

NOAA Products, Services & Partnerships

A Mn/DOT Perspective

Key Topics

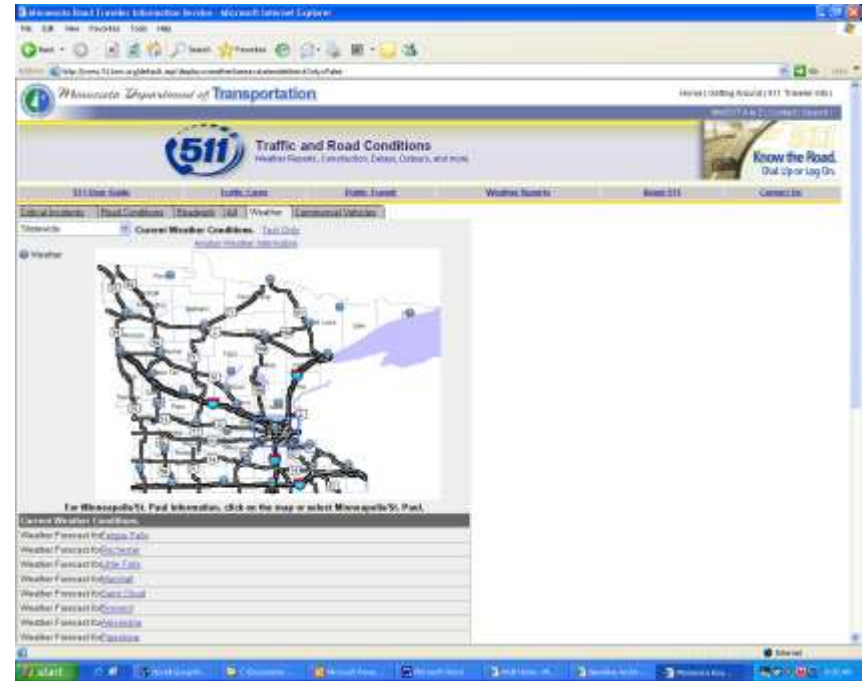
- National Weather Service
- National Geodetic Survey
 - CORS
 - Height Mod/Geoid Model Improvement



