



# **Metro Mobility Radio Communications Plan**

**Transportation Committee  
July 9, 2012**



# Background

## June 25<sup>th</sup> Transportation Committee Report Recap -

- Regional 800 MHz public safety radio system
- Metropolitan Council was an original participant
- Voice communication is a critical component of service
- Metro Mobility is a large user of air-time
- MESB formally requested Council to develop a plan
- MESB's Technical Operations Committee recommended that the MESB restrict Metro Mobility's access from 23 to 3 channels



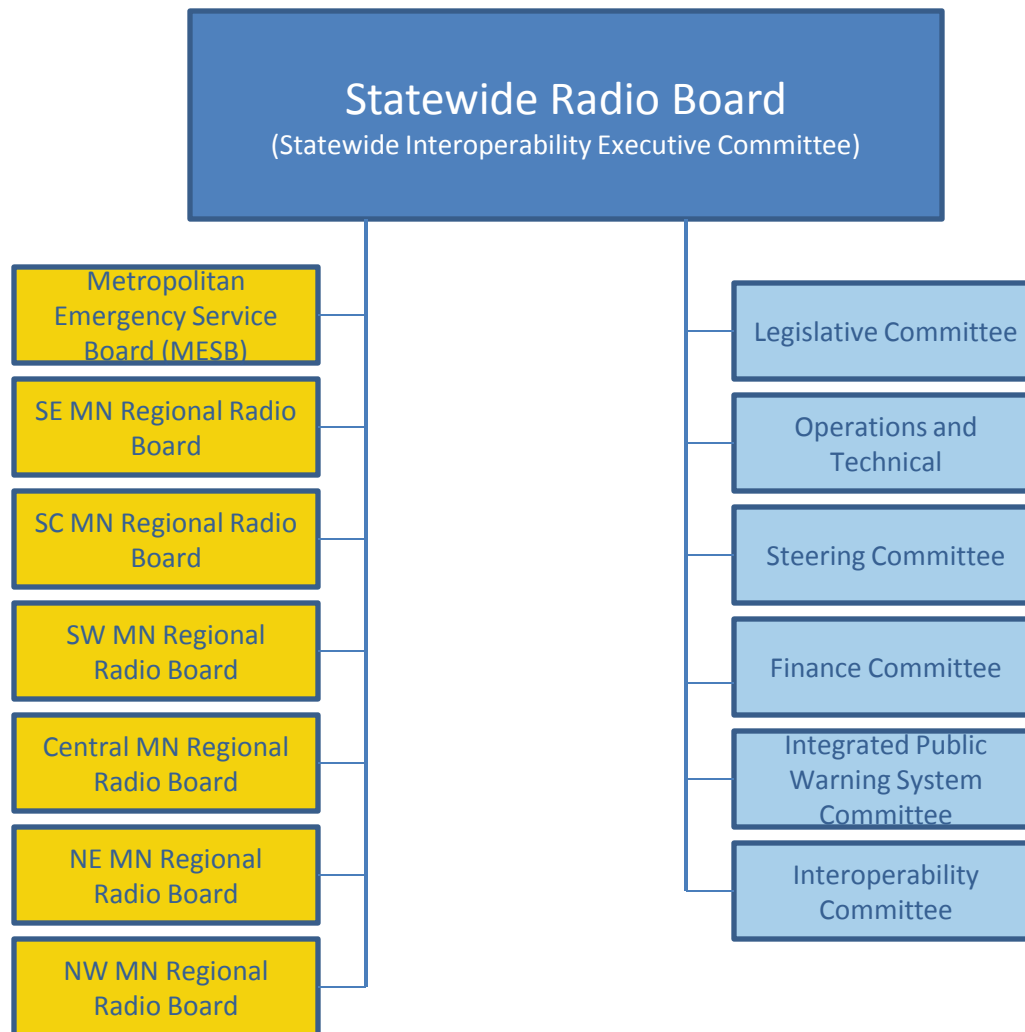
# MESB Overview

## **Metropolitan Emergency Services Board (MESB)**

- Established by Joint Powers Agreement
- Council has right to use system per contractual relationship with MESB
- Purpose of overseeing (in metropolitan area) :
  - 9-1-1 system
  - Public Safety Radio System
  - EMS activities
- MESB reports to the Statewide Radio Board

