M. Guy Vaillancourt

Compte-rendu

Cours

Système de gestion de la sécurité routière

Safety Management System

Augusta , Maine
Les 3 et 4 mai 1995

Préparé par:

Richard Langlois et Jacques Thibeault

Ingénieurs responsables de la formation
au service de la sécurité dans les transports

Direction de la planification
Service de la sécurité dans les transports

Compte-rendu

Cours

Système de gestion de la sécurité routière

Safety Management System

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1.0 Identification des participants

Richard Langlois et Jacques Thibeault, ingénieurs au service de la sécurité dans les transports au MTQ.

Le professeur Karsten Baass de Polytechnique a également participé au cours.

2.0 Description du voyage

Endroit	:	Augusta, Maine, USA
Durée	:	1 au 3 mai 1995
Autorisation	:	CT # pour J.Thibeault et autorisation vèrbale de L.Hinse pour R.Langlois qui défrayait lui-même ses dépenses.
Raison du voyage	:	Comme responsables de la formation en sécurité routière au service de la sécurité dans les transports du MTQ, Jacques Thibeault et Richard Langlois se devaient de suivre ce cours, afin de pouvoir l'adapter pour le contexte québécois.

3.0 Caractéristique de la réunion

Type de réunion : Cours donné pour le personnel du Maine avec des invités du Vermont, du FHWA, et du Québec.

Nom de l'organisme : Le FHWA a vendu le cours SMS au Maine DOT qui se chargeait de choisir les participants.

Contenu : Le cours comportait des sessions d'enseignement formel et des ateliers pratiques, dont un sur la technique du groupe nominal pour obtenir le consensus. L'annexe A présente les différents thèmes abordés. Le formateur était M. John Zogby (voir CV annexe B).

Contexte

À cause de la loi de 1991 **ISTEA** (Intermodal Surface Transportation Efficiency Act) le FHWA exige des états d'avoir un système de gestion dans les six domaines de **Chaussée, Congestion, Ponts, Intermodal, Transport en commun, et Sécurité.** Or la sécurité était celui où les états n'en avaient pas, le **FHWA** a donc élaboré un cours de gestion en sécurité, le **cours SMS**, et il l'offre à chacun des états avec un instructeur pour la somme de 3000 $US. C'est ce cours que le Maine a acheté pour le donner à ses divers intervenants en sécurité. Le Maine en a fait profiter quelques invités, dont nous trois du Québec.

Documentation recueillie : Des copies du manuel du participant et du manuel de référence ainsi qu'une copie du rapport "Maine Highway Accident Facts. De plus M.Rick J.Dubois enverra à Richard Langlois une copie du rapport d'implémentation du SMS au Maine.

4.0 Nature de la participation

Interventions

Jacques Thibeault et Richard Langlois ont posé plusieurs questions en plus de faire de nombreux commentaires. En outre R.Langlois a été le rapporteur des trois ateliers auxquels il a participé. Il a également fait la promotion du XX° Congrès Mondial de la Route en distribuant des copies du circulaire #2 et des épinglettes. La participation des représentants du Québec a donc été très active et appréciée comme en fait fois les remerciements du responsable du Maine, M. Gerald A. Audibert, du formateur et de quelques autres participants.

Contacts et personnes rencontrées

Les contacts avec les participants ont été l'occasion d'échanges très fructueux. L'annexe C donne d'abord la liste des participants avant de fournir une copie des cartes d'affaire des personnes avec qui les échanges ont été plus marqués.

5.0 Points d'intérêts pour le MTQ

Comme le MTQ vient juste de présenter une politique de sécurité routière, il est très important pour bien mettre en application les principales recommandations de cette politique de se doter d'un bon système de gestion de la sécurité afin de le faire efficacement. C'est justement ce que permet de réaliser le système de gestion de sécurité SMS tel que montré durant les deux jours de cours aux USA, car il encadre les activités essentielles suivantes:

- **identification des mesures de performance;**
- **recueil et analyse des données;**
- **détermination des besoins;**
- **évaluation et choix approprié des stratégies et des interventions pour répondre aux besoins;**
- **évaluation de l'efficacité de l'implémentation des stratégies et des interventions.**

Le fait que deux responsables de la formation en sécurité routière au MTQ aient participé à ce cours, cela permettra au MTQ une mise en place rapide d'un système de gestion de la sécurité adapté aux besoins du Québec.

