

PLAN ELEMENT V: TELECOMMUNICATIONS

Telecommunications is a major industry shaping economic development, business and daily lives. Businesses want the most cutting edge technology that is out there, and residents want good affordable service. Unlike other utilities, the Telecommunications Act of 1996 allows anyone to enter any communications business in any market. The City cannot prohibit telecommunications services, but telecommunications facilities, towers, and usage of right-of-way can be monitored and managed. However, the City needs to be very careful in dealing with telecommunications, hence the telecommunications portion of the 2020 Plan.

According to the *Growing Smart Legislative Guidebook*, telecommunications refers to “any origination, creation, transmission, emission, storage-retrieval, or reception of signs, signals, writing, images, sounds, or intelligence of any nature, by wire, radio, television, optical, or other means.” A Telecommunications Facility refers to “any facility that transmits and/or receives signals by electromagnetic or optical means, including antennas, microwave dishes, horns, or similar types of equipment, towers or similar structures supporting such equipment, and equipment buildings.”

The optimal goal for the City is for all citizens, businesses and organizations in Rockford to have access to the latest telecommunications services available. The City should use telecommunications technology to:

- ▶ Provide its citizens with information in an affordable and timely manner.
- ▶ Bridge gaps within society.
- ▶ Cultivate communication.
- ▶ Foster economic development.

The current Zoning Ordinance only addresses size and height restrictions of telecommunications towers. The City of Rockford should update the ordinance to meet with the goals of this section of the 2020 Plan.

Fiber Optic Lines

Fiber optic cable is what transmits the Internet using City right-of-way both above and below grade. The map shown on the following page was produced by the Council of 100 to illustrate where fiber optic lines currently exist in Winnebago County. The map also identifies industrial parks, which could not only be high users of telecommunications services but are also favorable sites for telecommunications facilities.

Because fiber optic lines use public rights-of-way, the City must insure that they are used efficiently. Rockford currently has a permitting process for telecommunications and a franchising fee for SBC (Ameritech). The Public Works Department has a draft ordinance based on the model right-of-way standards ordinance created by the Illinois Municipal League. There have been attempts for the City to adopt this model that have been unsuccessful. The City should continue to try to adopt this model or at least update current right-of-way policies to address the telecommunications industry more progressively. Also, some telecommunications providers claim that franchise agreements violate the Telecommunications Act of 1996, the model ordinance states:

The League believes that [the model's] provisions strike a fair compromise between honoring the municipality's contractual obligations under existing franchises and abiding by the Telecommunications Act's mandate to provide a level playing field to all providers of telecommunications services.

Telecommunications Facilities

The need for and importance of towers will only continue to increase as time goes on. Currently, the major use of towers is to provide cellular phone service. The entire City of Rockford is covered by at least one cellular phone company. Wireless Internet, also known as Wi-Fi, is becoming, and will continue to become, increasingly popular. Some cities have even used Wi-Fi as a downtown revitalization strategy or an economic development tool by

providing free Wi-Fi service in selected areas. The growth in Wi-Fi will require additional towers in the area to facilitate new demands in service. The Zoning Ordinance currently only addresses antenna support structure and needs to be updated to accommodate the growing need for new antennas. The most important issues to address are permitted locations of antennas, safety and cohesiveness.

Goals and Policies

Telecommunications facilities should:

- ▶ Accommodate a minimum of three providers as allowed by height restrictions.
- ▶ Give adequate compensation for use of public rights-of-way.
- ▶ Be provided in a publicly safe manner.
- ▶ Be cohesive with the surrounding environment.

Priority will be given to favorable locations such as:

- ▶ Existing public structures provided that the tower is compatible with the structure and does not adversely affect the structure or architectural significance.
- ▶ Collocation sites.
- ▶ Industrial zoned areas.



Facilities should not:

- ▶ Locate near airports where they could disrupt operations.
- ▶ Locate in historic districts.
- ▶ Interfere with health institutions or school facilities.
- ▶ Locate in or near residential areas whenever possible.

Telecommunication Providers

The Council of 100 has done a survey of area telecommunications providers. That information is summarized below.

