



DANE COUNTY, WISCONSIN
Department of Public Safety Communications

Report of Analysis and Recommendations

Options for
Communications System Governance & Cost Sharing

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Governance Structure and Cost Allocation Options for the Dane County Public Safety Radio Communication System

BACKGROUND

Historically, Dane County, the City of Madison and many other public safety agencies within the County have operated multiple public safety communications systems. In the late 1980's, Dane County and the City of Madison cooperated to establish a joint Public Safety Dispatch Center, operated as the Dane County Department of Public Safety Communications. This joint Dispatch Center has also supported many other, but not all, Public Safety Agencies within the County.

There is now a desire to replace the disparate and separate radio communications systems with one county-wide interoperable communications system capable of providing public safety communications for all agencies in the county.

Among the benefits to users of a new system would be:

- Improved interoperability among public safety services within Dane County; Law Enforcement, Fire and EMS
- Improved interoperability with other agencies in the Region
- Improved system coverage levels
- A wider coverage area for all users to access
- Higher level of system reliability and redundancy
- Enhanced features and functions that will come with the latest system technologies
- Long-term cost savings through a reduction in system duplication
- Long-term simplification of system maintenance and upgrade management

The Communications Interoperability Governance Steering Committee, formed to oversee the task of designing, purchasing and constructing the system, recognizes that a key component of implementing a county-wide, shared system is to develop a permanent governance structure to manage the operation of the shared system.

Dane County has agreed to finance the construction of the new infrastructure (sometimes referred to as the “backbone”) that will be necessary to support such a system. However, the County has indicated that there needs to be a fair and equitable way for all user agencies to share the ongoing annual costs of maintaining the system.

The Steering Committee, along with the need to form a governance structure, recognizes that to be successful and achieve “buy in” from participating agencies, a method of fairly allocating ongoing maintenance costs to the user agencies must be determined with some degree of precision. If such a formula is not in place prior to the formation of an intergovernmental agreement, an agreement may run into difficulty during the approval process.

RADIO SYSTEM GOVERNANCE MODELS

There are three typical methods for establishing a shared radio system governance structure:

1. Develop an intergovernmental agreement which includes a system oversight group
2. Seek authority from the State Legislature to establish a governance model
3. Have an existing government entity operate the system and contract with member users.

The following are descriptions of each model and a discussion of the key advantages and disadvantages of each.

Intergovernmental Agreement Model

The **intergovernmental agreement** method is very common. It is viewed as a process that, by its nature, involves all interested and affected government unit participants in the process of establishing a fair and reasonable approach to system governance. The agreement provides for broadly based participation on the governance board, outlines the obligations of the participating governmental units and often also includes language with regard to system maintenance and operational cost sharing. Frequently this new system oversight board is an authorized subdivision of the County government where the shared system is installed.

Governance structures and entities created through intergovernmental agreements are typically operated by an appointed board representing the spectrum of users served by the system. Those boards usually have policy, funding and management authority and in many cases, employees who assist with the administration of the system operations.

Advantages

- Tailored specifically to local requirements
- Broadly based representation
- Easily implemented once agreement approved.

Disadvantages

- Approval by numerous governmental units can be time consuming
- Funding is mostly all local resources.

Legislative Authorization Model

The **legislative authority** approach is used almost exclusively for state-wide or multi-county shared systems. This option is not typically selected for a system that primarily supports users within one county as it requires significant legislative coordination and activity.

Advantages

- Usually includes a funding mechanism for construction
- Easily implemented following adoption.

Disadvantages

- Formation requires State Legislative action
- Adoption may be difficult.

Contract for Service Model

The third model, **contract for service**, whereby an existing government entity establishes contracts with other governmental system users is perhaps the most expeditious method; however, it can be viewed as less desirable by system user groups since it may not include the establishment of a system governance board or an intergovernmental agreement which would outline the obligations of all participating governmental units. Contract for service structures most often have only an advisory board composed of contract user representatives.

The present Dane County / City of Madison agreement which established the joint dispatch center is in some forms a hybrid contract for services model although it does have aspects of the intergovernmental model also. The current working agreement with regard to radio system maintenance support is primarily informal in nature, with some cost sharing mechanisms in place. There is a written agreement in place with regard to the Dane County consolidated dispatch center; however, that agreement is a legacy document that essentially addresses the initial establishment of the shared dispatch center and it does not speak to the concept of a shared radio system. It also does not specifically name and include many of the various governmental user groups that are being served by the center. So while the current Public Safety Communications Center staff and oversight groups do regularly concern themselves with radio system issues, they are not specifically established for the purpose of governing a shared radio system.

Advantages

Staffing and operation are in-place

Contract for service agreements can normally be put into place quickly.

Disadvantages

Users must rely on providing agency for management and oversight

Cost sharing may not be viewed as fair and equitable by some users

Users have little control of funding and policy.

Operating agency responsible for capital funding.

Governance Principles

Following is a set of generally accepted principles that should be used as a guide in evaluation of the governance models that could be considered as feasible for the Dane County Interoperability.

- ◆ The governance structure has to be perceived as fair to all users.
 - The best way to ensure this is to establish Board membership that will include representatives of County and local jurisdictions along with representatives from each major functional area; i.e. Law Enforcement, Fire, EMS, and local government user groups.

- ◆ The governance structure should allow for operational usage decisions to be made at the agency level as long as they do not conflict with general system usage guidelines.
 - The Board should serve in a Policy role, establishing guidelines and setting strategic goals and objectives for the long-term benefit of the system. In so far as possible, individual user group usage of the system should be under those groups operational control.

- ◆ The governance structure should establish a policy-level board with authority to implement its plans.
 - The action that creates the Board must include providing it with the requisite authority and responsibility to carry out its governance function. Unless the contract for services structure of governance is selected, any other structure must be empowered to fulfill its purpose and obligations under its chartering action.

- ◆ The policy-level board should be composed of members representing the public interest as well as members representing public safety user agencies.
 - Membership should include a cross section of functional subject matter experts from the public safety disciplines, but also citizen, appointed and elected representatives.

- ◆ The policy-level board must establish a technical committee of users to advise it on operational decisions.
 - There should be a distinction between the policy board and any sub-committees such as a technical or operational sub-committee. The sub-committees will serve to provide information and advice to the policy board.
 - Operational procedures must be developed and enforced to ensure system integrity is not diminished by improper use of the system.

- ◆ A uniform user training program must be implemented to insure efficient and effective use of the system.
 - Interoperability and sharing of system resources depend on users understanding and using and applying operational procedures in a uniform and consistent manner. Governance needs to include a system-wide training component.

- ◆ The governing body should have the authority to allow jurisdictions outside Dane County to be included in the system.
 - Within established guidelines, participation of jurisdictions and user groups from outside the county should be allowed to enhance and encourage regional interoperability.

- ◆ The governance structure should guarantee that the interests of all user groups to include smaller agencies, quasi-public users or those with limited system use are protected.
 - A balanced approach to system user participation and inclusion in the governance process should be the goal. No one user group or individual user should have more or less control over or usage rights for the system. Procedures, protocols and priorities for general system usage and interoperability, approved by the governing body, should apply to and be used by all system users. A concept of “all users are created equal” is a fair and reasonable view of any one users need to access and utilize the system.
- ◆ If the policy-level board is appointed rather than created legislatively, the governance structure should provide for accountability to the user community and participating municipalities.
 - The most likely scenario is that an IGA (Intergovernmental Agreement) will be drafted and approved with participating agencies and municipalities signing the IGA. The IGA would create an appointed Radio System Governance Policy Board which would be accountable to the IGA participants through the requirements and responsibilities placed on the Board by the terms of the IGA.

Recommendation

The Intergovernmental agreement seems to be the best overall mechanism for establishing a reasonable governance structure for the new Dane County Radio System Network. This option avoids what could be a long and uncertain legislation action process with the Wisconsin Legislature if the legislative initiative is chosen.

The contract for services option is likely to be perceived as less than adequate by non-county participating agencies who desire a higher level of participation and influence in the oversight of a future shared system.

Steering Committee Action Plan Highlights

In order to move the critical process of establishing a governance structure forward, and the inherent issue of developing a fair and equitable cost sharing model, the Steering Committee has a challenging list of activates that it must undertake and initiate in the near term.

The Steering Committee needs to address the following issues as they proceed down the path of gaining consensus and support for a Governance Structure and Cost Sharing Formula.

1. Decide on a Governance model and obtain support and consent from the County Executives Office and from the County Board. County Board action would likely be necessary to establish the desired governance model.

2. Decide on a cost allocation formula, which would be conceptual initially, with illustrative examples of how cost sharing might occur under the formula. Firm cost sharing information will only become available once a radio system provider is selected and a final system design and detailed cost information are established.
3. Draft a preliminary intergovernmental agreement with the support of the County Corporation Counsels Office, incorporating in so far as possible, the governance principals as outlined earlier in this report.
4. Put together an explanatory information packet of the whole initiative and in particular the issues of governance and cost sharing.
5. Undertake an educational outreach effort to the potential governmental partners who would be signators to the intergovernmental agreement.
6. Come to consensus on a final version of the intergovernmental agreement that will be circulated for approval and signature. This process may be time consuming as numerous governmental counsels will likely be involved in reviewing the draft and offering comment. The County Corporation Counsels Office would likely coordinate this process.
7. Obtain approval and signature to the final intergovernmental agreement.

It can reasonably be expected that the above process would take between 6 and 12 months to be completed.

Governance Model Examples

King County, Washington

The King County Regional Communications Board (KCRCB) was established in 1993 by a joint powers agreement among 39 agencies and municipalities throughout the County. The KCRCB provides central coordination for the regional public safety radio system. Their System construction was financed by a three-year county-wide levy beginning in 1993 which raised 57 million dollars. The KCRCB is organized into four Sub-regions and governed by a joint board consisting of one representative from each Sub-region and an at-large member who represents the interests of system users who do not have a voting representative on the governing body of any Sub-region. Each member of the Board has equal voting authority. Decisions concerning network design require unanimous approval by the Board.

Sub regions are either individual governments or interlocal agencies which have a shared responsibility to build and operate the system. Sub regions include: The City of Seattle, King County, Valley Communications Center (an interlocal agency composed of the cities of Auburn, Kent, Renton, Tukwila and Federal Way), and the Eastside Public Safety Communications Agency (EPSCA, an interlocal agency composed of the cities of Bellevue, Kirkland, Redmond, Mercer Island and Issaquah).

The two Sub regions that are comprised of multiple local agencies have different governance structures. The Valley Communications Center has an Administrative Board composed of the Mayors of each of the five cities and an Operating Board with two representatives from each city, the Police Chief, Fire Chief or City Administrator. The Eastside Sub region has an Executive Board made up of the City Administrators and an Operations Committee composed of the Police and Fire Chief from each city. Voting on the Eastside governance agencies is weighted by the percentage of the number of radios each city has of the total.

The Eastside Sub region is engaged in an expansion to include additional cities and will result in a larger Northeast Sub region.

King County, Snohomish County and Pierce County are at the beginning of an exploratory process to expand and potentially create a three-county communications network

Washoe County, Nevada

Washoe County held a referendum in 1999 and passed a bond issue to fund a county-wide shared radio system network. With funding in place, an Inter-local Agreement [their version of an intergovernmental agreement] between 6 agencies was crafted and signed creating the Washoe County Regional Communication System (WCRCS). The agreement established a Joint Operating Committee for over-all system governance including funding authority. The Joint Operating Committee is composed of one appointed representative from each jurisdiction or agency and normally meets quarterly.

In addition to the Joint Operations Committee, the WCRCS governance structure includes an advisory group known as the User's Committee, containing three representatives of each participating jurisdiction and agency. The User's Committee makes recommendations to the Joint Operating Committee and recommends an annual operating and maintenance budget for the WCRCS. The User's Committee meets monthly. Leaders for both committees are elected during each committee's meeting at the start of the fiscal year.

The WCRCS system is operated by Washoe County Telecommunications (WTC). The WTC provides staff support to the Joint Operating Committee and manages the day-to-day operations of the WCRCS, subject to input from both the Joint Operations Committee and the User's Committee. The WTC charges participating agencies for expenses incurred in ongoing operations, maintenance and repair, and capital outlay for the regional system.

The success of the WCRCS is widely attributed to the fact that each participating agency has equal voting power regardless of size. There are presently 15 Agencies and Jurisdictions operating on the system:

- Washoe County - including Sheriff's, Public Works, Highway, Health, Animal Services
- City of Reno - including Reno Police, Fire and Public Works
- City of Sparks - including Public Works, Police and Fire Dept.
- Washoe County School District - including Campus Police
- Nevada Dept of Transportation - including the Nevada Highway Patrol

Truckee Meadows Fire District
Nevada Division of Forestry
Washoe County Airport Authority – including Airport Security
Reno-Sparks Indian Colony Police
Pyramid Lake Paiute Tribe Police
Truckee Meadows Water Authority
Truckee Meadows Community College Police
University of Nevada Reno Police
Nevada Air National Guard Fire – Reno
North Lake Tahoe Fire Protection District

Minnesota Metropolitan Radio Board

The Metropolitan Radio Board (MRB) was created by the Minnesota Legislature to design, develop and operate a regional radio system in the nine-county Minneapolis/St. Paul Regional Area. The legislation creating the MRB granted authority to the Department Transportation to provide 15 million dollars and authorized the sale of fifteen million dollars in bonds to finance construction of the “backbone” of the regional system. The legislation also specified the composition of the MRB. The repayment of the bond funding was financed by a 4-cent increase in the state-wide 911 surcharge on telephones, both wired and wireless.

The MRB was governed by a twenty-one member board, specified in the legislation, and composed of both elected officials and public safety officials. There was a County Commissioner appointed by each of the nine counties in the region, and a City Council member appointed by each of three cities of the first class (Minneapolis, St. Paul and Bloomington). A Metropolitan Council member was appointed by the Council. Additional members were appointed by the Governor, who was required to receive and consider recommendations from various organizations. Two gubernatorial appointees were specified to be elected officials from municipalities in the region (other than cities of the first class), with recommendations from the Metropolitan League of Cities. An elected official from outside the region was recommended by the Association of Minnesota Municipalities. A Metro County Sheriff was recommended by the Sheriff's Association and a Metro Police Chief was recommended by the Police Chief's Association.

The Commissioner of the Minnesota Department of Public Safety also appointed a representative. Two additional members served by virtue of their positions: the Director of Radio Communications at the Minnesota Department of Transportation, and the Chair of the Technical Operations Committee.

The Technical Operations Committee was required by statute and was composed of system users. It recommended operational procedures and policies for adoption by the Board.

In 2004 the Minnesota legislature created a Statewide Radio Board and dissolved the Metropolitan Radio Board. The functions of the MRB were taken over by the Metropolitan Emergency Services Board (MESB), a joint powers board composed of eight metro counties and the City of Minneapolis. A Technical Operations Committee provides recommendations to the MESB on public safety radio policies and procedures.

Waukesha County, Wisconsin

Waukesha County Communications Center (WCC) is a county-wide central dispatch service for public safety agencies. Cities, fire departments and emergency responders contract for services with the County. Funding is provided by assigning a portion of the county tax levy created to fund the WCC to each contracting service area. Cities receiving services from WCC report local tax savings have met or exceeded projections. However, without an effective user representative advisory board, operational frictions are frequent and communities with their own dispatch centers have been slow to join. 29 of the 37 municipalities have joined WCC but they represent only 49% of the county population. The 8 larger cities not participating provide their own dispatching service.