Flood and storm prediction
Road closures



NWS



511 road and weather conditions



NWS



Snow and Ice scheduling

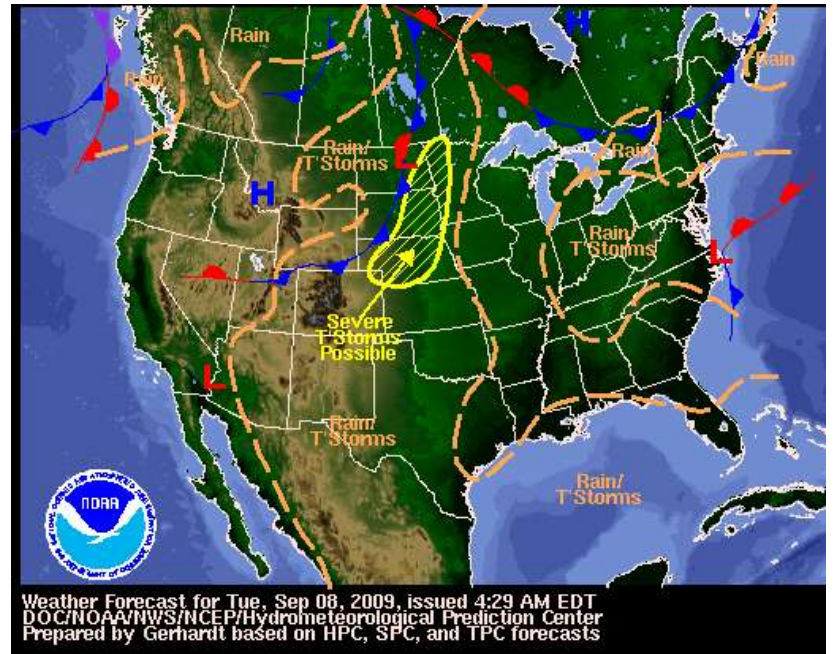
**WINTER HAZARD
AWARENESS INFO**



Employee Safety

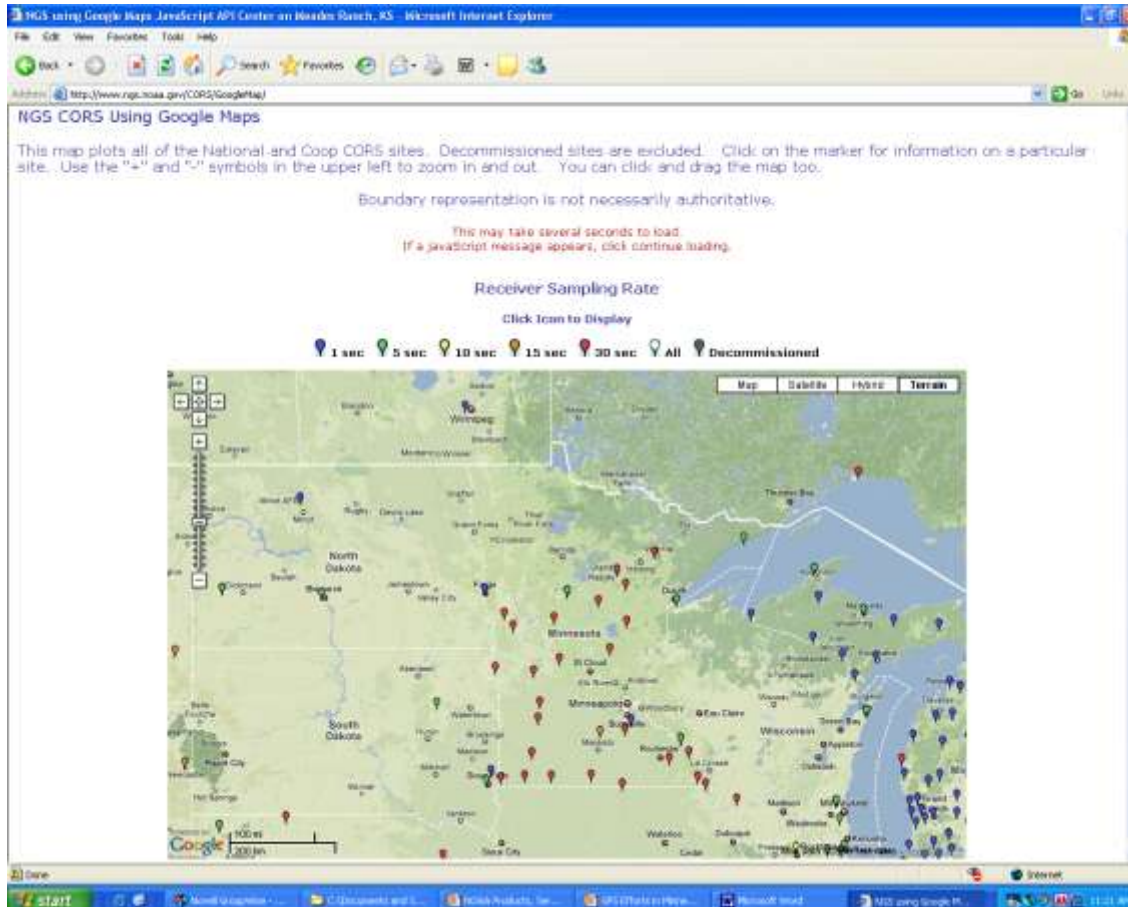
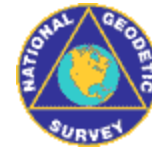


NWS



Mn/DOT

NGS CORS



6 in 2008

31 in 2009

100+ additional submitted
Northern MN

Users/Uses

- State Government
- Local Government
- Private Surveyors
- OPUS
- Mn CORS Adjustments