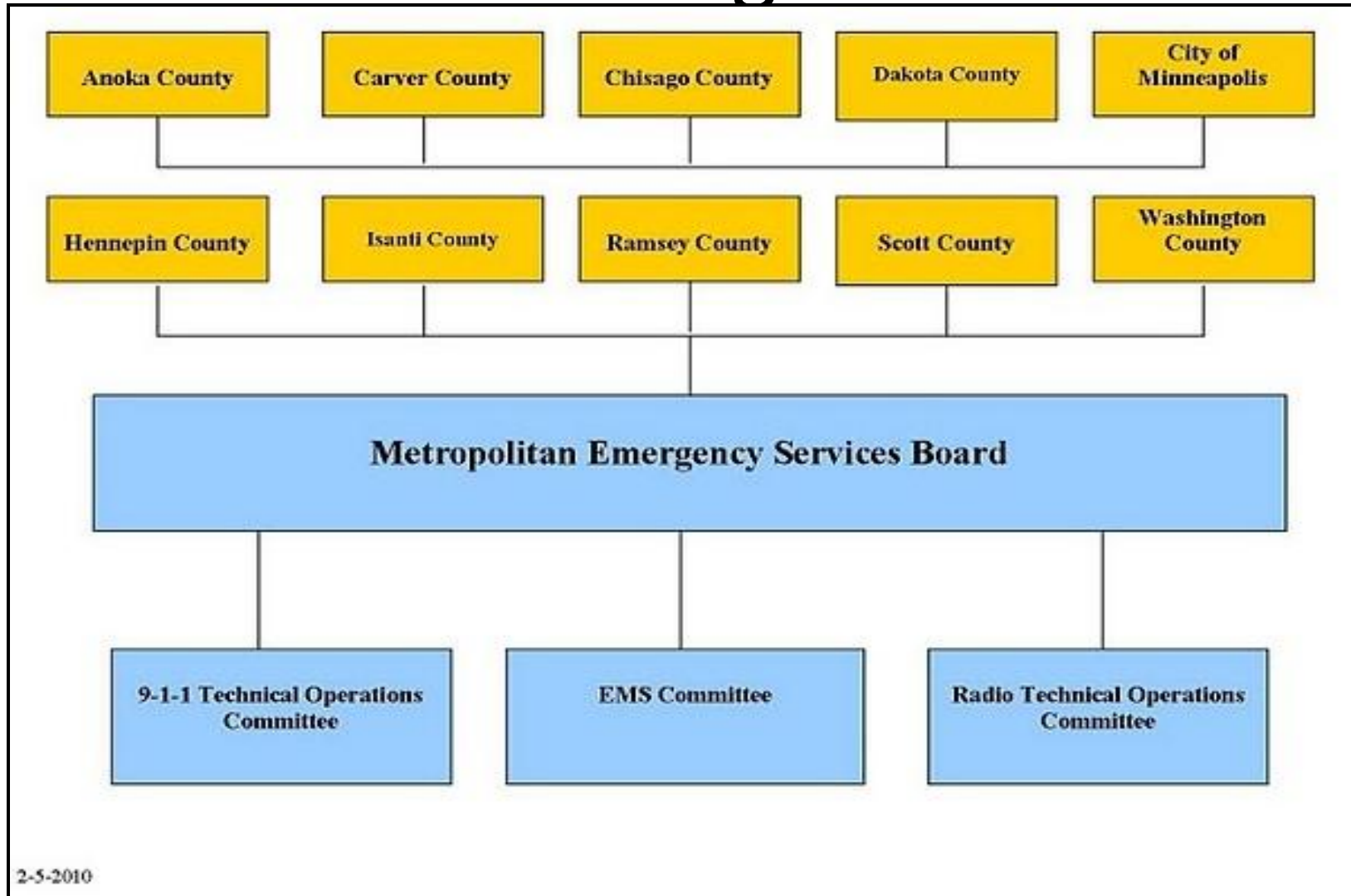


# Statewide Radio Board Org Chart





# MESB Org Chart

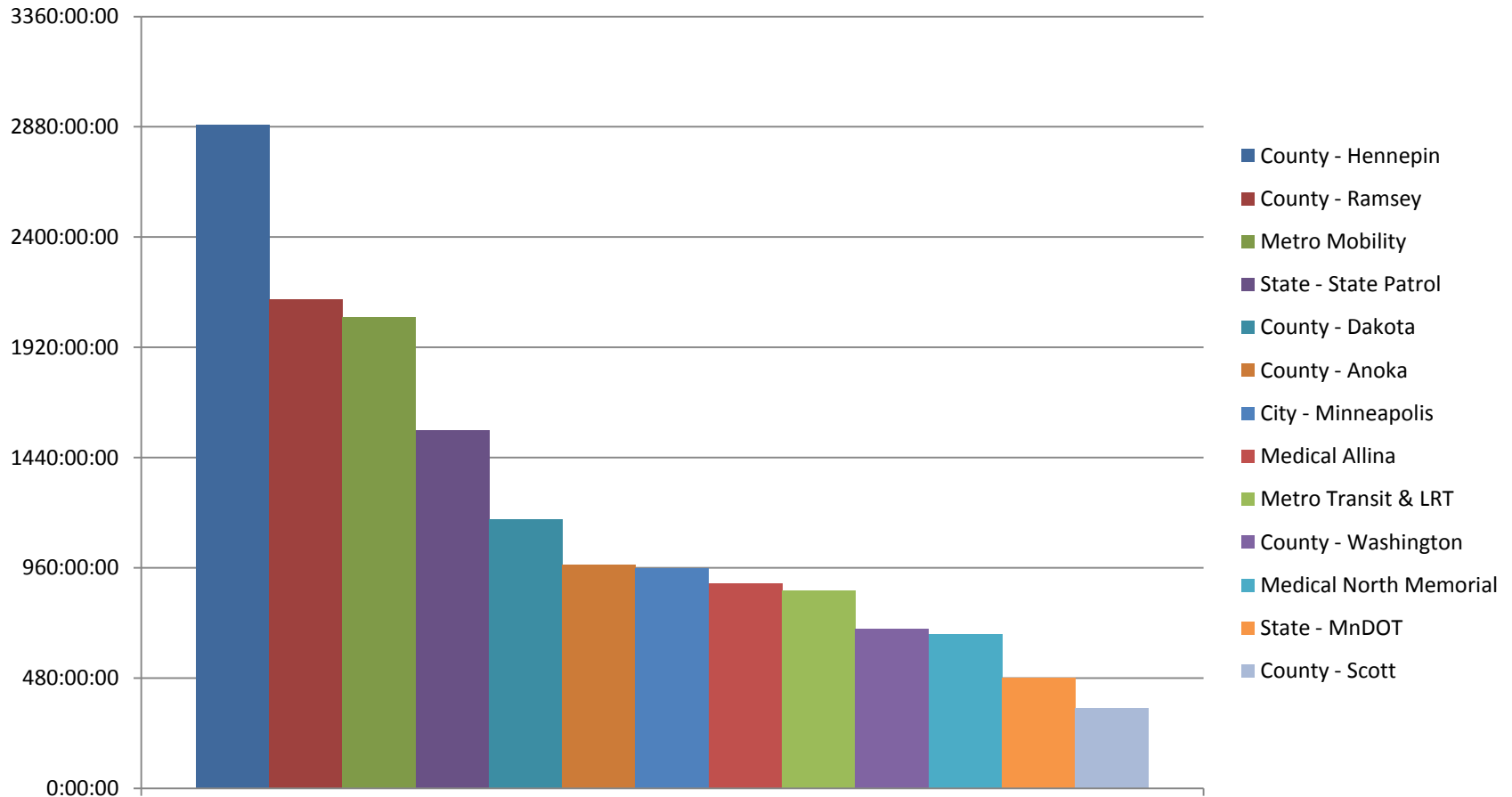


2-5-2010



# Metro Area System Top 15 Users

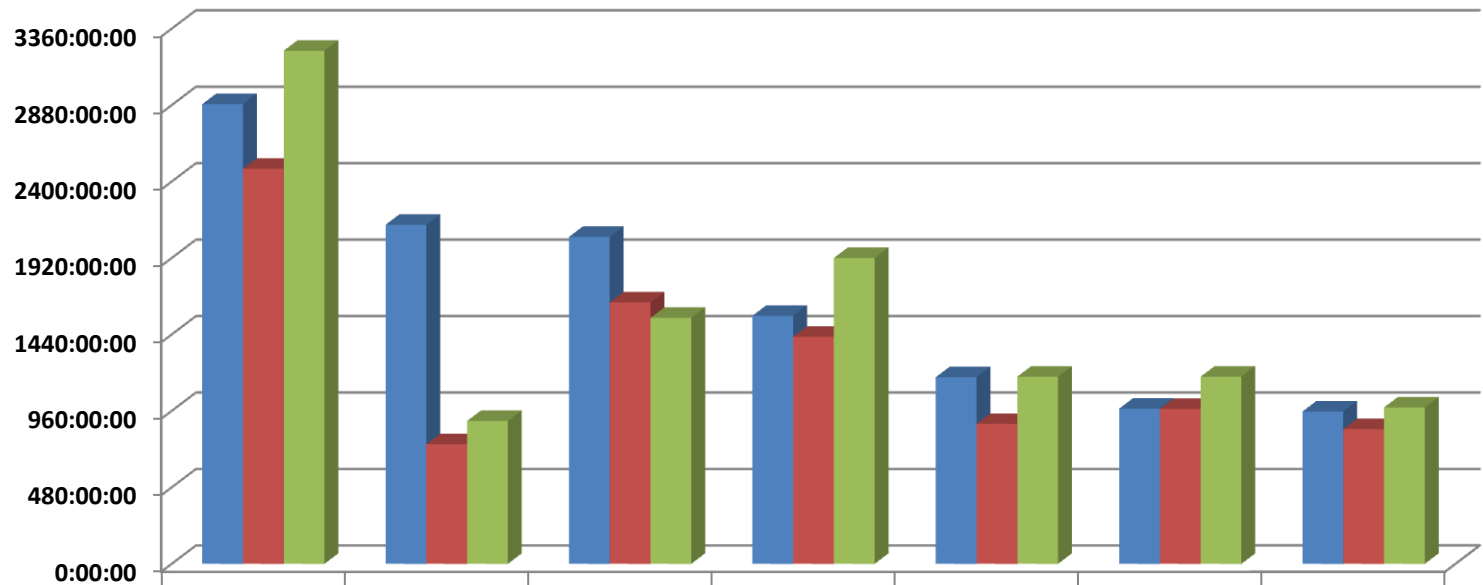
## May 2010 Air Time by Agency





# Metro Area System Top 7 Users

May 2010-2012



	Hennepin Co.	Ramsey Co.	Metro Mobility	MN State Patrol	Dakota Co.	Anoka Co.	City of Mpls
Air Time Use; May 2010	2886:12:18	2129:05:54	2052:53:22	1557:23:55	1171:47:39	974:12:27	956:21:44
Air Time Use; May 2011	2480:44:06	750:45:32	1640:47:00	1425:39:08	878:29:12	973:17:27	845:32:19
Air Time Use; May 2012	3221:56:05	897:18:06	1544:14:53	1920:17:55	1175:03:10	1175:11:21	981:57:53

■ Air Time Use; May 2010   
 ■ Air Time Use; May 2011   
 ■ Air Time Use; May 2012



# MESB Concerns

- Metro Mobility's airtime usage
  - Busy signals
  - Load on subsystem sites
  - Ongoing concern since 2006
- Operating costs
  - Ongoing maintenance costs of subsystems
  - User fee discussion





# Metro Mobility Action

- Short-term:
  - Radio reprogramming
  - Implementing a driver training program
