 or 8.6% use a library, community center or cafe while at home,
- 119 or 4.0% use a library, community center or cafe while at work, and
- 586 or 19.9% use a library, community center or cafe while traveling or commuting.

Of the 2,941 respondents to this question, a total of 303 or 10.3% checked off “**other**” for kind of Internet access in at least one setting;
- 116 or 3.9% checked “other” for kind of Internet access at home,
- 51 or 1.7% checked “other” for kind of Internet access at work,
- 197 or 6.7% checked “other” for kind of Internet access while traveling or commuting.
III.3. Past use of 9-1-1 calling

III.3.a. Survey Question # 12

**Question # 12** asked survey takers whether they have called 9-1-1 in the last two years. They were limited to checking only one of four options.

Of the 3,149 survey takers, 3,081 or 98% responded to this question as follows:

- 794 or 25.8% called once or twice in the past 2 years;
- 185 or 6% called between 3 and 5 times;
- 55 or 1.8% called 9-1-1 6 or more times; and
- 2,047 or 66.4% of the respondents have not called 9-1-1 in the last 2 years.

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once or twice</td>
<td>794</td>
<td>25.8%</td>
</tr>
<tr>
<td>Between 3 and 5 times</td>
<td>185</td>
<td>6.0%</td>
</tr>
<tr>
<td>6 or more times</td>
<td>55</td>
<td>1.8%</td>
</tr>
<tr>
<td>I have not called 9-1-1 in the last 2 years</td>
<td>2,047</td>
<td>66.4%</td>
</tr>
<tr>
<td>Total Responses</td>
<td>3,081</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Question #13 asked survey takers which telephone device or service they used to call 9-1-1. They were able to check one or more of nine options.

Of the 3,149 survey takers, 2,936 or 93% responded to this question as follows:

- 596 or 20.3% used a landline telephone;
- 522 or 17.8% used a wireless telephone;
- 26 or 0.9% used a captioned telephone;
- 47 or 1.6% used an amplified telephone;
- 99 or 3.4% used a TTY;
- 317 or 10.8% used video relay service (VRS);
- 39 or 1.3% used Internet relay service;
- 1,623 or 55.6% had not called 9-1-1 in the last 2 years; and
- 95 or 3.2% checked “other,” and were provided an opportunity to elaborate.

Examples of responses to “Other” for question #13: “Which telephone device or service did respondents use to call 9-1-1?”

95 people or 3.2% answered OTHER to this question. For example, 33 people reported having someone else call for them, 18 said they used an alarm system such as a pendant, 6 used a relay service, 5 used a cell phone, 5 used VoIP, and 5 used text (2 TTY, 1 Braille TTY, 1 sidekick, 1 email). A complete listing can be found at [http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q13](http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q13)
III.3.c. Survey Question #14

### #14 Was there ever a situation where respondent needed to contact 9-1-1 but found themselves unable to?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't have a phone or other device capable of contacting 9-1-1</td>
<td>2229</td>
<td>75.0%</td>
</tr>
<tr>
<td>The device I use for everyday communication was not with me at the time</td>
<td>98</td>
<td>3.3%</td>
</tr>
<tr>
<td>The way I use to communicate is not supported by 9-1-1</td>
<td>133</td>
<td>4.5%</td>
</tr>
<tr>
<td>I tried contacting 9-1-1 but got no answer or a busy signal</td>
<td>141</td>
<td>4.7%</td>
</tr>
<tr>
<td>I tried but got disconnected</td>
<td>55</td>
<td>1.9%</td>
</tr>
<tr>
<td>The device I have does not allow me to effectively communicate with 9-1-1</td>
<td>57</td>
<td>1.9%</td>
</tr>
<tr>
<td>I was afraid I wouldn't be able to communicate with the 9-1-1 dispatcher</td>
<td>154</td>
<td>5.2%</td>
</tr>
<tr>
<td>I tried, but the 9-1-1 dispatcher couldn't understand my needs</td>
<td>158</td>
<td>5.3%</td>
</tr>
<tr>
<td>Other - please tell us</td>
<td>72</td>
<td>2.4%</td>
</tr>
<tr>
<td>Other</td>
<td>234</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

Question #14 asked survey takers if there was ever a situation where they needed to contact 9-1-1 but found themselves unable to. They were able to check one or more of 10 options.

Of the 3,149 survey takers, 2,971 or 94% responded to this question as follows:

- 2,229 or 75% said no;
- 98 or 3.3% said they didn't have a phone or other device capable of contacting 9-1-1;
- 113 or 4.5% said the device they use for everyday communication was not with them at the time;
- 141 or 4.7% said the way they use to communicate is not supported by 9-1-1;
- 55 or 1.9% said they tried contacting 9-1-1 but got no answer or a busy signal;
- 57 or 1.9% said they tried to call 9-1-1 but got disconnected;
- 154 or 5.2% said the device they have does not allow them to effectively communicate with 9-1-1;
- 158 or 5.3% said they were afraid they wouldn’t be able to communicate with the 9-1-1 dispatcher;
- 72 or 2.4% said they tried, but the 9-1-1 dispatcher couldn't understand their needs; and
- 234 or 7.9% checked “other” and were provided an opportunity to elaborate.

Examples of responses to “Other” for question #14: “Was there ever a situation where respondent needed to contact 9-1-1 but found themselves unable to?”

234 people or 7.9% answered “Other” to this question. Respondents described various problems they confronted when trying to reach 9-1-1 personnel, including: being hung up on, being called “drunk,” not having a TTY, being mobile without a phone, not being able to find or reach a phone, not having people understand them, not being able to hear 9-1-1 personnel, and not being able to use VRS to call because power was down. A complete listing can be found at [http://transition.fcc.gov/egb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q14](http://transition.fcc.gov/egb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q14)
III.4. Preferences for emergency calling

III.4.a. Survey Question #15

Question #15 asked survey takers how they would prefer to be able to contact 9-1-1. They were able to check one or more of six options.

Of the 3,149 survey takers, 2,973 or 94% responded to this question as follows:

- 1,431 or 48.1%, preferred text;
- 1,045 or 35.1%, preferred video;
- 695 or 23.4%, preferred speech and artificial speech;
- 939 or 31.6%, preferred voice, video and text together;
- 54 or 1.8% preferred Braille; and
- 546 or 18.4% checked “other” and were provided an opportunity to elaborate.

Examples of responses to "Other" for question #15: “How would respondents prefer to be able to contact 9-1-1?”

546 people or 18.4% answered “Other” to this question. For example, 53 listed cell phones, 28 listed captioned telephony, 26 listed an emergency call system or button of some type, 15 listed TTY, 19 listed text in some fashion. A complete listing can be found at [http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q15](http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q15)
III.4.b. Survey Question # 16

#16 Which texting options would respondents like to be able to use?

<table>
<thead>
<tr>
<th>Option</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTY</td>
<td>289</td>
<td>10.8%</td>
</tr>
<tr>
<td>SMS</td>
<td>1,210</td>
<td>45.1%</td>
</tr>
<tr>
<td>Instant Messaging (IM) (a sentence at a time)</td>
<td>835</td>
<td>31.1%</td>
</tr>
<tr>
<td>Real-time text</td>
<td>1,226</td>
<td>45.7%</td>
</tr>
<tr>
<td>Email</td>
<td>1,171</td>
<td>43.7%</td>
</tr>
<tr>
<td>Web page that lets you communicate in text directly to 9-1-1</td>
<td>1,171</td>
<td>43.7%</td>
</tr>
<tr>
<td>Using text to call from communications systems built into your car, like OnStar and Sync</td>
<td>811</td>
<td>30.2%</td>
</tr>
<tr>
<td>Using relay services (with any of the items you checked above)</td>
<td>570</td>
<td>21.3%</td>
</tr>
<tr>
<td>Other</td>
<td>690</td>
<td>25.7%</td>
</tr>
<tr>
<td>Other</td>
<td>287</td>
<td>10.7%</td>
</tr>
</tbody>
</table>

Question # 16 asked survey takers which texting options they would like to be able to use to contact 9-1-1. They were able to check one or more of nine options.

Of the 3,149 survey takers, 2,682 or 85% responded to this question as follows:

- 289 or 10.8% would like to be able to use TTY;
- 1,210 or 45.1% would like to be able to use SMS;
- 835 or 31.1% would like to be able to use Instant Messaging (IM) (a sentence at a time);
- 1,226 or 45.7% would like to be able to use real-time text, where the 9-1-1 center reads the characters a caller types as soon as the person types them and the caller sees the characters that the 9-1-1 dispatcher types back as soon as they type them;
- 1,171 or 43.7% would like to be able to use Email;
- 811 or 30.2% would like to be able to use a web page that lets people communicate in text directly to 9-1-1;
- 570 or 21.3% would like to be able to use text to call from communications systems built into their car, like OnStar and Sync;
- 690 or 25.7% would like to be able to use relay service with any of the items they checked previously; and
- 287 or 10.7% checked “other,” and were provided an opportunity to elaborate.

Examples of responses to “Other” for question #16: “Which texting options would respondents like to be able to use?”