Mn/DOT CORS/VRS

116/123 Stations

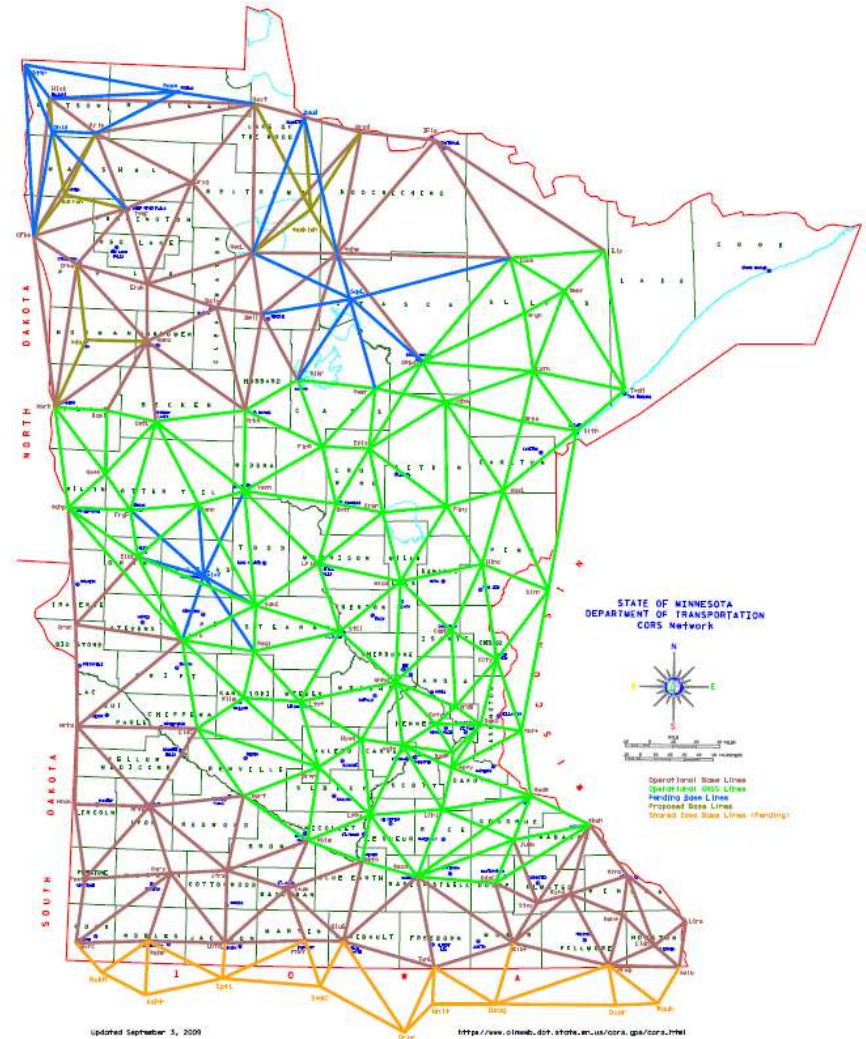
24/7

Post Process (Rinex)

RTK (cell phone modem, CMR+ or RTCM)

