



Transition Plan and Report to the 2002 Session of the Minnesota Legislature

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Session of the Minnesota Legislature**

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**Metropolitan Radio Board
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Executive Summary

Minnesota Sessions Laws 2001, Chapter 176 requires the Metropolitan Radio Board to submit to the Legislature a report and plan for the board's transition from its current status. This document is presented to the Legislature pursuant to that provision of the law.

The Metropolitan Radio Board (MRB) is a separate and independent government agency with powers and responsibilities defined in statute to include providing a portion of financing for, setting policy for, and overseeing the planning, design, construction, and operation of a region-wide 800 MHz shared public safety radio communications system serving the seven-county metropolitan area.

The new radio system will provide improved ability for public safety entities to communicate across jurisdictional lines (interoperability), as well as making better use of available and scarce spectrum resources. The events of September 11, 2001, demonstrated that radio interoperability is an extremely important factor in preparedness for responding to a major catastrophe.

GOVERNANCE

A governing body is needed to oversee the ongoing duties related to the use of a shared system as required by statute. If cities and counties outside the seven county metropolitan area make decisions to join or plan to join the system, the membership of the Board should be altered to provide greater representation outside the metropolitan area.

Recommendation: *The Metropolitan Radio Board should continue as an independent agency, made up primarily of elected officials who represent the interests of the local units of government served by the system. If the Legislature authorizes and finances expansion of the system to Greater Minnesota, the name of the Board and its geographical makeup should be changed to reflect the new geographical coverage of the system. In addition to the single representative from State Government now authorized, consideration should be given to adding a representative from the Department of Public Safety.*

FINANCING THE BOARD

Recommendation: *The 9-1-1 special revenue account should continue to finance the system's capital, maintenance, and operating costs. Future administrative costs should be funded via user fees as set and managed by the Board.*

METROPOLIAN RADIO BOARD

Transition Plan and Report to the 2002 Session of the Minnesota Legislature

INTRODUCTION

The Metropolitan Radio Board is currently structured as a special purpose local unit of government. It is a separate and independent agency with powers and responsibilities carefully defined in statute. The Board is made up of 17 members, 14 of whom are local elected officials. It is not a joint powers board, as there are members who represent various layers of government. It is not an integral part of the Metropolitan Council nor an existing state agency, although it has connections to both the Metropolitan Council and to several state departments.

The Board's primary responsibilities are to provide a portion of the financing for, set policy for and oversee the planning, design, construction and operation of a region-wide, 800 MHz shared public safety radio communications system serving all levels of government in the 7-county Minneapolis-St. Paul metropolitan area.

When conceived, one of the main objectives of the new radio system was to improve the ability of members of different public safety agencies to talk to one another, a feature known as interoperability. Additionally, the system was designed to make more efficient use of the limited radio spectrum available for public safety use, through trunking and pooling of channels.

Examples of “interoperability” include a municipal police officer being able to talk to a state patrol trooper who is currently passing through his geographical jurisdiction in pursuit of an offender, or being able to exchange information with a sheriff’s deputy in his county—without having to carry more than one radio. For a fire fighter it may mean being able to talk to all the fire fighters from surrounding communities when a large fire requires mutual aid. For the mother of a lost child it can mean that thousands of pairs of eyes can be on the lookout within minutes.

The actual ownership and operation of the system’s infrastructure, or “backbone,” is the responsibility of the Minnesota Department of Transportation’s Electronic Communications Office. Local units of government that have opted to share in the use of the backbone have, in most cases, added to the infrastructure at their own expense. These additions, which enhance radio coverage, benefit users at the state level just as access to the use of the backbone benefits the local governmental unit.

It should be noted that despite the fact that Minnesota state government is an important partner in the shared system, when the Legislature created the Board it gave the majority of the voting power to local elected officials. (see Appendix A) Thus the power to set policy for the operation of the system is largely in the hands of the elected representatives of the communities served by the system. The Legislature also made participation in the system optional for local units.

The Board believes these were wise decisions by the Legislature. The balance that exists between the state’s ownership of the backbone and the policy oversight by representatives of local units of government has worked well to date. Decisions at both the technical level and at the policy level have generally been made after consensus was reached among the users. By almost any measure, the Board has functioned well and has been a model for inter-governmental cooperation.

CURRENT STATUS OF THE SYSTEM

As of February 2002 construction of the region-wide public safety 800 MHz radio system infrastructure is complete and is very nearly ready for the beneficial use of the participating agencies. The contract between the owners and the vendor calls for a series of milestones leading to the complete turnover of the system to MnDOT and the other owners. Initial acceptance of the system from the vendor will follow a 30-day test period which is underway at the time of this writing and expected to be completed in March, 2002. Final debugging will occur between the date of initial acceptance and final acceptance, set to take place on April 1, 2002. At that time the last progress payment will be made to the vendor and the vendor's warranty period begins.

A more complete report on the history and progress of the Board and the system can be found in the Board's *2001 Program Evaluation*, Appendix B.

Users begin migrating to the system as of February 15, 2002—a process that will take place gradually over a period of about two years on schedules that vary from agency to agency. For purposes of assessing user fees, the Board has set July 1, 2002 as the official beginning date of operations on the new system. At that time the Board will begin accepting applications for additional participants in the system and will begin to plan for system expansion.