287 people or 10.7% answered “Other” to this question. For example, 66 said they did not use text, 31 said they use voice, 17 said they use video, and 13 said they use text and cell phone. A complete listing can be found at http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q16
III.4.c. Survey Question #17

Question #17 asked survey takers which video options they would like to use to call 9-1-1. They were able to check one or more of nine options.

Of the 3,149 survey takers, 2,242 or 71% responded to this question as follows:

- 382 or 17.0% would like to use multi-media messages (pictures, pre-recorded video);
- 1,115 or 49.7% would like to use video phone for sign language;
- 228 or 10.2% would like to use video phone for lip-reading;
- 567 or 25.3% would like to use video telephony on a mobile device;
- 322 or 14.4% would like to use a web page that lets people use sign language;
- 469 or 20.9% would like to use video to call from systems built into their car, like OnStar and Sync;
- 899 or 40.1% would like to use video relay services;
- 812 or 36.2% would like to send video so the dispatcher could see what’s around me or look at me;
- 306 or 13.6% checked “other,” and were provided an opportunity to elaborate.

Examples of responses to "Other" for the question #17: “Which video options would respondents like to use to call 9-1-1?”

306 people or 13.6 % answered OTHER to this question. For example, 100 said they did not use video, many responded they would rather use text or voice, and still others said video plus something else. A complete listing can be found at http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q17
Question #18 asked survey takers which voice and speech related services they would like to use to call 9-1-1. They were able to check one or more of seven options.

Of the 3,149 survey takers, 1,883 or 60% responded to this question as follows:

- 117 or 6.2% would like to use an Augmentative Alternative Communication Device (AACD);
- 1,037 or 55.1% would like to use voice and text on a cell phone (talk and listen but can use text when can't hear or speak well enough to be understood);
- 425 or 22.6% would like to use voice to call from systems built into their car like OnStar and Sync;
- 535 or 28.4% would like to use a web page that lets them use voice and text;
- 305 or 16.2% would like to use video phone for lip-reading, where they can hear and see the other person;
- 277 or 14.7% would like to use speech-to-speech relay services, where a person trained to understand people with speech disabilities listens and then re-speaks what you say to the 9-1-1 dispatcher; and
- 382 or 20.3% checked “other” and were provided an opportunity to elaborate.

Examples of responses to “Other” for question #18: “Which voice and speech related services would respondents like to use to call 9-1-1?”

382 people or 20% answered “Other” to this question. For example, 125 said “don’t use,” NA or None, 39 said ASL or video phone, approximately 30 said voice, 30 said landline, 26 said text of some sort, 10 said cell phone, 5 said captioned telephony, and 5 said all of the above. A complete listing can be found at http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q18
Question # 19 asked survey takers which services that combine voice, video and text they would like to use to call 9-1-1. They were able to check one or more of three options.

Of the 3,149 survey takers, 2,108 or 67% responded to this question as follows:
- 1,187 or 56.3%, would like to use video, voice and/or text at the same time on a TV or videophone;
- 1,490 or 70.7% would like to use video, voice and/or text at the same time on a cell phone; and
- 658 or 31.2% would like to use a web page that lets people use sign language, lip reading, voice, or text together.
Question # 20 asked survey takers which Braille options they would like to use to call 9-1-1. They were able to check one or more of four options.

Of the 3,149 survey takers, 656 or 21% responded to this question as follows:

- 222 or 38% would like to use a Braille device to send text to the 9-1-1 dispatcher;
- 125 or 19.1% would like to use a Braille device to receive text and to use video to sign back to the 9-1-1 dispatcher;
- 162 or 24.7% would like to use a Braille device to receive text, such as instructions, from the 9-1-1 dispatcher; and
- 357 or 54.4% checked “other,” and were provided an opportunity to elaborate.

Examples of responses to “Other” for the question #20: “Which Braille options would respondents like to use to call 9-1-1?”

357 people or 54% % answered “Other” to this question. Most of these respondents explained why they did not use Braille. For example, 180 said none or not applicable, 74 said they did not use Braille, and 28 said they were not blind. A complete listing can be found at [http://transition.fcc.gov/egb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q20](http://transition.fcc.gov/egb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q20)
III.4.g. Survey Question # 21

Question # 21 asked survey takers which devices they would prefer to be able to use to contact 9-1-1. They were able to check one or more of six options.

Of the 3,149 survey takers, 2,970 or 94% responded to this question as follows:

- 1,547 or 52.1% preferred a landline phone;
- 1,835 or 61.8% preferred a cell phone;
- 1,596 or 53.7% preferred a wireless mobile device (smartphone, pager, PDA, etc.);
- 1,200 or 40.4% preferred a computer with a keyboard and webcam;
- 882 or 29.7% preferred a stand alone video phone; and
- 163 or 5.5% checked “other,” and were provided an opportunity to elaborate.

Examples of responses to “Other” for the question #21: “Which devices would respondents prefer to be able to use to contact 9-1-1?”
163 people or 5.5% answered “Other” to this question. For example, 38 people listed a form of video communications, 21 said emergency call devices or services, 12 said computers, 16 said captioned telephony, 9 said TTYs, 12 said other text devices, 9 said iPads or iPods, 2 said voice, 2 said Braille, 1 said pagers, and 1 said amplified phones. A complete listing can be found at http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q21
III.4.h. Survey Question # 22

Question # 22 asked survey takers how important it is to call and communicate with 9-1-1 directly instead of through a relay service. They were limited to checking only one of four options.

Of the 3,149 survey takers, 2,988 or 95% responded to this question as follows:
- 2,307 or 77.1%, selected very important;
- 449 or 15.0% selected somewhat important;
- 114 or 3.8% selected not very important; and
- 118 or 3.9% selected not important at all.

Some committee members believed that the data here may be misleading due to misunderstanding by the survey takers. The members worried that some respondents may have thought the question was asking about the call set-up (i.e. could they all 911 directly or did they have to call a relay first) rather than whether they wanted a relay interpreter on the call as well (e.g. in a conference call manner which is possible with IP technology).
III.5. 9-1-1 Calling in the future

The questions in this section of the report cover the preferred methods and devices for use in the future with NG911.

### III.5.a. Survey Question #23

**Question #23** asked survey takers how important it is that they are able to call 9-1-1 using the same device (using text, video, voice, and/or captioned telephone) that they use to typically communicate with friends and co-workers every day. They were limited to checking only one of four options.

Of the 3,149 survey takers, 3,046 or 97% responded to this question as follows:

- 2,524 or 82.8% selected very important;
- 368 or 12.1% selected somewhat important;
- 71 or 2.3% selected not very important; and
- 83 or 2.7% selected not important at all.

Between 86% and 98% of the respondents in each disability group said that it was **very important** or **somewhat important** that they are able to call 9-1-1 using the same device they use every day, with an average of 95% across all respondents.

The distribution of responses across disability groups for all four choices was as follows:

- between 70% and 87% chose **very important**;
- between 8% and 17% chose **somewhat important**;
- between 2% and 5% chose **not very important**, and
- between 1% and 9% chose **not important at all**.
III.5.b. Survey Question # 24

#24 In the future, when respondents use a videophone to call 9-1-1, would they like to see both the 9-1-1 dispatcher and the relay service (VRS) communications assistant (or an emergency-trained sign language interpreter) during the call?

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1,556</td>
<td>53.0%</td>
</tr>
<tr>
<td>No</td>
<td>158</td>
<td>5.4%</td>
</tr>
<tr>
<td>does not matter</td>
<td>1,219</td>
<td>41.5%</td>
</tr>
<tr>
<td>Total Responses</td>
<td>2,934</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Question # 24** asked survey takers if in the future, when they use a videophone to call 9-1-1, would they like to see both the 9-1-1 dispatcher and the relay service (VRS) communications assistant (or an emergency-trained sign language interpreter) during the call. They were limited to checking only one of three options.

Of the 3,149 survey takers 2,934 or 93% responded to this question as follows:

- 1,556 or 53.0% said yes;
- 158 or 5.4% said no; and
- 1,219 or 41.5% said it does not matter.

Between 13% and 74% of the respondents in each disability group answered “Yes” to this question. Disability groups that chose “Yes” the most often were:

- 74% Deaf
- 58% Color Blind.

Disability groups that chose “Yes” the least often:

- 42% Mobility disability that does NOT affect use of communication devices,
- 40% Cognitive disability
- 32% Mobility disability that DOES affect use of communication devices,
- 31% Legally Blind
- 13% Blind

The rate that the other disability groups chose “Yes” ranged from 46% to 48%.
Between 3% and 21% of the respondents in each disability group answered “No” to this question. Disability groups that chose “No” the most often were:

- 21% Blind
- 10% Legally Blind.

The disability groups that chose “No” the least often were:

- 4% Mobility disability that does NOT affect use of communication devices,
- 4% Speech disability, and
- 3% Deaf.

The rate that the other disability groups chose “No” ranged from 5% to 8%. 
III.5.c. Survey Question # 25

#25 Which of the following are important to respondents if they are using a videophone?

