Appendix C

FINAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities was incorporated in the *Further Notice of Proposed Rulemaking* in CC Docket No. 94-102 (hereinafter referred to as the *Further Notice*). The Commission sought written public comment on the proposals in the *Further Notice*, including comments on the IRFA. The comments received are discussed below. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

A. Need for, and Objectives of, the Report and Order

The actions adopted in the Report and Order (Order) are intended to respond to the problems arising from the inability of non-initialized phones used for emergency purposes, to receive incoming calls from Public Safety Answering Points (PSAPs) seeking further information to assist in servicing E911 emergency callers. Initialized wireless mobile telephones are phones that are registered for service with a Commercial Mobile Radio Service (CMRS) carrier. Non-initialized wireless phones are not registered with a carrier. So, because carriers generally assign a dialable number to a handset only when a customer enters into a service contract, a non-initialized phone lacks a dialable number. The Commission, through the Order, addresses the problem of PSAPs inability to contact a party using a non-initialized phone in emergency situations for further information, in a number of ways. First, the Order requires that nonservice initialized handsets donated through carrier-sponsored programs and newly manufactured "911only" phones be programmed with the code 123-456-7890 to alert a PSAP that the 911 call is being made from a wireless phone that lacks call-back capability. Second, the Order requires that these phones be labeled to alert the user to the lack of call-back capability. Finally, the Order requires that public education programs be instituted to more fully inform users of the limitations of non-initialized phones. These important steps will alert the parties involved in a wireless 911 call of the need for quick information as to the caller's exact location, thus increasing the likelihood that emergency services can be dispatched quickly to save lives, while imposing limited burdens on wireless carriers and manufacturers of "911-only" telephones.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

Although the Commission received no direct responses to the IRFA, we received sixteen comments and eleven reply comments in response to the Further Notice, some of which discussed issues of interest to small entities. PSAPs, most of whom would qualify as small entities, would be effected by any actions taken or considered regarding this aspect of E911 service, and initiated the current discussion in April 2000, when several public safety entities filed a request for further consideration of solutions to the callback problems inherent in non-initialized phones. (See paragraphs three through six of the Order.) Many of the carriers and equipment manufacturers are likewise small businesses. Briefly, delays occur when individuals, often either distraught or physically or emotionally impaired, utilize non-initialized phones to seek assistance in emergency situations, and are unable to provide PSAPs with sufficient location

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¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601 et. seq., has been amended by the Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAA). Title II of the CWAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

² Public Notice, "Wireless Telecommunications Bureau Seeks Further Comment on the Commission's Rules Concerning Public Safety Answering Point Requests for Phase II Enhanced 911," 16 FCC Rcd 13670, Appendix A.

³ See 5 U.S.C. § 604.

information. PSAPs are unable to return a call from a non-initialized phone if they require further location information. Many wireless service carriers are also small entities as defined by the SBA. All parties generally agree that the ability of a PSAP to return a wireless 911 call if the originating call is dropped or the caller hangs up prematurely is important is ensuring a prompt emergency response. Public safety entities generally disagree with wireless carriers and equipment manufacturers regarding the availability and feasibility of a technical solution to the problem.

In general, comments filed by public safety interests assert that a technical means to allow PSAPs to contact non-initialized phones exists or can easily be devised. Wireless service carriers, on the other hand, maintain that no viable technical solution exists or is feasible to develop. As discussed in paragraph eight of the Order, one small entity, a 911-only phone manufacturer, SecureAlert, asserts that the costs of manufacturing call-back capability into its phone would be prohibitively high, effectively eliminating the market for 911-only phones. Other comments supporting the position that a technical solution to provide call-back capability to non-initialized phones is not feasible are discussed in paragraphs thirteen through twenty-four of the Order. Individual proposals as to how to solve the call-back problem of non-initialized phones are further discussed in this FRFA in the section discussing alternatives considered and rejected.

The Commission, in the Further Notice, also sought comment on the possibility of a requirement that all carrier-sponsored wireless phone donation programs be service initialized so that call-back from the PSAPs will be available if needed. In this regard, the Commission received comments from carriers indicating that they are already participating in service-initialized donation programs, where a dialable telephone number is delivered to the PSAP and is available if a call-back is required. These commenters also contend that Commission-mandated requirements regarding service-initialization to provide call-back from the PSAPs may have the detrimental effect of eliminating some of the carriers' voluntary donation programs. These comments, as well as the Commission's decision not to impose a mandate that all carrier-sponsored programs donate service-initialized phones, are discussed in paragraphs twenty-five through thirty-seven of the Order.

C. Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁴ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under Section 3 of the Small Business Act, unless the Commission has developed one or more definitions that are appropriate for its activities.⁶ Under the Small Business Act, a "small business concern" is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA). A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." Nationwide, as of 1992, there were

⁴ 5 U.S.C. § 603(b)(3).

⁵ 5 U.S.C. § 601(6)

⁶ 5 U.S.C. § 601(3), incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632.

⁷ 15 U.S.C. § 632.

⁸ 5 U.S.C. § 601(4).

approximately 275,801 small organizations. Nationwide, there are 4.44 million small business firms, according to SBA reporting data. 10

The definition of "small governmental jurisdiction" is one with populations of fewer than 50,000. There are 85,006 governmental jurisdictions in the nation. This number includes such entities as states, counties, cities, utility districts and school districts. There are no figures available on what portion of this number has populations of fewer than 50,000. However, this number includes 38,978 counties, cities and towns, and of those, 37,556, or ninety-six percent, have populations of fewer than 50,000. The Census Bureau estimates that this ratio is approximately accurate for all government entities. Thus, of the 85,006 governmental entities, we estimate that ninety-six percent, or about 81,600, are small entities. In this regard, we note that there are approximately 5,000 primary PSAPs, most of whom qualify as small entities because they are either small organizations or small governmental jurisdictions.

Throughout this analysis, the Commission uses the closest applicable definition under the SBA rules, the North American Industry Classification System (NAICS) standards for "Cellular and Other Wireless Telecommunications" and "Wired Telecommunications Carriers." ¹⁴ According to both of these standards, a small entity is one with no more than 1,500 employees. To determine which of the affected entities in the affected services fit into the SBA definition of small business, the Commission has consistently referred to Table 5.3 in *Trends in Telephone Service (Trends)*, a report published annually by the Commission's Wireline Competition Bureau. ¹⁵

We have included small incumbent local exchange carriers in this RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (*e.g.*, a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation." The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent local exchange carriers are not dominant in their field of operation because any such dominance is not

⁹ Department of Commerce, U.S. Bureau of the Census, 1992 Economic Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

¹⁰ See 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

¹¹ 5 U.S.C. § 601(5).

¹² 1992 Census of Governments, U.S. Bureau of the Census, U.S. Department of Commerce.

¹³ *Id*

 $^{^{14}}$ North American Industry Classification System (NAICS) codes 513322 and 51331.

¹⁵ FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone* Service, Table 5.3 (December 2000). (The Wireline Competition Bureau was formerly known as the Common Carrier Bureau.) Estimates of entities employing 1,500 or fewer employees are based on gross revenues information filed April 1, 2000, combined with employment information obtained from ARMIS and Securities and Exchange Commission filings as well as industry employment estimates published by the Bureau of Labor Statistics. The estimates do not reflect affiliates that do not provide telecommunications services or that operate only in foreign countries.

¹⁶ 15 U.S.C. § 632.

"national" in scope. ¹⁷ We have therefore included small incumbent carriers in this RFA analysis, although we emphasize that this RFA action has no effect on the Commission's analyses and determinations in other, non-RFA contexts.

Local Exchange Carriers. According to the most recent *Trends* data, 1,335 incumbent carriers reported that they were engaged in the provision of local exchange services. We do not have data specifying the number of these carriers that are either dominant in their field of operations, or are not independently owned. However, *Trends* indicates that 1,037 local exchange carriers report that, in combination with their affiliates, they have 1,500 or fewer employees, and would thus be considered small businesses as defined by NAICS.

Also included in the number of local exchange carriers is the rural radio telephone service. A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio Systems (BETRS). There are approximately 1,000 licensees in the Rural Radiotelephone Service, and we estimate that almost all of them qualify as small entities under the NAICS definition.

Competitive Access Providers and Competitive Local Exchange Carriers (CAPs and CLECs). *Trends* indicates that 349 CAPs and CLECs, 87 local resellers, and 60 other local exchange carriers reported that they were engaged in the provision of competitive local exchange services. We do not have data specifying the number of these carriers that are not independently owned and operated. However, *Trends* states that 297 CAPs and CLECs, 86 local resellers, and 56 other local exchange carriers report that, in combination with their affiliates, they have 1,500 or fewer employees, for a total of 439 such entities qualified as small entities.

Fixed Local Service Providers and Payphone Providers. *Trends* reports that there are 1,831 fixed local service providers and 758 payphone providers. Using the NAICS standard for small entity of fewer than 1,500 employees, *Trends* estimates that 1,476 fixed local service providers, in combination with affiliates, have 1,500 or fewer employees and thus qualify as small entities. In addition, 755 payphone providers report that, in combination with their affiliates, they employ 1,500 or fewer individuals.