Les recommandations de mettre en place un comité de direction technique et une façon efficace de réaliser des consensus seront également fort utiles au MTQ. En effet la technique du groupe nominal (présentée à l'annexe D) y a été montré et mis en pratique: elle pourra être enseignée très facilement par Jacques Thibeault et Richard Langlois aux gestionnaires du MTQ. De plus le professeur Baass pourra aussi former des personnes qui feront sûrement une contribution valable pour la sécurité routière au Québec.

La documentation recueillie servira de base à la préparation d'un cours de système de gestion de la sécurité routière et l'implémentation d'un tel système,cela de façon adaptée aux besoins propres du Québec.

Les écueils à éviter, soulignés lors du cours, sont égalements des points d'intérêt pour le MTQ surtout si l'on utilise leur

interprétation positive de la manière suivante:

- **implication des plus hauts niveaux de gestion;**
- **définition complète des buts, des objectifs et des stratégies;**
- **gestion très au courant des problèmes qui peuvent être créés par la réponse humaine au système;**
- **souplesse du système et de la démarche de mise en place.**

Aux USA où le FHWA utilise des coupures (10%) dans les subventions aux états pour les inciter à mettre en place un système de gestion de la sécurité (**SMS**), et cela s'avère très efficace. Le MTQ aurait avantage à trouver un moyen efficace pour engager vivement les DT et les services concernés à se doter d'un système de gestion de la sécurité de type **SMS**.

Enfin, comme il est suggéré dans le **SMS**, le MTQ se doit de former un comité de direction technique pour la mise en place et l'opération d'un système de gestion de la sécurité (**SMS**) au Québec. Ce comité doit inclure tous les intervenants en sécurité: MTQ, SAAQ, Sureté, UMQ, UMRCQ, Santé communautaire, Centres universitaires de recherche en sécurité routière et Associations pertinentes (AQTR, Camionneurs, AIMQ, etc...).

6.0 Conclusion

En résumé la participation à ce cours a été très fructueuse tant par les échanges lors et en dehors des réunions que par les moyens mis à la disposition des participants (salles, acétates, distribution de documents, etc...). Participer à de tels cours est une nécessité pour les organismes (et surtout pour leurs

responsable de la formation en sécurité routière) qui ont la responsabilité de gérer les programme de sécurité dans les transports, car c'est le cours le plus à point sur le sujet pour les agences gouvernementales.

Il est fort important de suivre tous les développements dans ce domaine et de participer à tout nouveau cours ou colloque qui sera donné sur la sécurité routière et sa gestion systémique, car la sécurité routière est un élément primordial de la responsabilité du MTQ.

Richard Langlois et Jacques Thibeault, le 15 mai 1995.

c.c. Guy Vaillancourt
Jean-Guy Loranger
Relations extra ministérielles
XX° Congrès Mondial de le Route
Karsten Baass

ANNEXE A

Thèmes abordés

au cours

SMS

Direction de la planification
Service de la securite dans les transports

Agenda

Day 1

MORNING
Session 1: Introduction/historic review of highway safety management

Session 2: Review and clarification of Safety Management System Regulatory Requirements: 23 CFR Part 500 Subparts A & D.

AFTERNOON.
Session 3: **Developing** a Safety Management System

Day 2

MORNING
Session 4: **Implementing** a Safety Management System

AFTERNOON
Session 5: **Administering** a Safety Management System

Course Objective

Upon completion of this course, participants should:

- ❑ Be familiar with background and theory pertaining to safety management and be able to apply these principles to develop, implement and administer a safety management system.

MAINE DEPARTMENT OF TRANSPORTATION
SAFETY MANAGEMENT
SYSTEM

The Maine Department of Transportation's Vision:

The Maine Department of Transportation will create and maintain a safe, efficient, and economical transportation system that is cost effective, environmentally sound, and responsive to the diverse needs and values of the people of Maine.

The Mission of the Management Systems is to provide information to assist and support decision makers in optimizing investments in Maine's transportation system.