<table>
<thead>
<tr>
<th>Method Description</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would like to use speech both ways.</td>
<td>789</td>
<td>32.9%</td>
</tr>
<tr>
<td>I would like to use text both ways.</td>
<td>978</td>
<td>40.8%</td>
</tr>
<tr>
<td>I would like to use ASL (American Sign Language) both ways.</td>
<td>1,145</td>
<td>47.8%</td>
</tr>
<tr>
<td>I would like to use video both ways so that I can lip read the 9-1-1 dispatcher and have that person see me.</td>
<td>357</td>
<td>14.9%</td>
</tr>
<tr>
<td>I would like to speak to the 9-1-1 dispatcher, but have the 9-1-1 dispatcher use text back to me so I can see it or display it on my braille device.</td>
<td>253</td>
<td>10.6%</td>
</tr>
<tr>
<td>I would like to text to the 9-1-1 dispatcher, but have the 9-1-1 dispatcher speak back to me.</td>
<td>193</td>
<td>8.1%</td>
</tr>
<tr>
<td>I would like to speak and listen, but have what the 9-1-1 dispatcher says be captioned.</td>
<td>518</td>
<td>21.6%</td>
</tr>
<tr>
<td>I would like to use American Sign Language to communicate with 9-1-1, but have text come back to me (so I can display it in large print or Braille).</td>
<td>213</td>
<td>8.9%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>192</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

Question # 25 asked survey takers which methods of communicating with 9-1-1 are important to them if they are using a videophone. They were able to check one or more of nine options.

Of the 3,149 survey takers, 2,397 or 76% responded to this question as follows:

- 789 or 32.9% said they would like to use speech both ways;
- 978 or 40.8% said they would like to use text both ways;
- 1,145 or 47.8% said they would like to use ASL (American Sign Language) both ways;
- 357 or 14.9% said they would like to use video both ways so that they can lip read the 9-1-1 dispatcher and have that person see them;
- 253 or 10.6% said they would like to speak to the 9-1-1 dispatcher, but have the 9-1-1 dispatcher use text back to them so they can see it or display it on their braille device;
- 193 or 8.1% said they would like to text to the 9-1-1 dispatcher, but have the 9-1-1 dispatcher speak back to them;
- 518 or 21.6% said they would like to speak and listen, but have what the 9-1-1 dispatcher says be captioned;
- 213 or 8.9% said they would like to use American Sign Language to communicate with 9-1-1, but have text come back to them (so they can display it in large print or Braille); and
- 192 or 8.0% checked “other” and were provided an opportunity to elaborate.

Examples of responses to "Other" for the question #25: “Which of the following are important to respondents if they are using a videophone?”

192 people or 8 % answered “Other” to this question. For example, 104 people said “Don't care,” “Don't need,” or “Don't use,” 16 want to use speech and receive signing back, 12 want both 9-1-1 access and an interpreter at the same time, 10 want speech with text or captions back, 5 want video text and speech, 2 want video and text, and 2 want someone to help them. A complete listing can be found at http://transition.fcc.gov/cgb/dro/EAAC/EAAC_SURVEY/List-of-Other-Responses.htm/#Q25
The following breakdown across disability groups lists the most preferred methods of communicating with 9-1-1 for each disability group when using a videophone. Items are ordered by preference under each disability:

- **Cognitive:**
  - Speech both ways - 66%
  - Text both ways - 29%
  - Speech both ways but have 9-1-1 captioned - 28%

- **Deaf:**
  - ASL both ways - 84%
  - Text both ways - 46%

- **Hard of hearing:**
  - Text both ways - 42%
  - Speech both ways but have 9-1-1 captioned - 40%
  - Speech both ways - 40%
  - ASL both ways - 28%
  - Video both ways so I can lip-read - 24%
  - Speak but have 9-1-1 text back - 17%

- **Late Deafened:**
  - Text both ways - 57%
  - Speech both ways but have 9-1-1 captioned - 41%
  - Speech both ways - 30%
  - Video both ways so I can lip-read - 30%
  - ASL both ways - 23%

- **Mobility disability that DOES affect use of communication devices:**
  - Speech both ways - 60%
  - Text both ways - 30%
  - Captioned speech from 9-1-1 - 27%
  - Text to 9-1-1 but have them speak back - 18%

- **Mobility disability that does NOT affect use of communication devices:**
  - Speech both ways - 70%
  - Text both ways - 37%
  - Speech both ways but have 9-1-1 captioned - 30%
  - Text to 9-1-1 but have them speak back - 16%

- **Speech disability:**
  - Speech both ways - 46%
  - Text both ways - 38%
  - ASL both ways - 30%
  - Speech both ways but have 9-1-1 captioned - 26%
  - Text to 9-1-1 but have them speak back - 23%

- **Blind:**
  - Speech both ways - 77%
  - Text both ways - 29%
  - Speak but have 9-1-1 text back - 15%
  - Text to 9-1-1 but have them speak back - 15%

- **Legally Blind:**
  - Speech both ways - 63%
  - Text both ways - 28%
  - ASL both ways - 17%
  - Speech both ways but have 9-1-1 captioned - 17%

- **Low Vision:**
  - Speech both ways - 53%
  - Text both ways - 35%
  - ASL both ways - 24%
  - Speech both ways but have 9-1-1 captioned - 22%
- Video both ways so I can lip-read - 16%

**Color Blind:**
- Text both ways - 52%
- Speech both ways - 45%
- ASL both ways - 36%
- Speech both ways but have 9-1-1 captioned - 23%
- ASL to 9-1-1 but have them text back - 23%
- Speak but have 9-1-1 text back - 16%

**Visual AND Hearing impairment [COMPOSITE]:**
- Text both ways - 42%
- Speech both ways - 39%
- ASL both ways - 38%
- Speech both ways but have 9-1-1 captioned - 23%
- ASL to 9-1-1 but have them text back - 23%
- Video both ways so I can lip-read - 21%
- Speak but have 9-1-1 text back - 17%
III.5.d. Survey Question # 26

**Question # 26** asked survey takers who are using voice to communicate with 9-1-1 what is important to them. They were able to check one or more of five options, or none of the above.

Of the 3,149 survey takers, 2,572 or 82% responded to this question as follows:

- 1,079 or 42.0% prefer to use their speech and listen to the 9-1-1 dispatcher directly;
- 233 or 9.1% prefer to have all information from the 9-1-1 dispatcher by voice only (they cannot see well);
- 699 or 27.2% prefer to hear what 9-1-1 says AND receive text, in case they cannot understand them;
- 291 or 11.3% would like to have someone help the 9-1-1 dispatcher if 9-1-1 cannot understand their speech;
- 419 or 16.3% would like to communicate with their voice, BUT have 9-1-1 reply using text only (they cannot hear well); and
- 682 or 26.5% chose none of the above.

<table>
<thead>
<tr>
<th>Preference</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I prefer to use my speech and listen to the 9-1-1 dispatcher directly.</td>
<td>1079</td>
<td>42.0%</td>
</tr>
<tr>
<td>My preference to have all information from the 9-1-1 dispatcher by voice only (I cannot see well).</td>
<td>233</td>
<td>9.1%</td>
</tr>
<tr>
<td>I prefer to hear what 9-1-1 says AND receive text, in case I cannot understand them</td>
<td>699</td>
<td>27.2%</td>
</tr>
<tr>
<td>I'd like to have someone help the 9-1-1 dispatcher if 9-1-1 cannot understand my speech.</td>
<td>291</td>
<td>11.3%</td>
</tr>
<tr>
<td>I'd like to communicate with my voice, BUT have 9-1-1 reply using text only (I cannot hear well).</td>
<td>419</td>
<td>16.3%</td>
</tr>
<tr>
<td>None of the above</td>
<td>682</td>
<td>26.5%</td>
</tr>
</tbody>
</table>
The following breakdown across disability groups lists the most preferred methods of communicating with 9-1-1 for each disability group when using voice. Items are ordered by preference under each disability:

- **Cognitive:**
  - Speech and listen - 66%
  - Speech with help if 9-1-1 cannot understand my speech - 30%
  - Speech with voice AND text back - 27%

- **Deaf:**
  - None of the above - 63%
  - Speech with just text back (I cannot hear well) - 23%
  - Speech with voice AND text back - 16%

- **Hard of hearing:**
  - Speech with voice AND text back - 49%
  - Speech and listen - 36%
  - Speech with just text back (I cannot hear well) - 28%

- **Late Deafened:**
  - Speech with voice AND text back - 53%
  - Speech with just text back (I cannot hear well) - 44%
  - Speech and listen - 26%

- **Mobility disability that DOES affect use of communication devices:**
  - Speech and listen - 65%
  - Speech with help if 9-1-1 cannot understand my speech - 23%
  - Speech with voice AND text back - 22%

- **Mobility disability that does NOT affect use of communication devices:**
  - Speech and listen - 77%
  - Speech with voice AND text back - 27%
  - Speech with help if 9-1-1 cannot understand my speech - 16%

- **Speech disability:**
  - Speech with help if 9-1-1 cannot understand my speech - 49%
  - Speech and listen - 45%
  - None of the above - 26%
  - Speech with voice AND text back - 21%

- **Blind:**
  - All information in speech (I cannot see well) - 75%
  - Speech and listen - 73%
  - Speech with voice AND text back - 20%

- **Legally Blind:**
  - Speech and listen - 69%
  - All information in speech (I cannot see well) - 42%
  - Speech with voice AND text back - 24%

- **Low Vision:**
  - Speech and listen - 57%
  - All information in speech (I cannot see well) - 22%
  - Speech with voice AND text back - 20%
  - Speech with help if 9-1-1 cannot understand my speech - 17%

- **Color Blind:**
  - Speech and listen directly - 58%
  - Speech with voice AND text back - 42%
  - All information in speech (I cannot see well) - 23%

- **Visual AND Hearing impairment [COMPOSITE]:**
  - Speech and listen directly - 45%
  - Speech with voice AND text back - 32%
  - All information in speech (I cannot see well) - 23%
  - Speech with just text back (I cannot hear well) - 22%
III.5.e. Survey Question # 27

Question # 27 asked survey takers who are using sign language what they would like to be able to do when communicating with 9-1-1. They were able to check one or more of three options, or none of the above.