Wireless Telephone Including Cellular, Personal Communications Service (PCS) and SMR Telephony Carriers. There are 806 entities in this category as estimated in *Trends*, and 323 such licensees in combination with their affiliates have 1,500 or fewer employees, and thus qualify, using the NAICS guide, as small businesses.

Other Mobile Service Providers. *Trends* estimates that there are 44 providers of other mobile services, and again using the NAICS standard, 43 providers of other mobile services utilize with their affiliates 1,500 or fewer employees, and thus may be considered small entities.

Toll Service Providers. *Trends* calculates that there are 738 toll service providers, including 204 interexchange carriers, 21 operator service providers, 21 pre-paid calling card providers, 21 satellite service carriers, 454 toll resellers, and 17 carriers providing other toll services. *Trends* further estimates that 656 toll service providers with their affiliates have 1,500 or fewer employees and thus qualify as small entities as defined by NAICS. This figure includes 163 interexchange carriers, 20 operator service

¹⁷ See Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC, dated May 27, 1999. The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." See 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 C.F.R. § 121.102(b).

¹⁸ BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules. 47 C.F.R. §§ 22.757, 22.759.

providers, 20 pre-paid calling card providers, 16 satellite service carriers, 423 toll resellers, and 15 carriers providing other toll services.

Offshore Radiotelephone Service. This service operates on several TV broadcast channels that are not otherwise used for TV broadcasting in the coastal area of the states bordering the Gulf of Mexico. At present, there are approximately 55 licensees in this service. The Commission is unable at this time to estimate the number of licensees that would qualify as small entities under the SBA definition for radiotelephone communications. The Commission assumes, for purposes of this FRFA, that all of the 55 licensees are small entities, as that term is defined by NAICS.

Cellular Equipment Manufacturers. The labeling requirement will affect manufacturers of 911-only phones. The Commission does not know how many total cellular equipment manufacturers are in the current market. The 1994 County Business Patterns Report of the Bureau of the Census estimates that there are 920 companies that make communications subscriber equipment. This category includes not only cellular equipment manufacturers, but television and AM/FM radio manufacturers as well. Thus, the number of cellular equipment manufacturers is considerably lower than 920. Under SBA regulations, such a communications equipment manufacturer, which includes not only U.S. cellular equipment manufacturers but also firms that manufacture radio and television broadcasting and other communications equipment, must have a total of 750 or fewer employees in order to qualify as a small business concern. This Order only affects manufacturers of 911-only phones. We are aware of only one manufacturer of 911-only phones, SecureAlert, which may be classified as a small entity. We therefore estimate that our current action will affect fewer than ten small cellular equipment manufacturers.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

As indicated in paragraphs two and twenty-six of the Order, carriers participating in non-initialized phone donation programs and manufacturers of 911-only phones have to program each handset with 123-456-7890 as its telephone number/mobile identification number. This will involve a one-time modification. Software adjustments for wireless and wireline carriers to accept and disperse the number to PSAPs to identify the calls as coming from phones which cannot be called back will also involve a one-time modification. As also indicated, carriers participating in non-initialized phone donation programs and manufacturers of 911-only phones have to label each handset and institute education programs so that users of non-initialized phones will be apprised of their limitations. The labeling requirement is also a one-time modification. Education requirements for carriers and manufacturers are described in paragraph forty-two of the Order.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives, among others: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) any exemption from coverage of the rule, or any part thereof, for such small entities.²⁰

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¹⁹ 13 C.F.R. § 121.201, NAICS code 334220.

²⁰ 5 U.S.C. § 603(c).

The issue of providing a solution to the non-initialized phone dilemma is of interest to small entities representing the public service community, and the wireless carrier and equipment manufacturing industries. As noted, most PSAPs are small entities and many carriers and equipment manufacturers are small entities. Public service entities, representing the views of PSAPs, on the one hand, are justifiably concerned with eliminating the possibility of delays in emergency response time due to their inability to contact callers using non-initialized phones to request vital location information. This incapability strains the already limited resources of PSAPs. Carriers and equipment manufacturers share PSAP concerns with impaired response time in emergency situations, but are also concerned with the practicalities of whether a technical solution is readily available at a cost that will not discourage the sale or the donation of non-initialized phones.