RADIO SYSTEM COST ALLOCATION OPTIONS

Methodology to Develop Alternatives for a Cost Allocation Formula

The following is an explanation of the methodology that E&A staff followed while assisting the Steering committee analyze various alternatives for a fair and reasonable cost sharing formula:

1. E&A consultants have attended meetings of the steering committee at which discussions of this issue ensued.
2. E&A consultants have conducted formal interviews with leaders from a variety of potential Dane County user agencies, in an attempt to gauge opinion and determine attitudes toward the cost allocation issue.
3. E&A consultants have conducted informal interviews with individual policy makers and operational personnel in some Dane County agencies.
4. E&A consultants have studied how other similar agencies around North America have dealt with this issue and have talked with key officials in other states and Canadian provinces to find out how their formulae have worked in practice.
5. E&A consultants have drawn upon the expertise of the federal SAFECOM agency and have analyzed data published by the Association for Public Communications Officials (APCO). Both organizations have studied this issue and have issued “best practices” suggestions and recommendations.

Potential Cost Sharing Factors

A variety of approaches have been used by existing multi-agency public safety radio networks to determine how much each user agency is charged for their share of the radio system on going maintenance and administration costs. These factors are listed below for informational and discussion purposes and are not in any order of importance nor is there any preconceived formula at present which would include or exclude any one factor or which would weight one factor differently than another. Suggestions and discussion as to how factors might be selected and weighted will be a part of later sections of this report. Some of these factors are:

1. Number of subscriber radios in use
2. Size of the coverage area
3. Amount of radio traffic
 - a. Number of push-to-talks
 - b. Total minutes used
4. Size of population served
5. Number of first responder runs
6. Type of usage, i.e., full time user, interoperability user only, private entity such as hospitals, utilities, etc.
7. Credits for in-kind or cash contributions to the capital costs of the system infrastructure
8. Credits for contributions to ongoing operations, such as housing staff, providing accounting or legal services, providing staff support, etc.
9. Ability to pay
10. Tax base of the entity served

Steering Committee Guidance

At a meeting of the Steering Committee on July 29, 2008, a substantive discussion of the cost allocation issue resulted in direction from the committee to Elert & Associates to prepare an example of a potential cost sharing formula that would not make a specific recommendation, but would present a possible scenario for how these future maintenance (and system upgrade) costs might be shared. Committee members indicated a desire to see an example of how users might be impacted.

Following discussion, the committee members present suggested that all users, regardless of the likely volume of use, should pay a base amount per radio for participation in the system and an additional amount to be determined by a usage factor. This base cost will be illustrated in our examples as the “fixed” cost, with the usage factor cost illustrated as the “variable” cost.

Underlying Cost Sharing Assumptions

1. All capital costs for the system infrastructure will be contracted for and financed by Dane County.
2. Dane County will be the fee title owner of the backbone system.
3. Each individual participating agency will be responsible for financing, purchasing and maintaining its subscriber radios.
4. A representative Governing Board or Commission will be established by law or by intergovernmental agreement under Wisconsin Statutes or County Ordinance.
5. Certain defined operation and maintenance costs beginning with vendor release and County acceptance of the system will be shared based on a formula to be determined by the Governing Board or to be determined prior to the formation of the Governing Board and incorporated into the agreement or law.
6. Agencies/entities will receive a credit against ongoing costs for contributions to infrastructure on a basis to be determined by prior agreement or by the Governing Board.

Definition of Ongoing Maintenance Costs

1. Backbone/system-wide network costs (costs attributable to operating and maintaining the switches, the microwave and/or fiber optic network, the towers and physical plant and the interoperability infrastructure components). These could include periodic payments for leased sites, if any; and the cost of utilities, insurance, and the cost of administering the governing board.
2. Maintenance contracts, if any, with vendor or other outside contractors.
3. Depreciation, capital upgrades and replacement costs. (not included in this reports example estimate)
4. System administration costs if any, such as system optimization, system reporting features, system settings and database maintenance.
5. Governing Board administration costs such as keeping minutes, scheduling meetings and sending out notices, billing users, providing staff assistance to technical and operations committees, etc.

Estimated System Maintenance Costs

The City of Madison radio shop has been operating and maintaining the present City radio systems and many of the other radio systems within the County. The Madison shop also programs all radios for the County. Currently, the County pays the city an hourly rate of \$53.15 (fee for 2008) for this service, a rate determined annually in June by the City Comptroller's office. Each year, the radio shop manager sends out an estimated budget amount for the following year.

Keith Lippert, the Communications Operations Supervisor for the City of Madison Radio Shop, provided an estimate of the annual maintenance costs for the new system. E&A has reviewed his estimate and feels that it is reasonable based on the preliminary system design information that is currently available. We did increase the estimate for outside (manufacturer) technical support not knowing what action might be taken with regard to added staffing and expertise within the current radio shop organization. The cost estimate does not include the cost of additional staffing recommended in this report, thus a modest increase of 10 to 15% in the total annual estimated cost for this service may be seen after the staffing issue is considered; however, additional internal staff and expertise may also result in a lower manufacturer support contract fee. Mr. Lippert's estimate follows:

Estimated Annual Maintenance Costs for new County-wide Radio System Backbone:

Number of sites in the new system: 19

Estimate: One routine inspection per site per quarter

Cost per inspection (2 persons, one day @\$53.15/hr.) = \$106.30/hr. x 7.75 hours = \$823.83/day

Total cost per quarter = \$15,656 x 4 = **\$62,624/yr**

Microwave/tower/base station radio maintenance/system monitoring/repair

Estimate 2 men per day, 3 days per week = **\$132,662.24**

Repair Parts Estimate: **\$30,000/yr.**

Manufacturer contracts/yr. Estimate: **\$250,000**

Utilities: Annual Estimate: **\$265,200**

Insurance Estimate: **\$ 25,000**

Annual Estimated System Maintenance and Administration Cost Recap:

| | |
|---|-------------------|
| Routine Inspections | \$ 62,624 |
| Tower, microwave, radio maintenance, monitoring and repair | 132,662 |
| Parts | 30,000 |
| Manufacturers contracts* | 250,000 |
| Utilities | \$ 265,200 |
| Insurance | 25,000 |
| Board Staffing and Administration ** | 50,000 |
| Contingency (10%) | \$ 81,500 |
| Annual Total | \$ 896,986 |

***Manufacturers Contracts** - This estimate is for the first year of operation following the expiration of the manufacturer’s warranty. A manufacturer’s contract may include an extended warranty, system monitoring and failure alerts, technical support, training, software upgrades, defective parts replacement, and the like. This figure should be negotiated with the successful contractor based upon the need for such services.

****Board Staffing and Administration** - There will be some costs associated with the administration and staffing of the governing board itself along with significant administrative duties associated with the management of the various on-going system maintenance costs. *At least a half-time position is likely to be needed to provide this function.* The job will entail scheduling meetings, preparing notices, assembling documents for members, collecting and synthesizing data, billing users, taking minutes of meetings of the Board and the operations and technical committees, maintaining records, updating a web site and other duties as may be directed by the Board. The incumbent(s) in this position can be an employee of Dane County or any of the signatories to an intergovernmental agreement. *If hired early in the implementation process, this person could provide significant support to the steering committee as it moved forward with the various action items that were previously outlined in this report.*

Notes:

- ◆ The above estimates **DO NOT INCLUDE** depreciation, contributions to a capital replacement fund, or system upgrades. The estimates also do not include any lease payments for tower sites which may be required once the system design is determined. We have added \$25,000 for an estimated annual premium for liability and for board errors and omissions insurance, and \$50,000 to cover the cost of board administration.
- ◆ In addition to annual and recurring maintenance costs, it is highly recommended that the creation of a capital replacement fund be discussed to cover the costs of future system backbone upgrades and equipment replacement. Typically, this sort of fund begins to be used in years 5+ after system installation depending on what sort of long-term support is purchased from the system vendor.
- ◆ The above figures also **DO NOT INCLUDE individual** agency costs for subscriber unit maintenance. Many of these radios will be new and will be covered for a specified period of time by manufacturer’s warranties. Agencies that will require out of warranty maintenance or radio repair will need to budget separately for those costs.

Assessment of the Capabilities of the Current City of Madison Radio Shop and Discussion of Alternatives

This report is an assessment of the readiness of the Radio Shop of the City of Madison, Department of Transportation Traffic Engineering Section to assume responsibility for the maintenance of the planned county-wide trunked radio system for Dane County. E&A visited this facility on August 29, 2008. During the visit, we interviewed Keith Lippert, Communications Operations Supervisor, who conducted a tour of the facility as well.

Interview and Facility Tour

From that interview, it is noted the basic responsibility of the Radio Shop is to install and maintain the radio system infrastructure of the City and Dane County plus any public safety entity in the county that desires the services of the shop. This responsibility extends to the mobiles, portables and the system infrastructure includes dispatch (radio systems). The shop will only seldom reach out to the manufacturers for support and generally this is dock maintenance (Motorola Speedy Repair Service plan). Overall, there has been very low turnover of staff.

The infrastructure systems maintained by the Radio Shop technicians include a 23-channel Motorola analog trunked system spread across seven sites (4 TX/RX and 3 RX- only) for the city. There are three major tower sites plus roof top technology. With the present system, there is a master and backup controller co-located at the Larkin main site. In addition to the trunked system, the county makes use of an analog based VHF repeater system. The microwave system consists of a combination of Alcatel and Western Mux (which is no longer in business). In addition, the city maintains distributed antenna systems (or BDAs) in seven buildings. An assumption is being made that, in the new system, there will be upwards of nineteen sites where the radio system infrastructure will exist and routine maintenance will be required.

The Radio Shop has a budget it operates with that is made up of a City allotment plus an annual charge to the users on the trunked radio system based on 3000 active radios. Of this number, 2600 are for City operations and roughly 400 for all others. There are a total of seven full-time technicians, two installers and a supervisor. Adding up the total cost of operation and dividing this by the labor pool and the Radio Shop has determined today (2008) their per hour cost is \$53.15/hour. This is what public safety agencies are charged. It is interesting to note there is not, nor has there ever been, any type of formal agreement between the Radio Shop and the customers it serves.

The anticipation is that the number of radios on the system will grow from 3000 to perhaps as high as 6300 with the new system as based on the total number of active users in Dane County who have an interest. In addition, if the University comes on line, then this will add another 450 radios to the system thus approaching 6800 total radios.

The Radio Shop technical staff of (10) ten consists of the supervisor, a lead technician (who has said he plans to retire in 2009), a mobile data technician, two installers, and five other techs. The supervisor stated they are trying to elevate some of the technicians as most are at the Tech I level. Within the budget, training has been allocated for the higher level technicians with internal cross training to the Tech I's.

A considerable amount of effort has been undertaken by the Communications Operations Supervisor to look into the future in an effort to see what will need to be done regarding the expansion of shop and personnel resources. During the interview, it was stated that there is a real need for administrative support so technician time is not wasted handling the processing of paperwork for parts ordering, exchanges and service invoicing. In addition, there is a need to increase the number of installers and technicians at the Tech II level to meet the anticipated demands.

A question was asked about system and repair documentation plus overall monitoring of the health of the radio network. For repairs, the Radio Shop makes use of a common PC package, MCM. As to the trunking system, they make use of the tools offered by Motorola thus this monitoring is only done actively on a M-F, 9-hour day. Some enhanced method of 24/7 system monitoring would need to be implemented either locally or via a service agreement with the new system vendor.

At the conclusion of the interview, a tour of the facility was conducted. The nine photos at the end of this document show the work spaces of the technicians. There are basically two rooms in the Traffic Engineering building located off the garage repair bays (1-8). Note that due to extremely cramped quarters, there is very little room to work on a large piece of equipment. E&A consultant suspects at one time these repair rooms were parts rooms for general automotive maintenance and have been made to work for this function today.

Information from Mr. Lippert suggested the City is planning a new and expanded facility to support the radio maintenance function.

IP (internet protocol) expertise, which will become more important with the new system technologies that will be installed, is currently provided through the County IT Department. Having internal Radio Shop expertise in this area in the future is recommended.

In addition to the above needs, if the system design also includes encryption there may also be the need for the routine administration of this feature.

Assessment Summary

From what was learned during the interview and tour, it seems as if the Radio Shop operates as a cost-effective service to the public safety community it serves and they strive to be what is needed to meet the needs of their clients. Shop management appears to have been both proactive in planning in anticipation of the new system and supportive of the concept of providing maintenance support for the new system.

Alternative system maintenance options would also be available. There are three primary options for providing long-term system maintenance for the new system. They are;

1. Contract with the new systems provider for extended maintenance
2. Contract with a third-party provider for similar services (This could be a contract with the City of Madison Radio Shop.)
3. Create a new County Radio Shop organization by hiring necessary personnel, purchasing adequate equipment and providing an adequate shop facility.

The determination of which alternative would be best and the most cost effective would take place after the new system vendor is selected and after the new system design is established.

No matter which option would be chosen, it is strongly recommended that a formalized agreement or contract be put into place that would clearly outline the relationship and cost between the participating agencies and the maintenance service provider.

Since the cost estimate provided by the Madison Radio Shop appeared to be reasonable, we have used that estimate in our illustrative example of a potential cost sharing formula.

Based on the historical cost information provided by the Madison Shop, it is our feeling that the other alternatives listed above would likely be either similar or higher in cost when equalized for comparison purposes.

Recommendations if the City of Madison Radio Shop were the Selected Provider

A number of areas will need attention by the Radio Shop as they migrate from the present analog systems to digital, including technician training, a better work environment, system management, administrative support to relieve technicians of bookkeeping functions and an overall increase in technical staff to meet the increased demand for service.

Technician Training

With the planned move to a new P25 hybrid trunked radio system, the technical staff will have to be provided a new set of skills. In addition, if the Radio Shop is expected to operate and maintain the trunked radio system then at a minimum two technicians will have to become technically certified to allow for backup during time away from the shop. With the added number of users on the system, the expectations for prompt and efficient repairs and maintenance will be very high.

IP Expertise

The one area the Radio Shop is weak in is knowledge of IP and this will be extremely important as all of the new trunked radio technology today is built on a platform of servers, routers, switches and computer programming. This IP is even being pushed out to the radio in that information and programming is sent over the air to reduce the need to bring a subscriber radio into the shop.

Improved Work Environment

The Radio Shop bench area (see photos at the end of this report) needs some real attention with a design that offers each work center the necessary tools, space, and environment to do the kind of job necessary to repair the high technology system that will be in use. Chances are each work center will require a computer to connect to the radio and the RF equipment to diagnose that side of the radio. Today, the shop does not have a walk-in screen room nor screen box that enables receiver testing. Anti-static control seemed to be very lax and no visible humidity control was present. An improved work environment would allow for more efficient processes and improved productivity by radio shop staff.

System Management

There is a need to have the tools in place and the staff training to provide for 24/7 monitoring of any new system. This can be done locally, by the vendor or a combination of both.

Additional Technical Support Staff

Additional staff would be required to provide enhanced skill levels and to address the increased level of effort that would be required to support a new and larger system. This ramping up of the number of staff and staff skill set may impact the cost structure, however, other variables such as pending retirements may off-set certain new costs. Therefore, it is difficult to predict exact staffing cost increases at this time although a modest increase would be anticipated.