Of the 3,149 survey takers, 1,971 or 63% responded to this question as follows:
- 1,107 or 56.2% would like to communicate in sign language;
- 504 or 25.6% said that when using sign language, they'd like to read numbers or things that are hard to write down while watching sign language;
- 501 or 25.4% would like to use sign language and have the 9-1-1 dispatcher type back to them; and
- 675 or 34.2% chose none of the above.

A more detailed analysis of the data reveals that of those whose response was NOT “None of the above,” 57% of all responders (and 55% of deaf responders) would like to have text along with sign language, and / or text back from the 9-1-1 center.
The following breakdown across disability groups lists the responses to this question for each disability group. The responses under each disability group are listed in the same order as they appear on the questionnaire:

- **Cognitive:**
  - Communicate in sign language - 12%
  - Sign language plus text - 11%
  - Sign with text back to me - 11%
  - None of the above - 80%

- **Deaf:**
  - Communicate in sign language - 84%
  - Sign language plus text - 36%
  - Sign with text back to me - 35%
  - None of the above - 6%

- **Hard of hearing:**
  - Communicate in sign language - 36%
  - Sign language plus text - 19%
  - Sign with text back to me - 20%
  - None of the above - 52%

- **Late Deafened:**
  - Communicate in sign language - 25%
  - Sign language plus text - 25%
  - Sign with text back to me - 33%
  - None of the above - 51%

- **Mobility disability that DOES affect use of communication devices:**
  - Communicate in sign language - 10%
  - Sign language plus text - 7%
  - Sign with text back to me - 12%
  - None of the above - 81%

- **Mobility disability that does NOT affect use of communication devices:**
  - Communicate in sign language - 14%
  - Sign language plus text - 11%
  - Sign with text back to me - 14%
  - None of the above - 74%

- **Speech disability:**
  - Communicate in sign language - 34%
  - Sign language plus text - 22%
  - Sign with text back to me - 24%
  - None of the above - 57%

- **Blind:**
  - Communicate in sign language - 12%
  - Sign language plus text - 4%
  - Sign with text back to me - 4%
  - None of the above - 88%

- **Legally Blind:**
  - Communicate in sign language - 31%
  - Sign language plus text - 13%
  - Sign with text back to me - 20%
  - None of the above - 61%

- **Low Vision:**
  - Communicate in sign language - 37%
  - Sign language plus text - 21%
  - Sign with text back to me - 19%
  - None of the above - 51%
• **Color Blind:**
  - Communicate in sign language - 50%
  - Sign language plus text - 32%
  - Sign with text back to me - 23%
  - None of the above - 36%

• **Visual AND Hearing impairment [COMPOSITE]:**
  - Communicate in sign language - 54%
  - Sign language plus text - 26%
  - Sign with text back to me - 32%
  - None of the above - 31%
III.5.f. Survey Question # 28

#28 If respondents are using video to communicate, what is important to them?

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I'd like to be able to see the 9-1-1 dispatcher's face and lips well. (I lip read or use lip reading to help me hear.)</td>
<td>551</td>
<td>25.6%</td>
</tr>
<tr>
<td>I'd like the 9-1-1 dispatcher to see me and hear what's happening around me.</td>
<td>1,198</td>
<td>55.7%</td>
</tr>
<tr>
<td>None of the above</td>
<td>725</td>
<td>33.7%</td>
</tr>
</tbody>
</table>

Question # 28 asked survey takers who are using video to communicate what is important to them when communicating with 9-1-1. They were able to check one or more of two options, or none of the above.

Of the 3,149 survey takers, 2,151 or 68% responded to this question as follows:
- 551 or 25.6% would like to be able to see the 9-1-1 dispatcher's face and lips well (they lip read or use lip reading to help them hear);
- 1,198 or 55.7% would like the 9-1-1 dispatcher to see them and hear what's happening around them; and
- 725 or 33.7% chose none of the above.

Between 5% and 58% of the respondents in each disability group would like to be able to see the 9-1-1 dispatcher's face and lips well. Disability groups with the highest reported preference rates were:
- 58% Late Deafened
- 45% Hard of hearing.

Disability groups with the lowest reported preference rates were:
- 15% Cognitive disability
- 13% Legally Blind
- 5% Blind.

The reported preference rates for the other disability groups ranged from 18% to 25%.

Between 43% and 74% of the respondents in each disability group would like the 9-1-1 dispatcher to see them and hear what's happening around them. Disability groups with the highest reported preference rates were:
- 74% Speech disability
- 66% Mobility disability.

Disability groups with the lowest reported preference rates were:
- 45% Legally Blind
- 43% Blind.

The reported preference rates for the other disability groups ranged from 52% to 59%.
III.5.g. Survey Question #29

**Question #29** asked survey takers who are using texting what is important to them when communicating with 9-1-1. They were able to check one or more of four options, or none of the above.

Of the 3,149 survey takers, 2,542 or 81% responded to this question as follows:

- 1,378 or 54.2% want to be able to communicate in text in both directions at the same time;
- 1,367 or 53.8% want the 9-1-1 dispatcher see their message as soon as possible, even while they are typing it;
- 335 or 13.2% only want the 9-1-1 dispatcher see their message after they finish typing it and send it;
- 1,203 or 47.3% want to be sure that what they had typed so far would get to 9-1-1 if they pass out or are interrupted in sending text; and
- 449 or 17.7% chose none of the above.

Between 34% and 67% of the respondents in each disability group want to be able to communicate in text in both directions at the same time. Disability groups with the **highest** reported preference rates were:

- 68% Color Blind
- 67% Deaf.

Disability groups with the **lowest** reported preference rates were:

- 40% Speech disability,
- 38% Mobility disability that DOES affect use of communication devices
- 34% Cognitive disability
- 33% Legally Blind.

The reported preference rates for the other disability groups ranged from 42% to 55%.

Between 40% and 76% of the respondents in each disability group want the 9-1-1 dispatcher see their message as soon as possible, even while they are typing it (this is called **real-time-text**). Disability groups with the **highest** reported preference rates were:
• 76% Late Deafened
• 58% Deaf
Disability groups with the **lowest** reported preference rates were:
• 47% Color Blind,
• 45% Cognitive disability
• 40% Legally Blind.
The reported preference rates for the other disability groups ranged from 50% to 56%.

Between 6% and 18% of the respondents in each disability group only want the 9-1-1 dispatcher see their message after they finish typing it and send it (this is called **messaging**). Disability groups with the **highest** reported preference rates were:
• 18% Color Blind
• 16% Deaf
• 14% Blind
• 14% Speech disability.
Disability groups with the **lowest** reported preference rates were:
• 8% Late Deafened,
• 7% Cognitive disability
• 6% Mobility disability that DOES affect use of communication devices.
The reported preference rates for the other disability groups ranged from 11% to 13%.

Between 41% and 70% of the respondents in each disability group want to be sure that what they had typed so far would get to 9-1-1 if they pass out or are interrupted in sending text. Disability groups with the **highest** reported preference rates were:
• 70% Late Deafened
• 57% Blind
• 56% Color Blind
Disability groups with the **lowest** reported preference rates were:
• 47% Deaf
• 46% Legally Blind
• 45% Low Vision
• 41% for Cognitive disability
The reported preference rates for the other disability groups ranged from 51% to 54%.

**NOTES:**
• Real-time text and messaging can be combined in the same text client.
• Pass out protection requires real-time text or “auto-transmit after no activity” feature to be automatically activated for 9-1-1 messages.
• Interruption (transmission is cut off or sending device disabled) requires real-time text.
III.5.h. Survey Question # 30

#30 New mobile devices may have additional functions for contacting 9-1-1.

<table>
<thead>
<tr>
<th>Option</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a smartphone, but don't want to install a 9-1-1 app.</td>
<td>79</td>
<td>2.7%</td>
</tr>
<tr>
<td>I have a smartphone and would be willing to install a special 9-1-1 app.</td>
<td>983</td>
<td>33.4%</td>
</tr>
<tr>
<td>I don't have a smartphone, but would be willing to buy one and then install a 9-1-1 app.</td>
<td>769</td>
<td>26.3%</td>
</tr>
<tr>
<td>None of the above</td>
<td>1,098</td>
<td>37.5%</td>
</tr>
<tr>
<td>Total Responses</td>
<td>2,929</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Question # 30 asked survey takers their opinion about installing a 9-1-1 app on their smart phone, given that new mobile devices may have additional functions for contacting 9-1-1. They were limited to checking only one of four options.