At this point, participating agencies include the State of Minnesota, Hennepin and Carver Counties, the City of Minneapolis, the City of Richfield, North Memorial Medical Transportation, Metro Transit, and Metro Mobility. Other counties have begun investigating joining the system. At this point the greatest expressed drawback to any new radio technology is the difficulty of financing a new system.

GOVERNANCE

Major issues that continue to confront the Board and the Legislature revolve around the question of what form future governance of the metropolitan system should take. Existing legislation requires the Metropolitan Council to make a biennial recommendation to the Legislature on whether the Board's duties and responsibilities should be transferred to the Metropolitan Council or to a state agency. The past two reports from the Council have recommended against doing either.

First, there is the issue of the very existence of a governing board for the system.

The Board believes that as long as there is work to be done to complete the shared metro system, the Board should continue to exist in its present form. Among necessary tasks are the following:

- To set, monitor and audit compliance with the standards, protocols and procedures necessary for the smooth operation of the region-wide shared radio system
- To expedite and manage the technical design process, the contracting for and leasing of sites, and the negotiating of cooperative agreements among agencies.
- To review, approve, and administer implementation of moves, additions, and changes to the backbone system.
- To provide core training for constituent agencies and interoperability training for non-participating agencies.
- To allocate system costs fairly among participants.
- To resolve complaints, disputes, and grievances from system users.
- To provide a structure for managing the system's growth and expansion.
- To administer the ongoing business of the system such as making lease and utility payments.
- Manage the planning, design and construction of a data layer for the system so that important information such as *CrimNet* data can be distributed to field users via the system.
- Manage and facilitate communication among users on issues affecting system participants at all levels.

Second is the issue of whether the organization should be run from the top-down or from the bottom-up. As discussed earlier, currently the Board is essentially a bottom-up organization, with policy being made by mostly elected representatives from a broad cross section of user entities and potential user entities.

Several other states and metropolitan areas in the US are building similar radio communications systems. In virtually every other system, there is less broad sharing of facilities and less inter-governmental cooperation than has been experienced here. This, we believe, is due in part to the structure of governance the Legislature created in 1995.

We also believe it has been demonstrated that the concept of concentrating power in the hands of elected local officials who represent the interests of the local user agencies becomes very important when making a determination as to the long term governance structure of a shared communications system.

Third, there is the issue of how the system should be governed if and when it is expanded to include counties and cities outside the Metropolitan area. From a technical viewpoint, it would not make sense to divide the radio system into an "Greater Minnesota system" and a "metro system." The nature of the technology as well as considerations of cost suggest that the system should be fully integrated. While there may be a fear in Greater Minnesota that too much control would be centralized in the Metropolitan Area, the fact is that control of talk groups and of day-to-day operations remain almost entirely in the hands of local participants. Only those procedures related to operations between and among different units of government is the responsibility of the Board. And with policymaking in the hands of local representatives, the representatives of local users throughout the state will determine these standards, protocols and procedures. Users would experience almost no difference in command and control of their local talk groups, but would benefit from the ability to inter-operate with other agencies.

It is our belief that if the Legislature authorizes and finances expansion of the system to Greater Minnesota, representation on the Board should be changed to reflect the broader reach of the system. The Board could be expanded to include representatives from out-state and/or some of the metro seats could be eliminated and replaced with out-state seats. The name of the Board should also be changed to reflect the changes in representation.

If and when the Legislature authorizes additional capacity within the system to support a data layer, consideration should be given to adding a representative from The Department of Public Safety to represent the interests of both the State Patrol and CrimNet.

Recommendation: The Metropolitan Radio Board should continue as an independent agency, made up primarily of elected officials who represent the interests of the local units of government served by the system. If the Legislature authorizes and finances expansion of the system to Greater Minnesota, the name of the Board and its geographical makeup should be changed to reflect the new geographical coverage of the system. In addition to the single representative from State Government now authorized, consideration should be given to adding a representative from the Department of Public Safety.

FINANCING THE BOARD

The Board's expenditures can conveniently be divided into four categories: debt service, capital costs, ongoing system operational costs, and administrative costs.

Currently the only source of revenue for the Board is derived from the 9-1-1 surcharge on telephone lines statewide. These funds are deposited in a special revenue fund administered by the Department of Administration. Although dedicated, the funds are appropriated by the Legislature. The Department is required by statute to request an appropriation from the fund on behalf of the Board each biennium as part of its overall budget request. The amount requested is determined by the Board in its annual budget.

The Board currently maintains four fund balances.

- A debt service account containing 9-1-1 funds used to service revenue bonds, as well as required reserve funds;
- An operating account containing the balance of 9-1-1 funds, used for administrative and system operation costs;
- A capital account containing funds raised from the sale of Metropolitan Council revenue bonds, which finance the construction of the system backbone.
- A second capital account containing funds from general obligation bonds sold by the Metropolitan Council, which finance the participation of Metro Transit and Metro Mobility in the system.

When the final payment for the system backbone is made, which is expected to be May 2002, both capital accounts will become empty. The debt service account and operating account will remain. It is important to note that the covenants for the bonds used to finance the construction of the system require a dedicated revenue fund for the life of the bonds, as well as a reserve fund.