Facility Photos



Main Technician Shop Photo 1



Main Technician Shop Photo 2



Main Technician Shop Photo 3
Lead Technician Shop Photo 5



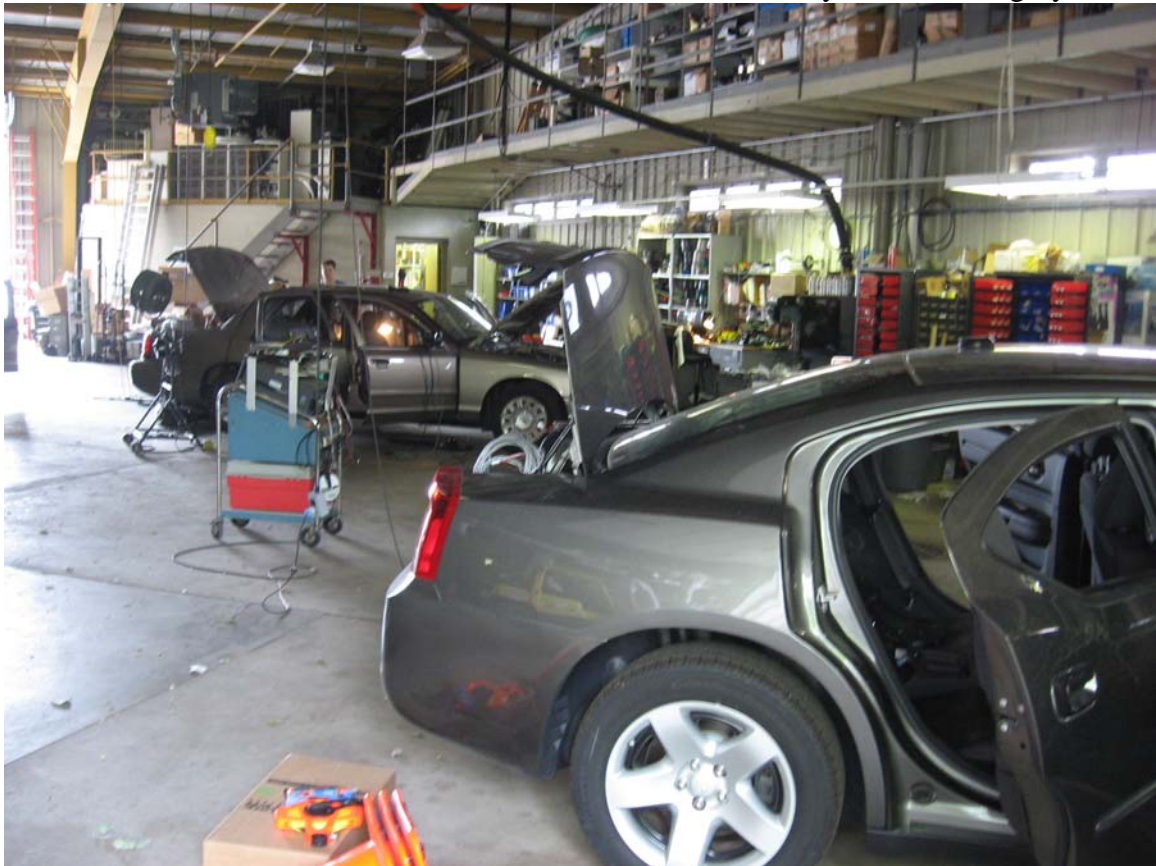
Main Technician Shop Photo 4
Lead Technician Shop Photo 6



Site Alarm Panel for Radio Sites



Motorola Alarm System Trunking System



Automotive Shop for Mobile Installation and Repairs

Cost Allocation Models

As discussed above and as shown in several examples that are found appended to this section, there are many different ways that costs can be allocated. E&A research has revealed that a majority of the systems surveyed in North America ultimately settle on a “cost per radio” which is uniform to all users except those whose use is only for interoperability purposes. Cost allocation on this basis can simply be the annual budgeted cost divided by the number of radios programmed onto the system. An advantage for this method is that it is simple to calculate and to understand. It also does not discourage use of the system because finances may become strained for a particular agency. Unlike a commercial cell phone network, a closed public safety network should not be managed to inhibit its use when it is genuinely needed. A disadvantage can be that, without any financial disincentive to use the system, frivolous use can result, thus straining system resources. This problem, if it arises, can be handled through the governing board by carefully setting up rules for system operating procedures and protocols, and giving the governing authority enough teeth to enforce these rules.

If there is to be a weighted variable cost, the suggestion of E&A for the first year is to estimate system usage based on historical data, then audit the actual use at the end of the year and make an adjustment to each of the agencies for the following year. Over time, patterns of usage should become well established.

One factor which has not been discussed at length involves the possibility of providing a credit back to those participants who contribute in kind to the infrastructure, such as providing the use of towers, property, frequencies, office space, etc. to the system or its support. Until the system designed is finalized and the value of those contributions is known, such a factor cannot be reliably determined.

It will remain for the governing body to determine how such contributions shall be factored into a cost allocation plan.

Based on the above estimates, on the following pages is a projected cost model for selected participants.

The figures used in this model **are not necessarily accurate**. While an attempt has been made to approximate the number of radios expected to be on the system for the entities listed, in some cases, the numbers are only estimates.

For illustrative purposes only, E&A has chosen nine entities which are expected to be part of the new system. The spreadsheet can be expanded to include all participants when the data becomes available. This should be seen as a management tool which can serve to estimate the approximate allocation to each respective entity for ongoing maintenance and system support. The figures in this example should not be viewed as actual cost allocation figures. The sample is simply one illustration of how the cost allocation template and formula could be used.

Once the data on the number of radios and on projected system usage are entered as accurately as possible, the accompanying Excel spreadsheet will allow the Governance Board to run scenarios on how various weighted factors will affect the cost to each participating agency. For example, if the annual budget for maintenance is estimated to be different from the figure used in this illustration, the amount can simply be changed and the spreadsheet will recalculate the participant cost estimates. Likewise, if the number of radios in use by a particular agency changes, the new number can be entered. This is true for any of the other variables, such as the percentage of weighting assigned to any use factor.

The model below shows the effect of assuming a 60% fixed cost for each radio on the system, a 20% weighted cost based on the annual number of push-to-talks for each respective agency, and another 20% weighted cost based on the annual minutes of air time used.

Separately, E&A is providing the Excel spreadsheet which was used to generate this illustration. It can be used as an administrative tool that will allow the committee to change the budgeted cost of maintenance, the respective percentages, the numbers of radios, the number of push to talks or air time, or any other variable, and see how the changes will affect each given entity, both in terms of percentages and in terms of dollars.

As mentioned in another section of this report. The first year of the new systems operation will capture actual and accurate use patterns, thus, from year two forward these actual usage patterns can then be accurately used to modify the cost allocation model in a manner that the Governance Board deems appropriate.

Legacy Dispatch Equipment and Systems

The current County dispatch center has a variety of legacy systems such as CAD and RMS. There is also a great deal of equipment in the center to include radio consoles, console furniture, CRT's, keyboards, PC's printers and other miscellaneous office equipment.

The new radio system is essentially independent of these other systems and equipment. The County will likely purchase new radio consoles for the center as part of the overall radio system upgrade. Otherwise, the new radio system should work independently of these other systems and equipment.

It should be noted, however, that the County is in the process of upgrading and/or replacing several of these other systems and the related equipment and furniture. From a cost sharing view, this other work is separate and independent of the radio system upgrade and it is being funded by the County without any cost sharing or user fees.

What is the Potential for Cost Savings and Efficiency Through this Initiative?

In the long run a shared county-wide radio system, when compared to multiple stand alone systems, will be more cost effective in the following areas;

- ◆ The shared system will allow for a full featured and flexible system that would likely be cost prohibitive to implement if communities were to do so individually.
- ◆ A consolidated system administration and system maintenance approach provides for a maximization of capabilities and a higher level of system reliability.
- ◆ The system infrastructure would be positioned to allow for other future uses as new technologies are embraced.
- ◆ A shared system would greatly enhance interoperability between public safety agencies.
- ◆ Participating agencies would need to spend significant money upgrading legacy VHF equipment to comply with the FCC narrowbanding requirements if they did not participate in the new shared system, and that expense would not get them any enhanced functionality or enhanced interoperability.

Equipment or Systems that may be Potentially Reused or Integrated into the New Radio System

The vast majority of the current legacy radio system equipment will be replaced by new equipment. However, there is a small subset of items that may potentially be reused or integrated into the new radio system design. If reused or integrated into the new system, these items could be considered to have some value as they might off-set the cost of replacement equipment. The final determination as to which if any of these items will be reused would be made jointly by the County and the selected radio system vendor. Items that might be potentially reused could include;

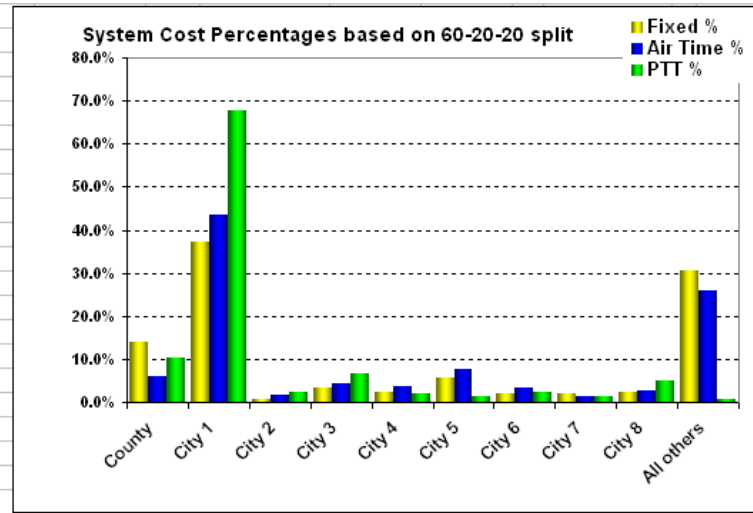
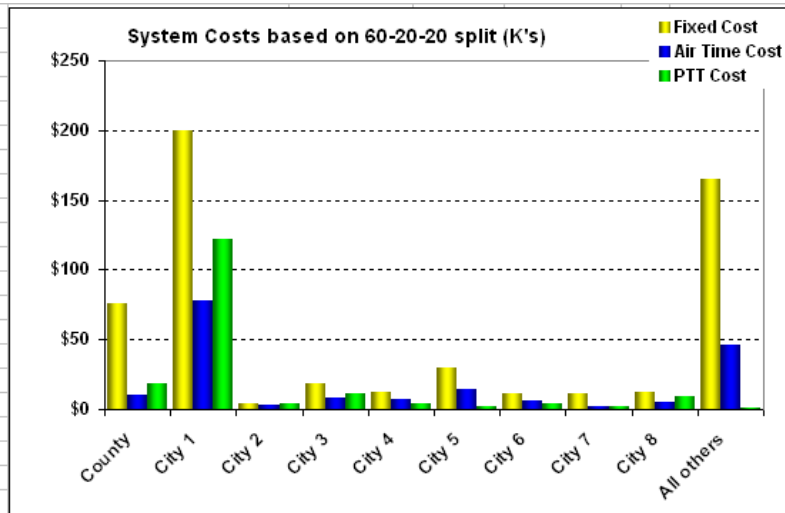
- ◆ Current radio transmit or receive sites
- ◆ Current system equipment back-up power sources such as generators or UPS systems
- ◆ Site connectivity systems such as current microwave links or fiber paths
- ◆ Frequencies licensed to a particular non-county entity might be usable in the new system. While there was no cost to obtain them, they would have value as a system resource.

The following criteria would need to be evaluated as the use of existing equipment or resources were considered;

- ◆ Would an existing tower or equipment location be suitable for the new system and new equipment?
- ◆ What if any modifications would need to be undertaken and at what cost?
- ◆ How would the site location fit into the coverage propagation modeling?
- ◆ Are available frequencies licensable and usable for the new system design?
- ◆ Would current site connectivity paths such as microwave or fiber support the new design?
- ◆ Would any modifications need to be made and at what cost?

Illustrative Example

| Sample Cost Allocation Based on 60-20-20 Weighting | | | | | | | | | | | | |
|--|--------------|-------------|--------------------------|------------------|-------------|---------------------|------------------|-------------|------------------|------------------|----------|------------|
| Projected Annual Budget for System Maintenance: \$ 896,986 | | | | | | | | | | | | |
| Fixed % 60.0% | | | Var Air Time % 20.0% | | | Var PTT % 20.0% | | | | | | |
| Fixed \$ \$538,192 | | | Air Time \$ \$179,397 | | | PTT \$ \$179,397 | | | | | | |
| Fixed Allocation | | | Air Time Allocation | | | PTT Allocation | | | Totals | Cost per Radio | | |
| | # Radios | Fixed % | Fixed Cost | Air Time/Min | Air Time % | Air Time Cost | PTT | PTT % | PTT Cost | | | |
| 1 County | 960 | 14.0% | \$75,536 | 68,398 | 5.9% | \$10,582 | 1000752 | 10.3% | \$18,399 | \$104,516 | \$108.87 | County |
| 2 City 1 | 2,535 | 37.1% | \$199,461 | 502,867 | 43.4% | \$77,796 | 6615876 | 67.8% | \$121,634 | \$398,891 | \$157.35 | City 1 |
| 3 City 2 | 48 | 0.7% | \$3,777 | 18,000 | 1.6% | \$2,785 | 230000 | 2.4% | \$4,229 | \$10,790 | \$224.79 | City 2 |
| 4 City 3 | 235 | 3.4% | \$18,491 | 50,000 | 4.3% | \$7,735 | 635000 | 6.5% | \$11,675 | \$37,900 | \$161.28 | City 3 |
| 5 City 4 | 152 | 2.2% | \$11,960 | 44,000 | 3.8% | \$6,807 | 210000 | 2.2% | \$3,861 | \$22,628 | \$148.87 | City 4 |
| 6 City 5 | 384 | 5.6% | \$30,214 | 90,000 | 7.8% | \$13,924 | 133843 | 1.4% | \$2,461 | \$46,598 | \$121.35 | City 5 |
| 7 City 6 | 139 | 2.0% | \$10,937 | 40,000 | 3.4% | \$6,188 | 235000 | 2.4% | \$4,320 | \$21,446 | \$154.29 | City 6 |
| 8 City 7 | 143 | 2.1% | \$11,252 | 16,338 | 1.4% | \$2,528 | 134280 | 1.4% | \$2,469 | \$16,248 | \$113.62 | City 7 |
| 9 City 8 | 152 | 2.2% | \$11,960 | 30,000 | 2.6% | \$4,641 | 500000 | 5.1% | \$9,193 | \$25,794 | \$169.69 | City 8 |
| 10 All others | 2,092 | 30.6% | \$164,605 | 300,000 | 25.9% | \$46,412 | 63000 | 0.6% | \$1,158 | \$212,175 | \$101.42 | All others |
| Total | 6,840 | 100% | \$538,192 | 1,159,603 | 100% | \$179,397 | 9,757,751 | 100% | \$179,397 | \$896,986 | | |



The effect of weighting the variable cost allocation on the basis of the number of push to talks will probably be to place higher costs on those agencies who are heavy law enforcement users, as police transmissions tend to be shorter and more frequent.

Some Examples of How Similar Systems Allocate Costs

There are several alternatives for a fair and equitable cost sharing formula for Dane County. Here we offer a few examples of how other large shared public safety radio systems have allocated their costs among users. The purpose is to provide information about how others have come to consensus when faced with a similar decision and to also demonstrate that there are different cost allocation models in place among similar systems.

EXAMPLE #1: E-Comm 9-1-1, Emergency Communications for Southwest British Columbia

The E-Comm radio system is a shared communications network used throughout the Metro Vancouver, BC area by police, fire and ambulance personnel. The E-Comm system provides better coverage, greater clarity and improved reliability through an earthquake resistant infrastructure and enhanced security. The multi-agency, multi-jurisdictional communication capabilities have played a critical role in the successful conclusion of several police pursuits, cross municipal-border crime investigations, and a police shooting.

- Member agencies are charged for their share of the radio system based on a weighted distribution cost allocation model that considers such factors as the coverage area (geography) and traffic of their region. Traffic factors are further broken down into the number of radios, radio traffic and population as these all impact system usage.

Shared radio infrastructure costs are allocated based on the following factors:

- Coverage area (50%)
- Radio traffic (20%)
- Number of radios (20%)
- Population (10%)

Radio user equipment is specific to an agency and is therefore a direct cost to each agency.

EXAMPLE #2: The Minnesota Metro System (Now part of the ARMER™ system)

The Minnesota Metro System is a 9-county trunked system that was built to serve all government agencies within the metropolitan region, including the state. Governments were given the option to join or not to join. The initial network infrastructure consisted of a wide area backbone, providing mobile coverage for the entire 9-counties. That was financed by a combination of state bonds and metropolitan area bonds. Initial participants, Hennepin County and the city of Minneapolis added sub-systems that included in-building coverage. Later other smaller counties opted in and built subsystems that were integrated with the state's initial 9-county backbone.