Of the 3,149 survey takers 2,929 or 93% responded to this question as follows:

- 79 or 2.7% have a smartphone, but don't want to install a 9-1-1 app;
- 983 or 33.4% have a smartphone and would be willing to install a special 9-1-1 app;
- 769 or 26.3% don't have a smartphone, but would be willing to buy one and then install a 9-1-1 app; and
- 1,098 or 37.5% chose none of the above.
III.6. Disability specific analyses

Supplemental analyses were conducted by disability categories for all of the questions. These analyses are provided in three separate HTML documents “Supplemental Analysis Charts” “Supplemental Analysis Data –By Question then Disability” and “Supplemental Analysis Data –By Disability then Question.” All of these data are also available on three worksheets in one Excel Workbook.
Appendix A

Section 106 of Public Law # 111-260 as amended by PL # 111-265.

SEC. 106. EMERGENCY ACCESS ADVISORY COMMITTEE.

(a) Establishment- For the purpose of achieving equal access to emergency services by individuals with disabilities, as a part of the migration to a national Internet protocol-enabled emergency network, not later than 60 days after the date of enactment of this Act, the Chairman of the Commission shall establish an advisory committee, to be known as the Emergency Access Advisory Committee (referred to in this section as the `Advisory Committee').

(b) Membership- As soon as practicable after the date of enactment of this Act, the Chairman of the Commission shall appoint the members of the Advisory Committee, ensuring a balance between individuals with disabilities and other stakeholders, and shall designate two such members as the co-chairs of the Committee. Members of the Advisory Committee shall be selected from the following groups:

(1) STATE AND LOCAL GOVERNMENT AND EMERGENCY RESPONDER REPRESENTATIVES- Representatives of State and local governments and representatives of emergency response providers, selected from among individuals nominated by national organizations representing such governments and representatives.

(2) SUBJECT MATTER EXPERTS- Individuals who have the technical knowledge and expertise to serve on the Advisory Committee in the fulfillment of its duties, including representatives of:
   (A) providers of interconnected and non-interconnected VoIP services;
   (B) vendors, developers, and manufacturers of systems, facilities, equipment, and capabilities for the provision of interconnected and non-interconnected VoIP services;
   (C) national organizations representing individuals with disabilities and senior citizens;
   (D) Federal agencies or departments responsible for the implementation of the Next Generation E 9-1-1 system;
   (E) the National Institute of Standards and Technology; and
   (F) other individuals with such technical knowledge and expertise.

(3) REPRESENTATIVES OF OTHER STAKEHOLDERS AND INTERESTED PARTIES- Representatives of such other stakeholders and interested and affected parties as the Chairman of the Commission determines appropriate.

(c) Development of Recommendations- Within 1 year after the completion of the member appointment process by the Chairman of the Commission pursuant to subsection (b), the Advisory Committee shall conduct a national survey of individuals with disabilities, seeking input from the groups described in subsection (b)(2), to determine the most effective and efficient technologies and methods by which to enable access to emergency services by individuals with disabilities and shall develop and submit to the Commission recommendations to implement such technologies and methods, including recommendations—

(1) with respect to what actions are necessary as a part of the migration to a national Internet protocol-enabled network to achieve reliable, interoperable communication transmitted over such network that will ensure access to emergency services by individuals with disabilities;

(2) for protocols, technical capabilities, and technical requirements to ensure the reliability and interoperability necessary to ensure access to emergency services by individuals with disabilities;
(3) for the establishment of technical standards for use by public safety answering points, designated default answering points, and local emergency authorities;
(4) for relevant technical standards and requirements for communication devices and equipment and technologies to enable the use of reliable emergency access;
(5) for procedures to be followed by IP-enabled network providers to ensure that such providers do not install features, functions, or capabilities that would conflict with technical standards;
(6) for deadlines by which providers of interconnected and non-interconnected VoIP services and manufacturers of equipment used for such services shall achieve the actions required in paragraphs (1) through (5), where achievable, and for the possible phase out of the use of current-generation TTY technology to the extent that this technology is replaced with more effective and efficient technologies and methods to enable access to emergency services by individuals with disabilities;
(7) for the establishment of rules to update the Commission’s rules with respect to 9-1-1 services and E-911 services (as defined in section 158(e)(4) of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 942(e)(4))), for users of telecommunications relay services as new technologies and methods for providing such relay services are adopted by providers of such relay services; and
(8) that take into account what is technically and economically feasible.

(d) Meetings-

(1) INITIAL MEETING- The initial meeting of the Advisory Committee shall take place not later than 45 days after the completion of the member appointment process by the Chairman of the Commission pursuant to subsection (b).
(2) OTHER MEETINGS- After the initial meeting, the Advisory Committee shall meet at the call of the chairs, but no less than monthly until the recommendations required pursuant to subsection (c) are completed and submitted.
(3) NOTICE; OPEN MEETINGS- Any meetings held by the Advisory Committee shall be duly noticed at least 14 days in advance and shall be open to the public.

(e) Rules-

(1) QUORUM- One-third of the members of the Advisory Committee shall constitute a quorum for conducting business of the Advisory Committee.
(2) SUBCOMMITTEES- To assist the Advisory Committee in carrying out its functions, the chair may establish appropriate subcommittees composed of members of the Advisory Committee and other subject matter experts as determined to be necessary.
(3) ADDITIONAL RULES- The Advisory Committee may adopt other rules as needed.


(g) Implementing Recommendations- The Commission shall have the authority to promulgate regulations to implement the recommendations proposed by the Advisory Committee, as well as any other regulations, technical standards, protocols, and procedures as are necessary to achieve reliable, interoperable communication that ensures access by individuals with disabilities to an Internet protocol-enabled emergency network, where achievable and technically feasible.

(h) Definitions- In this section—

(1) the term ‘Commission’ means the Federal Communications Commission;
(2) the term ‘Chairman’ means the Chairman of the Federal Communications Commission; and
(3) except as otherwise expressly provided, other terms have the meanings given such terms in section 3 of the Communications Act of 1934 (47 U.S.C. 153).
In this Public Notice, the Federal Communications Commission (“Commission”) seeks nominations for membership on its Emergency Access Advisory Committee (“EAAC” or “Committee”). The EAAC is being established in accordance with the Twenty-first Century Communications and Video Accessibility Act of 2010 (Twenty-first Century Act), which directs that an advisory committee be established, within 60 days after the Act’s passage, for the purpose of achieving equal access to emergency services by individuals with disabilities as part of our nation’s migration to a national Internet protocol-enabled emergency network, also known as the next generation 9-1-1 system (“NG9-1-1”). The EAAC is to have monthly meetings. The EAAC is to be composed generally of state and local government representatives responsible for emergency management and emergency responder representatives, national organizations representing people with disabilities and senior citizens, subject matter experts, and others, as described below. Nominations should be submitted in accordance with the procedures outlined below, which includes an optional online nomination form. The Federal Advisory Committee Act (5 U.S.C. App. 2) does not apply to the Advisory Committee.

**EAAC MISSION**

The purpose of the EAAC is to determine the most effective and efficient technologies and methods by which to enable access to NG9-1-1 emergency services by individuals with disabilities. In order to fulfill this mission, the Twenty-first Century Act directs that within one year after the EAAC’s members are appointed, the Committee shall conduct a national survey, with the input of groups represented by the Committee’s membership, after which the Committee shall develop and submit to the Commission recommendations to implement such technologies and methods. These recommendations shall take into account what is technically and economically feasible, and include the following:

1. actions needed for the migration to a national Internet protocol-enabled network to achieve reliable, interoperable communication that will ensure access to emergency services by people with disabilities;
2. protocols, technical capabilities, and technical requirements to ensure the reliability and interoperability necessary to ensure access to emergency services by people with disabilities;
3. technical standards for use by public safety answering points, designated default answering points, and local emergency authorities;
4. technical standards and requirements for communication devices and equipment and technologies to enable the use of reliable emergency access;

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11 PL 111-260, signed into law on October 8, 2010.
12 PL 111-260, § 106. This EAAC will address NG9-1-1 issues. A second advisory committee, the Video Programming and Emergency Access Advisory Committee, mandated by section 201 of this law, will address video programming emergency access issues.
13 PL 111-260, § 106(f).
14 PL 111-260, § 106(c).
(5) procedures to ensure that IP-enabled network providers do not install features, functions, or capabilities that would conflict with technical standards needed to achieve 9-1-1 emergency access by people with disabilities;

(6) deadlines by which interconnected and non-interconnected VoIP service providers and manufacturers shall achieve the actions required in the above paragraphs, where achievable, and for the possible phase out of current-generation TTY technology to the extent that this technology is replaced with more effective and efficient technologies and methods to enable access to emergency services by people with disabilities; and

(7) rules to update the Commission's telecommunications relay services regulations with respect to 9-1-1 services, as new technologies and methods for providing such relay services are adopted by providers of such relay services.

