

**CITY OF MADISON
OFFICE OF THE CITY ATTORNEY
Room 401, CCB
266-4511**

Date: November 26, 2013

MEMORANDUM

TO: Mike May
FROM: Siely Joshi, Law Clerk
RE: City-wide public access to Wi-Fi services

QUESTIONS PRESENTED

- I. Could the City provide broad public access to Wi-Fi services?
- II. If so, how?

BRIEF ANSWERS

- I. Yes, the city may provide broad public access to Wi-Fi services as long as the procedural prerequisites provided under Wis. Stat. § 66.0422 are satisfied.
- II. In order to provide broad public access to Wi-Fi services, the city must first hold a public hearing on the proposed ordinance or resolution, provide proper notice of this hearing, and prepare cost-benefit analysis regarding the telecommunications service and make this analysis available to the public. These are the statutory procedural prerequisites listed under Wis. Stat. § 66.0422. The city may be exempt from these procedural requirements if certain other conditions listed in Wis. Stat. § 66.0422(3), (3d), (3m) or (3n) are applicable in the present situation. Furthermore, the city may provide broad public access to Wi-Fi services by adopting one of the following four business models: (i) the

community network model, (ii) the public utility model, (iii) the private consortium model, and (iv) the cooperative wholesale model.

DISCUSSION

I. Federal Legislation – The Telecommunications Act of 1996

The Telecommunications Act of 1996 (TCA) was intended to accomplish two goals: (1) to catch up with the telecommunications advancements that had occurred since 1934, the last time Congress passed comprehensive legislation regarding telecommunications, and (2) to “make available, so far as possible, to all the people of the United States...a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at a reasonable charges.”¹ In order to accomplish this latter objective, Section 253 of the TCA stipulates that any state or local statute or regulation that “may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service” is in violation of federal law and is subject to preemption by the FCC.”²

Although Section 253 of the TCA limits state and local government authority over intrastate communications services, courts have narrowly interpreted this limitation and held that state and local governments retain broad power over intrastate telecommunications.³ The U.S. Supreme Court ruled on this matter in *Nixon v. Missouri Municipal League*, where the Court held that the TCA did not preempt a state law that prohibited state political subdivisions from offering telecommunications.⁴ In *Nixon*, the Missouri Municipal League challenged the Missouri

¹ Adam Christense, *Wi-Fi 'ght Them When You Can Join Them? How the Philadelphia Compromise May Have Saved Municipally-Owned Telecommunications Services*, 58 FED. COMM. L.J. 683, 688 (2006).

² *Id.*

³ *Id.* at 689.

⁴ *Nixon v. Missouri Municipal League*, 541 U.S. 125 (2004).

state law based on the contention that the TCA stated that no state or local statute can limit “any entity” from providing interstate or intrastate telecommunication services.⁵ The Court, however, determined that the class of “entities” contemplated under the TCA did not include “the state’s own subdivisions.”⁶ Thus, the Court ruled that states could impose laws precluding municipal interventions, effectively upholding the practice in approximately a dozen states where state law forbade municipal provisions of communications services.⁷

In *Nixon v. Missouri Municipal League*, the Supreme Court was careful to note that the decision turned only on whether the TCA could be interpreted to preempt a state’s rights to regulate itself and its subdivisions. The Court’s ruling that municipalities do not have rights that supersede those outlined by the state legislature has been applied to allow states to restrict or regulate local government’s entry into Wi-Fi.⁸ As a result, municipalities seeking to provide broad public access internet Wi-Fi services should determine their rights to do so by looking to their state law regarding telecommunication services.

II. State Legislation

a. In General

Current state Wi-Fi legislation tends to fall into three main categories: (1) prohibitions on municipal operation, (2) limitations on types of systems, and (3) procedural prerequisites for local governmental market entry.⁹ In Wisconsin, state legislation regarding Wi-Fi falls under the third category; thus, municipal governments may enter the local Wi-Fi market as long as the

⁵ *Id.*

⁶ *Id.*

⁷ Balhoff & Rowe LLC, *Municipal Broadband: Digging Beneath the Surface*, p. 120, available at <http://www.balhoffrowe.com/pdf/Municipal%20Broadband--Digging%20Beneath%20the%20Surface.pdf>

⁸ Michael Botein, *Regulation of Municipal Wi-Fi*, 51 N.Y.L.S. L.R. 976, 983 (2006).