Costs are shared based on a complex formula that takes into consideration:

- Initial contribution to the system infrastructure
- The type of user (subsystem owner, integrated subsystem owner, interoperability only user, subscriber only user)

System-wide costs attributable to the operation of the two switches, the microwave network, the fiber optic links, etc. are allocated to all except the interoperability only users on the basis of the number of radios programmed onto the system. Interoperability only users are responsible only for their own subscribers and the cost of the software. Their participation in the system is deemed to be an added benefit to the participating entities.

Costs associated with operating a simulcast prime site which is part of an integrated subsystem is allocated on a per radio basis to subscriber only users and integrated subsystem owners only.

Following the above formula, costs per radio per year were calculated at approximately the following rates per radio per year:

| | |
|--|----------|
| Interoperability only users (most have fewer than 20 radios) | \$ 12.00 |
| Integrated Subsystem users | \$ 95.93 |
| Full Subsystem users | \$ 38.31 |
| Subscriber only users (no contribution to infrastructure) | \$297.89 |

EXAMPLE #3 King County Radio Communications System

The King County Radio Communications System is shared by four entities: King County, the city of Seattle, a coalition of Seattle suburbs located east of Lake Washington, and a coalition of suburbs south of Seattle.

The system is a Motorola Smartzone™ trunked 800 MHz network. There is one zone controller and four subsystems, each of which is owned by the respective entities. There are approximately 16,000 subscribers on the network. Each entity pays for the maintenance of its share of the network infrastructure and charges its member government(s) a monthly fee which, in the case of the suburban coalitions, is determined by representative governing boards. King County’s Council and the Seattle City Council approve a budget based on the cost of their respective parts of the infrastructure. The costs associated with the zone controller, which are relatively low, are paid by the county’s transit system, which is the only agency that regularly uses the entire network. King County, Seattle and one of the suburban entities simply divide the maintenance costs by the number of subscribers. There is no determination of the number of push-to-talks or the amount of airtime utilized. One of the entities charges members on the basis of airtime used in a given billing cycle. The average cost per radio per month is approximately \$21.00.

EXAMPLE #4 Phoenix-Mesa, AZ Regional Wireless Cooperative

The Phoenix-Mesa Regional Wireless Cooperative (RWC) is a Motorola IP-Based P-25 800 MHz trunked system serving the cities of Phoenix and Mesa, as well as a number of other communities in the Phoenix metropolitan area. The system has approximately 15,000 subscriber radios in use. The system is governed by a board that has one representative from each participating city. Each member has one vote and decisions are usually made by consensus. If there is a controversy, any member may ask for weighted voting, which is entirely based on the number of subscriber radio units on the system. All ongoing operations and maintenance costs are paid for monthly by agencies that use the network as their primary radio system. Costs are allocated solely on the number of subscribers in use. The current monthly fee is \$47.90. Interop-only users pay nothing. All agencies are responsible for purchasing and maintaining their subscribers.

Recommendation

Due to the fact that usage by many system users will need to be estimated during the first year of the new systems operation, it is recommended that each participating agency be charged a fixed cost per month to cover operation and maintenance of the system. The fixed cost should be simple to understand and to compute. Therefore, the recommended first year cost sharing model is that each radio that is programmed to access the network would pay the same dollar amount. The actual amount would be the budgeted cost of operation and maintenance for the entire system divided by the total number of subscriber radios on the system.

Additionally, a yearly credit could be calculated based on any contributions to the infrastructure made by the respective agencies. The credit could be amortized over the expected life of the item contributed. For example, a tower might be expected to have a 25 year life expectancy, thus the value of the annual credit would be 1/25th of the value of the contribution.

At the end of the first year of system operation, and all years thereafter, actual usage patterns can be accurately determined. The actual maintenance and administrative costs will also be available. The governing board can then make adjustments to the cost sharing formula going forward based on whatever variable costs, such as air time, push-to-talks, population, etc. the board determines to be appropriate to include in a mixed fixed and variable cost sharing formula.

Appendix

Radio Terminal Quantity Summary Charts

The following charts are summaries of the data provided by user agencies with regard to the number of radio terminals (Portables and Mobiles) that are currently in service on today's public safety radio systems within Dane County. They are organized by frequency band (800, VHF, UHF, Low Band). The quantities have been provided by the agencies and are thus assumed accurate. Some agencies within the county did not return survey information, so while these charts are as accurate as they can be given the information that was received, there is some incomplete information. The spreadsheets are designed so that they can be updated when additional information is received at a later date and the total roll-up quantities will automatically be recalculated.

| VHF Summary | | | | | | | |
|---------------------------------|-----------------|---------------|-----------------|------------------------------------|------------------------------|--------------------------|--------------|
| Entity | Portable | Mobile | Desk-Top | Transmit/ Receive Sites | Console Positions | Base Stations | Total |
| Dane County | 386 | 294 | 8 | 2 | 0 | 12 | 702 |
| Albion, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Belleville | 67 | 16 | 0 | 0 | 0 | 2 | 85 |
| Berry, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black Earth, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black Earth, Village | 14 | 12 | 0 | 1 | 0 | 1 | 28 |
| Blooming Grove, Town(BGBUMB EMS | 21 | 13 | 0 | 1 | 0 | 1 | 36 |
| Blue Mounds, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blue Mounds, Village | 7 | 5 | 3 | 0 | 0 | 0 | 15 |
| Bristol, Town | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| Brooklyn, Village | 21 | 10 | 1 | 1 | 0 | 1 | 34 |
| Burke, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cambridge, Village | 4 | 3 | 1 | 0 | 0 | 0 | 8 |
| Cottage Grove | 33 | 18 | 5 | 0 | 0 | 0 | 56 |
| Cottage Grove, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cristiana, Town | 0 | 9 | 0 | 0 | 0 | 1 | 10 |
| Cross Plains, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cross Plains, Village | 56 | 16 | 7 | 1 | 0 | 0 | 80 |
| Dane, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dane, Village | 18 | 9 | 2 | 1 | 0 | 0 | 30 |
| Deerfield, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Deerfield, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DeForest | 16 | 8 | 1 | 0 | 0 | 1 | 26 |
| Dunkirk, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dunn, Town | 0 | 5 | 1 | 1 | 0 | 0 | 7 |
| Fitchburg | 108 | 89 | 18 | 10 | 4 | 8 | 237 |
| Madison, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Madison, City | 428 | 501 | 1 | 0 | 0 | 1 | 931 |
| Maple Bluff | 15 | 4 | 2 | 1 | 0 | 0 | 22 |
| Marshall | 43 | 26 | 0 | 0 | 0 | 3 | 72 |
| Mazomanie, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mazomanie, Village | 21 | 8 | 2 | 0 | 0 | 1 | 32 |
| McFarland | 71 | 46 | 12 | 7 | 0 | 2 | 138 |
| Medina, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Middleton, City | 97 | 78 | 8 | 5 | 2 | 3 | 193 |
| Middleton, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monona | 49 | 46 | 0 | 4 | 2 | 5 | 106 |
| Montrose | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mt Horeb | 17 | 9 | 1 | 0 | 0 | 1 | 28 |
| Oregon, Town | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Oregon, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pleasant Springs | 3 | 5 | 0 | 0 | 0 | 0 | 8 |
| Primrose, Town | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| Roxbury, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rutland, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shorewood Hills | 37 | 24 | 3 | 0 | 0 | 0 | 64 |
| Springdale, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Springfield, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stoughton | 103 | 47 | 1 | 4 | 1 | 6 | 162 |
| Sun Prairie | 82 | 55 | 7 | 4 | 2 | 9 | 159 |
| Sun Prairie, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vermont, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Verona, City | 67 | 59 | 4 | 2 | 0 | 0 | 132 |
| Verona, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vienna, Town | 0 | 6 | 0 | 0 | 0 | 1 | 7 |
| Waunakee | 21 | 20 | 7 | 0 | 0 | 1 | 49 |
| Westport, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Windsor, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| York, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UW Madison | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wisconsin, State of | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| US Government | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 1810 | 1454 | 96 | 45 | 11 | 60 | 3476 |

| 800 Summary | | | | | | | |
|-----------------------|-----------------|---------------|-----------------|------------------------------------|------------------------------|--------------------------|--------------|
| Entity | Portable | Mobile | Desk-Top | Transmit/ Receive Sites | Console Positions | Base Stations | Total |
| Dane County | 163 | 9 | 0 | 0 | 0 | 0 | 172 |
| Albion, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Belleville | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Berry, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black Earth, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black Earth, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blooming Grove, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blue Mounds, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blue Mounds, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bristol, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brooklyn, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Burke, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cambridge, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cottage Grove | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cottage Grove, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cristiana, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cross Plains, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cross Plains, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dane, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dane, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Deerfield, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Deerfield, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DeForest | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dunkirk, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dunn, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fitchburg | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| Madison, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Madison, City | 2191 | 1106 | 0 | 0 | 0 | 0 | 3297 |
| Maple Bluff | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Marshall | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Mazomanie, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mazomanie, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| McFarland | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Medina, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Middleton, City | 2 | 2 | 1 | 0 | 0 | 0 | 5 |
| Middleton, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monona | 24 | 14 | 3 | 0 | 0 | 0 | 41 |
| Montrose | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mt Horeb | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oregon, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oregon, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pleasant Springs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Primrose, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Roxbury, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rutland, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shorewood Hills | 3 | 3 | 0 | 0 | 0 | 0 | 6 |
| Springdale, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Springfield, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stoughton | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sun Prairie | 2 | 3 | 3 | 0 | 0 | 0 | 8 |
| Sun Prairie, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Token Creek | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vermont, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Verona, City | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Verona, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vienna, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Waunakee | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Westport, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Windsor, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| York, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UW Madison | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wisconsin, State of | 31 | 8 | 2 | 0 | 2 | 0 | 43 |
| US Government | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 2422 | 1145 | 14 | 0 | 2 | 1 | 3584 |

| UHF Summary | | | | | | | |
|-----------------------|-----------------|---------------|-----------------|------------------------------------|------------------------------|--------------------------|--------------|
| Entity | Portable | Mobile | Desk-Top | Transmit/ Receive Sites | Console Positions | Base Stations | Total |
| Dane County | 49 | 51 | 4 | 1 | 1 | 1 | 107 |
| Albion, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Belleville | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Berry, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black Earth, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black Earth, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blooming Grove, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blue Mounds, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blue Mounds, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bristol, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brooklyn, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Burke, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cambridge, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cottage Grove | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cottage Grove, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cristiana, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cross Plains, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cross Plains, Village | 8 | 0 | 0 | 0 | 0 | 0 | 8 |
| Dane, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dane, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Deerfield, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Deerfield, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DeForest | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dunkirk, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dunn, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fitchburg | 0 | 16 | 0 | 0 | 0 | 0 | 16 |
| Madison, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Madison, City | 320 | 3 | 2 | 0 | 0 | 2 | 327 |
| Maple Bluff | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Marshall | 30 | 0 | 0 | 0 | 0 | 0 | 30 |
| Mazomanie, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mazomanie, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| McFarland | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Medina, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Middleton, City | 3 | 201 | 0 | 1 | 3 | 0 | 208 |
| Middleton, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monona | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| Montrose | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mt Horeb | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oregon, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oregon, Village | 16 | 7 | 0 | 1 | 0 | 1 | 25 |
| Pleasant Springs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Primrose, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Roxbury, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rutland, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shorewood Hills | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Springdale, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Springfield, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stoughton | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| Sun Prairie | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sun Prairie, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Token Creek | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vermont, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Verona, City | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Verona, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vienna, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Waunakee | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Westport, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Windsor, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| York, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UW Madison | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wisconsin, State of | 40 | 8 | 0 | 1 | 2 | 2 | 53 |
| US Government | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 469 | 288 | 6 | 4 | 6 | 6 | 779 |

| Low Band | | | | | | | |
|-----------------------|-----------------|---------------|-----------------|------------------------------------|------------------------------|--------------------------|--------------|
| Entity | Portable | Mobile | Desk-Top | Transmit/ Receive Sites | Console Positions | Base Stations | Total |
| Dane County | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Albion, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Belleville | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Berry, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black Earth, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black Earth, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blooming Grove, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blue Mounds, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blue Mounds, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bristol, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brooklyn, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Burke, Town | 1 | 1 | 1 | 1 | 0 | 1 | 5 |
| Cambridge, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cottage Grove | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cottage Grove, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cristiana, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cross Plains, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cross Plains, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dane, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dane, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Deerfield, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Deerfield, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DeForest | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dunkirk, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dunn, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fitchburg | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Madison, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Madison, City | 4 | 12 | 1 | 1 | 0 | 0 | 18 |
| Maple Bluff | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Marshall | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mazomanie, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mazomanie, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| McFarland | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Medina, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Middleton, City | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Middleton, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Monona | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Montrose | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mt Horeb | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oregon, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oregon, Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pleasant Springs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Primrose, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Roxbury, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rutland, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shorewood Hills | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Springdale, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Springfield, Town | 2 | 5 | 1 | 1 | 0 | 1 | 10 |
| Stoughton | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sun Prairie | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sun Prairie, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Token Creek | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vermont, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Verona, City | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Verona, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vienna, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Waunakee | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Westport, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Windsor, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| York, Town | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UW Madison | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wisconsin, State of | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| US Government | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 7 | 18 | 3 | 3 | 0 | 2 | 33 |

| Grand Summary | | | | | |
|-----------------------|-------------|-------------|------------|-----------------|--------------|
| Entity | VHF | 800 | UHF | Low Band | Total |
| Dane County | 702 | 172 | 107 | 0 | 981 |
| Albion, Town | 0 | 0 | 0 | 0 | 0 |
| Belleville | 85 | 0 | 0 | 0 | 85 |
| Berry, Town | 0 | 0 | 0 | 0 | 0 |
| Black Earth, Town | 0 | 0 | 0 | 0 | 0 |
| Black Earth, Village | 28 | 0 | 0 | 0 | 28 |
| Blooming Grove, Town | 36 | 0 | 0 | 0 | 36 |
| Blue Mounds, Town | 0 | 0 | 0 | 0 | 0 |
| Blue Mounds, Village | 15 | 0 | 0 | 0 | 15 |
| Bristol, Town | 6 | 0 | 0 | 0 | 6 |
| Brooklyn, Village | 34 | 0 | 0 | 0 | 34 |
| Burke, Town | 0 | 0 | 0 | 5 | 5 |
| Cambridge, Village | 8 | 0 | 0 | 0 | 8 |
| Cottage Grove | 56 | 0 | 0 | 0 | 56 |
| Cottage Grove, Town | 0 | 0 | 0 | 0 | 0 |
| Cristiana, Town | 10 | 0 | 0 | 0 | 10 |
| Cross Plains, Town | 0 | 0 | 0 | 0 | 0 |
| Cross Plains, Village | 80 | 0 | 8 | 0 | 88 |
| Dane, Town | 0 | 0 | 0 | 0 | 0 |
| Dane, Village | 30 | 0 | 0 | 0 | 30 |
| Deerfield, Village | 0 | 0 | 0 | 0 | 0 |
| Deerfield, Town | 0 | 0 | 0 | 0 | 0 |
| DeForest | 26 | 0 | 0 | 0 | 26 |
| Dunkirk, Town | 0 | 0 | 0 | 0 | 0 |
| Dunn, Town | 7 | 0 | 0 | 0 | 7 |
| Fitchburg | 237 | 5 | 16 | 0 | 258 |
| Madison, Town | 0 | 0 | 0 | 0 | 0 |
| Madison, City | 931 | 3297 | 327 | 18 | 4573 |
| Maple Bluff | 22 | 2 | 0 | 0 | 24 |
| Marshall | 72 | 1 | 30 | 0 | 103 |
| Mazomanie, Town | 0 | 0 | 0 | 0 | 0 |
| Mazomanie, Village | 32 | 0 | 0 | 0 | 32 |
| McFarland | 138 | 4 | 0 | 0 | 142 |
| Medina, Town | 0 | 0 | 0 | 0 | 0 |
| Middleton, City | 193 | 5 | 208 | 0 | 406 |
| Middleton, Town | 0 | 0 | 0 | 0 | 0 |
| Monona | 106 | 41 | 3 | 0 | 150 |
| Montrose | 0 | 0 | 0 | 0 | 0 |
| Mt Horeb | 28 | 0 | 0 | 0 | 28 |
| Oregon, Town | 5 | 0 | 0 | 0 | 5 |
| Oregon, Village | 0 | 0 | 25 | 0 | 25 |
| Pleasant Springs | 8 | 0 | 0 | 0 | 8 |
| Primrose, Town | 2 | 0 | 0 | 0 | 2 |
| Roxbury, Town | 0 | 0 | 0 | 0 | 0 |
| Rutland, Town | 0 | 0 | 0 | 0 | 0 |
| Shorewood Hills | 64 | 6 | 0 | 0 | 70 |
| Springdale, Town | 0 | 0 | 0 | 0 | 0 |
| Springfield, Town | 0 | 0 | 0 | 10 | 10 |
| Stoughton | 162 | 0 | 2 | 0 | 164 |
| Sun Prairie | 159 | 8 | 0 | 0 | 167 |
| Sun Prairie, Town | 0 | 0 | 0 | 0 | 0 |
| Token Creek | 0 | 0 | 0 | 0 | 0 |
| Vermont, Town | 0 | 0 | 0 | 0 | 0 |
| Verona, City | 132 | 0 | 0 | 0 | 132 |
| Verona, Town | 0 | 0 | 0 | 0 | 0 |
| Vienna, Town | 7 | 0 | 0 | 0 | 7 |
| Waunakee | 49 | 0 | 0 | 0 | 49 |
| Westport, Town | 0 | 0 | 0 | 0 | 0 |
| Windsor, Town | 0 | 0 | 0 | 0 | 0 |
| York, Town | 0 | 0 | 0 | 0 | 0 |
| UW Madison | 0 | 0 | 0 | 0 | 0 |
| Wisconsin, State of | 6 | 43 | 53 | 0 | 102 |
| US Government | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 3476 | 3584 | 779 | 33 | 7872 |

