

**TRAFFIC SIGNAL COMMITTEE**  
**Meeting Minutes**  
**February 2, 2005**

This document is available online at <http://www.nc-ite.org/signals.html>

**ATTENDEES**

Jerry Kotzenmacher	MnDOT	Roger Plum	S.E.H
Bryant Ficek	Bonestroo	Marc Culver	Maple Grove
Pete Sorenson	Bolten & Menk	Rachel Guan	Mn/DOT
Ben Osemenam	MnDOT	Suzanne Danen	Dakota Co.
Joe Gustafson	Scott Co.	Brandon Bourdan	Kimley - Horn
George Stuempfig	SRF	Nick Erpelding	RLK – Kuusisto
Kristi Sebastian	Dakota Co.	John Tackman	Mn/DOT – CESU
Jerry Smrcha	Hennepin Co.	Marlin Reinardy	Mn/DOT – CESU
Steve Misgen	Mn/DOT Metro	Steve Manhart	Howard R. Green Co.
Special Guests in Attendance: Allen Eisinger and Matt Allwood from Traffic Control Corp.			

**LOCATION**

Mn /DOT waters' Edge – Conference Room C

**HANDOUTS**

Presentation on NEMA TS2 Standard [Click here for Powerpoint ppt file](#)  
 Bill SF 7 -- Legislation for Traffic Signal Override Devices use and possession restriction  
 Synchro 101 – Course Outline (Draft for committee's review/Discussion)

**Main Topic – TS 2 VS. TS 1 Cabinets**

Marcus Culver, City of Maple Grove traffic engineer introduces the topic and guest speakers, Allen Eisinger and Matt Allwood from Traffic Control Corporation. Traffic Control Corp. was invited to provide a technical presentation of the two control systems. Matt Allwood is the technical representative and presented the main information to the group.

TS 2 compared to TS 1 Controllers – Essentially, TS 2 is an upgrade from TS 1. The TS 2 controllers were first introduced for mainstream use in 1992. TS 1 is still a good standard meeting requirements for safe and efficient traffic control. The presentation revolved around the specifics of the TS 2 system. A handout of the slide presentation was distributed (see attached).

After the main presentation, the group discussed their experiences with TS 1 and/or TS 2 controllers. Mn/DOT noted they work nearly exclusively with TS 1. The cost of conversion for 1100 signals would be prohibitive, particularly since they had recently moved to the TS 1 upgrade. Other concerns issues noted:

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- Due to budget issues, few intersections have phone lines. Thus, analysis needs to be done in the field not in office where main expertise may be.
- The turnover in field staff, difference in expertise, and need for experience in reading logs in the field make training for the new system a challenge for installation of TS 2 cabinets.
- While cabinet was available in 1992, communication issues between cabinets and controllers because of proprietary interests on software design were not resolved to allow systems to work well together until 1998/1999.
- It seems more likely that Mn/DOT when ready for a major upgrade would move to the next major cabinet change.
- Some TS2's had problems with circuit boards in cold weather from connections loosening.

Other agencies also shared comments/discussion:

Scott County formerly had ACT electronics assemble their cabinets. Due to staffing changes, this is no longer a service they provide. Joe noted that he is looking into the TS2 cabinet as an option in light of this recent change.

Maple Grove has four TS 2 controllers that run signals in their downtown area. Marcus worked with Hennepin County and Jerry Smrcha to ensure the County could undertake maintenance needs for the City on this newer system

**2. EVP Legislation Update** – Steve Misgen passed out a copy of S.F. No 7 – introduced to the 84<sup>th</sup> Legislative Session (2205-2006). This is essentially the same proposal that went to the legislature last year. Those watching this issue feel it has a good chance of pass this year. Discussion followed regarding other measures agencies might take to limit misuse while maintaining safety. A consensus on a specific plan or idea was not determined.

**3. Training Ideas/Issues** – Jerry Kotzenmacher provided an update on Mn/DOT offered classes and other potential training opportunities for NCITE to sponsor:

- The Roadway Lighting Class has been canceled, notifications to those who registered will be sent out this week.
- A second Signal Design class has been added for March 7, 8, and 9 of 2005. Those on the waiting list from the first class will be notified and receive priority for signing up. A larger notice regarding the class will also be sent via E-mail.
- In looking to meet the need for signal training, Jerry spoke with Trafficware who developed an outline for a Synchro 101 class. Signal committee discussed this class that is aimed at providing an overview of synchro (without computers) to those that are either new to operations or do not plan to use the software on a regular basis. Group recommended that the class be broadened in scope to include ICT and the HCM 2000. Jerry will work with Trafficware to revise the prospectus and present the class for sponsorship by NCITE at the next board meeting.

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**ROUND ROBIN**

**Nick E.** explained that he is working on a project that is considering wireless interconnect for a system with six signals. Marc provided experiences with Maple Grove's system. He noted the system has video detection and radio wireless connection. They used the same vendor for the equipment for uniformity. When assessing options they found wireless to be cheaper than fiber optics, particularly if the fiber needed to be relocated in future with roadway upgrades. Mn/DOT (John with ESS) noted there is no current standard from Mn/DOT. They have one wireless system in SSP on Concord that requires FCC licenses. Based on this, they cannot do maintenance work themselves and this presents a challenge. Currently the system is working but had problems in the past.

**Steve Manhart** inquired about ACT and renewal of the contract with Mn/DOT. Kristi presented a letter from ACT noting contract renewal number and need to order by March 31, 2005 to avoid surcharges (doesn't apply to Mn/DOT). John T. – ESS noted that Mn/DOT is confident with the ACT product. It was noted in discussion that ACT no longer provides the service of setting up the cabinet system for agencies.

**Jerry S.** provided information and raised concern for several areas:

1. Maintenance – recently they had a signal that was going on flash intermittently. They found that the problem resulted from an unused 1-way fitter being left open. Mice and freezing rain created the problems. County had to steam the area and rewire that mast arm.
2. Conflict Monitor Tester Problem – County found a problem with their testing equipment and went to using their old tester. ESS uses an MT180 – there can be a cold temperature issue with some systems.
3. Mast Arm Structural Integrity problem uncovered – The County found two 55' mast arms developed cracks outside of the weld. They dealt with the immediate issue by having a certified person weld the area with Mike Wendolek from Millerbernd on site for inspection. County then made list of all 50 and 55 foot poles and inspected all locations within the next several days. Millerbernd is redeveloping new specification to address this issue. New arms will be placed at the two locations that had cracks. An anti galloping plate will be added to all other locations.
4. New Tech Memo on Pedestrian Crossing Signs – County received the Mn/DOT memo (<http://www.dot.state.mn.us/tecsup/tmemo/active/tm04/11t02.pdf>) last month that requires changes be implemented as directed. Jerry noted concern that technical memos come out as final direction without large circulation to counties and cities that are affected by the change. Group decided this was an important issue to work with Mn/DOT on and due to time, complexity will place issue on a future meeting agenda.

**NEXT MEETING**

The next meeting will be: March 2, 2005 from 8:00 – 10:00 am at SRF Lake Superior Room

Topic – ITE National Report Card for Traffic Signal Operations Assessment

**ATTACHMENTS**

NEMA TS2 Standard – Presentation handout