- **Choice One Communications** Choice One Communications is a facilities-based CLEC whose main thrust is delivering a full range of competitively priced business telephone services. Services in the Rockford area include:
 - ▷ Local and long distance phone services
 - ▷ Voice mail
 - ▷ Dedicated T-1 Service
 - ▷ DSL Internet access
 - ▷ Internet/Data services, including Web design and Web hosting
 - ▷ Dedicated internet/Data Service
 - ▷ VPN - Virtual Private Networks
 - ▷ Firewall security
 - ▷ NAT - Network Address Translation
 - ▷ On-line billing and payment
 - ▷ Bundled services
- **Insight Communications** holds a franchise with the City of Rockford to provide cable TV service in the City. In addition to cable TV, Insight provides high speed internet access via cable modem to its customers.
- **McLeod USA** is a facilities-based telecommunications provider headquartered in Cedar Rapids, Iowa, offers a variety of services, including local and long distance services, voice mail, teleconferencing and calling card

services to both businesses and residential customers, Internet access, Virtual Private Networks, and Virtual Internet Service. Services in the Rockford area include:

- ▷ Dedicated Internet Access
 - ▷ KnowledgePortal™ - an application enabling businesses to create, manage, and deliver streaming-media based interactive presentations from the company's own Web site, in real time and with real quality
 - ▷ VPN - flexible, affordable, custom solutions utilizing a nationwide network of over 360
 - ▷ POP's, nearly 900 dial-access cities (local call), and IPSec security software which affords data encryption to ensure security
 - ▷ Enhanced 800 Service - a repertoire of features including Deal Locator, which automatically routes the caller to the store or location nearest to them,
 - ▷ Messaging/Menuing, Percentage Allocation, which allows the routing of calls to the same toll-free number on a percentage basis, Whisper, a voice announcement identifying tollfree calls, and more
 - ▷ Dedicated/Shared Web Hosting - dedicated lines and telephone company servers allows service to expand as the company grows
- **SBC** (formerly Ameritech), originally one of the Bell companies, offers the following services in Rockford:
 - ▷ Local phone service
 - ▷ DS3
 - ▷ DSL
 - ▷ SONET
 - ▷ ISDN
 - **TDS METROCOM** is a Wisconsin-based company offering services to the Rockford area and eastern Lake and Cook counties. Services in the Rockford area include:
 - ▷ Digital and analog phone service
 - ▷ CENTREX
 - ▷ 800 service
 - ▷ Calling card
 - ▷ Voice messaging
 - ▷ Internet access--dial-up
 - ▷ DSL--for single user or LAN
 - ▷ Private lines -- LAN-to-LAN connection, video conferencing, host-to-host connections
 - ▷ ISDN
 - ▷ DS3
 - ▷ VPN
 - ▷ SONET technology