Summary of Current Maintenance and Equipment Costs as Provided by Survey Respondents

SUMMARY OF RADIO BUDGET INFO FROM DANE COUNTY SURVEY DATA

12/01/2008

| <u>GOV UNIT</u> | <u>REPAIR & MAINT</u> | <u>REPAIR FACILITY</u> | <u>CAPITAL BUDGET</u> | <u>MOB</u> | <u>RADIOS PORT</u> | <u>BASE</u> |
|------------------|---------------------------|------------------------|-----------------------|------------|--------------------|-------------|
| Cottage Grove PD | \$2,400 | Madison | ? | 9 | 15 | 1 |
| Middleton PD | \$5,280 | Madison | \$350,000 * | 16 | 39 | 1 |
| Middleton Fire | \$4,200 ** | ? | NONE | 11 | 33 | 2 |
| Stoughton EMS | \$1,000 | Madison & Gen Comm | NONE | 1 | 43 | |
| Stoughton Fire | \$1,000 | Madison & Vendor | NONE | 12 | 25 | 1 |
| Stoughton PD | \$15,000 *** | Contract | \$70,000 * | 9 | 25 | 1 |
| Stoughton PW | \$2,000 | Gen Comm | \$155,000 | 25 | 10 | 3 |
| Verona PW | \$5,000 **** | Madison & Gen Comm | NONE | 30 | 2 | 1 |
| Verona Fire | \$1,300 | Gen Comm | \$64,000 | 22 | 40 | 2 |
| Verona PD | \$2,000 | Madison & | NONE | 7 | 25 | 1 |

* Includes bonding for relocation (Cottage Grove PD) and remodeling dispatch center (Stoughton PD)