⁹ *Id.*

proper procedural prerequisites are first satisfied.¹⁰ States that allow for municipal Wi-Fi are generally concerned about distortions to the marketplace and therefore focus their legislation on protecting citizens' rights to vote on governmental activity, and imposing clear rules against the use of anti-competitive advantages (i.e. cross-subsidization, below-market rates), as illustrated by Wis. Stat. § 66.0422.

b. Wis. Stat. § 66.0422

Act 278 of the 2003 Wisconsin Legislature, codified as Wis. Stat. § 66.0422, creates procedural requirements related to the start-up of municipal cable television, broadband, or telecommunications services. Under Wis. Stat. § 66.0422(2),

[N]o local government may enact an ordinance or adopt a resolution authorizing the local government to construct, own, or operate any facility for providing cable service, telecommunications service, or broadband service, directly or indirectly, to the public, *unless all of the following are satisfied*:

- (a) The *local government holds a public hearing* on the proposed ordinance or resolution.
- (b) *Notice of the public hearing is given* by publication of a class 3 notice under ch. 985 in the area affected by the proposed ordinance or resolution.
- (c) No less than 30 days before the public hearing, *the local government prepares and makes available for public inspection a report* estimating the total costs of, and revenues derived from, constructing, owning, or operating the facility and including a cost-benefit analysis of the facility for a period of at least 3 years. The costs that are subject to this paragraph

¹⁰ See Wis. Stat. § 66.0422 (2011-12).

include personnel costs and costs of acquiring, installing, maintaining, repairing, or operating any plant or equipment, and include an appropriate allocated portion of costs of personnel, plant, or equipment that are used to provide jointly both telecommunications services and other services.¹¹

(emphasis added)

Thus, under Wis. Stat. §66.0422, it appears that a municipality may provide broad public access to Wi-Fi services as long as the municipality holds a public hearing on the proposed ordinance or resolution, provides proper notice of this hearing, prepares a cost-benefit analysis regarding the telecommunications service and makes this analysis available to the public.

Moreover, a municipality seeking to provide broad public access to Wi-Fi services may be exempt from these procedural requirements if certain other conditions listed in Wis. Stat. § 66.0422(3), (3d), (3m) or (3n) are applicable. Specific exemptions include: (i) a municipality with CLEC status and adoption of an advisory referendum, (ii) broadband service provision in the absence of private providers, (iii) nondiscriminatory wholesale broadband service, and (iv) a grandfather clause for 2 existing municipal cable TV systems. Wisconsin state law also allows a municipality to conduct a feasibility study of proposed municipal cable, broadband, or telecommunications service without first complying with the procedural requirements.¹² However, it requires that, if the municipality subsequently provides the service, it must reimburse the municipal treasury the cost of the study from the revenues derived from the service.¹³

¹¹ Wis. Stat. § 66.0422(2) (2011-12).

¹² Wis. Stat. § 66.0422(5) (2011-12).

¹³ *Id.*

Based on this discussion, it appears that the city of Madison may provide broad public access to Wi-Fi services if the statutory procedural prerequisites provided under Wis. Stat. § 66.0422 are satisfied.

III. Potential Municipal Wireless Business Models¹⁴

Municipalities seeking to provide broad public access to Wi-Fi services usually adopt one of the following four municipal wireless business models: (i) the community network model, (ii) the public utility model, (iii) the private consortium model, and (iv) the cooperative wholesale model. The following section discusses the details and practical applications of each of these four business models.

a. *Community Network Model*

The community network model is focused on providing free or low cost wireless broadband access. Two hybrid models have emerged from cities using this model, but both share similar characteristics: free Wi-Fi access in areas known for tourism or targeted for revitalization. This model most often supports wireless hot zones or citywide networks and is being used in Hermosa Beach, California, and Austin, Texas.