Free

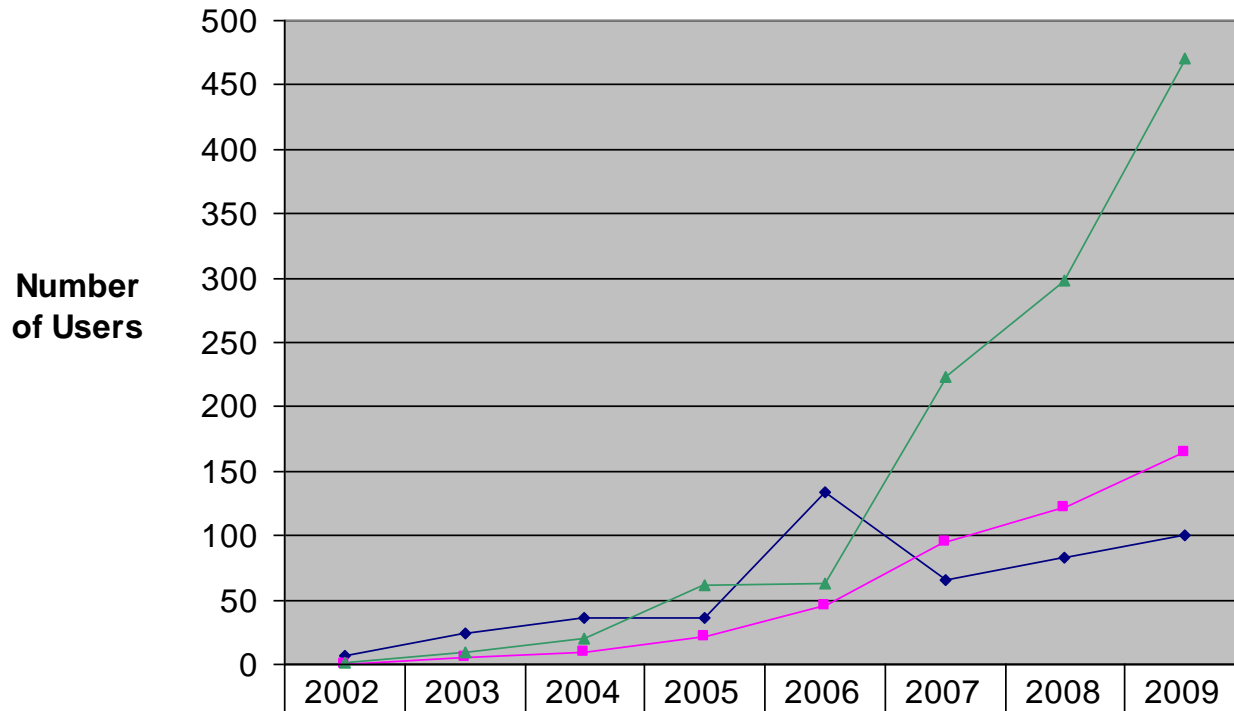
CM Accuracy





Mn/DOT CORRS/VRS

VRS Users



◆ Mn/DOT Users	7	24	36	36	134	66	83	100
■ Other Agency Users	0	5	10	21	46	95	122	165