Effective July 1, 2002, the Board will begin charging user fees to participants and will be fully responsible for its administrative costs, which will be paid from those proceeds. The statute that established the Board directed the Metropolitan Council to provide office space and administrative support to the Board until that time. Going forward, there are no identifiable cost savings through consolidation with either a state agency or the Metropolitan Council. Debt service will be paid from the debt service account and the ongoing lease costs for the backbone system will be paid from the operating account. Utility costs and operational costs such as insurance will be billed back to the users on a pro-rated basis.

In addition to the reserve account required by the bond covenants, the Board has set up a capital reserve fund into which it plans to transfer monies to cover long-term repair and replacement costs of its facilities, with a target amount of \$1.8 million. The Board has also planned for an operating reserve to cover administrative and operating costs in the event that a system participant defaults on its user fee payments, or in the event of unforeseen operating costs such as might be incurred in the event of a large-scale emergency or disaster.

A copy of the Board's current budget projections is attached as Appendix C. These projections are based on current law and current Board assumptions. If the Legislature should authorize additional bonding to allow the Board to assist local units of government, a new set of projections might look like those presented in Appendix D, Budget Projections Based on Additional Bonding Authorizations.

Recommendation: The 9-1-1 special revenue account should continue to finance the system's capital, maintenance, and operating costs. Future administrative costs should be funded via user fees as set and managed by the Board.

Appendix A

Metropolitan Radio Board Membership

473.893 Board; membership, administration.

Subd. 2. **Membership.** The board consists of 17 members. Fifteen members shall be local officials and shall include:

- (1) one county commissioner appointed by each respective county board from each of the seven metropolitan counties;
- (2) an elected official from each of the cities of Minneapolis, St. Paul, and Bloomington appointed by each respective city governing body;
- (3) two elected officials from other metropolitan cities appointed by the governor, who shall consider recommendations made by the Association of Metropolitan Municipalities when making these appointments;
- (4) an elected official from a county or a city within a county in Minnesota that is contiguous to the metropolitan area appointed by the governor, who shall consider recommendations made by the League of Minnesota Cities when making this appointment;
- (5) a sheriff appointed by the governor, who shall consider recommendations made by the metropolitan sheriffs association when making this appointment; and
- (6) a police chief appointed by the governor, who shall consider recommendations made by the Minnesota police chiefs association when making this appointment.

The 16th member shall be a member of the metropolitan council appointed by the council. The 17th member shall be the director of electronic communications of the Minnesota department of transportation. As provided in section 473.894, subdivision 20, the chair of the technical operations committee serves as an ex officio member of the board.

COUNTY COMMISSIONERS	SPECIFIED CITIES	SHERIFF
Anoka County Commissioner Dave McCauley	City of Minneapolis Council Member Robert Lilligren	Sheriff Pat McGowan, Hennepin County
Carver County Commissioner John Siegfried	City of Saint Paul Council Member Dan Bostrum	CHIEF OF POLICE Chief Kent Therkelsen, Eagan
Dakota County Commissioner Don Maher	City of Bloomington Council Member Steve Peterson	METROPOLITAN COUNCIL Council Member Todd Paulson
Hennepin County Commissioner Randy Johnson	OTHER CITIES City of St. Paul Park Council Member Veid Muiznieks	DEPARTMENT OF TRANSPORTATION Andy Terry, Director of Electronic Communications
Ramsey County Commissioner Tony Bennett	City of Independence Mayor Marvin Johnson	EX OFFICIO Roger Laurence, Radio Communication Manager Hennepin County
Scott County Commissioner Art Bannerman	NON-METRO REPRESENTATIVE City of Buffalo Council Member Del Haag	
Washington County Commissioner Dick Stafford		



**METROPOLITAN RADIO BOARD
2001 PROGRAM EVALUATION**

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METROPOLITAN RADIO BOARD 2001 PROGRAM EVALUATION

BACKGROUND

Authority

Minnesota Statutes 473.897, subdivision 2 requires that the Metropolitan Radio Board report annually to the Metropolitan Council on the progress of the region-wide public safety radio system. The Council uses the Board's annual reports to prepare its biennial reports to the legislature on the activities of the Board and on the progress of the region-wide radio system.

The Metropolitan Radio Board was authorized by the 1995 legislature and held its first meeting on June 30, 1995. Its legislative charge is to develop and implement a plan for a region-wide public safety radio communications system. The Board adopted its system design plan on September 1, 1995.

History and Description of the System

First Phase: The first phase of the region-wide public safety radio communications system plan consists of a region-wide backbone network that provides outdoor two-way radio coverage throughout the nine-county region for state agencies, the Metropolitan Council's Metro Transit division and for emergency medical services.

Initial Network: In 1996 the Board, with MnDOT's concurrence, agreed to allow Hennepin County and the City of Minneapolis to integrate their subsystems with the first phase backbone in an Initial Network that will provide in-building coverage for day-to-day operations for Hennepin County and the City of Minneapolis as well as providing outdoor coverage for state agencies, Metro Transit and emergency medical communications region-wide. In 1999 the Board agreed to allow Carver County to join the network by sharing facilities and radio frequencies with the region-wide backbone system rather than constructing a separate subsystem.

Later Phases: After operation on the Initial Network commences, expected on or about July 1, 2002, other participants and subsystems may apply to become integrated in later phases. Future metropolitan area participants potentially include the remaining metropolitan counties, the city of St. Paul, other cities within the 9-county service area, additional EMS providers, the Metropolitan Airports Commission and the University of Minnesota.