HIGHWAY SAFETY MANAGEMENT SYSTEM

The goal of the Safety Management System is to provide an ongoing systematic and comprehensive approach to reduce the frequency and severity of crashes on Maine's public roads

The objectives of the Safety Management System (SMS) are:

1. **Define performance measures and standards.**
2. **Ensure that traffic safety is considered at all phases of roadway related programs including engineering, enforcement, education, and emergency response disciplines.**
3. **Identify existing and potential safety problems.**
4. **Identify strategies and actions to enhance safety as related to the human, vehicle, and highway elements.**
5. **Evaluate the costs and safety benefits of potential strategies and actions.**
6. **Produce timely summaries and reports as needed by decision makers.**
7. **Evaluate the effectiveness of implemented strategies and actions.**
8. **Integrate the SMS with other management systems as appropriate.**
9. **Review and evaluate the SMS process on an ongoing basis.**

1. What are management systems?

Faced with today's fiscal constraints local, state, and federal governments must make difficult spending decisions. The costs and benefits of various investments must be carefully weighed to ensure the most effective use of limited funds. In transportation, numerous concerns must be addressed: preserving the infrastructure; considering and, as appropriate, implementing an intermodal approach to moving people and goods; ensuring that the highways are safe; reducing congestion; and meeting public transportation needs. Objective information that identifies needs and evaluates possible solutions is necessary to help decision makers determine what investments are made.

The Intermodal Surface Transportation Efficiency Act (ISTEA) requires each state to develop, establish, and implement systems for managing the pavement of Federal aid highways, bridges on and off Federal aid highways, highway safety, traffic congestion, public transportation facilities and equipment, and Intermodal transportation facilities. It also requires a traffic monitoring system. The U.S. DOT defines a management system as a systematic process designed to assist decision makers in selecting cost effective strategies and actions to improve the efficiency and safety of, and protect the investment in, the nation's transportation infrastructure.

MDOT views the management systems as an opportunity to develop a tool that provides the best assistance, information, and support to Maine's decision makers. The mission for the management systems is to provide information to assist and support decision makers in optimizing investments in Maine's transportation system.

2. How will they work?

The management systems will provide accurate data, produce useful reports, and support good decisions. They will provide a systematic process to analyze and summarize the information necessary for selecting and implementing cost effective programs and actions.

First, each system will develop or review the performance measures and standards which drive the analytical models to determine existing and future needs. Performance measures and standards are the operational characteristics, physical condition, or other appropriate criterion used to evaluate the adequacy of transportation facilities and estimate needed improvements. This information, including an inventory of facilities, will be maintained in an integrated database.

Management Systems staff will work with decision makers to identify what information they need and when they need it. This will include the identification of potential strategies and actions to address identified needs. These reports will include an evaluation of the possible strategies. In many cases this will include a

cost and benefit analysis. The systems will generate candidate lists of projects for TIP/STIP projects, CMAQ proposals, Sec.3 grants, etc.

The management systems will also evaluate effectiveness of implemented strategies, programs, and actions. Identifying successful investments will be valuable in making appropriate recommendations to address needs in the future.

3. How is this different from past procedures?

Various processes currently exist within and outside of the MDOT to determine need and evaluate options. Pavement and bridge management systems have been in place for some time. Now a similar management systems approach will be applied to new areas; congestion, intermodal facilities and systems, safety, and public transportation. This expansion reflects a multi-modal approach to meeting Maine's mobility needs.

The Management Systems will provide a structured, objective, and logical process for evaluating the state's transportation system utilizing cost-effective techniques that consider the whole State network. The management systems will provide more uniformity in the decision-making process by applying the same measures and standards to facilities statewide.

In the past implemented strategies were not routinely evaluated for their effectiveness. By providing this evaluation, the management systems will be able to identify both effective actions and situations were improvements may be needed.

4. What are the benefits?

The systematic identification of needs and evaluation of proposed and implemented strategies will support decision making at all levels. The objective information they provide will be useful in securing local support. The coordination of data collection will reduce duplicated efforts, saving state and local agencies time and resources. The increased cooperation and coordination among decision makers will be beneficial to all.

5. What won't they do?

Management systems will not replace the decision making process or reduce flexibility. They are a planning tool, not a "magic box" that produces an investment program. Their purpose is to assist decision makers by supplying objective data and information.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING

MEMORANDUM

Date: May 5, 1995

To: SMS TECHNICAL ADVISORY COMMITTEE & CONFERENCE ATTENDEES

From: GERRY AUDIBERT, SAFETY MANAGEMENT SYSTEM COORDINATOR

Subject:: SUMMARY OF MAY 2-3, 1995 NHI SAFETY MANAGEMENT SYSTEM CONFERENCE

CONFERENCE ATTENDEES:

Tim Bolton	MDOT - Policy Analysis
Ron Emery	MDOT - Computer Services
Tracy Hunnewell	Dept. of Public Safety
Lt. Bruce Dow	Maine State Police
Don Craig	MDOT - Acting MPO Coordinator
Maurice Dionne	Bureau of Motor Vehicles
A. Graham Bailey	FHWA - Assistant Division Administrator
Bob Baker	MDOT - Accident Records
Nancy Berube	Maine Safety Council
Bruce Ibarguen	MDOT - Traffic Division
Margaret Vandebroek	MDOT - Bicycle & Pedestrian Coordinator
Rick Dubois	MDOT - Management Systems Coordinator
David Ross	Vermont AOT - SMS Coordinator
Barry Driscoll	Vermont AOT - Policy Analysis
Prof. Karsten Baass	Quebec Ministry of Transportation
Richard Langlois	Quebec Ministry of Transportation
Jacques Thibeault	Quebec Ministry of Transportation
Tracey Praul	FHWA - Assistant Programs Engineer
Dale Mitchell	LACTS
Robert Kenerson	BACTS
Bruce Hyman	PACTS
Ed Hanscom	MDOT - CMS Coordinator
Thomas Jamison	MDOT - Construction Programming
Brian Pickard	MDOT - Maintenance & Operations
Tracy Perez	MDOT - Transit Planner
John Sliva	MDOT - Traffic Planning
James Andrews	MDOT - Construction
Greg Costello	MDOT - Accident Records
Gerry Audibert	MDOT - SMS Coordinator

SUMMARY OF MAY 2-3, 1995

NHI SAFETY MANAGEMENT SYSTEM CONFERENCE

John Zogby's presentation stressed management rather than information systems and data collection. His approach to SMS is very similar to TQM (Total Quality Management), in that it strives for brainstorming sessions and a consensus approach to problem resolution.

Mr. Zogby started the Conference with a brief history of transportation and crash data, and key federal highway safety acts. He explained that though the death rate is continuing to drop, the rate of serious injuries is rising. ISTEA (Intermodal Surface Transportation Efficiency Act) requires the establishment of 6 management systems; Safety, Pavement, Bridges, Congestion, Intermodal and Public Transportation. In Maine, Pavement and Bridge Management sections are assigned to MDOT's Technical Services. The other Management Systems, along with Air Quality Planning, are within the MDOT Planning Division under the direction of Rick Dubois.

Mr. Zogby stressed that goals and strategies must be developed first, and then the organization of resources (data collection and information systems) can be developed to meet the objectives of the system. He added that the imposition of sanctions by U.S. DOT (Department of Transportation) is unlikely, provided the states are showing ongoing development of the safety management system.

The development of a Safety Management System requires commitment from the highest level. This can be accomplished through:

- Memorandum of Understanding between agency heads
- Establishment of a Governor's Council
- Legislation (least desired)

Safety Management typically requires a partnership with the following groups:

TYPICAL AGENCY	TYPICAL FUNCTION
Transportation/Highway	Road Design, Construction, Operation & Maintenance
Highway Safety	Highway Safety, PI &E (Public Information & Education)
Law Enforcement	Driver/Vehicle Safety & Surveillance
Public Health	EMS, Injury Prevention & Control
Judiciary	Adjudication of Highway Safety
Driver License	Driver Qualifications & Control
Vehicle Registration	Vehicle Control & Qualifications
State Legislature	Enactment of Highway Safety Legislation
Education	Driver Education, K-12 Safety Education
MPO (Metropolitan Planning Org.)	Regional Highway Safety Programs
State/Local RR & Truck Regulatory	Grade Crossing & Freight Movement Safety
Local Technical Assistance Program	Expansion Of Local Transportation Agency Expertise
Local Govt./Private Organizations	Local Highway Safety Improvement Programs
FHWA & NHTSA Representatives	Enhance Federal, State & Local Relationships

All partners are considered equal in the development of safety goals. Multi-disciplinary teams are developed from this group to formulate specific objectives and strategies. Ongoing program evaluations are necessary to ensure their effectiveness. It is recommended an outside source be used to conduct evaluations (i.e., university or other technical assistance).

Applicable portions of the eight management principles and five safety program areas noted in the ISTEA Regulation must be addressed for each safety goal that is developed. Coordination with the other Management Systems is also required.