** Includes Pagers

*** Include dedicated line to repeater

**** Include some funding for replacement

Tower Detail Summary

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|----------------------|---|---|---|---|-------------|--------------|-----------------------|---|--|
| Dane County | Alliant Energy Center Coroners Office Dane County Airport (Dane County Regional Airport PDF) Emergency Management Highway Dept Paging System Parks and Forestry Public Health - ACO Public Works Sheriff's Office (Dane County Sheriff's Office PDF) | Airport Administration Repeater | Dane County Regional Airport | Dane County Regional Airport Terminal Building | 43-8-10.0N | 089-20-45.4W | 10meters (36ft) | 10meters (36ft) | Additional antenna space is available on the roof of the terminal building |
| | JRC(Dane County Juvenile Detention PDF) | | | 210 Martin Luther King Jr Blvd 2nd Floor Madison WI 53703 | | | | | |
| | Madison Metro Sewerage District (Madison Metro Sewerage PDF) | Nine Springs Wastewater Treatment Plant-Radio Tower | MMSD | 1610 Moorland Rd Madison WI 53713 | 43-02-41.9N | 089-22-55.4W | 30meters (100ft) | Tower elevation is 298.7 meters (980 ft.) Antennas are at various heights | In addition to the districts own antenna tower at the Nine Springs Wastewater Treatment Plant, the district rents space on the Larkin Tower and has an agreement with the city of Madison Water Utility to have an antenna on the Lakeview Water Tower. Those towers are used for the telemetry system only. |
| | | City of Madison-Larkin Tower | City of Madison-Leased for approximately \$5,000 per year | 125 Larkin St Madison WI 53705 | 43-03-53.9N | 089-26-23.4W | Uncertain | Tower elevation is 315.5meters (1035 ft) and antenna height is 61.0meters (200 ft.) | In addition to the districts own antenna tower at the Nine Springs Wastewater Treatment Plant, the district rents space on the Larkin Tower and has an agreement with the city of Madison Water Utility to have an antenna on the Lakeview Water Tower. Those towers are used for the telemetry system only. |
| | | Lakeview Water Tower | City of Madison-Water Utility | 1202 Northport Dr Madison WI 53704 | 43-08-19.0N | 089-18-25.0W | Unknown | Tower elevation is 309 meters (1015ft) and antenna height is 37.79 meters (124ft) | In addition to the districts own antenna tower at the Nine Springs Wastewater Treatment Plant, the district rents space on the Larkin Tower and has an agreement with the city of Madison Water Utility to have an antenna on the Lakeview Water Tower. Those towers are used for the telemetry system only. |
| | Zoo | | | | | | | | |
| Albion, Town | Road Crew | | | | | | | | |
| Belleville | DPW EMS Fire Dept Police Dept School District Water Utility | | | | | | | | |
| Berry, Town | Road Crew | None | None | None | None | None | None | None | None |
| Black Earth, Town | Road Crew (Town of Black Earth PDF) | None | None | None | None | None | None | None | None |
| Black Earth, Village | DPW Fire Dept (Village of Black Earth Joint Water/Sewer Utility) EMS (District 1)(District One EMS PDF) | Black Earth Fire Department | Black Earth Joint Fire District | 711 Blue Mounds St Black Earth WI 53515 | 43-8-32N | 089-44-55.4W | 24meters (80ft) | | |
| | | unknown | unknown | unknown | unknown | unknown | unknown | unknown | unknown |
| Blooming Grove, To | Road Crew Fire Dept (Town of Blooming Grove Fire PDF) EMS (MB/BU/BG) | Blooming Grove Fire Department | Blooming Grove Fire Department | 1880 South Stoughton Rd Madison WI 53716 | 43-4-5.0N | 089-18-47.4W | 18.28meters (60 feet) | Ground elevation 264degrees | |
| Blue Mounds, Town | Road Crew | | | | | | | | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|---|--|---|-----------------------------------|---|-------------|--------------|--|---|---|
| Blue Mounds, Village | DPW (Village of Blue Mounds PDF) | No sites | | | | | None | None | 1 water tower currently in use with cell antennas |
| | Police (Village of Blue Mounds Police PDF) | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown |
| | Water/Sewer Utility | | | | | | | | |
| Bristol, Town | Road Crew (Town of Bristol PDF) | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Brooklyn, Village | DPW | | | | | | | | |
| | EMS | | | | | | | | |
| | Fire & EMS | Village of Brooklyn | Brooklyn Fire & EMS Prot Dist | 401 W Main St Brooklyn | 41-51-11-4N | 89-22-48-7W | 45.3 meters | | |
| | Police Dept | | | | | | | | |
| Burke, Town | Road Crew (Town of Burke PDF) | Town of Burke (Main Offices) | Town of Burke | 5365 Reiner Rd Madison WI 53718 | | | 12.19meters (40 ft) small antenna | | |
| | Water Utility | | | | | | | | |
| Cambridge, Village | DPW | | | | | | | | |
| | EMS | | | | | | | | |
| | Fire Dept | | | | | | | | |
| | School District | | | | | | | | |
| | Water/Sewer District | | | | | | | | |
| Cottage Grove | DPW | | | | | | | | |
| | EMS (Deer-Grove) | | | | | | | | |
| | Fire Dept (Village of Cottage Grove Fire PDF) | Cottage Grove Emergency Services Building | Town and Village of Cottage Grove | 4030 County Hwy N Cottage Grove WI 53527 | 43-04-18.0N | 089-11-53.4W | 19.5meters (64ft) (Building Hose Tower) | 19.5meters (64ft) | |
| | Police Dept | | | | | | | | |
| | School District (MG) Emergency Government (Village of Cottage Grove Emergency Government PDF) | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown |
| Cottage Grove, Town | Road Crew (Town of Cottage Grove PDF) | Hwy Garage | | 4062 Hwy N Cottage Grove WI 53527 | | | | | Emergency services building has hose tower |
| Cristiana, Town (Town of Cristiana PDF) | Road Crew | Unknown | Unknown | 773 Koshkonong Rd Cambridge WI 53523 | Unknown | Unknown | Unknown | Unknown | Unknown |
| Cross Plains, Town | Road Crew | | | | | | | | |
| Cross Plains, Village | DPW | | | | | | | | |
| | EMS | Tower | EMS District | 2027 Park St Cross Plain | 43.1140686 | 89.6485367 | 55 ft | 55 ft | No |
| | Fire | Building | Fire District | 1501 Bourbon Rd Cross F | 43.1125338 | 89.6643777 | 35 ft | 35 ft | No |
| | Police Dept (Village of Cross Plains PDF) | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown |
| Dane, Town | Road Crew | | | | | | | | |
| Dane, Village | DPW ?? | | | | | | | | |
| | Fire Dept | Dane Fire Department | | 102 West Main St Dane WI 53529 | 43-15-1.8N | 089-30-7.4W | 4.57meters (15ft)(roof mounted antenna) | 9.14meters (30ft)(roof mounted antenna) | One village owned water tower |
| | Police Dept (Village of Dane Police PDF) | Village of Dane Police Department | Village of Dane Police Department | 102 West Main St Dane WI 53529 | | | unknown | 6.09meters (20ft)- 9.14meters (30ft) | water tower on south side by Hwy 113 |
| Deerfield, Village | DPW (Village of Deerfield Public Works PDF) | None | None | None | None | None | None | None | None |
| | EMS (Deer-Grove) | | | | | | | | |
| | Fire Dept | | | | | | | | |
| | School District (School District Village of Deerfield PDF) | None | None | None | None | None | None | None | None |
| | Sewer District | | | | | | | | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|-----------------|--|-----------------------------------|---------------------|---|-----------------|------------------|-------------------------------|--------------------|---|
| Deerfield, Town | Road Crew | | | | | | | | |
| DeForest | DPW | | | | | | | | |
| | EMS | | | | | | | | |
| | Fire Dept | | | | | | | | |
| | Police Dept (Village of DeForest Police PDF) | DeForest PD-Repeater Tower | Village of DeForest | Linde St DeForest WI 53532 | 43.1457.96 N | 089.2007.23 W | 27.43meters (approx. 90ft) | 21.34meters (70ft) | Both water towers have cell phone units installed |
| | School District | | | | | | | | |
| | Water Utility | | | | | | | | |
| Dunkirk, Town | Road Crew (Town of Dunkirk PDF) | None | None | None | None | None | None | None | None |
| Dunn, Town | Road Crew(Town of Dunn PDF) Kegonsa Sanitary District | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown |
| Fitchburg | DPW | Public Safety Building Tower | City of Fitchburg | 5791 Lacy Rd Fitchburg, | 43-00-02.70N | 89-26-42.72W | 198 Ft | | |
| | | Montadale Watertower | City of Fitchburg | 5613 Montadale St Fitchb | 42-59-26-20N | 89-25-53-40W | 98 Ft | 98 ft & 40 ft | |
| | | Commerce Park Watertower | City of Fitchburg | 2827 Commerce Park Dr | 43-00-37.31N | 89-28-01.09W | 105 ft | 105, 40, 20, 10 ft | |
| | | WMGN Radio Tower | Midwest Radio Group | 1975 County Highway MN | 42-57-46.00N | 89-22-46.00W | 400 ft | 198, 20 ft | |
| | | WB57 Studio tower | WB57 Television | 2700 blk S Syene Rd | 43-02-03.00N | 89-23-39.70W | 198 ft | 198 ft | |
| | | WB57 TV transmitter Tower | WMTV WB57 | 615 Forward Dr Madison, | 43-03-04.20N | 89-29-13.88W | 1500 ft | 750 ft | |
| | | Fitchburg Fire station 2 | City of Fitchburg | 5415 King James Way M | 43-01-00.00N | 89-28-30-05W | 40 ft | 20-40ft | |
| | | DPW Garage | City of Fitchburg | 2377 s Fish Hatchery Rd | 42-58-59.67N | 89-25-50-08W | 30 ft | 30 ft | |
| | | Parks Dept Garage | City of Fitchburg | 2450 S Fish Hatchery Rd | 42-59-03.36N | 89-25-49.30W | 20ft | 20 ft | |
| | | City Hall/Police | City of Fitchburg | 5520 Lacy Rd Fitchburg, | 43-00-08.21N | 89-25-25.94W | 30ft | 30 ft | |
| | EMS (Fitch-Rona) | | | | | | | | |
| | Fire Dept | | | | | | | | |
| | Police Dept | | | | | | | | |
| | Water Utility | | | | | | | | |
| Madison, Town | DPW | | | | | | | | |
| | EMS / Fire Dept | | | | | | | | |
| | Police Dept | | | | | | | | |
| Madison, City | American Red Cross | | | | | | | | |
| | Edgewood College | | | | | | | | |
| | EMS / Fire Dept | | | | | | | | |
| | Police Dept | | | | | | | | |
| | Engineering Services | | | | | | | | |
| | Forestry | | | | | | | | |
| | Hospitals: | | | | | | | | |
| | Mentor Hospital | | | | | | | | |
| | St Mary's Hospital | | | | | | | | |
| | UW Hospital | | | | | | | | |
| | VA Hospital | | | | | | | | |
| | Local Govt: | | | | | | | | |
| | Art Center | | | | | | | | |
| | Convention Center | | | | | | | | |
| | Golf Courses | | | | | | | | |
| | Madison Gas & Electric | | | | | | | | |
| | MATC (MATC PDF) | No follow on information | | | | | | | |
| | Med-Flight | | | | | | | | |
| | Metro Bus | | | | | | | | |
| | Parks | | | | | | | | |
| | Private Ambulance Companies | | | | | | | | |
| | Curtis | | | | | | | | |
| | Ryan Brothers (Ryan Brothers PDF) | 922 South Park St WI (Station) | Madison | 922 South Park St Madison WI (Station) | Unknown | Unknown | Unknown | Unknown | Unknown |
| | Radio Shop | | | | | | | | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|--------------|---------------|---|----------|---|-------------|--------------|-------------------------------------|--|---|
| | Survey KAZ666 | 1970 CTY HWY PB Verona WI (Location #1) | | 1970 CTY HWY PB Verona WI (Location #1) | 42-57-32N | 089-30-04.4W | 328meters (1076ft)ground elevation | Ant#1 79meters (259ft) Ant#2 108meters (354ft) Ant#3 142meters (465ft) | |
| | | Dane County Courthouse Madison WI (Location #2) | | Dane County Courthouse Madison WI (Location #2) | 43-04-21N | 089-22-55.4W | 279meters (915ft) ground elevation | Ant#1 58meters (190ft) | |
| | | 125 Larkin St Madison WI (Location #3) | | 125 Larkin St Madison WI (Location #3) | 43-03-54N | 089-26-23.4W | 315meters (1033ft) ground elevation | Ant#1 61meters (200ft) | |
| | | Brigham Park CTY HWY F Blue Mounds WI (Location #4) | | Brigham Park CTY HWY F Blue Mounds WI (Location #4) | 43-01-37N | 089-48-44.4W | 448meters (1469ft) ground elevation | Ant#1 38meters (124ft) | |
| | | 8559 Mineral Point Rd Madison WI (Location #5) | | 8559 Mineral Point Rd Madison WI (Location #5) | 43-03-21N | 089-32-06.4W | 343meters (1125ft) ground elevation | Ant#1 155meters (508ft) | |
| | | 6543 Simpson Rd Roxbury WI (Location #5) | | 6543 Simpson Rd Roxbury WI (Location #5) | 43-12-43N | 089-36-04.4W | 367meters (1204ft) ground elevation | Ant#1 73meters (239ft) | |
| | | Dane County, Countywide (Location #7) | | Dane County, Countywide (Location #7) | | | | | |
| | | Statewide (Location #8) | | Statewide (Location #8) | | | | | |
| | Survey KBA293 | 210 Martin Luther King Jr Blvd Madison WI (Location #1) | | 210 Martin Luther King Jr Blvd Madison WI (Location #1) | 43-04-21N | 089-22-55.4W | 279meters (915ft) ground elevation | Ant#1 61meters (200ft) | |
| | | 316 West Dayton St Madison WI (Location #2) | | 316 West Dayton St Madison WI (Location #2) | 43-04-30N | 089-23-28.4W | 265meters (869ft) ground elevation | Ant#1 12meters (39ft) | |
| | | 421 Grand Canyon Dr Madison WI (Location #3) | | 421 Grand Canyon Dr Madison WI (Location #3) | 43-03-30N | 089-30-00.4W | 320meters (1049ft)ground elevation | Ant#1 7meters (22ft) | |
| | | 1437 Monroe St Madison WI (Location #4) | | 1437 Monroe St Madison WI (Location #4) | 43-04-06N | 089-24-39.4W | 267meters (875ft)ground elevation | Ant#1 12meters (39ft) | |
| | | 4418 Cottage Grove Rd Madison WI (Location #5) | | 4418 Cottage Grove Rd Madison WI (Location #5) | 43-05-04.0N | 089-19-25.4W | 268meters (879ft)ground elevation | Ant#1 7meters (22ft) | |
| | | 825 West Badger Rd Madison WI (Location #5) | | 825 West Badger Rd Madison WI (Location #5) | 43-02-17.0N | 089-23-46.4W | 265meters (869ft) ground elevation | Ant#1 8meters (26ft) | |
| | | 16km radius around Location #1 (Location #7) | | 16km radius around Location #1 (Location #7) | | | | | |
| | Survey KBD334 | 1870 CTY HWY PB Verona WI (Location #1) | | 1870 CTY HWY PB Verona WI (Location #1) | 42-57-32N | 089-30-04.4W | 328meters (1076ft)ground elevation | Ant#1 101meters (331ft) | |
| | | 125 Larkin St Madison WI (Location #2) | | 125 Larkin St Madison WI (Location #2) | 43-03-54N | 089-26-23.4W | 315meters (1033ft) ground elevation | Ant#1 76meters (249ft) | |
| | | 210 Martin Luther King Jr Blvd Madison WI (Location #3) | | 210 Martin Luther King Jr Blvd Madison WI (Location #3) | 43-04-21N | 089-22-55.4W | 279meters (915ft) ground elevation | Ant#1 38meters (124ft) | |
| | | 42km radius around Location #2 (Location #4) | | 42km radius around Location #2 (Location #4) | | | | | |
| | | 42km radius around Location #1 (Location #5) | | 42km radius around Location #1 (Location #5) | | | | | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|--------------|----------------|---|----------|---|-----------|--------------|-------------------------------------|---|---|
| | Survey KCP297 | 45km radius around 43-04-21N,089-22-55.4W | | 45km radius around 43-04-21N,089-22-55.4W | | | | | |
| | Survey KMF914 | 8559 Mineral Point Rd Madison WI (Location #2) | | 8559 Mineral Point Rd Madison WI (Location #2) | 43-03-21N | 089-32-06.4W | 343meters (1125ft)ground elevation | Ant#1 155meters (508ft) | |
| | | 6543 Simpson Rd Roxbury WI (Location #3) | | 6543 Simpson Rd Roxbury WI (Location #3) | 43-12-43N | 089-36-4.4W | 367meters (1204ft)ground elevation | Ant#1 70meters (229ft) Ant#2 73meters (239ft) | |
| | | 1970 CTY HWY PB Verona WI (Location #4) | | 1970 CTY HWY PB Verona WI (Location #4) | 42-57-32N | 089-30-04.4W | 328meters (1076ft)ground elevation | Ant#1 120meters (393ft) Ant#2 125meters (410ft) | |
| | | 1996 State Hwy 73 Rockdale WI (Location #5) | | 1996 State Hwy 73 Rockdale WI (Location #5) | 42-57-25N | 089-4-14.4W | 302meters (990ft)ground elevation | Ant#1 104meters (341ft) | |
| | | 5417 Reeve Rd Mazomanie WI(Location #6) | | 5417 Reeve Rd Mazomanie WI(Location #6) | 43-9-7N | 089-48-30.4W | 332meters (1089ft)ground elevation | Ant#1 38meters (124ft) | |
| | | Land mobile control station meeting the 6.1 meter rule (Location #7) | | Land mobile control station meeting the 6.1 meter rule (Location #7) | | | | | |
| | | Operating within a 60km radius around fixed location #2 (Location #8) | | Operating within a 60km radius around fixed location #2 (Location #8) | | | | | |
| | | 935 Bird St Sun Prairie WI (Location #9) | | 935 Bird St Sun Prairie WI (Location #9) | 43-11-37N | 089-13-30W | 308meters (1010ft)ground elevation | Ant#1 50meters (164ft) | |
| | Survey KMF916 | 8485 Mineral Point Rd Madison WI (Location #1) | | 8485 Mineral Point Rd Madison WI (Location #1) | 43-03-21N | 089-32-6.4W | 344meters (1128ft)ground elevation | Ant#1 155meters (508ft) | |
| | | 1970 CTY HWY PB Verona WI (Location #2) | | 1970 CTY HWY PB Verona WI (Location #2) | 42-57-32N | 089-30-04.4W | 328meters (1076ft)ground elevation | Ant#1 61meters (200ft) | |
| | | 1996 State Hwy 73 Rockdale WI (Location #3) | | 1996 State Hwy 73 Rockdale WI (Location #3) | 42-57-25N | 089-4-14.4W | 302meters (990ft) ground elevation | Ant#1 67meters (219ft) | |
| | | 6543 Simpson Rd Roxbury WI (Location #4) | | 6543 Simpson Rd Roxbury WI (Location #4) | 43-12-43N | 089-36-4.4W | 367meters (1204ft)ground elevation | Ant#1 70meters (229ft) Ant#2 79meters (259ft) | |
| | | 210 Martin Luther King Jr Blvd Madison WI (Location #5) | | 210 Martin Luther King Jr Blvd Madison WI (Location #5) | 43-04-21N | 089-22-55.4W | 279meters (915ft)ground elevation | Ant#1 38meters (124ft) | |
| | | Dane County, Countywide (Location #6) | | Dane County, Countywide (Location #6) | | | | | |
| | Survey KNNU879 | SE quadrant of the intersection HWY 90 and Dane CTY HWY N | | SE quadrant of the intersection HWY 90 and Dane CTY HWY N | 42-59-55N | 089-11-55.4W | 268meters (879ft)ground elevation | Ant#1 15meters (49ft) | |
| | Survey KSA293 | 125 Larkin St Madison WI (Location #1) | | 125 Larkin St Madison WI (Location #1) | 43-03-54N | 089-26-23.4W | 315meters (1033ft)ground elevation | Ant#1 84meters (275ft) | |
| | | 8559 Mineral Point Rd Madison WI (Location #3) | | 8559 Mineral Point Rd Madison WI (Location #3) | 43-03-21N | 089-32-06.4W | 343meters (1125ft) ground elevation | Ant#1 153meters (501ft) | |
| | | Land mobile control station meeting the 6.1 meter rule (Location #6) | | Land mobile control station meeting the 6.1 meter rule (Location #6) | | | | | |
| | | Operating within a 30km radius around fixed location #1 (Location #7) | | Operating within a 30km radius around fixed location #1 (Location #7) | | | | | |
| | Survey KSA719 | 210 Martin Luther King Jr Blvd Madison WI (Location #3) | | 210 Martin Luther King Jr Blvd Madison WI (Location #3) | 43-04-21N | 089-22-55.4W | 279meters (915ft)ground elevation | Ant#1 44meters (144ft) | |
| | | Dane County, Countywide (Location #6) | | Dane County, Countywide (Location #6) | | | | | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|--------------|---------------|--|----------|--|-----------|--------------|-------------------------------------|---|---|
| | Survey KSH315 | Land mobile control station meeting the 6.1 meter rule (Location #1) | | Land mobile control station meeting the 6.1 meter rule (Location #1) | | | | | |
| | | 1970 CTY HWY PB Verona WI (Location #3) | | 1970 CTY HWY PB Verona WI (Location #3) | 42-57-32N | 089-30-04.4W | 328meters (1076ft)ground elevation | Ant#1 96meters (314ft) Ant#2 130meters (426ft) | |
| | | 6543 Simpson Rd Roxbury WI (Location #4) | | 6543 Simpson Rd Roxbury WI (Location #4) | 43-12-43N | 089-36-4.4W | 367meters (1204ft) ground elevation | Ant#1 70meters (229ft) | |
| | | 3160 CTY HWY F Blue Mounds WI (Location #5) | | 3160 CTY HWY F Blue Mounds WI (Location #5) | 43-01-37N | 089-48-44.4 | 448meters (1469ft) ground elevation | Ant#1 67meters (219ft) | |
| | | 1996 State Hwy 73 Rockdale WI (Location #6) | | 1996 State Hwy 73 Rockdale WI (Location #6) | 42-57-25N | 089-4-14.4W | 302meters (990ft) ground elevation | Ant#1 58meters (190ft) Ant#2 67meters (219ft) | |
| | | 8485 Mineral Point Rd Madison WI (Location #9) | | 8485 Mineral Point Rd Madison WI (Location #9) | 43-03-21N | 089-32-6.4W | 344meters (1128ft)ground elevation | Ant#1 155meters (508ft) Ant#2 182meters (597ft) | |
| | | Dane County, Countywide (Location #10) | | Dane County, Countywide (Location #10) | | | | | |
| | Survey KSI257 | 1970 CTY HWY PB Verona WI (Location #1) | | 1970 CTY HWY PB Verona WI (Location #1) | 42-57-32N | 089-30-04.4W | 328meters (1076ft)ground elevation | Ant#1 130meters (426ft) | |
| | | 1996 State Hwy 73 Rockdale WI (Location #2) | | 1996 State Hwy 73 Rockdale WI (Location #2) | 42-57-25N | 089-4-14.4W | 302meters (990ft) ground elevation | Ant#1 80meters (262ft) | |
| | | Land mobile control station meeting the 6.1 meter rule (Location #3) | | Land mobile control station meeting the 6.1 meter rule (Location #3) | | | | | |
| | | 48km radius around 43-04-21N,089-22-55.4W | | 48km radius around 43-04-21N,089-22-55.4W | | | | | |
| | Survey KSI322 | 125 Larkin St Madison WI (Location #1) | | 125 Larkin St Madison WI (Location #1) | 43-03-54N | 089-26-23.4W | 315meters (1033ft)ground elevation | Ant#1 86meters (282ft) | |
| | | 8485 Mineral Point Rd Madison WI (Location #2) | | 8485 Mineral Point Rd Madison WI (Location #2) | 43-03-21N | 089-32-6.4W | 343meters (1125ft) ground elevation | Ant#1 153meters (501ft) | |
| | | 24km radius around Location #1 (Location #4) | | 24km radius around Location #1 (Location #4) | | | | | |
| | | NW of McClellan Dr at Cottage Grove RD (Location #5) | | NW of McClellan Dr at Cottage Grove RD (Location #5) | 43-05-32N | 089-16-38.4W | 300meters (984ft)ground elevation | Ant#1 51meters (167ft) | |
| | Survey KTT968 | 4000 International Ln Madison WI (Location #1) | | 4000 International Ln Madison WI (Location #1) | 43-08-10N | 089-20-45.4W | 262meters (859ft)ground elevation | Ant#1 14meters (45ft) | |
| | | Land mobile control station meeting the 6.1 meter rule (Location #2) | | Land mobile control station meeting the 6.1 meter rule (Location #2) | | | | | |
| | | 16km radius around Location #1 (Location #4) | | 16km radius around Location #1 (Location #4) | | | | | |
| | Survey KUV742 | 125 Larkin St Madison WI (Location #1) | | 125 Larkin St Madison WI (Location #1) | 43-03-54N | 089-26-23.4W | 315meters (1033ft)ground elevation | Ant#1 86meters (282ft) | |
| | | 8485 Mineral Point Rd Madison WI (Location #2) | | 8485 Mineral Point Rd Madison WI (Location #2) | 43-03-21N | 089-32-6.4W | 343meters (1125ft) ground elevation | Ant#1 153meters (501ft) | |
| | | 215 Martin Luther King Jr Blvd Madison WI (Location #3) | | 215 Martin Luther King Jr Blvd Madison WI (Location #3) | 43-04-24N | 089-22-52.4W | 279meters (915ft)ground elevation | Ant#1 37meters (121ft) | |
| | | 1120 Sayle St Madison WI (Location #4) | | 1120 Sayle St Madison WI (Location #4) | 43-03-16N | 089-22-58.4W | 259meters (849ft)ground elevation | Ant#1 6meters (19ft) | |
| | | 24km radius around Location #1 (Location #5) | | 24km radius around Location #1 (Location #5) | | | | | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|--------------|----------------|---|----------|--|-------------|--------------|--|-----------------------------|---|
| | Survey WEH565 | Station (210 Martin Luther King Jr Blvd Madison WI)(Fixed Location Address)(Location #1) | | Fixed location address 210 Martin Luther King Blvd Madison WI | 43-04-20.9N | 089-22-55.4W | 278.6meters (914ft)ground elevation | | |
| | | 1167 (Location #2) | | 1167 (Location #2) | 42-57-25N | 089-04-14.4W | 301.8meters (990ft) ground elevation | Ant#1 36.9meters (121ft) | |
| | | 3110 (Location #3) | | 3110 (Location #3) | 43-12-42.9N | 089-36-04.4W | 367.3meters (1205ft) ground elevation | Ant#1 42.7meters (140ft) | |
| | | 2615 (Location #4) | | 2615 (Location #4) | 43-03-20.9N | 089-32-06.4W | 343.2meters (1125ft) ground elevation | Ant#1 36.9meters (121ft) | |
| | Survey WNEK762 | Station (City County Building Madison WI)(Fixed location address) (Location #1) | | Fixed location City County Building Madison WI | 43-04-20.9N | 089-22-55.4W | 278.6meters (914ft)ground elevation | | |
| | | 2176 (Station #2) | | 2176 (Station #2) | 42-57-31.9N | 089-30-04.4W | 329.2meters (1080ft) ground elevation | Ant#1 36.9meters (121ft) | |
| | Survey WNEK763 | Station (Location #1) | | Fixed location JCT CTY HWY PB and Wesner Rd Verona WI | 42-57-31.9N | 089-30-04.4W | 329.2meters (1080ft) ground elevation | | |
| | | 0376 (Location #2) | | | 43-04-20.9N | 089-22-55.4W | 278.6meters (914ft)ground elevation | | |
| | Survey WNUL617 | 325 W Johnson St Madison WI (Location #1) | | 325 W Johnson St Madison WI | 43-04-30N | 089-23-30.4W | 265meters (869ft) ground elevation | Ant#1 24meters (78ft) | |