The first hybrid involves the city or a non-profit entity obtaining funding from taxpayer funds, foundation grants, donations from citizens and businesses, and advertising revenue from a splash page. The city or non-profit entity then builds the network and provides marketing and customer service. Hermosa Beach has used this model to provide free Wi-Fi to residents throughout the city. The network has been funded largely through general fund monies, although the city is evaluating options to partner with Google to generate advertising revenue.

¹⁴ Stone, Maitland & Tapia, *Making IT Work for Municipalities: Building Municipal Wireless Networks*, available at <http://atapia.ist.psu.edu/wp-content/uploads/stone-maitland-tapia-final.pdf> (discussing the four municipal wireless business models).

The second hybrid model under the community network approach involves a non-profit community group or government entity that acquires funding to educate business owners about the benefits of deploying a Wi-Fi hotspot. The city or community group then acts as a catalyst to encourage the organic build-out of a Wi-Fi network in downtown areas. Since the city or non-profit organization is not funding the network deployment, the need to use city funds is substantially lower. The network, however, may not be ubiquitous because it depends on venue owners' financial support. This model is being used in Austin, Texas.¹⁵ Through this organic approach, the Austin Wireless City Project is responsible for deploying over 80 hotspots throughout downtown Austin.¹⁶

The most pronounced advantage to the community network model is free access to broadband. The model supports targeting certain areas for revitalization by attracting people to downtown areas. Since the network is most often provided as an amenity, little focus is given to building a universally available, secure, and reliable network. Therefore, the city government usually chooses not to use the network to support mobile applications for public safety and public works functions.

b. *Public utility*

Under the public utility model, the need to deploy, operate, and manage broadband service requires a local government to establish a new city department or combine operations with existing water, gas, and/or electric departments. The broadband utility's capital cost is funded through the use of taxpayer dollars and revenue bonds. The public utility installs the network, markets the service, and provides customer support and billing. In addition, the local

¹⁵ *Austin Wireless City*, available at <http://www.austinwirelesscity.org/about.php>.

¹⁶ *Id.*

government may choose to provide both fixed and mobile broadband to its agencies. This model is most often used when private providers choose not to offer broadband service in a city for financial reasons. The City of Chaska, Minnesota, has used the public utility model to deploy a citywide Wi-Fi mesh network.¹⁷

The public utility model allows local governments to control a number of variables involving broadband access. Since governments have easier access to capital through tax dollars, bonds, and other revenue sources, municipalities do not always face the same capital scarcity that private sector providers do. With a clear funding strategy, public utility networks can be built quickly by a city interested in providing broadband service to its citizens. However, this model's dependence on taxpayer dollars can make it both politically unattractive and almost financially impossible for some city leaders.

Cities are also hesitant to enter direct competition with private sector providers. Since this model requires head-to-head competition between the local government and private sector providers, little opportunity is left for local government to partner with for-profit firms to operate and manage the network. However, the public utility model is used by rural cities that cannot receive broadband access from a private provider or that cannot have competitive prices for broadband service. In these cases, cities are much more willing to use this model to insure that citizens have the access to information that many require.

c. Private consortium

The private consortium model involves one or many private sector provider(s) offering broadband service to end users. Funded by private investment, the provider offers access to both the city and to subscribers for a monthly fee. The provider is responsible for operating and maintaining the network and providing technical support, customer service, and billing. Under

¹⁷ Chaska.net, *available at* <http://www.chaska.net/>.

this model, the private sector bears the responsibility for funding the network deployment and maintenance costs; thus, no taxpayer funds are required and no city employees are needed to provide service.

