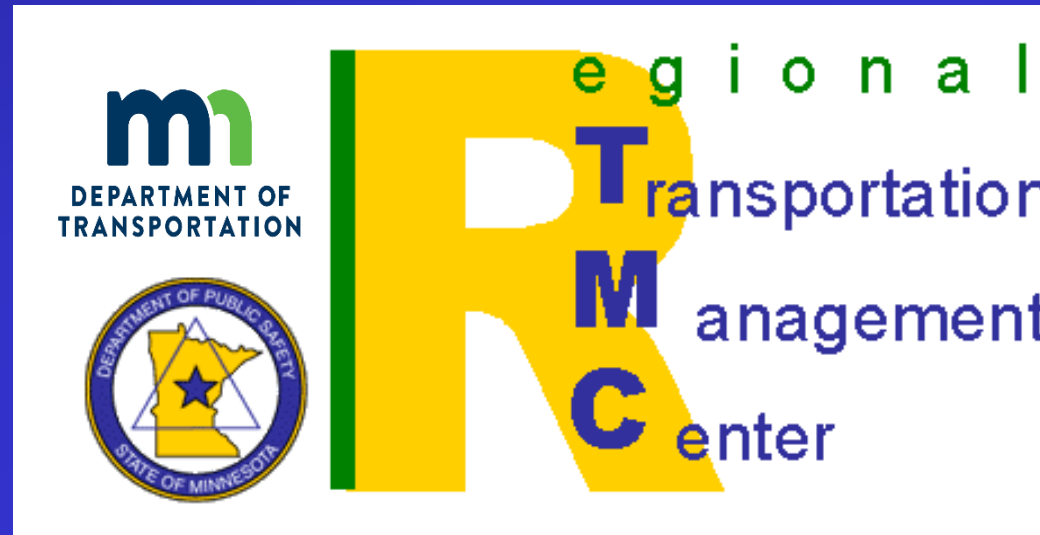# MN State Patrol / MN DOT Dispatch CAD integration

John McClellan
Freeway Operations Supervisor
MNDOT Regional Transportation Management Center (RTMC)

Regional Transportation Management Center (RTMC)

Joint dispatch facility:

- DPS State Patrol Dispatch

- MNDOT Metro Maintenance Dispatch

- MNDOT Freeway Operations (TMC)

Total building size: 53,000 square feet
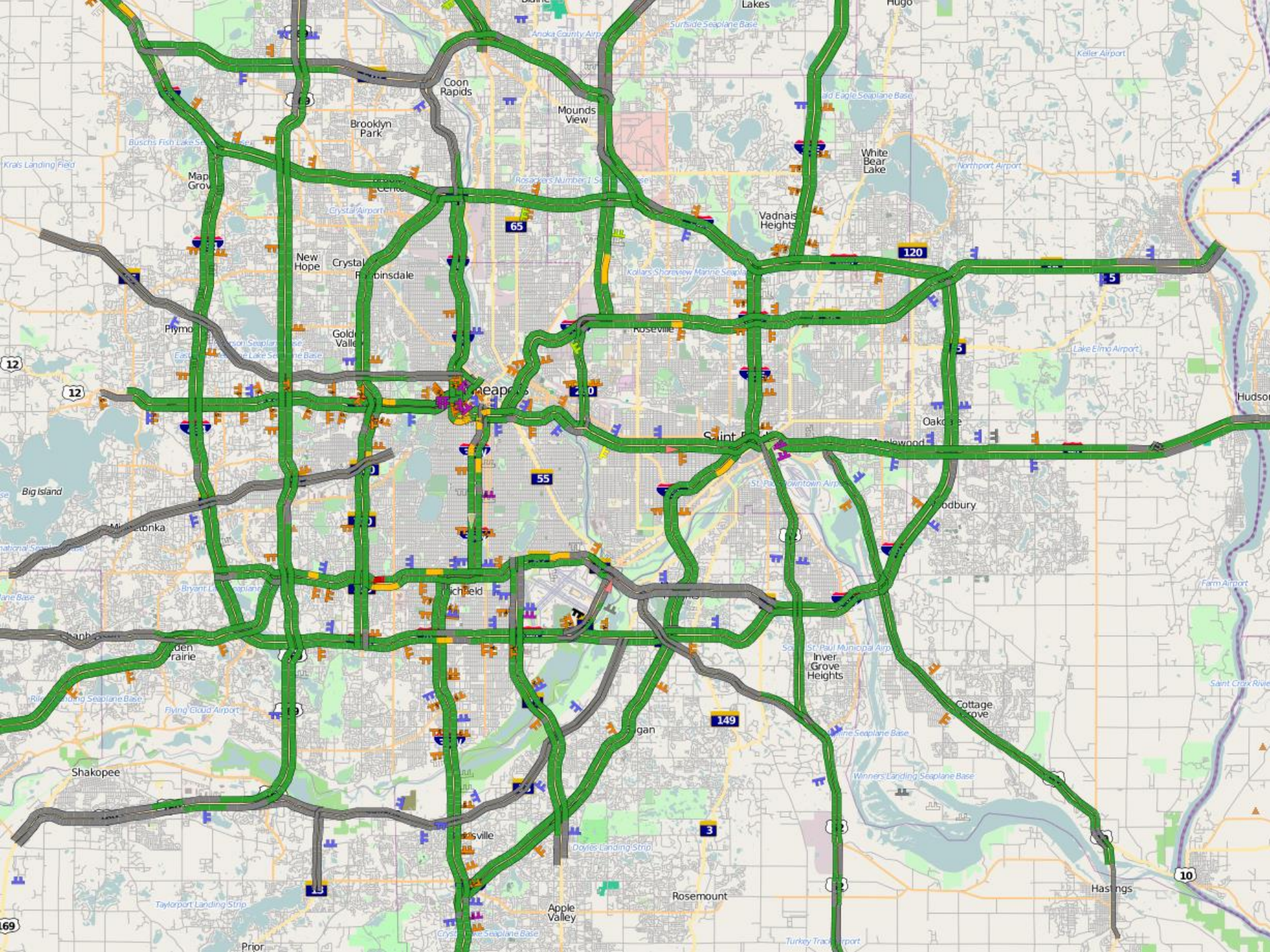
- Dispatch area: 10,000 square feet.