  - Purchased onboard GPS navigation units to assist drivers
- Results: 2012 vs. 2010 airtime usage by month:

January – down 12.9%	April – down 11.8%
February – down 16.9%	May – down 24.8%
March – down 20.1%	



# Future Options

## Moderate and Long-Term:

1. Create zones - Business Process Reengineering (BPR)
2. Commercial leased voice services
3. Add ARMER capacity
4. Team with others for ARMER overlay
5. Various forms of data system deployment:
  - a. Private - Data Only Plan
  - b. Private – Full Voice and Data w MDC/AVL/CAD
  - c. Private – AVL/MDC/CAD – Retain ARMER Voice
  - d. Upgrade Metro Council AVL/MDC– Retain ARMER Voice



# Future Options

Table 20 – Migration Options and Estimated Costs (all figures X \$1,000)

Option	Description	Est. Capital Cost	Est. Annual Operating Cost	5 Yr Total (Capital plus 5 Yrs Ops)	Reduce ARMER Usage	Entp Fit	Tech Road Map	Ease of Deploy	Risk	Interop
1	Create Zones - Business Process Reengineering	\$ 380	\$ 5	\$ 405	Mod	Low	Low	High	Mod	High
2	Commercial leased voice services (Ancom / Verizon / AT&T)	\$ 185	\$ 165	\$ 1,010	High	Low	Low	High	Low	Low