Projects will be identified within the HSP (Highway Safety Plan) and MCSAP (Motor Carrier Safety Assistance Program). Potential funding sources include:

- NHS (National Highway System)
- STP (Surface Transportation Program)
- FHWA - State Planning & Research
- MPO (Metropolitan Planning Organizations)
- 402 Funds (Highway Safety)

The remainder of the Conference essentially consisted of workgroup development of safety goals and objectives, and discussions of these. Following is a summary of the process used in the development of safety goals, objectives and strategies, based on hypothetical crash statistics.

Each group first introduced 5 safety goals. Similar goals were consolidated by consensus management principles into a specific goal. Fifteen quantified goals emerged from this process, as listed below:

1. Increase use of safety belts from the current 30% to 45% over the next 3 calendar years.
2. Reduce fatalities for 19 year old drivers and younger by 20% in 3 years.
3. Initiate a corridor safety program over 2 years for 10 high accident corridors.
4. Increase MCSAP inspections by 5% per year for the next 4 years.
5. Increase sobriety checkpoint enforcement by 5% over 2 years.
6. Initiate 2 new community safety programs each year over 5 years.
7. Reduce response times of EMS in rural areas from 1 hour to 45 minutes over 2 years.
8. Reduce fixed-object crashes by 20% over 5 years.
9. Reduce the number of pedestrian/bicyclist crashes by 20% over 5 years.
10. Reduce alcohol-related crashes by 10% over 2 years.
11. Reduce fatality rate among elderly drivers by 10% over 3 years.
12. Reduce the number of truck-related crashes by 10% within 2 years.
13. Reduce pedestrian fatalities by 15% in 5 years.
14. Increase bicycle helmet use by 30% within 3 years.
15. Reduce risk-taking related crashes by 30% within 3 years.

Each person then selected 5 goals and assigned a ranking of 1 to 5 to each, with 5 being the highest ranking. The results from all participants were then totaled. The 6 highest ranking goals were then selected to allow each group to work on an individual goal. The 6 goals selected, ranging from highest rating, were 1, 8, 10, 3, 9 and 12. The following paragraphs summarize the objectives each work group presented for their particular goal. These are included for illustration only - they do not represent actual SMS recommendations. In reality, work groups would be selected based on their expertise regarding the particular goals.

1. Increase use of safety belts from the current 30% to 45% over the next 3 calendar years.

Existing Program

Maintain law (safety belts for 19 years old and under) with fines
Continue school educational program
Continue other PI & E efforts
Safety belt convincer program
Observational use study
Checkpoint (alcohol stops to now include belt checks)

New Program

Expand law to include all ages
Add points for violations - not just fines
Develop programs for adults
Add education to MCJA (Maine Criminal Justice Academy) for in-service and cadet training
Letter of clarification to educate inspection stations (damaged/removed safety equipment)
New road sign "Buckle Up - It's the Law"

Lead Responsible Agency:	Maine State Police	
Program Costs:	Existing Staff	$0
	Information Technology	$0
	Materials (paper, postage)	$1,000
Expected Results:	Vehicles repaired, Increased awareness, Equipment readily available for use (not buried in or behind seat). Program could continue with future mailings - cost to be absorbed in existing operating resources.	

8. Reduce fixed-object crashes by 20% over 5 years. The particulars for this goal were inadvertently lost - my apologies.

10. Reduce alcohol-related crashes by 10% over 2 years.
This work group selected young adults from a larger target audience, which included casual drinkers, alcoholics and older drivers.

New Program

Public Information & Education

K-12	General awareness education
	Public Speakers by affected individuals
College	Orientation program
	Peer Counseling
Media	Point-of-Sale warning signs
	TV and Radio (prime time slots and public service slots, if available)
	Promotional materials (Tee shirts, buttons, etc.)

Lead Responsible Agency:	Department of Public Safety	
Program Costs:	Production	$ 50,000
	TV & radio time	$ 50,000
	Promotional	$ 25,000
	Staff (4)	$200,000
	Training	$ 20,000
Revenue Sources:	Alcohol licensing fees	
	Increase Violation fines	
Expected Results:	Reduce OUI-related crashes by 20% in 2 years.	