Built in 2000-2003 on MNDOT owned property. Employees are all State workers.

RTMC Dispatch Floor

Metro TMC system

550 miles of fiber

900 Metro cameras, 250+ DMS boards, 6500 loops & Wavetronix

450 ramp meters (traffic adaptive)

HOV / HOT operation.

FMS software (IRIS) developed by TMC staff (open source GPL)

Freeway Incident Response Safety Team (F.I.R.S.T.) Dispatch

¾ ton pickups

TMC Challenges **

Massive investments in:
- **Cameras & traffic sensors – incident detection**
- **Message boards & 511 aps – incident communication**
- **Service Patrols – DOT's incident response**

Problems:
- **Finite camera monitoring**
- **Many incidents don't create congestion (at least at first)**
- **Service Patrol**

911 / PSAP challenge

Location & description

- No street addresses on freeway
- Limited cross streets
- Poor landmarks
- Phase 2 911 helps – unless a passer-by…

- Difficult to assess severity as a witnesses

- Ties closely to next slide

Emergency Responder challenge

- Prompt response in true emergencies critical

- Foundation of responder safety = proper parking
  - Parking emerg vehicle upstream to block/shield/direct

- Limited access (ramps, barriers, fly-overs)

- Requires accurate precise locations

Solution: TMC/PSAP coordination

- **Coordination between TMC + 911 + responders.**
  - **911 takes the call**
  - **TMC verifies the location**
  - **Responders get to right spot, with correct equipment.**

  - **TMC communicates accurate info to public**

  - **Requires an incident responsive TMC**

What's unique* for MN?

MNDOT TMC & FSP fully uses Patrol's CAD

– **Create own events**

– **Use State Patrol generated events**

- **TMC logs benchmarks   (lanes & inc clear, arrival times)**
- **FSP logs work done   (gas, jump, push, tire change)**

- **Coordinate response with Patrol   (units, chat msg, AVL)**
- **FSP custody towing**
- **Protected (CJI) data is firewalled off.**

TMC / FIRST Dispatch workstation

IRIS & email
CAD
Cameras
Radio

Benefits

- **Public**
  - **Max benefit of TMS infrastructure**
  - **Especially for managed lanes!**
  - **Goal - scene management & efficient clearance**

- **Responders**
  - **Scene safety starts with good location info**
  - **Ability to upgrade <u>or</u> downgrade response before on-scene**

Challenges

- **Creation - Years of hard work**
  - Individual & management level
  - Maintenance
  - Patrol

- **Maintaining relationship**
- **Budget & politics**

Future Challenges

Getting the data in:

- Locals PSAPS taking freeway 911 calls
- Local PD encrypting mains
- Calls going to WAZE instead of 911
- Adding statewide responsibilities
- Scaling for severe weather
- **Connected vehicles**

Car Stopped On Shoulder

US-169 S
Reported by Anonymous
27 min ago

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