CENTREX: Central office exchange service

CLEC: Competitive long exchange carrier

DS3: A dedicated phone connection supporting data rates of about 43 megabytes

DSL: Digital subscriber lines

ISDN: Integrated service digital network

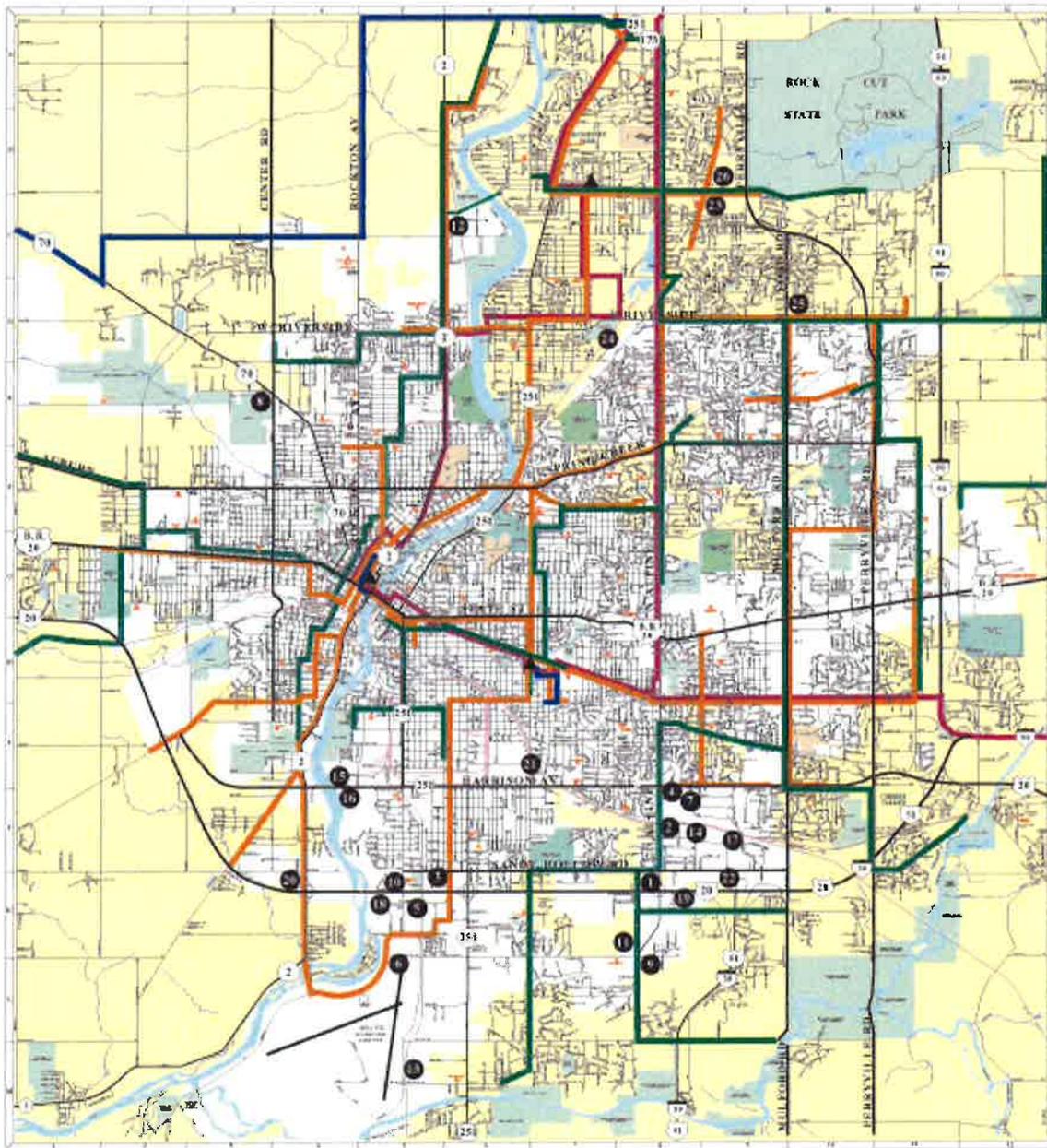
NAT: Network Address Translation

POPs: Post office protocol

SONET: Synchronous optimal network

VPN: Virtual Private Networks

Winnebago County Fiber Optic Map



Courtesy of the Council of 100

Telecommunications Implementation Matrix

Goal	Objective	Action	Who	When
All citizens of Rockford should have access to the latest telecommunications services available.	Provide its citizens with information in an affordable and timely manner.	Update the City's website so that it provides more information and services.	All City Departments	Ongoing
	Bridge gaps within society.	Create a community computer center and/or facilitate access to community computer labs such as the library and schools	All City Departments	Immediate
	Cultivate communication.	Create an online forum on the City's website	All City Departments	Short-term
All businesses in Rockford should have access to the latest telecommunications services.	Foster economic development.	Update the City's zoning ordinance	Community Development Department	Immediate
		Support Wireless development	All City Departments	Ongoing
Telecommunications facilities should be cohesive with the surrounding environment, safe and as unobstructive as possible	Telecommunications facilities should accommodate a minimum of three providers as allowed by height restrictions	Update the City's zoning ordinance	Community Development Department	Immediate
	Telecommunications facilities should give adequate compensation for use of public rights-of-way	Adopt the Illinois Municipal League's model ordinance	Public Works	Immediate
	Priority should be given to favorable locations such as public structures, collocation sites and industrial zones	Update the City's zoning ordinance	Community Development Department	Immediate
	Facilities should not locate near airports, in historic districts or in residential areas whenever possible	Update the City's zoning ordinance	Community Development Department	Immediate

Fiber Optic Routes

Ameritech

Choice One

Communications

Insight Communications

McLeodUSA

Point of Presence



Industrial Parks

Rockford

1 Alpine Business Park

2 Alpine Industrial Park

3 Camp Grant Industrial Subdivision

4 Eastrock Industrial Park

5 Greater Rockford Industrial Park

6 Greater Rockford Airport Park

7 Harrison Park

8 J.S.G. Dev. Industrial Subdivision

9 Jefferson Tech Industrial Park

10 Kishwaukee Industrial

Subdivision

11 Linden Road Business Park

12 Northrock Industrial Park

13 Parkside Industrial Subdivision

14 Pyramid Industrial Park

15 Rock River Valley Industrial Park

16 Sabrooke Industrial Park

17 Sandy Hollow Industrial Park

18 South Bypass Industrial Park

19 Southeast Technical Center

20 Southrock Industrial Park

21 Southtown Business Park

22 Stenstrom Industrial Park

Leves Park

23 Harlem Village Industrial Park

24 River Lane Industrial Subdivision

25 Rock Valley Business Center

26 Zenith Center Business Park