MEMBERSHIP

The Commission seeks nominations for the membership of the EAAC from the following groups:15

- State and local government representatives responsible for emergency management and emergency responder representatives, selected from among persons nominated by national organizations representing such governments and representatives;
- Providers of interconnected and non-interconnected VoIP services;
- Vendors, developers, and manufacturers of systems, facilities, equipment, and capabilities for the provision of interconnected and non-interconnected VoIP services;
- National organizations representing people with disabilities and senior citizens;
- Federal agencies responsible for the implementation of the NG9-1-1 system;
- The National Institute of Standards and Technology; and
- Other individuals with subject matter or technical knowledge and expertise.

From the nominations submitted, the Chairman of the Commission will appoint the members of the EAAC to serve on the EAAC for a minimum period of two years. The Chairman retains the discretion to choose stakeholders and interested and affected parties other than those enumerated above, as are deemed appropriate to the membership of this committee. The Chairman will also select two co-chairs to lead the Committee, in accordance with the legislative mandate.16

Selections for the committee’s membership will be made to maximize a diversity of viewpoints necessary to an advisory body charged with advising the Commission on matters relevant to emergency access for persons with disabilities as a part of the migration to a national Internet protocol-enabled emergency network. The goal will be to ensure a balance between individuals with disabilities and other stakeholders.17

NOMINATIONS FOR Membership/ Deadline

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15 PL 111-260, § 106(b)(1)-(3).
16 PL 111-260, § 106 (b).
17 Id.
Nominations for EAAC membership should include the nominee’s name, title, and organization if appropriate, as well as the nominee’s postal address, e-mail address, and telephone number. Nominees should also include a statement of the nominee’s interests, any specific expertise or issues of interest to the nominee, and a detailed description of the nominee’s qualifications to serve on the EAAC. Individuals may self-nominate, or be nominated by a third party. If self-nominating, the nominee should also include a statement indicating a willingness to serve on the Committee for a two-year term of service, and a commitment to attend monthly meetings in Washington, D.C. A sample nomination form is attached and may be used, but is not required. If nominating a third party, please include as much of the above information as possible.

The Commission must receive nominations by 11:59 PM, EST, November 1, 2010. The nominations may be sent to the Federal Communications Commission, Consumer and Governmental Affairs Bureau, Attn.: Cheryl King, via e-mail at EAAC@fcc.gov, via facsimile at 202-418-0037, or via U.S. mail at EAAC Nominations, FCC, 445 12th Street, S.W., Washington, D.C. 20554. Nominations may also be completed online. An online nomination process is provided at: http://www.fcc.gov/cgb/dro/EAAC/EAACnominationform.html. Due to the extensive security screening of incoming mail since September 11, 2001, delivery of mail sent to the FCC may be delayed. Therefore, we encourage submission by e-mail, fax or via the online nomination form. FCC staff will acknowledge receipt of your nomination by e-mail or fax shortly thereafter.

Please note this Notice is not intended to be the exclusive method by which the Commission will solicit nominations and expressions of interest to identify qualified candidates. However, all candidates for membership on the Council will be subject to the same evaluation criteria.

APPOINTMENTS AND FIRST MEETING

The Commission will publish a notice in the Federal Register announcing the appointment of EAAC members and the first meeting date. As directed by the Twenty-first Century Act, the first meeting of the EAAC will occur not later than 45 days after the completion of the member appointment process.

FOR FURTHER INFORMATION CONTACT: Cheryl King, Consumer and Governmental Affairs Bureau, Federal Communications Commission, 202-418-2284 (voice) or 202-418-0416 (TTY), Cheryl.King@fcc.gov (e-mail) or Patrick Donovan, Public Safety and Homeland Security Bureau, Federal Communications Commission, 202-418-2413, Patrick.Donovan@fcc.gov (e-mail).

- FCC -
EMERGENCY ACCESS ADVISORY COMMITTEE
NOMINATION FORM (OPTIONAL)

NOTE: Nominations may be made by an individual or by an organization selecting a nominee.

Name: __________________________________________________________________

Organization and title: __________________________________________________________________

Address: __________________________________________________________________

City: __________________________ State: ______________ Zip: _______________

Contact telephone numbers and information (*please indicate preferred contact method):

    Business: ____________________   Home: ____________________

    Fax: __________________________   Cell: __________________________

    Email: __________________________

Affiliation or identification (optional)

☐ person with a disability, advocate, or national organization representing persons with disabilities

☐ person who is a senior citizen, advocate, or national organization representing persons who are senior citizens

☐ emergency manager or emergency responder

☐ local, tribal or state government official (give title): __________________________

☐ subject matter expert (specify): __________________________

☐ vendor, developer, or manufacturer of systems, facilities, equipment, and capabilities for the provision of interconnected and non-interconnected VoIP services

☐ provider of interconnected and non-interconnected VoIP services

☐ Federal agency or department responsible for the implementation of the NG 9-1-1 system

☐ National Institute of Standards and Technology

☐ other individual or company with relevant technical knowledge and expertise. Please specify: __________________________

Statement of interest and commitment to attend monthly meetings and serve for up to a two-year term (may add additional information on separate sheets):

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

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________________________________________________________________________________________

________________________________________________________

Signed: ___________________________  Date: _____________
Appendix C

Public Notice announcing members and co-chairs

DA 10-2318
Released: December 7, 2010

EMERGENCY ACCESS ADVISORY COMMITTEE
ANNOUNCEMENT OF MEMBERS AND CO-CHAIRPERSONS

Committee to Focus on Matters Pertaining to Next Generation 911 Access for Persons with Disabilities

On December 7, 2010, Chairman Julius Genachowski announced the establishment, and appointment of members and Co-Chairpersons of the Emergency Access Advisory Committee (EAAC), an advisory committee required by the Twenty-first Century Communications and Video Accessibility Act of 2010 (the Accessibility Act). In a public notice released on October 19, 2010, the Commission solicited nominations for membership on the EAAC in accordance with the Accessibility Act. The nominations period closed on November 1, 2010.

The EAAC shall conduct monthly meetings during 2011. The first meeting will be held on January 14, 2011 at Commission Headquarters from 9:30 a.m. to 4:30 p.m., and subsequent meetings will be held on the second Friday of every month during 2011. All meetings shall be open to the public.

EAAC MISSION

The purpose of the EAAC is to determine the most effective and efficient technologies and methods by which to enable access to Next Generation 911 emergency services by individuals with disabilities. In order to fulfill this mission, the Accessibility Act directs that within one year after the EAAC’s members are appointed, the Committee shall conduct a national survey, with the input of groups represented by the Committee’s membership, after which the Committee shall develop and submit to the Commission recommendations to implement such technologies and methods. These recommendations shall include the following, taking into account what is technically and economically feasible:

(1) actions needed for the migration to a national Internet protocol (IP)-enabled network to achieve reliable, interoperable communication that will ensure access to emergency services by people with disabilities;

(2) protocols, technical capabilities, and technical requirements to ensure the reliability and interoperability necessary to ensure access to emergency services by people with disabilities;

(3) technical standards for use by public safety answering points, designated default answering points, and local emergency authorities;

(4) technical standards and requirements for communication devices, equipment and technologies to enable the use of reliable emergency access;

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20 Id. at 3.
(5) procedures to ensure that IP-enabled network providers do not install features, functions, or capabilities that would conflict with technical standards needed to achieve 9-1-1 emergency access by people with disabilities;

(6) deadlines by which interconnected and non-interconnected Voice over IP (VoIP) service providers and manufacturers shall achieve the actions required in the above paragraphs, where achievable, and for the possible phase out of current-generation TTY technology to the extent that this technology is replaced with more effective and efficient technologies and methods to enable access to emergency services by people with disabilities; and

(7) rules to update the Commission's telecommunications relay services regulations with respect to 9-1-1 services, as new technologies and methods for providing such relay services are adopted by providers of such relay services.

APPOINTMENT OF MEMBERS

By this Public Notice, the Chairman of the Commission appoints thirty-two (32) members of the EAAC. Of this number, eleven (11) represent interests of persons with disabilities and researchers; seven (7) represent interests of communication service providers; six (6) represent interests of state and local emergency responders and emergency subject matter technologies; three (3) represent vendors, developers and manufacturers of systems, facilities and equipment; three (3) represent Federal agencies; and two (2) represent industry organizations. The EAAC’s membership is designed to be representative of the Commission’s many constituencies, and the diversity achieved ensures a balance among individuals with disabilities and other stakeholders, as required by the Accessibility Act.22 All appointments are effective immediately and shall terminate December 7, 2012, or when the Committee is terminated, whichever is earlier.

