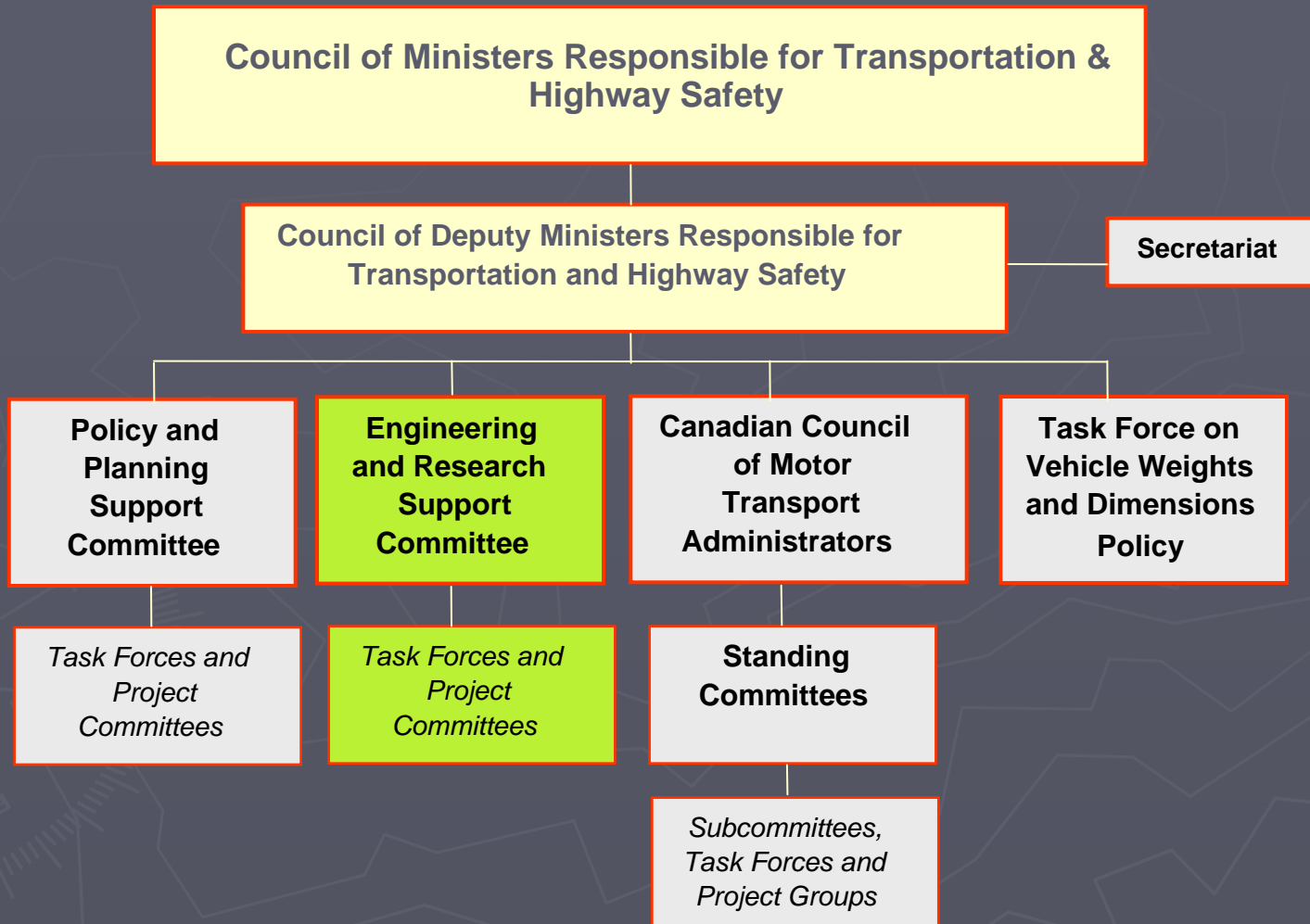


Councils of Ministers and Deputy Ministers
Responsible for Transportation and Highway Safety

Engineering and Research Support Committee
Overview
and
Engineering & Infrastructure Working Committee
Report Back

October 2008

Council of Ministers Organization



Engineering and Research Support Committee (ERSC)

Purpose

Reporting to the Council of Deputy Ministers Responsible for Transportation and Highway Safety, the ERSC is responsible for:

- carrying out initiatives as directed by the Council of Deputy Ministers
- developing recommendations regarding direction of federal-provincial-territorial technical policy
- developing proposed positions or responses to invitations and coordinating Canadian participation international intergovernmental technical activities
- developing an annual workplan plan and budget for Canadian participation in international intergovernmental activities and projects in areas related to transportation engineering
- reporting on progress of activities carried out under the workplan.