▲ Private Users	1	10	20	62	63	223	298	470



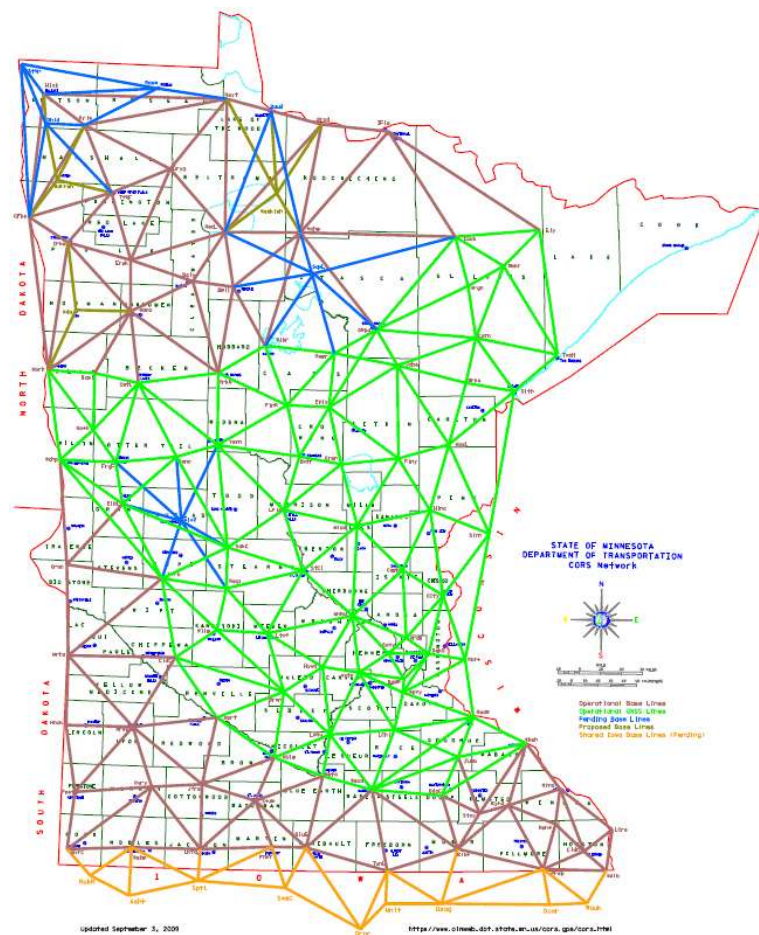
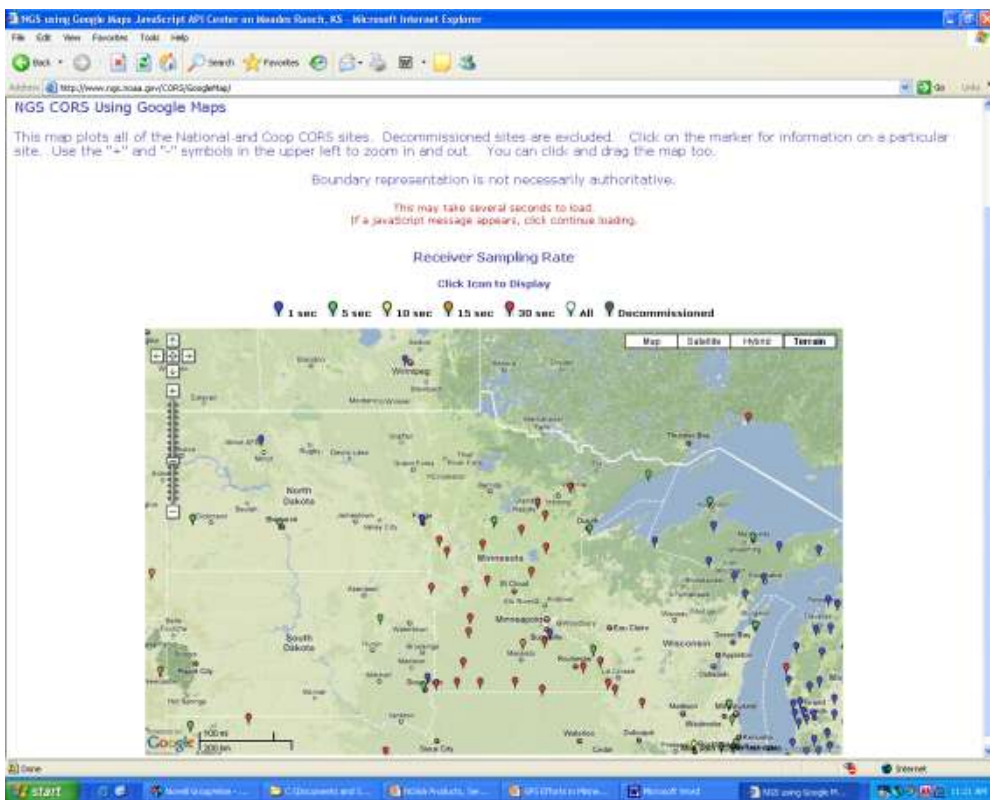
Mn/DOT CORS/VRS