Award of a Contract for the System

The Board prepared detailed RFP/bid specifications for the Initial Network, which were issued by the Minnesota Department of Administration on February 7, 1997. One response was received from Motorola Inc. with E.F. Johnson and Harris Microwave as subcontractors providing interoperability and microwave equipment.

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The participating agencies evaluated the Motorola proposal, concluded that it met the RFP/bid specifications and recommended to the Board on November 7, 1997 that the Board, MnDOT and other participating agencies enter into negotiations with Motorola to prepare a contract for the Initial Network radio equipment. Following extensive negotiations, MnDOT, on behalf of the state and the Metropolitan Radio Board, entered into a contract for the first phase equipment in December 1998. The Metropolitan Council (Metro Transit) and Hennepin County also entered into contracts with Motorola in December 1998, while Carver County entered into a contract with Motorola in 1999 and North Memorial Medical Transportation did so in 2000.

Financing the First Phase of the System

The Metropolitan Radio Board's share of costs for the First Phase was estimated to be \$17.5 million with an additional 10 percent for contingencies bringing the total to \$19.4 million. The 1995 legislature provided the Board with \$3 million in transit bond funds and \$10 million in revenue bond funds for the first phase.

Expanded Bonding Authority

In order to pay for its share of the costs of the radio equipment and for civil construction, the Metropolitan Radio Board needed additional funds beyond the \$13 million authorized in 1995. The initial \$13 million authorization was not sufficient due in part to the increase in costs resulting from inflation between 1995 and 1999. The Board also decided that it would be more cost-effective to build-in higher capacity microwave and to include a second master zone controller as part of the First Phase rather than retrofit the system later to include these. In response to the Board's request, the legislature increased the authorization for revenue bond issuance by \$3.3 million.

Debt service on the Board's revenue bonds is covered by a four cent statewide fee that is collected as part of the total 911 fee on all wired and wireless phone connections in the state. The four cent fee generates enough revenues to cover the debt service costs on the additional \$3.3 million as well as the \$10 million in revenue bonds authorized in the 1995 legislation. The Board has had sufficient funds to cover its costs for the First Phase from the combination of \$3 million in transit bond funds, \$13.3 million in revenue bond funds and \$3+ million in cash reserves from 911 revenues.

Revenue Bonds Issued

On October 13, 1999 the Metropolitan Council issued \$13.3 million in revenue bonds on behalf of the Metropolitan Radio Board. The primary backing for the bonds is the four cent 911 fee levied statewide on all wired and wireless phone connections and allocated to the Board for debt service, system maintenance and operating costs. The bonds are also backed by the Board's authority to assess user fees to cover its capital and operating costs and by the authority of the Metropolitan Council to levy property taxes in the amount of the deficiency on any jurisdiction that does not pay the user fees imposed by the Board. Despite the fact that this issue was the first of its

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kind nationally using 911 telephone surcharge revenues as the primary source of repayment of debt service, the rating agencies gave the issue an AA rating. The bonds were sold at a 5.3158 percent interest rate, making them competitively priced with comparably sized general obligation issues.

Purchase of Second Zone Controller

The Metropolitan Radio Board and MnDOT mutually agreed that a second master zone controller to be used for both backup and added capacity should be purchased and installed as part of the First Phase system. The \$3.7 million cost for the second controller is to be shared between the Board and MnDOT in the same proportion as other First Phase costs (53.6 percent for MnDOT and 46.4 percent for the Board). The Board's share of the \$3.7 million cost of the second controller is \$1.716 and is included in the total cost of \$17.5 million stated above.

Because MnDOT did not receive an appropriation of capital funds for its share of the second controller, the Board authorized its chair to enter into a purchase agreement with Motorola for the Board to purchase the second controller. The purchase agreement included a lease-purchase option, allowing MnDOT to pay its share over a period of time if it does not have the funds to pay its share outright. During 2001 the Board decided to pay for the second zone controller from its capital reserves rather than to lease and agreed to allow MnDOT to pay its share to the Board by issuing credits to the Board equal to the Board's share of MnDOT's maintenance and operating expenses. The Board is obligated to pay to MnDOT quarterly for those ongoing expenses. These credits will be used to offset MnDOT's share of the second zone controller until its \$1.93 million is fully accounted for. When the final credits are issued on the second controller, ownership of the controller will be transferred from the Board to MnDOT.

Sunset Provision

The Board's enabling legislation included a provision that provided for the Board to sunset on July 1, 1999, with its functions, responsibilities and assets to be transferred to either the Metropolitan Council or to a state agency based on recommendations included in the Metropolitan Council's biennial reports on the progress of the project. Consistent with the Metropolitan Council recommendation that the Board continue in existence at least until the First Phase is operational, the 1999 legislature extended the sunset of the Board until July 1, 2002. During 2001, recognizing that more time would be needed by the Board to complete its work, the legislature again extended the sunset to July 1, 2004. In so doing the legislature directed the Board to submit a plan for the system's future as it transitions from overseeing design and construction of the first phase to operating the first phase and to preparing for future growth and expansion.

Leasing of Tower and Building Sites

The First Phase of the Initial Network uses 27 leased public or private sites. MnDOT requested that the Board assist the state department of administration in leasing the

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sites to ensure that all sites were under lease by the time Motorola was ready to install equipment. All sites were leased by March 2000.