3. Initiate a corridor safety program over 2 years for 10 high accident corridors.

New Program

Pressure to activate and implement a corridor safety program
Enforcement of safety laws
Distribution of helmets
Evaluation

Lead Responsible Agency: Police (all), Department of Public Safety

Program Costs:	Purchase 30,000 helmets	$400,000
	PI & E	$100,000

9. Reduce the number of pedestrian/bicyclist crashes by 20% over 5 years.

New Program

Education - Act Safely
- Dress Safely
- Respect bicyclists and pedestrians

Signalization - Pavement marking
- Warning signs

Law - Bicycle helmets
- Bicycle lights at night
- Pedestrian & bicycle zone enforcement
- Fluorescent clothing at night
- enforcement of jaywalking restrictions

12. Reduce the number of truck-related crashes by 10% within 2 years.

A. Types of crash-related causes
- Shoulders
- Curves
- Sight Distance
- Warning Signs
- Directional signs
- Mode switch
- IVHS (Intelligent Vehicle/Highway System) & ITS (Intelligent Transportation System)

B. Crash-related Categories
- Sleep-related/tired
- Mechanical
- Signs/signals
- Geometry
- Legislation
- Mode switch & IVHS
- Maintenance
- Licensing/qualifications
- Enforcement
- Weight

New Program (Short-term)

New signs	10%
Installation	30%
Study-locations	20%
Inventory-statewide	20%
Staff/Consultant	10%
Evaluate/monitor	10%

Lead Responsible Agency: Maine Department of Transportation, Division of Maintenance & Operations, Consultant

Expected Results: Reduce truck crashes by 2% over a two year period, resulting in saving 3 trucker and 5 other lives.

ANNEXE B

CV DU FORMATEUR

JOHN ZOGBY

JOHN J. ZOGBY

SUMMARY OF EXPERIENCE

Mr. Zogby has over 30 years experience in engineering and management for highway safety and motor vehicle administration.

His transportation career began in the Bureau of Traffic Engineering in the Pennsylvania Department of Highways, where he was responsible for statewide application of highway signs and markings. He was instrumental in developing the state's first automated accident record system in 1966. In the late 1960's, he helped initiate and was project director for the statewide safety improvement program and the state's in-depth accident investigation function.

He worked in the private sector in traffic safety research for several years before returning to public service as the Director of the Bureau of Accident Analysis in the Pennsylvania Department of Transportation (PennDOT). He was appointed Deputy Secretary of Transportation for Safety Administration in February of 1979, a position he held for 13 years, until his retirement from public service in December 1991.

Mr. Zogby is currently consulting on management and policy issues for government and private organizations in the area of transportation safety.

PROFESSIONAL AND BUSINESS EXPERIENCE

Mr. Zogby's most recent experience is as project director and principle instructor for a FHWA contract for the development, implementation, and instruction of a training program for the Highway Safety Management System as required under section 1034 of The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).

He also helped in the final implementation phase of the Commercial Driver License (CDL) program to advise several states in meeting compliance deadlines of the Commercial Motor Vehicle Safety Act of 1986. This effort was under contract by the Federal Highway Administration, Office of Motor Carrier Safety

Mr. Zogby is consultant to the Texas Engineering Extension of Texas A & M University on the development of a graduate level course on Highway Safety Management Systems for the FHWA.

Mr. Zogby is currently under contract with Loyola College of Maryland to author a report on the findings of a U.S. Delegation led by the Federal Highway Administration on the safety management practices of Japan, Australia, and New Zealand. Zogby was a member of the delegation along with federal and state transportation officials.

He has consulted with several states in assessing their Traffic Records capabilities to address highway safety program management needs. The states are: New Jersey, Tennessee, California, and Alaska.

PROFESSIONAL SOCIETIES AND NATIONAL COMMITTEES

Mr. Zogby served as vice chair of the National Motor Carrier Advisory Committee to the U.S. Secretary of Transportation and is a member of the Transportation Research Board's (TRB) group 3 council. He was a member of the Committee for a Strategic Transportation Research Study: Highway Safety, which produced special report 229, Safety Research for a Changing Highway Environment.

He completed a six year tenure as Chair of the TRB committee on Planning and Administration for Transportation Safety. During this period, in concert with the Highway Safety committee of the American Association of State Highway and Transportation Officials,(of which he was a member), he directed the study that eventual resulted in the publication by both organizations, of a STRATEGIC HIGHWAY SAFETY PLAN.

He had previously served on the National Driver Register Advisory Committee and the Advisory Committee for the National Accident Sampling System. He served in many capacities on transportation safety matters with the following national organizations: the National Governor's Association, the National Association of Governor's Highway Safety Representatives, the Transportation Research Board, the American Association of State Highway and Transportation Officials, the Institute of Transportation Engineers (ITE), the National Safety Council and the American Association of Motor Vehicle Administrators (AAMVA).