Opportunities for partnerships exist between the local government and the private provider under this model. Private firms often need access to city assets, including street lights or traffic lights, to deploy a wireless network. Cities often provide these assets to private providers at low fees in exchange for low-cost wireless broadband access. Some wireless broadband providers agree to revenue sharing agreements with the city, creating a new revenue stream for the local government. Since the network is professionally monitored and can be secured, government agencies, including public safety, can use the network for mobility applications.

d. *Cooperative wholesale*

The cooperative wholesale model provides two options for local political leaders. The first is a city-owned model in which the city makes a “build versus buy” decision regarding broadband service. The city builds a broadband network to provide its broadband and telecommunications needs. Funding for the network comes from taxpayer dollars, state and federal grants, foundation grants, and/or bonds. After securing funds, the city issues a Request for Proposal for the design, deployment, and management of the network. Once the network is deployed and the city has completed in-sourcing its broadband needs, the excess capacity is sold to private providers at wholesale prices. The private providers then compete for business and residential subscribers while providing marketing, technical support, customer care, and billing. The total positive cash flow remaining after network upgrades and maintenance generated from the wholesale fees can be used to fund a number of programs, including economic development

and digital divide initiatives. While this option meets many municipal leaders' needs, it still requires taxpayer dollars and city employees to be successful.

Under a second option of the cooperative wholesale model, instead of the city funding and managing the network, the community can create a non-profit organization to raise funding for the wireless broadband network deployment. In turn, the non-profit organization then partners with private companies to both build and manage the network. The non-profit's focus would remain on monitoring network management, developing effective social and/or economic development programs, and attracting and developing relationships with retail providers. With this approach, the local government would provide low cost access to light poles and other assets for the network deployment and act as an anchor tenant for the network. Furthermore, a social and/or economic development charter would enable the non-profit to secure funding for the network deployment from state and federal grants and private foundation donations. Additional funding could be obtained through bank loans, which may be easier to obtain with a secure anchor tenant commitment from city government agencies.

This cooperative wholesale model allows cities to have influence over a broadband network build out and the wholesale price offered to retail providers without necessarily relying on taxpayer funding. Furthermore, this model is not restrictive since private providers not interested in the wholesale program can deploy their own network infrastructure. However, this model rests upon attracting enough funding from loans and grants to fund the initial capital expenses without using tax dollars. In addition, cities or non-profits must recruit private providers to offer their service over a network owned by another party to support operational costs.

Notably, under Wisconsin law, a municipality that offers use of a facility on a nondiscriminatory basis to entities that provide broadband service to end users and does not, itself, use the facilities to provide broadband service to end users – essentially, a municipality that offers only wholesale broadband service – is exempt from the procedural requirements of Wis. Stat. §66.0422(2) if the municipality determines that the facility does not compete with more than one other provider of broadband service.¹⁸ This exception applies relative to facilities for the delivery of broadband service only.¹⁹

CONCLUSION

State and local governments retain broad power over intrastate telecommunications in spite of the federal regulations provided by the Telecommunications Act of 1996. Municipalities do not have rights that supersede those outlined by the state legislature; thus, municipalities seeking to provide internet Wi-Fi services should determine their rights to do so by looking to their state law regarding telecommunication services.

Under Wisconsin state law, a municipality may provide broad public access to Wi-Fi services as long as the procedural prerequisites provided under Wis. Stat. § 66.0422 are adequately satisfied. In short, municipalities seeking to provide public access to Wi-Fi services must first hold a public hearing on the proposed ordinance or resolution, provide proper notice of this hearing, and prepare a cost-benefit analysis regarding the telecommunications service and make this analysis available to the public. Moreover, the city may be exempt from these procedural requirements if certain other conditions listed in Wis. Stat. § 66.0422(3), (3d), (3m) or (3n) are applicable in the present situation. Thus, it is important to look to Wis. Stat. §

¹⁸ David Lovell, *New Law Regarding Municipal Cable Television, Telecommunications, and Broadband Services (2003 Wisconsin Act 278)*, Wis. Legis. Council Info. Memo, available at http://libcd.law.wisc.edu/~wilc/im/im_2004_04.pdf.

¹⁹ *Id.*

66.0422 in order to determine the city's statutory procedural prerequisites for providing broad public access to Wi-Fi services.

Furthermore, the city may provide broad public access to Wi-Fi services by adopting one of the following four municipal wireless business models: (i) the community network model, (ii) the public utility model, (iii) the private consortium model, or (iv) the cooperative wholesale model. In determining which municipal wireless business model to implement, policy makers should be aware of the multi-dimensional realities of the different municipal wireless business models and consider what type of regulation is appropriate for the specific goals and resources of the municipality.