Membership

Membership includes one representative from each of the federal, provincial and territorial governments, preferably responsible for highway/transportation engineering functions, as nominated by its Deputy Minister responsible for Transportation in each jurisdiction.

Chair

The Chair will be a Deputy Minister appointed by, and for a term determined by, the Council of Deputy Ministers.

Current Chair:

Andy Horosko, Deputy Minister, Manitoba Infrastructure and Transportation

ERSC Agenda and Current Activities

- ▶ Agendas reflect interests of members, current and emerging issues:
 - Highway Engineering:
 - ▶ Development of briefing on Construction Cost and Contracting Issues
 - ▶ Development of engineering guidelines for the National Highway System
 - ▶ Survey of use of Life Cycle Costing by Canadian highway agencies
 - ▶ Exchange of policies and practices with management and inspection of bridges and structures
 - ▶ Review of impacts of new truck tires on highway infrastructure
 - ▶ Synthesis of research and experience with Central Tire Inflation (CTI) systems
 - Human Resources:
 - ▶ Recruitment and retention of skilled professionals
 - ▶ Survey of engineering salaries within member agencies

ERSC Agenda and Current Activities (continued)

- Review of Regulatory Initiatives and Impacts:
 - ▶ Navigable Waters Protection Act
 - ▶ Health Impacts of Noise
 - ▶ VOC in Traffic marking paints

- Road Safety:
 - ▶ Discussions with CCMTA representatives on Road Safety Vision
 - ▶ Closer collaboration with engineering community

- Management Systems, Innovation and Research:
 - ▶ Survey of management systems used by member agencies
 - ▶ Survey of innovation, research and development activities

- Subcommittee on Construction in Permafrost:
 - ▶ Forum for exchange on engineering issues with changing permafrost conditions
 - ▶ Project on construction and maintenance best practices

ERSC: Research and Development Linkages and Roles

Canadian Long Term Pavement Performance Program (CLTPP)

- ongoing national research effort from C-SHRP – began in 1988
- monitoring of pavement performance at sites across Canada
- Outcome: development of pavement performance models, better designs

Cooperation With US AASHTO & TRB (SCOR)

- two representatives from ERSC on AASHTO Standing Committee on Research
- participate in selection of NCHRP projects; provide Canadian priorities
- ~ \$33 million/yr in projects

International Cooperation (ITF)

- linkages to OECD/ECMT International Transport Forum
- national coordination role in contributing to workplan development and prioritization
- support for P/T representatives to serve on projects

Strategic Highway Research Program 2 (SHRP 2)

- ▶ Cooperative research program with United States:
 - launched in early 2006; seven year \$150 million
 - Four focus areas for research - Safety, Capacity, Renewal and Reliability

- ▶ ERSC responsible for national coordination of Canadian participation
 - Appointment of representatives on committees
 - Selection of loaned staff

- ▶ Canadian representatives on SHRP 2 Management Structure
 - Oversight Committee - Andy Horosko (Manitoba)
 - Technical Coordination Committees
 - ▶ Renewal: Lance Vigfusson (Manitoba)
 - ▶ Safety: Kent Speiran (Nova Scotia)
 - ▶ Reliability: Vacant – new nomination pending
 - ▶ Capacity: Thérèse Trépanier (Québec)

Strategic Highway Research Program 2 (SHRP 2)

► Loaned Staff Program

- Assistance to US in management and conduct of SHRP2 through secondment of Canadian expertise to program
 - Staff placed in TRB offices in Washington
 - Salary and accommodation costs borne by Canada, through ERSC
- Appointments:
 - First: Derek Sweet (retired TC)
 - Served in Washington in Jan to Dec 2007
 - maintains part-time involvement with SHRP2 in international coordination
 - Second: Ralph Hessian (retired NS):
 - Term began in January '08
- Loaned staff contribution highly valued by US, provides resources to assist in launch and management of research efforts

Strategic Highway Research Program 2 (SHRP 2)

► Complementary Research

- Feasibility of developing and conducting complementary safety research program in Canada being explored
 - Joint working group formed ~ TC, CCMTA and ERSC
 - Canadian Naturalistic Driving Study
 - Potential objectives and scope under development
 - Business case to be developed
 - Presentation expected at fall meeting of ERSC

Engineering & Infrastructure Strategy Working Group

- ▶ Direction:
- ▶ By the fall of 2008, develop and engineering and infrastructure strategy to contribute to RSV 2010 and beyond.