The membership of the EAAC, designated by organization or affiliation as appropriate, is as follows:

- American Foundation for the Blind – Brad Hodges
- Alliance for Telecommunications Industry Solutions – Gregory Schumacher
- AT&T – Brian Daly
- Avaya Labs – Paul Michaelis
- Center for Public Safety Innovation/National Terrorism Preparedness Institute – Christopher Littlewood
- City of Los Angeles’ Department on Disability, and National Emergency Number Association’s Accessibility Committee – Richard Ray
- Comcast Cable – Angel Arocho
- Communication Service for the Deaf – Alfred Sonnenstrahl
- CTIA, The Wireless Association – Matthew Gerst
- Fairfax County Emergency Management – Bruce McFarlane
- Gallaudet University – Norman Williams
- Hearing, Speech & Deafness Center – Donna Platt
- Intrado, Inc. – John Snapp
- Livingston Parrish (Louisiana) Communication District 911 – Ronnie Cotton
- Microsoft – Bernard Aboba
- NorCal Center for Deaf and Hard of Hearing, Telecommunications for the Deaf, Inc., and E911 Stakeholder Council – Sheri A. Farinha
- Omnitel – Gunnar Hellstrom
- Partners for Access, LLC – Joel Ziev
- Purple Communications – Mark Stern
- RealTime Text Task Force (R3TF) – Arnoud van Wijk

• Research in Motion (RIM) – Gregory Fields
• Speech Communication Assistance for the Telephone, Inc. – Rebecca Ladew
• TeleCommunications Systems, Inc – Don Mitchell
• Telecommunications Industry Association and the Mobile Manufacturers Forum – David J. Dzumba
• Time Warner Cable Communications – Martha (Marte) Kinder
• T-Mobile, 911 Policy – Jim Nixon
• Trace R&D Center, University of Wisconsin (IT&Tel-RERC) – Gregg Vanderheiden
• Verizon Communications – Kevin Green
• Vonage Holding Corporation – Brendan Kasper
• Washington Parish, LA Communications District – James Coleman

Federal Agencies
• U.S. Department of Commerce, National Institute for Standards and Technology – Douglas Montgomery
• U.S. Department of Justice, Civil Rights Division/DRS - Robert Mather
• U.S. Department of Transportation, NHTSA - Laurie Flaherty

FCC Chairman Julius Genachowski has designated Richard Ray and David J. Dzumba as Co-Chairpersons of the EAAC.

ACCESSIBLE FORMATS: To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

FOR FURTHER INFORMATION CONTACT: Cheryl King, Consumer and Governmental Affairs Bureau, Federal Communications Commission, 202-418-2284 (voice), 202-418-0416 (TTY), or Cheryl.King@fcc.gov (e-mail); or Patrick Donovan, Public Safety and Homeland Security Bureau, Federal Communications Commission, 202-418-2413, Patrick.Donovan@fcc.gov (e-mail).

- FCC -
Surveys: Access to 9-1-1 for People with Disabilities

Introduction

All Americans need to be able to call 9-1-1 in an emergency. This survey asks questions to help figure out the best ways for Americans with disabilities to call and get help from 9-1-1 services.

Under the new 21st Century Communications and Video Accessibility Act, the Federal Communications Commission (FCC) created the "Emergency Access Advisory Committee" (EAAC) to work on 9-1-1 accessibility issues. The EAAC is now conducting this survey to better understand how people like you use 9-1-1 services now and how you want to access these services in the future.

In the future, access to 9-1-1 will be changing. Callers will still be able to dial 9-1-1 using voice telephones. But a new "next generation 9-1-1 system" will also allow you to call 9-1-1 using text, video, and other kinds of devices. Some of these devices will use the Internet. This survey is to help figure out which of these devices and communications services are needed so that you have access to the new 9-1-1 system.

The survey should only take 10 to 15 minutes to complete. To participate, please respond by April 24, 2011. Your answers are kept confidential. We will not distribute any of your personal information to anyone.

Please only answer this survey if (1) you are 13 years or older, (2) have a disability or a senior, and (3) live in the United States.

If you have any questions about this survey, please contact: EAAC@fcc.gov or call (202) 418-2285.

Thank you very much for your participation. Your input is extremely valuable and will help us to shape a better 9-1-1 future.
Please tell us about yourself

1. How old are you?

Information about the ages of people answering this survey will be useful to us. Please be assured that this information will be kept confidential. Reminder: If you are under 13 years old, you should not fill out this survey.

( ) Between 13 and 19 years old
( ) Between 20 and 24 years old
( ) Between 25 and 34 years old
( ) Between 35 and 44 years old
( ) Between 45 and 54 years old
( ) Between 55 and 64 years old
( ) Between 65 and 74 years old
( ) 75 and older
( ) I prefer not to answer

2. What describes (fits) you best?

Please check all that apply.

[ ] Cognitive (autism, dementia, Down Syndrome, dyslexia, learning, traumatic brain injury)
[ ] Deaf
[ ] Hard of hearing
[ ] Late deafened
[ ] Mobility disability that affects my ability to use communication devices
[ ] Mobility disability that does not affect my ability to use communication devices
[ ] Speech disabled
[ ] Blind
[ ] Legally blind
[ ] Low vision or partially sighted
[ ] Color blind
[ ] Other – please tell us: _____________________________________
3. **What is your first (primary) language?**

( ) English  
( ) Spanish  
( ) ASL (American Sign Language)  
( ) Sign language used in a Spanish-speaking country (Mexico, Columbia, Venezuela …)  
( ) Other - please tell us: ___________________

4. **What is your second language?**

( ) English  
( ) Spanish  
( ) ASL (American Sign Language)  
( ) Sign language used in a Spanish-speaking country (Mexico, Columbia, Venezuela …)  
( ) Other - please tell us: ___________________

( ) I do not use a second language
What technology do you use to communicate?

5. Which assistive devices or programs do you use now?

*Please select all that apply.*

<table>
<thead>
<tr>
<th>Device Type</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistive listening device such as Pocketalker, neckloop or silhouette</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Augmentative alternative communication devices such as Bliss, DynoVox, LightWRITER, Pathfinder, or Pictograms</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Braille devices such as DeafBlind Communicator, DB-BrailleNote, Telebraille</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Screen reader</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Hearing aids or cochlear implants</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Computer accessibility features</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Screen magnification software such as Dolphin, Lunar, MAGic, PnC Net, SuperNova or ZoomText</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Speech-related device or service such as Hearing Carry Over, STS Relay Service, or speech synthesizer</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Text-to-speech such as IntelliTalk, Kurzweil, WordQ, Writing Aid or WYNN</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
</tbody>
</table>

6. Which types of telephones do you use now?

*Please check all that apply.*

<table>
<thead>
<tr>
<th>Telephone Type</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular landline (voice) phone</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Amplified telephone</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Telephone with large display and/or large buttons</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Captioned telephone</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Wireless mobile devices such as a cell phone or smart phone</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
</tbody>
</table>
7. Which types of video devices or video software programs do you use?

*Please check all that apply. You can skip this question if you do not use a videophone.*

<table>
<thead>
<tr>
<th>Device/Software</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop or laptop computer (PC or Mac) with camera (ntouch, P3, Z4)</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Mobile videophone (Viable CES2008, Z-340)</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Smartphones (Android, iPhone, HTC-EVO) mobile videophone (Z4, FaceTime)</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Videophone (Ojo, VP200, VPAD, Z-150)</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Video chat (Fring, Google Talk, iChat, ooVoo, Qik, Skype, Tango)</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
</tbody>
</table>

8. Which types of TTY devices do you use now?

*Please check all that apply. Skip this question if you do not have a TTY.*

<table>
<thead>
<tr>
<th>Device</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer-based TTY such as NexTalk VM, NexTalk NTS or web-based TTY</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>TTY (also known as TDD, teletypewriter or text-telephone)</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>TTY with large visual display (LVD)</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>TTY with Braille device</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
</tbody>
</table>
9. Do you use a mobile phone, smart phone or computer for media or text messaging?

*Please check all that apply. You can skip this question if you do not use text messaging, multimedia messaging or email.*

<table>
<thead>
<tr>
<th></th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Instant messaging such as AIM, Jabber, MSN, Skype, or Yahoo Messenger</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Multi-media services such as MMS, pictures or pre-recorded video</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>SMS (Short Message Service, texting)</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Social networking services such as Facebook or Twitter</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
</tbody>
</table>

10. What Telecommunications Relay Services do you use now?

*Please check all that apply. If you do not use relay services, please skip this question.*

<table>
<thead>
<tr>
<th>Relay Services</th>
<th>Almost every day</th>
<th>Fairly regularly, but not daily</th>
<th>On rare occasions</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Protocol (IP) relay services</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Video Relay Services (VRS)</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Speech-to-speech relay services</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>State relay services (traditional)</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
<tr>
<td>Captioned telephony relay services</td>
<td>()</td>
<td>()</td>
<td>()</td>
<td>()</td>
</tr>
</tbody>
</table>

11. What kind of Internet access do you have at home, at work and while traveling or commuting?

*Please check all that apply. If you do not have Internet access, please skip this question.*

<table>
<thead>
<tr>
<th>Internet Access</th>
<th>Home</th>
<th>Work</th>
<th>Traveling or commuting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dial-up modem</td>
<td>[]</td>
<td>[]</td>
<td>[]</td>
</tr>
<tr>
<td>Broadband (high-speed Internet)</td>
<td>[]</td>
<td>[]</td>
<td>[]</td>
</tr>
<tr>
<td>Cellphone with wireless data plan</td>
<td>[]</td>
<td>[]</td>
<td>[]</td>
</tr>
<tr>
<td>Library, community center, cafe, ...</td>
<td>[]</td>
<td>[]</td>
<td>[]</td>
</tr>
<tr>
<td>Other</td>
<td>[]</td>
<td>[]</td>
<td>[]</td>
</tr>
</tbody>
</table>
Past use of 9-1-1

This section of the survey is designed to identify how you communicate with 9-1-1 emergency centers today.