Tower and Shelter Construction and Building Remodeling

March of the same year bids were awarded for tower construction. The Board approved an award for building remodeling in August 1999. The Board recognized that timely completion of tower and shelter construction and building remodeling would be critical to the implementation schedule for the radio system. Some shelters were delivered late due to the warm spring and the resulting closure of certain roads by MnDOT, which prevented trucks from making timely deliveries. However, by June 2000, all shelters were on site and the civil work was substantially complete. One tower, at the Hennepin County Golden Valley site, was found to be inadequate in terms of its load capacity. The Board had earlier planned to reinforce the structure but an engineering study recommended the construction of a new, stronger tower. That approach was authorized by the Board, and a new tower was built to replace the existing one, which had been originally constructed in 1947. The new tower was finished in November 2000. In a few instances remodeling was delayed beyond originally schedule completion dates. All of the delays except that caused by the need to replace the Golden Valley tower were minor and none of the delays had the effect of causing a slippage in the overall project timetable.

Factory Acceptance Testing Completed Successfully

Three separate factory acceptance tests were conducted during 2000. The first was at Harris Microwave's facility in San Antonio, Texas in June. Representatives of each of the system participants were on hand to witness the testing and to sign off on acceptance of the equipment. Microwave equipment performed as required on the factory floor after some minor problems were corrected, and all system representatives signed acceptance documents. The microwave equipment was shipped on or about July 1, 2000 and arrived in Minnesota during the first week of July to await installation. Similarly, the interoperability equipment, built under contract to Motorola by E. F. Johnson was tested in Waseca, Minnesota during the last week of August 2000. Again, only a few minor problems were found and addressed. As with Harris, the Johnson equipment was accepted and was shipped to Schaumburg, IL to be integrated with the Motorola gear. During the last week of November 2000, final factory acceptance testing of the entire system was performed at Motorola's facility in Schaumburg. Not a single deficiency was discovered. The testing was completed ahead of schedule and all system owner representatives signed the acceptance documents. On December 13 the equipment was shipped to the Twin Cities for installation, scheduled to begin in early 2001.

Antennas Installed

During the period from July through November 2000 subcontractors to Motorola successfully installed antennas at all tower sites in preparation for radio and console equipment installation.

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Standards, Protocols and Procedures Process

In June 2000 an RFP was issued aimed at selecting a contractor to assist the Board in conducting the process of defining standards and operating protocols and procedures for the region-wide system. The Board wanted broad participation from all members of the First Phase System as well as from those entities that are planning to interoperate with First Phase participants. In pursuit of those goals, a consulting firm experienced in facilitating meetings and in achieving defined deliverables was sought. The St. Paul firm of Alliant Consulting was selected by the Board. An extensive planning process culminated in a kick-off meeting November 1st that attracted more than 200 interested parties. Subsequently, two major working groups, the System Manager's Group (SMG), and the Regional Task Team (RTT) were formed to provide the core leadership in formulating the documents. These groups were scheduled to finish their work in April.

Improved Communications

During 2000 a Metropolitan Radio Board web site was established. General information for the public and for members were made available on the site, as were significant documents needed by participants in the standards, protocols and procedures process.

2001 OBJECTIVES

- Oversee complete installation and testing of the entire backbone system by Motorola and subcontractors
- Achieve formal **Initial Acceptance** of the system by owners
- Develop and publish **Interim Standards, Protocols and Procedures** for system operation
- Complete and begin implementation of system user training plan
- Promote and sponsor Public Safety Wireless Network symposium on interoperability
- Continue effort to Improve communications among members, constituent groups and other potential future participants in the region-wide system and improve image with legislature
- Obtain general liability Insurance coverage for the regional system
- Transfer licenses and obtain FCC extension of unused NPSPAC 800 MHz channels for future users
- Plan for loss of free administrative support from Metropolitan Council

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- Extend sunset date to 2005 to insure time for 2nd phase participants to join system
- Obtain legislative authority to use 911 funds more flexibly to assist local units of government to pay capital costs of joining system

Installation and Testing of Backbone System

Virtually all of the year 2001 was taken up with installation and testing of the regional network. After the equipment arrived in December 2000, Motorola began installation at the sites. Motorola assembled teams of technicians, who worked with MnDOT technicians as well as personnel from the other participants to insure proper installation. This is a sophisticated, multi-dimensional state-of-the-art system and as such, installation is a major component of the cost. Many specialists worked thousands of man hours performing numerous mechanical and electrical tasks at each of the 27 antenna and shelter sites as well as at the major controller and console locations.

Software Upgrade

Early in 2001 Motorola announced that the software version 5.1 system that was specified in the Board's contract would be the only one of its kind in the world if it were to be installed. The vendor had made a corporate decision to move to a new platform, dubbed 6.0. The new platform would be the basis for all anticipated future development in the APCO Project 25 digital trunked standard for 800 MHz systems. Important among the changes would be reliance on Internet Protocol digital packet communication to and from the system controllers. Not only would the new software-based strategy provide for a higher capacity system, but it would make many new features possible going forward, including new data capabilities such as Over the Air Re-keying (OTAR) and Over the Air Programming (OTAP). Motorola proposed that it substitute a 6.0 system for the system as specified in the contract at no cost to the Board. Motorola further proposed that the regional system become the beta test site for its new platform. Motorola explained that conversion to 6.0 might delay final completion by a few weeks. In view of the anticipated advantages, the Board accepted Motorola's offer. To date Motorola has managed to stay on schedule.