| | | 1120 Sayle St Madison WI (Location #2) | | 1120 Sayle St Madison WI (Location #4) | 43-03-16N | 089-22-58.4W | 259meters (849ft)ground elevation | Ant#1 6meters (19ft) | |
| | | 215 Martin Luther King Jr Blvd Madison WI (Location #3) | | 215 Martin Luther King Jr Blvd Madison WI (Location #3) | 43-04-21N | 089-23-28.4W | 279meters (915ft)ground elevation | Ant#1 30meters (98ft) | |
| | | 4000 International Ln Madison WI (Location #1) | | 4000 International Ln Madison WI (Location #1) | 43-08-01N | 089-20-19.4W | 262meters (859ft) ground elevation | Ant#1 2meters (6ft) | |
| | | 4000 International Ln Madison WI (Location #2) | | 4000 International Ln Madison WI (Location #2) | 43-08-24N | 089-20-02.4W | 261meters (856ft) ground elevation | Ant#1 2meters (6ft) | |
| | | 4000 International Ln Madison WI (Location #3) | | 4000 International Ln Madison WI (Location #3) | 43-08-40N | 089-20-33.4W | 261meters (856ft) ground elevation | Ant#1 2meters (6ft) | |
| | Survey WNKH743 | 4000 International Ln Madison WI (Location #4) | | 4000 International Ln Madison WI (Location #4) | 43-08-13N | 089-20-44.4 | 262meters (859ft) ground elevation | Ant#1 13meters (42ft) | |
| | Survey WNTJ324 | Station (1996 State Hwy 73 Rockdale WI) (Fixed Location Address) (Location #1) | | Station (1996 State Hwy 73 Rockdale WI) (Fixed Location Address) (Location #1) | 42-57-25N | 089-04-14.4W | 301.8meters (990ft) ground elevation | | |
| | | 2969 (Location #2) | | | 43-04-20.9N | 089-22-55.4W | 278.6meters (914ft)ground elevation | Ant#1 79.2meters (259ft) | |
| | | 3345 (Location #3) | | | 43-11-36.9N | 089-13-30.4W | | Ant#1 96meters (314ft) | |
| | Survey WNTJ325 | Station (5417 Reeve Rd Mazomanie WI) (Fixed Location Address) (Location #1) | | Station (5417 Reeve Rd Mazomanie WI) (Fixed Location Address) (Location #1) | 43-9-6.9N | 089-48-30.4W | 332.2meters (1089ft) ground elevation | | |
| | | 0683 (Location #2) | | | 43-12-42.9N | 089-36-4.4W | 367.3meters (1205ft) ground elevation | Ant#1 45.7meters (149ft) | |
| | | (Location #3) | | | 43-25-43.9N | 089-39-06.4W | 482.5meters (1583ft)ground elevation | Ant#1 38.1meters (125ft) | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|--------------|----------------|--|----------|---|-------------|--------------|--|-----------------------------|---|
| | Survey WNT026 | Station (6543 Simpson Rd Roxbury WI) (Fixed Location Address) (Location #1) | | Station (6543 Simpson Rd Roxbury WI) (Fixed Location Address) (Location #1) | 43-12-42.9N | 089-36-04.4W | 367.3meters (1205ft) ground elevation | Ant#1 73meters (239ft) | |
| | | 1309 (Location #2) | | | 43-04-20.9N | 089-22-55.4W | 278.6meters (914ft)ground elevation | Ant#1 61meters (200ft) | |
| | | 2485 (Location #3) | | | 43-25-43.9N | 089-39-06.4W | 332.2meters (1089ft) ground elevation | Ant#1 42.7meters (140ft) | |
| | Survey WNTV869 | Station (935 Bird St Sun Prairie WI) (Fixed Location Address) (Location #1) | | Station (935 Bird St Sun Prairie WI) (Fixed Location Address) (Location #1) | 43-11-36.9N | 089-13-30.4W | 309.1meters (1014ft)ground elevation | | |
| | | 1544 (Location #2) | | | 42-57-25N | 089-04-14.4W | 301.8meters (990ft) ground elevation | Ant#1 51.8meters (169ft) | |
| | Survey WNDW548 | 125 Larkin St Madison WI (Location #1) | | 125 Larkin St Madison WI (Location #1) | 43-03-54N | 089-26-23.4W | 315meters (1033ft) ground elevation | Ant#1 85meters (278ft) | |
| | | 9559 Mineral Point Rd Madison WI (Location #2) | | 9559 Mineral Point Rd Madison WI (Location #2) | 43-03-21N | 089-32-06.4W | 343meters (1125ft) ground elevation | Ant#1 153meters (501ft) | |
| | | 1202 Northport Dr Madison WI (Location #3) | | 1202 Northport Dr Madison WI (Location #3) | 43-08-19N | 089-22-27.4W | 309meters (1013ft) ground elevation | Ant#1 43meters (141ft) | |
| | | 11KM NW of McClellan Dr at Cottage Grove RD (Location #4) Land mobile control station meeting the 6.1 meter rule (Location #5) | | 11KM NW of McClellan Dr at Cottage Grove RD (Location #4) Land mobile control station meeting the 6.1 meter rule (Location #5) | 43-05-32N | 089-16-38.4W | 300meters (984ft) ground elevation | Ant#1 53meters (173ft) | |
| | | 32km radius around Location #1 (Location #5) | | 32km radius around Location #1 (Location #5) | | | | | |
| | Survey WPOD227 | 125 Larkin St Madison WI (Location #1) | | 125 Larkin St Madison WI (Location #1) | 43-03-54N | 089-26-23.4W | 315meters (1033ft) ground elevation | Ant#1 85 meters (278ft) | |
| | | 3160 CTY HWY P Blue Mounds WI (Location #2) | | 3160 CTY HWY P Blue Mounds WI (Location #2) | 43-01-37N | 089-48-44.4 | 448meters (1469ft)ground elevation | Ant#1 79meters (259ft) | |
| | | 1996 State Hwy 73 Rockdale WI (Location #3) | | 1996 State Hwy 73 Rockdale WI (Location #3) | 42-57-25N | 089-4-14.4W | 302meters (990ft) ground elevation | Ant#1 102meters (334ft) | |
| | | 6543 Simpson Rd Roxbury WI (Location #4) | | 6543 Simpson Rd Roxbury WI (Location #4) | 43-12-43N | 089-36-04.4W | 367meters (1204ft)ground elevation | Ant#1 79meters (259ft) | |
| | | 56km radius around Location #1 (Location #5) | | 56km radius around Location #1 (Location #5) | | | | | |
| | | 56km radius around Location #1 (Location #5) | | 56km radius around Location #1 (Location #5) | | | | | |
| | | 9600 BLK Mineral Point Rd Madison WI (Location #7) | | 9600 BLK Mineral Point Rd Madison WI (Location #7) | 43-03-21N | 089-32-06W | 343.2meters (1125ft) ground elevation | Ant#1 153meters (501ft) | |
| | Survey WPF8867 | 210 Martin Luther King Jr Blvd Madison WI (Location #1) | | 210 Martin Luther King Jr Blvd Madison WI (Location #1) | 43-04-21N | 089-22-55.4W | 279meters (915ft)ground elevation | Ant#1 34meters (111ft) | |
| | Survey WPMU377 | 4718 Monona Dr Madison WI (Location #1) | | 4718 Monona Dr Madison WI (Location #1) | 43-04-06N | 089-19-30.4W | 272meters (892ft)ground elevation | Ant#1 8meters (26ft) | |
| | | 5km radius around Location #1 (Location #2) | | 5km radius around Location #1 (Location #2) | | | | | |
| | Survey WPOQ371 | Cottage Grove 0.5 miles North of Cottage Grove Rd and 0.54 miles West of Sprecher Rd Madison WI (Fixed Location Address) (Location #1) | | Cottage Grove 0.5 miles North of Cottage Grove Rd and 0.54 miles West of Sprecher Rd Madison WI (Fixed Location Address) (Location #1) | 43-05-32N | 089-16-38W | 300meters (984ft)ground elevation | | |
| | | Spaanem (Location #2) | | | 43-04-19N | 089-18-56W | 289meters (948ft)ground elevation | Ant#1 48.7meters (159ft) | |
| | | Verona (Location #3) | | | 42-57-32N | 089-30-04W | 320meters (1076ft) ground elevation | Ant#1 8meters (26ft) | |
| | Survey WPOQ374 | Larkin 125 Larkin St Madison WI (Fixed Location Address) (Location #1) | | Larkin 125 Larkin St Madison WI (Fixed Location Address) (Location #1) | 43-03-54N | 089-26-23W | 315meters (1033ft) ground elevation | | |
| | | UW Tower (Location #2) | | | 43-03-21N | 089-32-06W | 343.2meters (1125ft) ground elevation | Ant#1 40.3meters (132ft) | |
| | | County CTS (Location #3) | | | 43-04-21N | 089-22-55W | 278.6meters (914ft)ground elevation | Ant#1 18.3meters (60ft) | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|--------------|----------------|---|---|---|-------------|--------------|--|-----------------------------|---|
| | Survey WPQJ375 | County CTS 210 Martin Luther King Jr Blvd Madison WI (Fixed Location Address) (Location #1) | County CTS 210 Martin Luther King Jr Blvd Madison WI (Fixed Location Address) (Location #1) | County CTS 210 Martin Luther King Jr Blvd Madison WI (Fixed Location Address) (Location #1) | 43-04-21N | 089-22-55W | 278.6meters (914ft)ground elevation | | |
| | | Larkin (Location #2) | | | 43-03-54N | 089-26-23W | 315meters (1033ft) ground elevation | Ant#1 36.9meters (121ft) | |
| | | Metro Trans (Location #3) | | | 43-05-5N | 089-22-07W | 259.7meters (852ft)ground elevation | Ant#1 38.4meters (125ft) | |
| | | Holiday (Location #4) | | | 43-07-58N | 089-18-17W | 300.2meters (984ft)ground elevation | Ant#1 36.9meters (121ft) | |
| | Survey WPRJ910 | 3402 HWY AB McFarland WI (Location #1) | 3402 HWY AB McFarland WI (Location #1) | 3402 HWY AB McFarland WI (Location #1) | 43-00-42N | 089-16-6.4W | 262meters (859ft) ground elevation | Ant#1 6meters (19ft) | |
| | | 5km radius around Location #1 (Location #2) | | 5km radius around Location #1 (Location #2) | | | | | |
| | Survey WPRR661 | Lakeview 1202 Northport Dr Madison WI (Fixed Location Address) (Location #1) | Lakeview 1202 Northport Dr Madison WI (Fixed Location Address) (Location #1) | Lakeview 1202 Northport Dr Madison WI (Fixed Location Address) (Location #1) | 43-08-19N | 089-22-27W | 309meters (1013ft)ground elevation | | |
| | | Holiday (Location #2) | | | 43-07-58N | 089-18-17W | 300meters (984ft)ground elevation | Ant#1 34.1meters (111ft) | |
| | | Spaanem (Location #3) | | | 43-04-19N | 089-18-56W | 288.7meters (947ft) ground elevation | Ant#1 34.1meters (111ft) | |
| | Survey WPRR662 | Spaanem 4724 Spaanem Ave Madison WI (Fixed Location Address) (Location #1) | Spaanem 4724 Spaanem Ave Madison WI (Fixed Location Address) (Location #1) | Spaanem 4724 Spaanem Ave Madison WI (Fixed Location Address) (Location #1) | 43-04-19N | 089-18-56W | 289meters (948ft)ground elevation | | |
| | | Lakeview (Location #2) | | | 43-08-19N | 089-22-27W | 309meters (1013ft)ground elevation | Ant#1 43.3meters (142ft) | |
| | | Cottage Grove (Location #3) | | | 43-05-32N | 089-16-38W | 300meters (984ft)ground elevation | Ant#1 43.3meters (142ft) | |
| | Survey WPSR724 | 702 South Randall Ave at Primate Building Madison WI (Location #1) | 702 South Randall Ave at Primate Building Madison WI (Location #1) | 702 South Randall Ave at Primate Building Madison WI (Location #1) | 43-03-40.9N | 089-24-38.9W | 262meters (859ft) ground elevation | Ant#1 8.5meters (27ft) | |
| | | 5km radius around Location #1 (Location #2) | | 5km radius around Location #1 (Location #2) | | | | | |
| | Survey WPUA730 | 125 Larkin St Madison WI (Location #1) | 125 Larkin St Madison WI (Location #1) | 125 Larkin St Madison WI (Location #1) | 43-03-54N | 089-26-23W | 315meters (1033ft) ground elevation | Ant#1 85meters (278ft) | |
| | | 8600 BLK Mineral Point Rd Madison WI (Location #2) | 8600 BLK Mineral Point Rd Madison WI (Location #2) | 8600 BLK Mineral Point Rd Madison WI (Location #2) | 43-03-21N | 089-32-06W | 343.2meters (1125ft) ground elevation | Ant#1 153meters (501ft) | |
| | | Land mobile control station meeting the 6.1 meter rule (Location #3) | | Land mobile control station meeting the 6.1 meter rule (Location #3) | | | | | |
| | | 32km radius around Location #1 (Location #4) | | 32km radius around Location #1 (Location #4) | | | | | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|--------------------|--|--|---|--|---------------------------|---------------------------|--|------------------------------------|---|
| | Survey WPUR277 | 8600 BLK Mineral Point Rd Madison WI (Location #1) Land mobile control station meeting the 6.1 meter rule (Location #2) | | 8600 BLK Mineral Point Rd Madison WI (Location #1) Land mobile control station meeting the 6.1 meter rule (Location #2) | 43-03-21N | 089-32-06W | 343.2meters (1125ft) ground elevation | Ant#1 433.7meters (1422ft) | |
| | | 32km radius around Location #1 (Location #3) | | 32km radius around Location #1 (Location #3) | | | | | |
| | Survey WQFT610 | Dane County, Countywide (Location #1) Dane County, Countywide (Location #2) | | Dane County, Countywide (Location #1) Dane County, Countywide (Location #2) | | | | | |
| | School District | | | | | | | | |
| | Streets Departments | | | | | | | | |
| | Traffic Engineering | | | | | | | | |
| | Water Utility | | | | | | | | |
| Maple Bluff | DPW Fire Dept (Village of Maple Bluff Fire PDF) Police Dept EMS Utility | Maple Bluff Village Hall | Village of Maple Bluff | 18 Oxford Place Maple Bluff WI 53704 | Unknown | Unknown | Unknown | 9meters (30ft) to 12meters (40 ft) | |
| Marshall | DPW EMS Fire Dept Police Dept (Village of Marshall PDF) School District (School District Marshall PDF) Utility District (Village of Marshall PC | None None Marshall Middle School | None None Marshall Public Schools | None 401 School St Marshall WI 53559 | None 43-09-55.0N | None 089-04-06.4W | None 9meters (30ft) tower with antenna | None Unknown | village owned water tower Unknown |
| Mazomanie, Town | Road Crew (Town of Mazomanie PDF) | None | None | None | None | None | None | None | None |
| Mazomanie, Village | DPW (Village of Mazomanie DPW1 PDF) EMS (District 1)(District One EMS PDF) Fire Dept (Village of Mazomanie Fire Department PDF) School District (Wisconsin Heights) Water/Sewer District | Unknown Unknown Mazomanie Fire Station | Unknown Unknown Mazomanie Fire Department | 133 Crescent St Mazomanie WI 53560 Unknown 133 Crescent St Mazomanie WI 53560 | Unknown Unknown | Unknown 089-47-39.4W | 237meters (780ft) Ground elevation with 9meters (30ft) antenna 15meters (50ft) | Unknown Both at 15meters (50ft) | Unknown Village has a couple bluff top locations, but they are within a mile of Eisner Park, which is higher |
| McFarland | DPW (Village of McFarland all agencies PDF) EMS (Village of McFarland all agencies PDF) Fire Dept (Village of McFarland all agencies PDF) Police Dept (Village of McFarland all agencies PDF) School District Water Utility | Unknown N/A Unknown | Unknown N/A Unknown | Unknown N/A Unknown | Unknown N/A Unknown | Unknown N/A Unknown | Unknown N/A Unknown | Unknown N/A Unknown | Unknown N/A Unknown |
| Medina, Town | Road Crew | | | | | | | | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|-----------------|---|---|---|--|---------------|-----------------|--|---|---|
| Middleton, City | Airport (Morey Field) | | | 7426 Hubbard Ave Middleton, WI 53562 | 43-5-44.0N | 089-30-35.4W | | | 2 municipal owned water towers |
| | DPW | City Hall Building/Antenna | City of Middleton | | | | | | |
| | EMS | | | | | | | | |
| | Fire Dept | | | | | | | | |
| | Police Dept | City Hall Tower | City of Middleton | 7426 Hubbard Ave Middleton, WI 53562 | 43 05' 44" | 089 30' 33" | 25meters (85ft) | 25meters (85ft) | Highland Way Water Tower 43 06' 48"N 089 28' 41"W (city owned) |
| | | Pleasant View Rd Rx Site | USCC (Cell Phone Tower) | 4281 Pleasant View Rd Middleton WI, 53562 | 43.103399 | 89.516022 | unknown | unknown | |
| | | High Road Water Tower Rx Site | City of Middleton | 3640 High Road Middleton WI, 53562 | 43 06' 54.05" | 089 30' 5.43" | 28meters (95ft) | 19meters (65ft) | |
| | School District (School District Middleton PDF) | Middleton-Cross Plains Area School District-Transportation Center | Middleton-Cross Plains Area School District | 7613 Century Ave Middleton WI 53562 | 43-4-28N | 089-36-4.4W | Not available | Approx. 30meters (100ft) (Bus barn with mast antenna) | |
| | | Middleton High School | Middleton-Cross Plains Area School District | 2100 Bristol St Middleton WI 53562 | 43-6-0.0N | 089-30-27.4W | School building | | |
| | | E.G. Kromrey Middle School | Middleton-Cross Plains Area School District | 7009 Donna Dr Middleton WI 53562 | 43-6-20.4N | 089-30-8.7W | School building | | |
| | | Glacier Creek Middle School | Middleton-Cross Plains Area School District | 2800 Military Rd Cross Plains WI 53528 | Not available | Not available | School building | | |
| | | West Middleton Elementary School | Middleton-Cross Plains Area School District | 7627 W. Mineral Point Rd Verona WI 53593 | Not available | Not available | School building | | |
| | | Sauk Trail Elementary School | Middleton-Cross Plains Area School District | 2205 Branch St Middleton WI 53562 | Not available | Not available | School building | | |
| | | Sunset Ridge Elementary School | Middleton-Cross Plains Area School District | 8686 Airport Rd Middleton WI 53562 | Not available | Not available | School building | | |
| | | Park Elementary School | Middleton-Cross Plains Area School District | 1209 Park St Cross Plains WI 53528 | Not available | Not available | School building | | |
| | Northside Elementary School | Middleton-Cross Plains Area School District | 3620 High Rd Middleton WI 53562 | Not available | Not available | School building | | | |
| | Elm Lawn Elementary School | Middleton-Cross Plains Area School District | 6701 Woodgate Rd Middleton WI 53562 | Not available | Not available | School building | | | |
| | Water Utility | | | | | | | | |
| Middleton, Town | Road Crew | | | | | | | | |
| Monona | DPW (Monona DPW PDF) | | | | | | | | |
| | EMS/Fire Dept | | | | | | | | |
| | Police Dept (City of Monona Police PDF) | Monona City Hall | City of Monona | 5211 Schluter Rd Monona WI 53716 | 43-03-49N | 089-21-21.4W | 22meters (75ft) | 22meters (75ft) | |
| | | Monona Water Tower | City of Monona | Frost Woods Rd and Monona Dr | 43-03-19N | 089-19-23.4W | 33meters (110ft) | 33meters (110ft) | |
| | South Town Mall | Unknown | 2305 West Broadway Ave Monona WI 53713 | | | 9meters (30ft) | 9meters (30ft) | | |
| | School District | | | | | | | | |
| | Water Utility | | | | | | | | |
| Montrose | Road Crew (Town of Montrose PDF) | None | None | None | None | None | None | None | None |
| Mt Horeb | DPW | | | | | | | | |
| | EMS/Fire Dept | | | | | | | | |
| | Police Dept (Village of Mount Horeb Police PDF) | Mount Horeb Village Hall | Village of Mount Horeb | 138 East Main St Mount Horeb WI 53572 | | | 45meters (150ft) | 45meters (150ft) | Currently located on water tower |
| | School District | | | | | | | | |
| | Water/Sewer Utility | | | | | | | | |
| Oregon, Town | Road Crew (Town of Oregon PDF) | Public Safety Pool | | 1138 Union Rd Oregon WI 53575 | 42-57-57N | 089-23-2.4W | 305meters (1000ft) ground elevation | 17 meter (55 ft) antenna height | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|----------------------|---|------------------------------|------------------------------|---|-------------|--------------|--|------------------|---|
| Oregon, Village | DPW | | | | | | | | |
| | EMS/Fire | | | | | | | | |
| | Police Dept (Village of Oregon Police PDF) | | Village of Oregon | 383 Park St Oregon WI 53575 | 42.926N | 089.384W | unknown antenna height | unknown | 2 water towers |
| | School District Water/Sewer Utility | | | | | | | | |
| Pleasant Springs | Road Crew (Town of Pleasant Spring Sanitary District) | None | None | None | None | None | None | None | |
| Primrose, Town | Town of Primrose Road Crew (Town of Primrose Sanitary District) | None | None | None | None | None | None | None | |
| Roxbury, Town | Road Crew | | | | | | | | |
| Rutland, Town | Road Crew | | | | | | | | |
| Shorewood Hills | DPW (Village of Shorewood Hills Public Works PDF) | Village Hall | Village of Shorewood Hills | 810 Shorewood Blvd Madison WI 53705 | 43-4-33N | 089-26-39.4W | 10 meters (33ft) | 10 meters (33ft) | |
| | EMS/Fire Dept (Village of Shorewood Hills Fire & EMS PDF) | unknown | unknown | unknown | unknown | unknown | unknown | unknown | unknown |
| | Police Dept (Village of Shorewood Hills Fire & EMS PDF) | unknown | unknown | unknown | unknown | unknown | unknown | unknown | unknown |
| Springdale, Town | Road Crew | | | | | | | | |
| Springfield, Town | Road Crew (Town of Springfield PDF) | Town Hall | Town of Springfield | 6157 CTH P Dane WI 53529 | 43-11-31.0N | 089-33-52.4W | 6meters (20ft) | | |
| Stoughton | DPW | | | | | | | | |
| | Electric Utility | | | | | | | | |
| | EMS | | | | | | | | |
| | Fire Dept (City of Stoughton Fire Department) | Stoughton Community Hospital | Stoughton Community Hospital | 381 East Main St Stoughton WI 53589 | 42-55-00N | 089-13-01.2W | 18meters (60ft) | 18meters (60ft) | |
| | Hospital | Stoughton Community Hospital | Stoughton Community Hospital | 900 Ridge St Stoughton WI 53589 | 42-55-28N | 089-13-21.4W | 21meters (70ft) | 22meters (75ft) | |
| | Police Dept | Water Tower | City of Stoughton Utilities | 1430 Furseth Rd Stoughton WI 53589 | 42-55-49N | 089-14-17.4W | 51meters (167.28ft) | | Water towers and city owned buildings |
| | School District | Public Safety Building | City of Stoughton | 321 S Fourth St Stoughton WI 53589 | 42-55-00N | 089-12-55.4W | 16meters (55ft) | | |
| | Streets (City of Stoughton Streets Department) | City Hall | City of Stoughton | 515 South Fourth St Stoughton WI 53589 | 42-54-51N | 089-13-01.4W | 15meters (50ft) | 15meters (50ft) | |
| | Streets (City of Stoughton Streets Department) | City Hall | City of Stoughton | 381 East Main St Stoughton WI 53589 | 42-55-00N | 089-13-01.2W | 29meters (98ft) | 33meters (110ft) | |
| | Streets (City of Stoughton Streets Department) | Stoughton Community Hospital | Stoughton Community Hospital | 900 Ridge St Stoughton WI 53589 | 42-55-28N | 089-13-21.4W | 21meters (70ft) | 22meters (75ft) | |
| Water/Sewer District | | | | | | | | | |
| | Utilities (City of Stoughton Utilities) | Stoughton Utilities | Stoughton Utilities | 600 South Fourth St PO Box 383 Stoughton WI 53589 | 42-54-00N | 089-13-30.4W | 33meters (111.5ft)(1087ft MSL(Mean Sea Level)) | 12meters (40ft) | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|-------------------|---|-----------------------------|--|--|--------------|------------------|--|----------------------|---|
| Sun Prairie | DPW | | | | | | | | |
| | Electric Utility | | | | | | | | |
| | EMS | | | | | | | | |
| | Fire Dept | | | | | | | | |
| | Police Dept (City of Sun Prairie Police Dept PDF) | Sheehan Park Water Tower | Sun Prairie Water and Light | 914 Linnerud Drive Sun Prairie WI 53590 | 43-10-28N | 089-13-44.4W | 45meters (150ft) | 48meters (160ft) | |
| | Bird Street Water Tower | Sun Prairie Water and Light | 935 North Bird St Sun Prairie WI 53590 | 43-11-37N | 089-13-30.4W | 44meters (145ft) | 44meters (145ft) | | |
| | Westside Building | City of Sun Prairie | 2598 West Main St Sun Prairie WI 53590 | | | 12meters (40ft) | 13meters (45ft) | | |
| | City Hall | City of Sun Prairie | 300 East Main St Sun Prairie WI 53590 | 43-11-19N | 089-12-31.4W | 15meters (50ft) | 21meters (70ft) | 3 water towers | |
| | School District | | | | | | | | |
| | Water/Sewer District | | | | | | | | |
| Sun Prairie, Town | Road Crew (Town of Sun Prairie PDF) | None | None | None | None | None | None | None | None |
| Token Creek | Road Crew ?? | | | | | | | | |
| | Sanitary District | | | | | | | | |
| Vermont, Town | Road Crew (Town of Vermont PDF) | None | None | None | None | None | None | None | None |
| Verona, City | DPW (City of Verona DPW PDF) | Public Works Department | City of Verona | 410 Investment Ct Verona 53593 | 42-59-30N | 089-31-39.4W | Antenna on roof 9meters(30ft)-12meters(40ft) tower on top of a 21meters (70ft) tall building | 12meters (39ft) | They are within range of Dane County's west tower on CTH PB and Fitchburg's tower |
| | Fire Dept (City of Verona Fire Department PDF) | | Verona Fire District | 101 Lincoln St Verona WI 53593 | | | | | 2 water towers |
| | Police Dept (City of Verona Police Dept PDF) | City Hall | City of Verona | 111 Lincoln St Verona WI 53593 | 42.59.30N | 089.31.39.4W | 15 meters (49.21 ft) | 15 meters (49.21 ft) | They are within range of Dane County's west tower on CTH PB and Fitchburg's tower |
| | School District | | | | | | | | |
| | Water Utility | | | | | | | | |
| Verona, Town | Road Crew (Town of Verona PDF) | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown |
| Vienna, Town | Road Crew (Town of Vienna PDF) | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown | Unknown |
| Waunakee | DPW | | | | | | | | |
| | EMS | | | | | | | | |
| | Fire Dept | | | | | | | | |
| | Police Dept (Village of Waunakee Police PDF) | | Waunakee | 205 North Klein Drive Waunakee WI 53597 | | | | | There are additional places, but not listed |
| School District | | | | | | | | | |
| | Utilities (Village of Waunakee Utilities PDF) | Utility | | 322 Moravian Valley Rd Waunakee WI 53597 | 43.2.00N | 089.5.00W | 7meters (25ft) to top of antenna | | they own four water towers |
| Westport, Town | Road Crew (Town of Westport PDF) | | | 5387 Mary Lake Rd Waunakee WI 53597 | | | 39meters (130ft) | | Water tower |
| | Utility District | | | | | | | | |
| Windsor, Town | Road Crew | | | | | | | | |
| | Windsor Sanitary District #1 | | | | | | | | |
| York, Town | Road Crew (Town of York PDF) | York Center | Town of York | 7762 Hwy 89 Columbus WI 53925 | 43-14-22N | 089-4-7.4W | 86meters (283 ft) ground elevation on 15 meter (49ft) wood pole | | |