He served as Chair of the National Safety Council's Traffic Records Committee, President of the Mid-Atlantic section of ITE, President of Region 1 and International Executive Board of AAMVA, Chair of the Governing Board of the International Registration Plan, and Chair of a subcommittee of the NGA Working Group on State Motor Carrier Taxation and Regulation. He also chairs his community's planning commission.

Mr. Zogby is currently a member of the Institute of Transportation Engineers, the American Society of Public Administration, and a senior member of the American Society of Highway Engineers.

EDUCATION

Mr. Zogby received a degree of Bachelor of Science in Economics from Villanova University and a degree of Master in Public Administration from Pennsylvania State University. He currently is a doctoral candidate at Pennsylvania State University for a degree in Public Administration.

ANNEXE C

LISTE DES PARTICIPANTS

ET

CARTES D'AFFAIRE

Direction de la planification
Service de la sécurité dans les transports

NATIONAL HIGHWAY INSTITUTE - SAFETY MANAGEMENT SYSTEM
MAY 2 - 3, 1995
AUGUSTA CIVIC CENTER - AUGUSTA, MAINE

CONFIRMED CONFERENCE ATTENDEES

VERMONT:

1. Dave Ross (Engineer of Traffic & Safety Division) ✓
2. Barry Driscoll (Policy Analysis) ✓

CANADA: (via FHWA-Quebec Ministry of Transportation)

3. Prof. Karsten Baass ✓
4. Richard Langlois ✓
5. Jacques Thibeault ✓

NEW HAMPSHIRE:

6. Scott Davis (Highway Maintenance/SMS)
7. Jim Colburn (Engineer of Traffic)

FHWA:

8. Tracey Praul (Assistant Programs Engineer) ✓

NHTSA:

9. Jack Magee (NHTSA, Regional Manager)

MDOT:

10. Bob Baker (Accident Records) ✓
11. Don Craig (MPO Coordinator) ✓
12. Dale Mitchell - MPO (LACTS) ✓
13. Robert Kenerson - MPO (BACTS) ✓
14. Bruce Hyman - MPO (PACTS) ✓
15. Tom Reinaur - MPO (KACTS)
16. Rick Dubois (Management Systems Division Engineer) ✓
17. Ed Hanscom (CMS Coordinator) ✓

NATIONAL HIGHWAY INSTITUTE - SAFETY MANAGEMENT SYSTEM
MAY 2 - 3, 1995
AUGUSTA CIVIC CENTER - AUGUSTA, MAINE

18. Gerry Audibert (SMS Coordinator) ✓

19. Tom Jamison (Bureau of Planning-Construction Programming) ✓

20. Brian Pickard (Maintenance) ✓

21. Peter Coughlan (Maine Local Roads)

22. Tracy Perez (Transit Planner) ✓

23. Margaret Vandebroeck (Bicycle & Pedestrian Coordinator) ✓

24. Tim Bolton (Office of Policy Analysis) ✓

25. John Sliva (Planning's Traffic Engineer) ✓

26. Jerry Casey (Statewide Planning Engineer)

27. Bruce Ibarguen (Engineer of Traffic) ✓

28. Ron Emery (Computer Services Division) ✓

29. Arthur Getchel (Construction) JAMES ANDREWS ✓

OTHER AGENCIES OR GROUPS:

30. Tracy Hunnewell (Department of Public Safety) ✓

~~31. Dennis Bergeron (Public Utilities Commission)~~ ✓

32. Maurice J. Dionne, Jr. (Department of Motor Vehicles-Commercial Vehicles) ✓

~~33. Cliff Gray (Maine Motor Transport Association)~~ ✓

~~34. Steve Burgess (Maine Emergency Management)~~ ✓

35. Nancy Berube (Maine Safety Council) ✓

36. Lt. Bruce Dow (Maine State Police) ✓

37. Terry Bineau (Bureau of Motor Vehicles)

38- Greg Costello ✓

35 primes 28 present

Graham Bailey a fait introduction

CARTES D'AFFAIRES DES PERSONNES CONTACTÉES

State of Maine
Department of Transportation

Gerald A. Audibert, P.E.