Initial Acceptance

In late November 2001, the participants and the Board approved a formal Acceptance Test Plan. Thus began a 30-day "burn-in" after which, if completed successfully, would result in formal **Initial Acceptance** of the system. At this writing, the burn-in is progressing with no serious faults noted and is expected to end on December 28, 2001. Following initial acceptance is a 90-day period during which owners can begin migrating to the system. Motorola will continue to correct any deficiencies during this period, leading up to **Final Acceptance**, when the system warranty takes effect.

Interim Standards, Procedures and Protocols

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During the first half of 2001 two groups representing the future users of the regional network met together BI-weekly to plan and draft operating standards, procedures and protocols for operations on the system, once initiated. These two groups were the System Manager's Group (SMG) and the Regional Task Team (RTT). The SMG was composed of representatives of the full participants in the first phase system. The RTT was made up of individuals representing non-participating agencies. The job of the former group was to draft standards for operations within the network, while the objective of the latter group was to draft the same for interoperations between the system participants and non-participants. While the process began with these groups and certain individuals, all documents were reviewed by at least two additional bodies: the Board's Technical Operations Committee, and the full Metropolitan Radio Board. Alliant Consulting, a St. Paul firm, was retained to assist Board staff in conducting and facilitating the process. Their work was completed in May 2001. , and a set of the Interim Standards, Procedures and Protocols generated through the described process was approved by the Board at several regular meetings during the year. A few standards were deemed to be more properly the responsibility of the Board itself. A special committee of the Board was appointed by the chair to draft and review additional standards. These dealt with such subjects as how user fees would be determined and collected, procedures for applying for participation in future phases and media policy as it relates to scanning channels. The special committee is continuing its work and Board expects to have a complete set of Interim Standards in place early in 2002, prior to system operation.

User Training

In June, following the report of a special subcommittee of the RTT, the Board determined that a significant training program would be needed prior to the start of operations on the new system. Experiences from other parts of the country where a lack of adequate training had resulted in serious communications problems with trunked systems underscored the need to prepare users thoroughly. The Board moved forward by approving a training plan and voted unanimously to fund a program to develop core training materials consisting of videos, computer based training modules, power-point presentations, print materials and train-the-trainer workshops. A training consultant with experience in public safety radio training was hired to assist staff in the development of the materials. The first contract, for an overview video presentation was awarded to Big City Productions of Burnsville in October. More materials will be developed in the first half of 2002.

PSWN Symposium

The Public Safety Wireless Network (PSWN) is a program sponsored by the US Department of Justice and the U S Treasury Department to encourage and promote the development of public safety radio systems that provide interoperability among agencies in a particular geographical area. They do this through a variety of means, including the dissemination of information through books and pamphlets, the maintenance of an active web site, and the sponsorship of regional symposia on issues of radio interoperability. They also fund experimental demonstration projects and assist agencies to find funding for projects similar to our regional system. After

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much planning, the Board co-sponsored a PWSN regional symposium in June 2001. The event was held at the Minneapolis Millennium Hotel and was attended by more than 200 delegates. About half were from Minnesota and about half were from out of state. The 3-day affair brought speakers of national reputation to Minnesota. David Fisher, Commissioner of Administration for Minnesota and Dave McCauley, Chair of the MRB were the welcoming and keynote speakers respectively.

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Improved Communication

During 2001 the Board and staff moved forward on several fronts to improve communications and inter-governmental relations. Due to some problems with the perception of the Board at the legislature, a new governmental affairs representative was hired. The firm of McGrann, Shea, Carnival, et. al. was retained, and has made significant progress in improving relations at the Capitol. Staff has also provided outreach, with the Executive Director having made presentations to the Dakota, Washington, and Carver County Boards, respectively. Also, several meetings with legislators coupled with tours of the system were held. In November, the Board sponsored a luncheon for county commissioners and other county elected officials to update them on features and benefits of the system and to update them on progress. Meanwhile, a new brochure and other materials, including a press kit with information and explanations on the system are in process. The web site, too, is undergoing redesign, with new features slated to appear on line early in 2002.

Liability Insurance

During 2001 the risk managers from each of the participating agencies met to discuss general liability insurance needs. The group decided that the Board would carry insurance on the entire system and bill each agency their pro-rated share of the premium, based on the amount of equipment owned. Several bids were received. The lowest bid was submitted by the Department of Administration's Risk Management Fund. The bid was accepted and the policy went into effect on November 28, 2001.

NPSPAC Frequencies

Minnesota Statutes 473.894 Subdivision 3 requires the Board to hold certain NPSPAC frequency channels for the future use of local governments. The licenses for those channels have been held by MnDOT as a result of their original application for master licenses and were never transferred to the Board. To comply with the statute, the Board has initiated the application process for transfer. As part of the same application the Board is seeking to extend the expiration of the licenses beyond the February 11, 2002 expiration date.

