

also seek comment on ways of obtaining independent verification of competition information provided for the report. Which independent sources can be reliably used to verify carrier-supplied coverage information? Do commenters believe such verification is necessary in analyzing service availability and competition?

17. In addition to analyzing service availability by all facilities-based mobile telephone carriers, previous *CMRS Reports* have discussed “nationwide” mobile telephone operators. Companies that analysts typically describe as being nationwide offer service in at least some part of the western, midwestern, and eastern United States. This label does not necessarily mean that the operator’s license areas, service areas, or pricing plans cover the entire land area of the United States. The *Seventh Report* listed six carriers that analysts typically describe as nationwide mobile telephone operators, all of which, with their affiliates and partnerships, have licenses covering between 230 and 285 million people. We seek comment on whether it is appropriate to call these similarly situated operators “nationwide” mobile telephone operators. Is there other terminology that would better describe the carriers that have a relatively large number of licensed POPs and provide coverage in multiple large regions of the United States?

iii. Market Performance and Key Metrics

18. The *CMRS Reports* have looked at a series of key metrics as indicators of the demand for and reliance on mobile telephone service. Examples of key metrics employed in the past include the number of subscribers and penetration rates, average minutes of use per subscriber per month (“MOUs”), average revenue per unit, and churn. In addition, the *CMRS Reports* look at the prices for mobile telephone services, including new developments in pricing plans; the extent of digital service; and wireless-wireline competition. The sources of data and analysis of these metrics are discussed. Are there other metrics or techniques that should be used to analyze competition in the mobile telephone sector? Are metrics available on a national and/or sub-national level? What types of conclusions can and cannot be drawn from the current and recommended metrics? For example, is service quality related to competition? How would the Commission measure service quality?

(a) Subscribership

19. One of the key metrics that provides an indication of the demand

for mobile telephone service is the total number of subscribers. Prior to the *Seventh Report*, the Commission relied on estimated national subscribership data from a semi-annual survey, started in 1985, conducted by the Cellular Telecommunications and Internet Association (“CTIA”). Beginning with the *Seventh Report*, however, the Commission was able to estimate the number of U.S. subscribers using information filed directly with the FCC. This information, the Numbering Report Utilization / Forecast (“NRUF”) data, tracks phone number usage in the United States. All mobile telephone carriers must report to the FCC which of their phone numbers they have assigned to end users, thereby permitting the Commission to make an accurate estimate of the total number of mobile telephone subscribers. As stated in the *Seventh Report*, the Commission used NRUF data to estimate that there were 128.5 million subscribers in the United States as of December 31, 2001. The CTIA estimate for the same time was 128.4 million subscribers.

20. We seek comment on the use of NRUF data to estimate the total number of U.S. mobile telephone subscribers. We also seek comment on the continued use of CTIA’s estimate from its semi-annual survey. Furthermore, we request information from commenters on other data sources that are available to determine the number of U.S. mobile telephone subscribers and whether parties are willing to provide the data. In addition, we request subscribership data that would assist in a greater understanding of the competitive landscape, such as penetration rates by age cohorts or household penetration rates.

21. The Commission also collects subscribership data as part of the local competition and broadband data gathering program. Mobile telephone carriers with more than 10,000 facility-based subscribers in a state are required to report their number of subscribers in those states twice a year to the Commission. Using this data, the Commission reported that mobile telephone carriers had 122.4 million U.S. subscribers as of December 31, 2001. For purposes of the Eighth Report, we seek comment on whether this data should be used to draw any conclusions about the mobile telephone sector, or whether it undercounts subscribership to such a degree that it should not be employed for such purposes.

22. NRUF data is submitted to the Commission on a rate center basis. Rate center boundaries have in large part been determined by incumbent local exchange carriers for their own network

management purposes. Because rate center boundaries are relatively small, the NRUF data allows the Commission to make sub-national or regional estimates of mobile telephone subscribership and penetration. However, there are a number of disadvantages associated with using NRUF data for this purpose. First, because CMRS carriers have wide latitude in choosing to which rate center to assign a phone number across a large geographic area, rate center boundaries are not necessarily indicative of where a phone number assignee, and hence a mobile telephone subscriber, lives, works, or uses her phone. In addition, rate center boundaries are not coterminous with other boundaries frequently used in mobile telephone analyses, such as counties, Cellular Market Areas (“CMAs”), or BTAs. Furthermore, in order to protect the confidentiality of the companies submitting NRUF data, the Commission does not report the number of subscribers for geographic areas in which there are three or fewer carriers.

23. For purposes of the *Seventh Report*, the Commission chose to use Economic Areas (“EAs”) as the geographic unit for its sub-national subscribership analysis using NRUF data, in part because it minimized many of NRUF’s drawbacks, discussed. EAs, which are defined by the Department of Commerce, consist of one or more economic nodes and the surrounding areas that are economically related to the node. One of the main factors in determining the economic relationship between the economic node(s) and the surrounding areas is commuting patterns, so that each EA includes, as far as possible, the place of work and the place of residence of its labor force. Because EAs are large enough to include many rate centers and because they attempt to capture both the rate centers in which subscribers have their numbers assigned and the larger area in which they use their phones, an EA-based analysis minimizes the pitfalls of the NRUF data while still providing useful sub-national penetration information.

24. We ask for comment on how to determine which geographic area or areas should be used, for purposes of the Eighth Report, to calculate mobile telephone subscribership and penetration rates. We request opinions on the appropriateness of using EAs for such calculations. Would other geographic areas be appropriate to use in place of or in addition to EAs, such as states, Major Trading Areas (“MTAs”), BTAs, CMAs, or counties, noting the caveats of the NRUF data