Engineering & Infrastructure Strategy Working Group

- ▶ Membership:
- ▶ Co-chairs: P. Boase (TC) & R. Mantha (ON)
- ▶ Participants: M. Anderson (AB), D. DeGrasse (TC), B. Kenny (AB), A. Kwan (AB), K. Quaye (SK), V. Todd (CCMTA)

Engineering & Infrastructure Strategy Working Group

- ▶ Initial observations:
- ▶ RSV 2010 focussed mainly on education and enforcement
- ▶ Alberta developed infrastructure strategy that will lead to AB Traffic Safety Plan
- ▶ RSRP Cmttee Task Force Chairs offered Engineering & Infrastructure elements

Engineering & Infrastructure Strategy Working Group

► Future

- 2 roundtable discussion topics at TAC Sustainable Traffic Safety Programs Workshop (Sept 08)

For RSV 2020, what are key E & I targets?

How do we further involve the Engineering Community?

Engineering & Infrastructure Strategy Working Group

- ▶ Engineering Infrastructure elements to be considered in:
- ▶ **STRID** – Strategy to reduce impaired driving, fatigue and distraction
- ▶ **VRU** – Vulnerable Road Users
- ▶ **RRS** – Rural Road Safety
- ▶ **SISM** – Speed & intersection safety mgmt
- ▶ **NORP** – National occupant restraint prgm

Engineering & Infrastructure Strategy Working Group

- ▶ **STRID** – Strategy to reduce impaired driving, fatigue and distraction
- ▶ Shoulder and centreline rumble strips
- ▶ Improved access to safe stopping and resting areas

Engineering & Infrastructure Strategy Working Group

- ▶ **VRU** – Vulnerable Road Users
- ▶ Treatments that will help integrate pedestrians and cyclist into roundabouts in the safest and most efficient fashion
- ▶ Count down timers for pedestrians at intersections
- ▶ Rounded curbs for bikes and wheelchairs at intersections
- ▶ Road Safety Audits to evaluate neighborhoods for accessibility for handicapped or pedestrians or even cyclists to prioritize work
- ▶ Guidelines for separating cyclists from traffic flow
- ▶ Improved school zone markings including flashing lights while kids are present
- ▶ Improved lighting

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▶ RRS – Rural Road Safety

▶ Single Vehicle Run-off-road

- Shoulder and centreline rumble strips
- Advanced warning and delineation in curves
- Improve design and application of barrier and attenuation systems

▶ Intersections

- Provide roadside markers or pavement markings to assist drivers in judging available gaps
- Transverse rumble strips at approach to intersections
- Enhanced signing and delineation
- Provide left-turn lanes
- Left-turn phasing
- Indirect left-turn treatments to minimize conflicts
- Improved lighting

▶ Head-on

- Centreline rumble strips
- Median barriers for multilane roads
- Improved access to safe stopping and resting areas
- Automated enforcement of red-light running
- All red clearance intervals at signals
- Raised channelization
- Passing lanes

Network screening and wildlife mitigation

Engineering & Infrastructure Strategy Working Group

- ▶ **SISM** – Speed & intersection safety mgmt
- ▶ Safe/wide shoulder/pull-off area for enforcement activities
- ▶ Consistent speed limit signage
- ▶ Variable message signs for seasonal use
- ▶ Roundabouts
- ▶ Road safety audits
- ▶ Improved lighting at intersections

Engineering & Infrastructure Strategy Working Group

- ▶ **NORP** – National occupant restraint prgm
- ▶ Safe/wide shoulder/pull-off area for enforcement activities

Engineering & Infrastructure Strategy Working Group

- ▶ Next Steps:
- ▶ Participate in ongoing workshops
- ▶ Challenge ERSC to identify opportunities supporting RSV 2010 and 2020