| Municipality | Entity | Tower/Structure | Owned By | Location | Latitude | Longitude | Height of Tower | Mounted Height | Potential Site/Additional Tower Locations |
|--|--|-------------------------------------|--|--------------------------------------|----------|--------------|---|----------------------|---|
| UW Madison | Arboretum | | | | | | | | |
| | Athletic Dept Ops | | | | | | | | |
| | Camp Randall | | | | | | | | |
| | Housing Security | | | | | | | | |
| | Kohl Center | | | | | | | | |
| | Parking Utility | | | | | | | | |
| | Physical Plant | | | | | | | | |
| | Student Union (Memorial Student Union) | | | | | | | | |
| | Student Union (Union South) | | | | | | | | |
| | Telecommunications | | | | | | | | |
| | University Ridge Golf Course | | | | | | | | |
| | UW Hospitals | | | | | | | | |
| | Wis Dept of Corrections Secure Unit | | | | | | | | |
| | ER | | | | | | | | |
| | Med-Flight | | | | | | | | |
| | Physical Plant | | | | | | | | |
| | Security | | | | | | | | |
| | UW Extension | | | | | | | | |
| UW Lifesaving | | | | | | | | | |
| UW Police and Security | | | | | | | | | |
| WECB | | | | | | | | | |
| WHLA TV and Radio | | | | | | | | | |
| Wisconsin, State of Airport Fire Dept | Capital Police (State of Wisconsin Capital Police PDF) | Wilson Street State Office Building | State of Wisconsin, Dept of Administration | 1 West Wilson St Madison WI 53707 | 43-4-49N | 089-22-53.4W | 10 story building with penthouse (275 meters (902 feet) ground elevation) | 47 meters (154 feet) | Just about any state office building, but don't count on Hill Farms |
| | Department of Corrections | | | | | | | | |
| | Mendota | | | | | | | | |
| | Oak Hill Correctional | | | | | | | | |
| | Oregon Correctional | | | | | | | | |
| | Thompson Correctional (Deerfield) | | | | | | | | |
| | Department of Justice | | | | | | | | |
| | Department of Natural Resources (DNR) | | | | | | | | |
| | DOA - State Office Building Mtc | | | | | | | | |
| | DOT - State Patrol | | | | | | | | |
| | State Historical Society | | | | | | | | |
| | State Legislature - Assembly | | | | | | | | |
| | Wisconsin Emergency Management | | | | | | | | |
| US Government | ATF | | | | | | | | |
| | DEA | | | | | | | | |
| | FBI | | | | | | | | |
| | Forest Product Labs | | | | | | | | |
| | Postal Service | | | | | | | | |
| | Secret Service | | | | | | | | |
| | Truax Field | | | | | | | | |
| | Base Security | | | | | | | | |
| | Engineering | | | | | | | | |
| | Maintenance | | | | | | | | |
| TSA (at Dane County Airport) | | | | | | | | | |
| US Army - Civil Support Team (CST) @ Truax | | | | | | | | | |
| US Marshalls | | | | | | | | | |