Uses





NGS CORS



Mn/DOT CORS/VRS

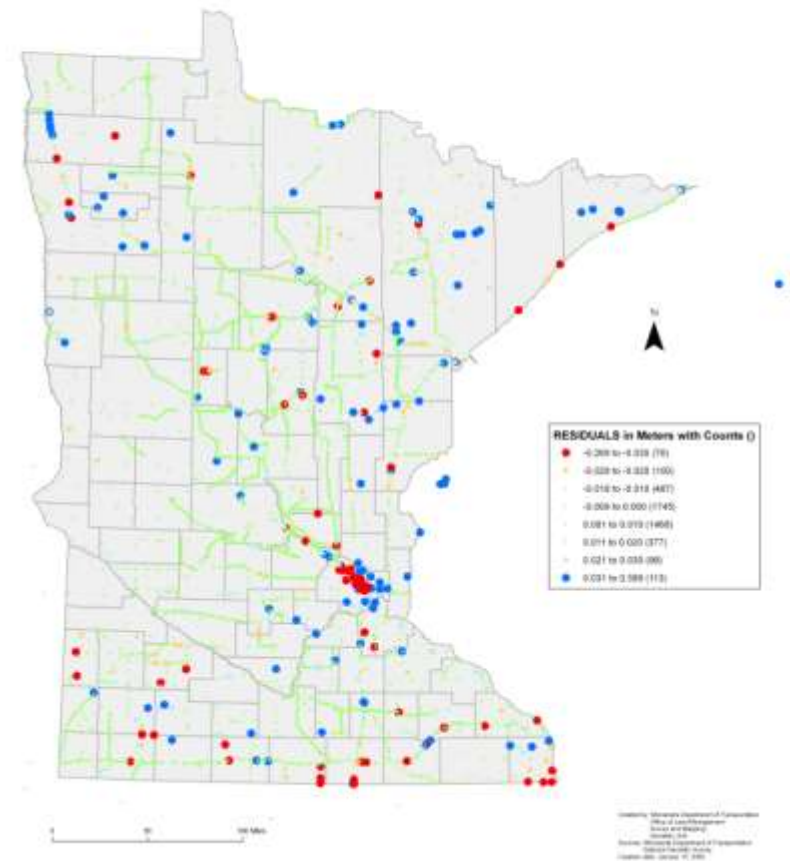




NGS Height Mod/Geoid Model Improvement

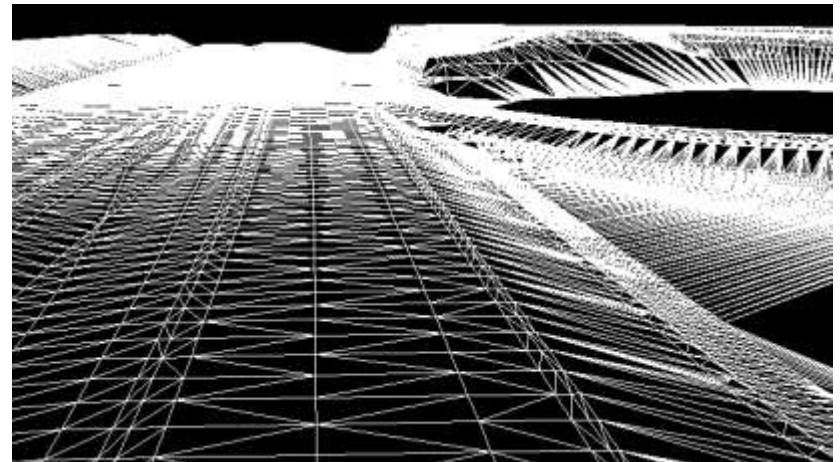
Tighter Control
Greater Accuracy
Consistency
Flexibility
\$\$\$ Savings

Mn/DOT Ellipsoid and Ortho Residuals





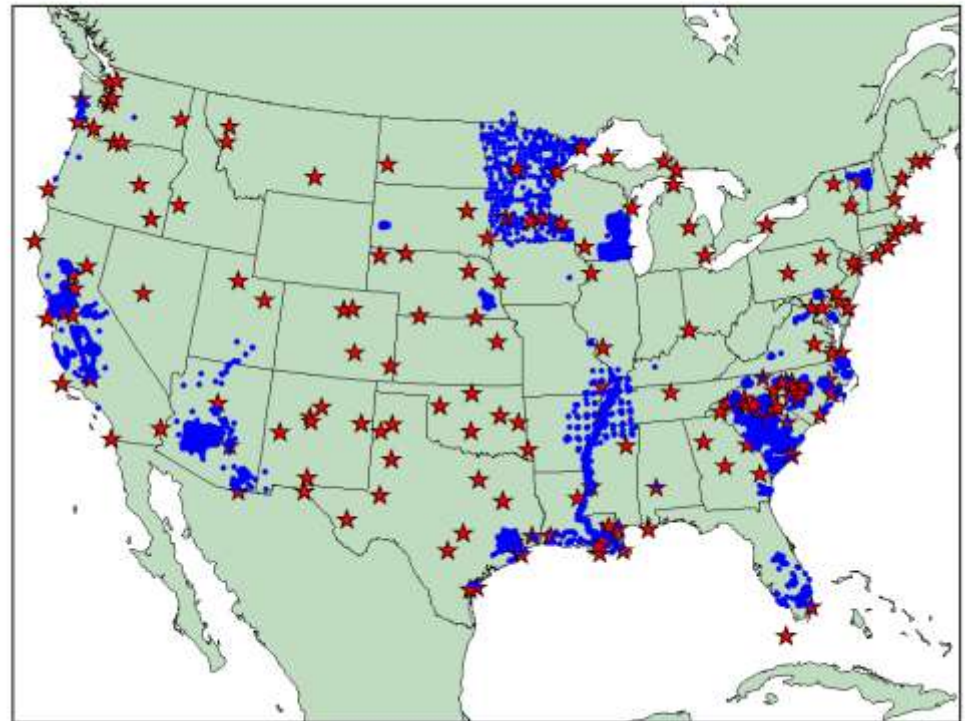
NGS Height Mod/Geoid Model Improvement





Partnering

Guidance
Commitment
Results



Published Height Modernization Stations

Thank You

Rick Morey LS

richard.morey@dot.state.mn.us