The Commission, in reaching a decision in the Order, carefully weighed the possible negative impact on all the small entities involved in the problem of non-initialized phone use in emergency situations, and found that a network-based technical solution to provide call-back capability to all non-initialized phones is not presently feasible. Instead, the Commission requires that non-initialized handsets donated through carrier-sponsored programs and newly manufactured 911-only phones be programmed with 123-456-7890 as their "telephone number," to alert a PSAP that the 911 call is originating from a wireless phone that lacks call-back capability. This will necessitate minor software modifications on the carriers' equipment. Additionally, the Commission requires that these phones be labeled to alert the user of the lack of call-back capability, and that public education programs be instituted to more fully inform non-initialized phone users of the their limitations. The Commission finds that these requirements place limited, one-time burdens on carriers and manufacturers of 911-only phones while alerting all the parties involved in an emergency 911 call to the need for quick, precise and complete caller location information, thus reducing the likelihood that emergency response will be delayed and limited PSAP resources misused.

The Commission considered a number of alternative solutions to the predicament raised by non-initialized phones used in emergency situations, ranging from the possibility of developing and implementing a technical solution applicable to all non-initialized phones, to the use of labeling and public education programs. Paragraphs eight through twenty-four of the Order discuss possible technical solutions proposed in the comments. The most widely-discussed technological possibilities involve using either temporary local directory numbers (TLDNs), which are currently used to deliver calls to roamers, or pseudo-mobile identification numbers (pseudo-MINs). In the former instance, it is suggested that TLDNs could be temporarily assigned, via a network mechanism, to non-initialized phones so that a PSAP would have a number to call back if prematurely disconnected. The latter instance would require the use of pseudo-MINs - a string of numbers and/or symbols, unique to each handset, which would be programmed into each non-initialized phone and used by the PSAP to effectuate a call-back. As stated in paragraphs eight through twelve of the Order, the Commission concluded that the development and implementation of either proposed theory would likely require extensive changes to the networks and would be cost prohibitive. Mandating a call-back solution at this stage would be especially difficult to justify considering the dearth of information received regarding the scope of the problem of PSAPs' inability to contact callers using non-initialized phones for further location information. No data has been provided in this proceeding to show the volume of 911 traffic generated by non-initialized phones, nor the percentage of non-initialized calls which require a call-back to effect an adequate emergency response. Comments regarding the use of TLDNs and pseudo-MINs are summarized in paragraphs sixteen through nineteen of the Order. A variation of the pseudo-MIN theory was proposed by Richard Levine of Beta Scientific Laboratory, Inc., and is considered in paragraph twenty of the Order.

Paragraphs twenty-two through twenty-three of the Order considers the possibility of providing call-back to non-initialized wireless phones which use GSM technology. Some commenters argue against this option, maintaining that the elements of this solution have not been put together in a manner to support this capability, and that even if they were, the operator's network would be at risk of being deluged by calls from closed handsets receiving the same call-back page, which could effectively take down the

entire network or a portion of the network. There would be no way for an operator to prevent calls from being placed by a handset, so, these commenters claim, there would be a serious risk of fraud and or terrorist activities.

Paragraphs twenty-five through thirty-three of the Order discuss options regarding carrier-donated handsets. One alternative raised in the FNPRM is a requirement that all carrier-sponsored wireless phone donation programs be service initialized, so that call-back from the PSAPs will available if needed. The Commission instead concluded that it would be more beneficial to needful individuals if carriers were allowed to continue to choose which program best serves their communities. While call-back may not be available in some instances, the Commission does not find that mandating service-initialization requirements on voluntary industry-led donation programs would be in the best interests of public safety. Many carriers are already participating in service-initialized donation programs, where a dialable telephone number is delivered to the PSAP and is available if a call-back is required. In addition, various service-initialized programs can be tailored by the carriers to provide users with the best available emergency access, while minimizing potential abuse of their programs.

In recognition of the concerns of public service entities, while the Commission does not impose a mandate that all carrier-sponsored programs donate only service-initialized phones, we do place requirements on those programs where non-initialized phones are donated. Additionally, in paragraph twenty-seven, the Commission adopts a labeling requirement for programs where a carrier donates service-initialized handsets, but blocks all call-backs to the phone. The label must notify the user that the called party will not be able to call the user back, and that in the event of an emergency, the user should convey the exact location of the emergency to the called party as soon as possible.

Finally, the Commission, as stated in paragraphs thirty-eight through forty-two of the Order, mandated that labels be affixed to each non-initialized phone and that carriers and manufacturers institute public education programs to alert users of non-initialized phones that call-back is unavailable and that the user should convey exact location information to the 911 operator as soon as possible.

Report to Congress: The Commission will send a copy of this Order, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.²¹ In addition, the Commission will send a copy of this Order, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of this Order, and FRFA (or summaries thereof) will also be published in the *Federal Register*. ²²

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²¹ 5 U.S.C. § 801 (a)(1)(A)

²² See 5 U.S.C. § 604(b)