Planning For Independent Administration of the Board

Minnesota Statutes 473.893 Subdivision 1 provides that the Metropolitan Council shall provide office space and administrative support to the board at no cost until funds to administer the Board become available from the collection of user fees. The Board determined that it would begin collecting user fees effective July 1, 2002. At that time the costs of administering the Board will no longer be the responsibility of the Metropolitan Council. Anticipating this change, staff has been planning for the change. Some functions, deemed a necessary part of the transition process, were taken over by the Board during 2001. These include web site support and inter-governmental relations.

Appendix B

Legislative Action: Sunset Extension, Transition Plan

The Board's legislative program for 2001 included a request to extend the sunset date for the Board to June 30, 2005. A bill was introduced to accomplish the extension. The Board's reasoning was that approximately four more years would be needed to give non-participants the time to decide whether or not to join the system, and to perform the work necessary to get them up and running, if they were to opt to join. A realistic estimate of the time necessary to do the job properly would require continuation of the Board until at least the end of FY 2005. The Senate passed the bill unanimously, but the House amended the bill to the sunset the Board June 30, 2003. The House also added a provision requiring the Board to file a transition plan with the legislature by February 1, 2002. The final bill compromised the House and Senate positions by extending the sunset to 2004 and adding the House provision providing for the submittal of the transition plan.

Assistance to Local Units of Government: The Board also had a bill introduced to provide more flexibility in the use of the 4 cents monthly from the 911 surcharge that it collects. Because of the proliferation of cell phones, fax lines, pagers, dial up Internet service, etc., the growth in the fund exceeded original expectations. Recognizing that many of the counties and cities that have opted not to participate in the system have been reluctant to commit due to the cost of capital equipment, the Board sought permission to use money from the 911 fund to assist those local units of government. The bill passed in the Senate, and passed several House committees, but failed to receive a hearing in the House State Government Finance Committee and failed in the final compromise bill that came out of the House-Senate Conference Committee.

PARTICIPATION IN THE INITIAL NETWORK

As of December 31, 1998, the State of Minnesota (on behalf of the state and the Radio Board), the Metropolitan Council (on behalf of Metro Transit) and Hennepin County had signed contracts with Motorola committing to participation in the construction of the Initial Network.

In May 1999 the city of Minneapolis received approval from the Metropolitan Radio Board to enter into a contract with Motorola to be a participant in the system but with a construction schedule beginning at the point the Initial Network construction is completed.

Carver County received approval in March 1999 from the Metropolitan Radio Board to participate in the Initial Network by sharing frequencies and facilities with the region-wide backbone system rather than constructing a separate subsystem. The county also entered into a contract with Motorola in 1999.

North Memorial Medical Transportation received approval in May 2000 from the Metropolitan Radio Board to participate in the Initial Network through a spur link to the Golden Valley site. North Memorial also entered in a contract with Motorola in 2000.

Appendix B

USER FEES

The Board has determined that it will not impose user fees until the system is operational, currently projected to be July 1, 2002. At that time user fees are projected to be approximately \$46 per subscriber radio set, based on the projected total of radios expected to be in use when the system is fully utilized. The Board has made a preliminary determination that any additional funds needed to support administrative costs during the migration to full operation shall come from interest earned on 9-1-1 funds since 1995, which are unrestricted.

Appendix C

**Metropolitan Radio Board
Budget Projection
Calendar Year 2002**

	General Fund Proposed	Capital Reserve Proposed	Cap Project \$3M Bond Proposed	Debt Service Proposed	Total Proposed
Revenue					
911 Fees	1,052,509			1,393,918	2,446,427
User Fees	410,200		158,852		569,052
Interest Earnings	140,000		-	115,000	255,000
Total Revenues	<u>1,602,709</u>	<u>-</u>	<u>158,852</u>	<u>1,508,918</u>	<u>3,270,479</u>
Expenditures					
Tech Consult/Process Facilitator	59,070				59,070
Training	356,051				356,051
Leases	200,000		196,365		396,365
Utilities	109,000		100,000		209,000
Insurance	40,000				40,000
Travel	12,000				12,000
Government Relations	45,000				45,000
Administration	206,235				206,235
Total	<u>1,027,356</u>	<u>-</u>	<u>296,365</u>	<u>-</u>	<u>1,323,721</u>
Sub-total Operations	575,353	-	(137,513)	1,508,918	1,946,758
Other Uses					
Transfers to Other Funds	600,000	(600,000)			-
Capital Outlays	1,379,236		1,068,764		2,448,000
Debt Service				1,378,898	1,378,898
Excess of Revenues over/(Under) Expenditures	<u>(1,403,883)</u>	<u>600,000</u>	<u>(1,206,277)</u>	<u>130,020</u>	<u>(1,880,140)</u>
Funds Balance Beginning	3,316,197		1,206,277	2,799,402	7,321,876
Funds Balance End of Period	<u>1,912,314</u>	<u>600,000</u>	<u>(0)</u>	<u>2,929,422</u>	<u>5,441,736</u>