12. Have you called 9-1-1 in the last two years?

This includes any calls to 9-1-1 via a video or text relay service. Please select one of the following options.
( ) Once or twice
( ) Between three (3) and five (5) times
( ) Six (6) or more times
( ) I have not called 9-1-1 in the last two years

13. Which telephone device or service did you use to call 9-1-1?

Please select all that apply.
[ ] Landline telephone
[ ] Wireless/mobile telephone
[ ] Captioned telephone
[ ] Amplified telephone
[ ] TTY
[ ] Video Relay Service (VRS)
[ ] Internet Relay Service
[ ] I have not made any 9-1-1 calls in the last two years
[ ] Other - please tell us: ____________________________

14. Was there ever a situation where you needed to contact 9-1-1 but found yourself unable to?

Please select all that apply.
[ ] No
[ ] I don't have a phone or other device capable of contacting 9-1-1.
[ ] The device I use for everyday communication was not with me at the time.
[ ] The way I use to communicate is not supported by 9-1-1.
[ ] I tried contacting 9-1-1 but got no answer or a busy signal.
[ ] I tried but got disconnected.
[ ] The device I have does not allow me to effectively communicate with 9-1-1.
[ ] I was afraid I wouldn't be able to communicate with the 9-1-1 dispatcher.
[ ] I tried, but the 9-1-1 dispatcher couldn't understand my needs.
[ ] Other - please tell us: ____________________________
Preferences for calling 9-1-1 today

15. How would you prefer to be able to contact 9-1-1?

Select all that apply.

[ ] Text
[ ] Video
[ ] Speech and artificial speech
[ ] Voice, video and text together
[ ] Braille
[ ] Other - please tell us: ________________________________

16. Which texting options would you like to be able to use?

Please select all that apply. If you do not use text, please skip this question.

[ ] TTY
[ ] SMS
[ ] Instant Messaging (IM) (a sentence at a time)
[ ] Real-time text: The 9-1-1 center reads the characters you type as soon as you type them and you see the characters that the 9-1-1 dispatcher types back as soon as they type them
[ ] Email
[ ] Web page that lets you communicate in text directly to 9-1-1
[ ] Using text to call from communication systems built into your car (OnStar and Sync)
[ ] Using relay services (with any of the items you checked above)
[ ] Other: ________________________________

17. Which video options would you like to use to call 9-1-1?

Please select all that apply. If you do not use video, please skip this question.

[ ] Multi-media messages (pictures, pre-recorded video)
[ ] Video phone for sign language
[ ] Video phone for lip-reading
[ ] Video telephony on a mobile device
[ ] Web page that lets you use sign language
[ ] Using video to call from systems built into your car, like OnStar and Sync
[ ] Video relay services
[ ] I would like to send video so the dispatcher could see what's around me or look at me
[ ] Other - please tell us: ________________________________
18. Which voice and speech related services would you like to use to call 9-1-1?

Please select all that apply. If you do not use voice services, please skip this question.

[ ] Augmentative Alternative Communication Device (AACD)
[ ] Voice and text together on a cell phone (talk and listen but can use text when can't hear or speak well enough to be understood)
[ ] Using voice to call from systems built into your car like OnStar and Sync
[ ] Web page that lets you use voice and text
[ ] Video phone for lip-reading, where you hear and see the other person.
[ ] Using speech-to-speech relay services, where a person trained to understand people with speech disabilities listens and then re-speaks what you say to the 9-1-1 dispatcher.
[ ] Other - please tell us: ________________________________

19. Which services that combine voice, video and text would you like to use to call 9-1-1?

Please select all that apply. If you do not use voice, video, or text, please skip this question.

[ ] Video, voice and/or text at the same time on TV or videophone
[ ] Video, voice and/or text at the same time on cell phone
[ ] Web page that lets you use sign language, lip reading, voice, or text together

20. Which Braille options would you like to use to call 9-1-1?

Please select all that apply. If you do not use Braille, please skip this question.

[ ] Use Braille device to send text to the 9-1-1 dispatcher.
[ ] Use Braille to receive text and use video to sign back to 9-1-1 dispatcher.
[ ] Use Braille to receive text, such as instructions, from the 9-1-1 dispatcher.
[ ] Other - please tell us: ________________________________

21. Which devices would you prefer to be able to use to contact 9-1-1?

Please select all that apply.

[ ] a landline phone
[ ] a cell phone
[ ] a wireless mobile device (smartphone, pager, PDAs, etc.)
[ ] a computer with keyboard and webcam
[ ] a stand alone video phone
[ ] Other - please tell us: ________________________________

22. How important is it to you to call and communicate with 9-1-1 directly instead of through a relay service?

Please select one of the following options.

( ) Very important
( ) Somewhat important
( ) Not very important
( ) Not important at all
9-1-1 Calls in the Future

In the questions below, we want to find out how you want 9-1-1 to work in the future, using technologies that may become available in a few years.

23. How important is it to you that you are able to call 9-1-1 using the same device (using text, video, voice, and/or captioned telephone) that you use to typically communicate with friends and co-workers every day?

Please select one of the following options.
( ) Very important
( ) Somewhat important
( ) Not very important
( ) Not important at all

24. In the future, when you use a videophone to call 9-1-1, would you like to see both the 9-1-1 dispatcher and the relay service (VRS) communications assistant (or an emergency-trained sign language interpreter) during the call?

Please select one of the following options.
( ) Yes
( ) No
( ) Does not matter

25. Which of the following are important to you if you are using a videophone?

Please select all that apply. Please skip this question if you are not using a videophone.
[ ] I would like to use speech both ways.
[ ] I would like to use text both ways: you text to 9-1-1 and the 9-1-1 dispatcher texts back to you
[ ] I would like to use ASL (American Sign Language) both ways.
[ ] I would like to use video both ways so that I can lip read the 9-1-1 dispatcher and have that person see me.
[ ] I would like to speak to the 9-1-1 dispatcher, but have the 9-1-1 dispatcher use text back to me so I can see it or display it on my Braille device.
[ ] I would like to text to the 9-1-1 dispatcher, but have the 9-1-1 dispatcher speak back to me.
[ ] I would like to speak and listen, but have what the 9-1-1 dispatcher says be captioned. That way, I can hear them AND see their words on the screen of my phone while they talk.
[ ] I would like to use American Sign Language to communicate with 9-1-1, but have text come back to me (so I can display it in large print or Braille).
[ ] Other (please specify): ________________________________
26. If you are using voice to communicate with 9-1-1, what is important to you?

*Please select all that apply. Skip this question if this does not apply to you.*

[ ] I prefer to use my speech and listen to the 9-1-1 dispatcher directly.

[ ] My preference to have all information from the 9-1-1 dispatcher by voice only (I cannot see well).

[ ] I prefer to hear what 9-1-1 says AND receive text, in case I cannot understand them.

[ ] I'd like to have someone help the 9-1-1 dispatcher if 9-1-1 cannot understand my speech.

[ ] I'd like to communicate with my voice, BUT have 9-1-1 reply using text only (I cannot hear well).

[ ] None of the above

27. If you are using sign language, what would you like to be able to do when communicating with 9-1-1?

*Please select all that apply. If you are not using sign language, please skip this section.*

[ ] I'd like to communicate in sign language.

[ ] When using sign language, I'd like to read numbers or things that are hard to write down while watching sign language.

[ ] I'd like to use sign language and have the 9-1-1 dispatcher type back to me.

[ ] None of the above

28. If you are using video to communicate, what is important to you?

*Please select all that apply. If you are not using video to communicate, please skip this question.*

[ ] I'd like to be able to see the 9-1-1 dispatcher's face and lips well. (I lip read or use lip reading to help me hear.)

[ ] I'd like the 9-1-1 dispatcher to see me and hear what's happening around me.

[ ] None of the above

29. If you are using texting, what is important to you?

*Please select all that apply. If you are not using texting, please skip this question.*

[ ] I want to be able to communicate in text in both directions at the same time.

[ ] I want the 9-1-1 dispatcher see my message as soon as possible, even while I am typing it.

[ ] I only want the 9-1-1 dispatcher see my message after I finish typing it and send it.

[ ] I want to be sure that what I had typed so far would get to 9-1-1 if I pass out or am interrupted in sending text.

[ ] None of the above

30. New mobile devices may have additional functions for contacting 9-1-1.

*Please select the option that best describes your opinion.*

( ) I have a smartphone, but don't want to install a 9-1-1 app.

( ) I have a smartphone and would be willing to install a special 9-1-1 app.

( ) I don't have a smartphone, but would be willing to buy one and then install a 9-1-1 app.

( ) None of the above
Thank You!

Thank you for taking our survey. Your response will help us to make the Nation’s 9-1-1 system accessible to all. We plan to publish a report including the findings of the survey on the EAAC web site in summer 2011.