3	Add ARMER Capacity	\$ 205	\$ 50	\$ 455	Low	Low	Low	Low	High	High
4	Team for ARMER Overlay	\$9,380	\$460	\$ 11,680	High	Mod	Mod	Low	High	High
5 A	Private - Data Only Plan	\$ 190	\$225	\$ 1,315	Mod	Mod	Mod	Mod	Low	High
5 B	Private – Full Voice and Data w MDC/AVL/CAD	\$2,645	\$525	\$5,270	High	Mod	High	Mod	Mod	Low
5 C	Private – AVL/MDC/CAD – Retain ARMER Voice	\$2,645	\$300	\$4,145	High	High	High	Mod	Mod	High
5 D	Upgrade Metro Council AVL/MDC – Retain ARMER Voice	\$3,065	\$150	\$3,815	High	High	High	Low	High	High



# Next Steps

- MESB follow-up
  - July 11 MESB meeting
  - Usage target?
  - User fees?
- Council to research most promising options
- Work collaboratively with the MESB and other users to:
  - Educate MESB on Metro Mobility business needs and serving the needs of shared customers
  - Understand MESB system capacity needs & constraints



# Questions

- Paul Colton, Sr. Manager  
Metro Mobility  
651-602-1668  
[paul.colton@metc.state.mn.us](mailto:paul.colton@metc.state.mn.us)
- Andy Terry, Director – ITS and Public Safety  
SEH Inc.  
651-490-2147  
[aterry@sehinc.com](mailto:aterry@sehinc.com)