Appendix C

**Metropolitan Radio Board
Budget Projection
Calendar Year 2003**

	General Fund <u>Proposed</u>	Capital Reserve <u>Proposed</u>	Debt Service <u>Proposed</u>	Total <u>Proposed</u>
<u>Revenue</u>				
911 Fees	1,147,680		1,396,578	2,544,258
Transferred Expense Billed to Owners	835,791		-	835,791
Interest Earnings	93,000	27,000	105,000	225,000
Total Revenues	<u>2,076,471</u>	<u>27,000</u>	<u>1,501,578</u>	<u>3,605,049</u>
<u>Expenditures</u>				
Tech Consult/Process Facilitator	30,000			30,000
Training	50,000			50,000
Leases	398,891			398,891
Utilities	229,900			229,900
Insurance	50,000			50,000
Operations Management	-			-
Travel	12,000			12,000
Government Relations	54,000			54,000
Administration	275,000			275,000
Total	<u>1,099,791</u>	<u>-</u>	<u>-</u>	<u>1,099,791</u>
<u>Sub-total Operations</u>	976,680	27,000	1,501,578	2,505,258
Other Uses				
Transfers to Other Funds	500,000	(500,000)		
Capital Outlays	1,099,116			1,099,116
Construction Management	-			-
Debt Service			1,377,748	1,377,748
Excess of Revenues over/(Under)	<u>(622,436)</u>	<u>527,000</u>	<u>123,830</u>	<u>28,394</u>
Expenditures				
Funds Balance Beginning	1,912,314	600,000	2,929,422	5,441,736
Funds Balance End of Period	<u><u>1,289,878</u></u>	<u><u>1,127,000</u></u>	<u><u>3,053,252</u></u>	<u><u>5,470,130</u></u>

**Metropolitan Radio Board
Budget Projection Based on Additional Bonding Authorizations**

Calendar Year 2002

	<u>General Fund Proposed</u>	<u>Cap Project \$3M Bond Proposed</u>	<u>Cap Project \$60M Bond Proposed</u>	<u>Debt Service \$14M Bond</u>	<u>Debt Service \$60M Bond</u>	<u>Total Proposed</u>
Revenue						
911 Fees	1,052,509			1,393,918	2,700,000	5,146,427
User Fees	410,200	158,852				569,052
Interest Earnings	140,000	-	300,000	115,000	30,000	585,000
Total Revenues	<u>1,602,709</u>	<u>158,852</u>	<u>300,000</u>	<u>1,508,918</u>	<u>2,730,000</u>	<u>6,300,479</u>
Expenditures						
Tech Consult/Process Facilitator	59,070					59,070
Training	356,051					356,051
Leases	200,000	196,365				396,365
Utilities	109,000	100,000				209,000
Insurance	40,000					40,000
Travel	12,000					12,000
Government Relations	45,000					45,000
Administration	206,235					206,235
Total	<u>1,027,356</u>	<u>296,365</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,323,721</u>
Sub-total Operations	575,353	(137,513)	300,000	1,508,918	2,730,000	4,976,758
Other Uses						
Bond Proceeds			59,000,000			59,000,000
Transfers to Other Funds	1,000,000		2,300,000		(3,300,000)	-
Bond Reserve Set Aside						-
Capital Outlays	1,379,236	1,068,764	500,000			2,948,000
Debt Service				1,378,898		1,378,898
Excess of Revenues over/(Under) Expenditures	<u>(1,803,883)</u>	<u>(1,206,277)</u>	<u>56,500,000</u>	<u>130,020</u>	<u>6,030,000</u>	<u>59,649,860</u>
Funds Balance Beginning	3,316,197	1,206,277	0	2,799,402	0	7,321,876
Funds Balance End of Period	<u>1,512,314</u>	<u>(0)</u>	<u>56,500,000</u>	<u>2,929,422</u>	<u>6,030,000</u>	<u>66,971,736</u>

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Appendix D

**Metropolitan Radio Board
Budget Projection Based on Additional Bonding Authorizations
Calendar Year 2003**

	General Fund <u>Proposed</u>	Cap Project \$60M Bond <u>Proposed</u>	Debt Service \$14M Bond	Debt Service \$60M Bond	Total <u>Proposed</u>
<u>Revenue</u>					
911 Fees	1,147,680		1,396,578	5,455,742	8,000,000
Transferred Expense Billed to Owners	835,791			-	835,791
Interest Earnings	93,000	600,000	105,000	100,000	898,000
Total Revenues	<u>2,076,471</u>	<u>600,000</u>	<u>1,501,578</u>	<u>5,555,742</u>	<u>9,733,791</u>
<u>Expenditures</u>					
Tech Consult/Process Facilitator	30,000				30,000
Training	50,000				50,000
Leases	398,891				398,891
Utilities	229,900				229,900
Insurance	50,000				50,000
Operations Management	-				-
Travel	12,000				12,000
Government Relations	54,000				54,000
Administration	275,000				275,000
Total	<u>1,099,791</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,099,791</u>
<u>Sub-total Operations</u>	976,680	600,000	1,501,578	5,555,742	8,634,000
Other Uses					
Transfers to Other Funds					-
Capital Outlays	1,099,116	33,875,000			34,974,116
Construction Management	-				-
Debt Service			1,377,748	6,000,000	7,377,748
Excess of Revenues over/(Under) Expenditures	<u>(122,436)</u>	<u>(33,275,000)</u>	<u>123,830</u>	<u>(444,258)</u>	<u>(33,717,864)</u>
Funds Balance Beginning	1,512,314	56,500,000	2,929,422	6,030,000	66,971,736
Funds Balance End of Period	<u><u>1,389,878</u></u>	<u><u>23,225,000</u></u>	<u><u>3,053,252</u></u>	<u><u>5,585,742</u></u>	<u><u>33,253,872</u></u>