Safety Management Coordinator
Bureau of Planning

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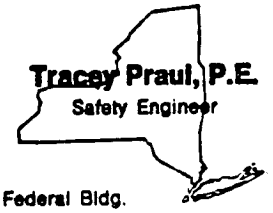

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Direction de la planification
Service de la sécurité dans les transports

ANNEXE D

Technique du groupe nominal pour arriver au consensus

Traduction adaptée du SMS Reference Manual par:

Richard Langlois ing., M.Sc.

Sécurité dans les Transports
Transports Québec

Technique du groupe nominal pour arriver au consensus

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Richard Langlois ing., M.Sc.

Sécurité dans les Transports
Transports Québec

TECHNIQUE DU GROUPE NOMINAL POUR ARRIVER AU CONSENSUS

Le texte présenté ici est une traduction adaptée de ce qui a été montré au cours sur le Safety Management System à Augusta dans le Maine, les 2 et 3 mai 1995.

Plusieurs techniques de "tempête d'idées" existent pour arriver au consensus dans un groupe ou un comité. La technique du groupe nominal (TGN)[1] est particulièrement efficace pour les groupes restreints. Les étapes nécessaires pour réaliser la technique du groupe nominal, c'est à dire atteindre le consensus dans un petit groupe de travail, sont au nombre de 5:

- **Établissement des buts du programme;**
- **Dresser la liste de tous les buts;**
- **Clarification de la liste des buts par regroupement;**
- **Priorisation par vote individuel sur les buts;**
- **Choix des buts pour une meilleure définition par une ou des équipes multidisciplinaires.**

Chacune de ces étapes est décrite brièvement ci-après afin de faciliter l'utilisation de la technique du groupe nominal (TGN).

◆ Établissement des buts du programme

Chaque membre du comité de gestion suggère au moins trois buts nouveaux ou existant déjà qui, selon son avis, doivent être inclus dans le programme de sécurité routière. Même si cette technique s'applique en temps réel, les buts peuvent être établis avant la réunion du comité de gestion convoquée pour cela. Cela requerrait des instructions préliminaires sur la méthode TGN ainsi que des prévisions des exercices. Les buts doivent être clairement et brièvement écrits sur une carte individuelle ou une feuille de papier.

◆ Dresser la liste de tous les buts

Une personne est assignée pour ramasser et enregistrer sur un tableau les buts soumis, en ne plaçant pas plus de 5 buts à la fois pour plus de clarté. On doit prendre soins que les buts soient transcrits sur le tableau fidèlement. Chaque but doit être numéroté séquentiellement.

◆ Clarification de la liste des buts par regroupement

Les membres du comité de gestion doivent reviser la liste pour s'assurer qu'ils comprennent bien chacun des buts listés. Celui qui a présenté le but doit discuter plus à fond et clarifier chacun de ses buts: quels besoins à satisfaire; le niveau d'effort requis; la source de financement; les résultats attendus.

Les buts similaires doivent être regroupés là où c'est approprié. À cette étape-ci des buts peuvent être ajoutés, enlevés ou modifiés. Cependant, tout changement ou regroupement de buts peut être l'objet d'un véto par l'objection de n'importe quel membre du comité. Le consensus gouverne cette procédure.

◆ Priorisation par vote individuel sur les buts

Chaque membre doit choisir, selon leur avis, les 5 meilleurs buts. L'animateur doit fournir des cartes (75 x 125 mm) aux membres du comité pour chacun des buts qui restent sur la liste. Le membre doit mettre le focus sur les buts qu'il a choisis et inscrire le numéro assigné au but au centre de la carte pour chacun des 5 buts. Un niveau 5 est donné au but qu'ils jugent le meilleur. Ce niveau est inscrit dans le coin droit inférieur de la carte et est encerclé. Ensuite choisir le moins important des buts et le classer en lui

donnant le niveau 1 de la même manière que pour le niveau 5. Continuer avec chacun des autres buts jusqu'à ce qu'un niveau leur soit assigné.

- **Choix des buts pour une meilleure définition par une ou des équipes multidisciplinaires**

L'animateur ramasse les cartes et enregistre les votes pour chacun des buts. Les membres du comité choisissent alors les but qui doivent être mieux définis par les équipes multidisciplinaires du programme dans l'ordre de priorité suggéré par le vote. Le nombre de buts sera déterminer par consensus et dépendra des ressources disponibles requises pour les élaborer chacun en une initiative de programme.

Référence

[1] Ford, David L.,Jr. Purdue University, "A Group Process Model for Problem Identification and Program Planning" Journal of Applied Behaviorial Science, 1977 p.466-491.