



## Conclusions and Recommendations

The PSCW takes seriously its obligations and welcomes the opportunity to keep the Legislature informed about the status of telecommunications infrastructure and the administration of the USF. These reports will continue to document the status of existing infrastructure and trends, changes, and advances in technology, along with statistics on USF programs. The Commission considers this reporting an important part of its role to assure that infrastructure and programs are in place so that customers have access to reasonably priced and quality communications services.

Both urban and rural providers have seen significant changes and challenges in providing service as technologies evolve, fiber facilities are built further into the network and partnerships are developed between different types of providers. These partnerships, including wireline/wireless, retail/wholesale and triple play relationships give consumers increased access to advanced and bundled services and provide additional service choices for consumers. These changes also alter traditional service provisioning models creating both opportunities and challenges for meeting infrastructure needs and universal service assurances. The Commission will continue to monitor these changes and will alert the Legislature to new issues as they are identified and point out concerns that may arise including problems with collecting and reporting information because of the divergent state of regulation and oversight of the entities that are part of the telecommunications landscape.

### Infrastructure

#### General

On the specific parameters for which the Legislature has directed reporting, Wisconsin's infrastructure has continued to grow and generally meet consumers' needs. There have been significant advances in fiber deployment and broadband networks across the state. Incumbent and competitive providers have continued to make investments that add to the robustness of Wisconsin's telecommunications infrastructure. New technologies and other provider types also contribute the coverage of the state.

The Commission will continue to work with incumbent and competitive providers in the collection and publishing of relevant data on deployment of infrastructure and new services offered in the state. The Commission will also use FCC data where available to provide some basic information on other types of providers. The results of this work will provide legislators, local communities and consumers with information on the status of infrastructure and the technology changes affecting communications services available in the State of Wisconsin.

The legislative reporting construct for infrastructure issues is now almost a decade and a half old. To make future reports more current, the Commission again recommends changes that cover the reporting requirements under Wis. Stat. § 196.196(5)f. These include eliminating the specific mandate for ISDN reporting and introducing a more neutral platform for technology reporting. These changes will help make the reporting requirements more flexible.

### Broadband

Both urban and rural areas have seen increased rollout of broadband services, many of these riding on advanced fiber networks. Wisconsin has a robust network of fiber backbone facilities in place. These and other fiber networks are used extensively and invested in by all network provider types. Two significant developments in infrastructure are the deployment of Fiber to the Premises (FTTP) and wireless broadband networks in all areas of the state. A number of rural companies have developed extensive FTTP applications. These are in place across the state and consumers are seeing the benefit of these advanced service. In addition, providers have applied for federal RDUP loans to deploy broadband wireless networks. ILECs, CLECs, CATV companies, and broadband Internet providers have also added facilities and increased bandwidth availability. Often, VoIP-based services ride on the new technology offerings. It remains important to track where broadband service is available and what providers offer what types of services.

As referenced in the infrastructure section of this report, a number of states have completed or have proposed a broadband inventory for their state, including Kentucky and California. The Commission recommends that Wisconsin also proceed with taking this type of inventory. This could include collecting data on provider types, locations, data transmission capabilities, and cost of services. It could identify areas that are served with a number of providers and those that are underserved or have no service available. The data the Commission staff has collected to date has been on an exchange basis or on a zip code basis. This information is readily available and gives a general, but not complete, picture of the extent of broadband deployment. The inventory could include information from all providers of broadband service noting the differences between urban and rural locations. This type of inventory would not only give a complete picture of broadband deployment but also assist the Legislature in evaluating if a plan or policy is needed to assure equity access to broadband for all in customers in the state.

### Reporting

The Commission collects data from all ILECs and CLECs, both through annual reports and data requests. Only two of the CLECs did not respond to the data request used for this report.<sup>21</sup> As the Commission has noted in past reports, information from all other providers is not available. Customers served by CATV, wireless, satellite, and independent VoIP providers continue to grow. These providers, along with their supporting infrastructure and investments in Wisconsin, are difficult to document. The Commission staff did request data from CATV providers. Fifty-seven percent of the companies responded; one of the largest CATV providers declined to provide all the information requested. Since the CATV companies, along with wireless companies and VoIP providers, are not under Commission jurisdiction, they are under no obligation to provide data. In the case of VoIP

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<sup>21</sup> These were Globalcom, Inc. and Closecall America.

providers, it is often difficult to identify who, where, and what type VoIP service is offered in the state. Although, the data provided by ILECs and CLECs does provide a baseline for infrastructure and services in the state, this inconsistency in data makes it difficult to give a complete picture of the infrastructure present and the services available throughout the State of Wisconsin. Consequently, as the Commission has done in past Infrastructure Reports, we again recommend statutory changes that will expand the Commission's ability to gather data and to impose penalties on those entities that are not responsive to Commission data requests

### Consumer Protection

As technologies change, consumers increasingly have new choices and options to meet their communications needs. As offerings expand and change, it is important that consumers be kept informed of their responsibilities and have a source of help when problems arise with their communication services. For example, in the case of Fiber to the Premises installations, back-up batteries must be maintained by the customer at these installations. The Commission is working with industry groups and is in the process of preparing information that will link the customer with documents to help explain the inside wire connection to the outside fiber and outline the customers responsibilities for maintaining the battery back-up at the customer's location. This type of information is necessary so that consumers have a resource for information that will document their responsibilities and outline how they may be affected by new technologies. The Commission intends to remain attuned to consumer information needs as infrastructure advances arise.

### Universal Service

As shown in Part 5 above, the USF is working to fulfill the legislative mandates of assuring the availability of reasonably-priced telecommunications services to selected groups and parts of the state. Monitoring how well the USF meets consumer needs is an ongoing activity of the Commission. The Commission does recommend that the existing statutory requirement in Wis. Stat. § 196.218(5r), which has the Commission file an annual USF report, be modified to requirement for a biennial filing. This change will continue an adequate and sufficient level of USF oversight, but offer administrative advantages by allowing the USF and infrastructure reports to be prepared and filed on a joint basis.

### Recommendations

The Commission recommends the following to the Legislature to further necessary oversight of infrastructure and universal service issues in the state:

- 1) Change Wis. Stat. § 196.196(5)f. reporting requirements, including replacement of the specific ISDN mandate with a more neutral technology reference.
- 2) Complete a broadband inventory for the state of Wisconsin.

- 3) Establish statutory authority under Wis. Stat. § 196.25 to allow the Commission to collect data from CATV, wireless and VoIP providers so that the Legislature and the public have complete and relevant information covering all areas of the communications industry. In addition, a provision should be added to assess a penalty or other form of redress where providers do not respond to data requests as required under Wis. Stat. § 196.25(3).
- 4) Change the annual USF reporting requirement to a biennial requirement so that future USF reports and infrastructure reports can be jointly prepared and filed.