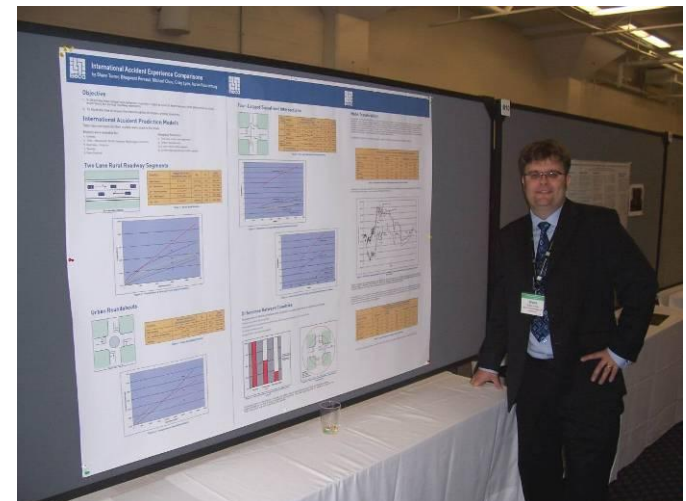


TRB Annual Meeting (Conference) - Overview & Highlights

Shane Turner ---- Bruce Robinson ---- Glen Koorey



Conference Overview

- Held each January in Washington DC
- Over 10,000 attendees
 - representation from at least 65 countries
- Over 3,000 presentations covering all aspects of Transportation
 - Aviation
 - Pavements & Materials
 - Design & Construction
 - Systems and Data Analysis
 - Environment, Energy and Climate
 - Freight Systems and Planning
 - Public transport and ferries
 - **Road safety**
 - Social, economic and cultural issues
 - Planning, policy and processes
 - Maintenance
 - Legal Issues
 - Management and leadership
 - **Transport operations**
 - Marine
 - **Pedestrians and Cyclists**
 - Rail
 - Security
 - Structures
 - Road users



Conference Overview

- Runs from Sunday through to Thursday, with session starting at 8am and going through to 10pm
- 600 technical sessions and workshops
- High use of poster sessions
- TRB committee and task force meetings
- Podium sessions reserved for emerging areas and invited speakers
- Spread over three hotels!



Poster Sessions

- The lifeblood of TRB (>2000 poster papers)
 - A very efficient way to see a lot of relevant info in a short time
 - Allows for one-on-one discussions with authors

(Also a way to catch up with a lot of colleagues at their posters!)
- These are NOT the "second-class" papers
 - Have to meet the same paper review standards as podium papers
 - May be selected for *TRB Research Record* or win awards



TRB Committees

- >200 committee and task force meetings
 - One of two face-to-face meetings a year for most committees
 - Committee members often spend more time in committee, sub-committee and task force meetings than at the conference sessions
- Develop TRB research needs and conf session content
 - The engine room of Nth American transport research (and beyond)



Reaping the benefits of TRB

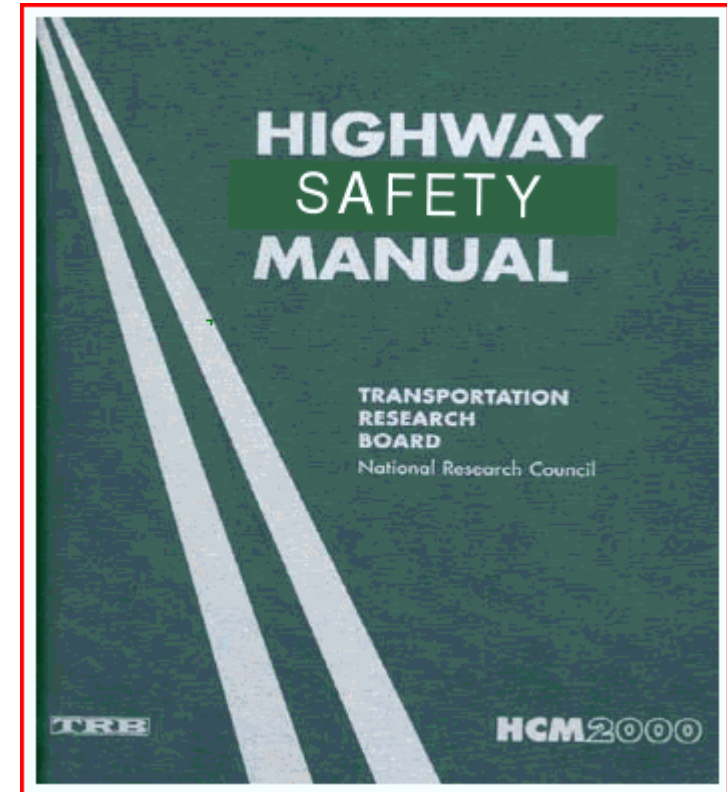
- Between 2003 and 2009 Utah DOT sent 49 individuals to TRB
- These attendees have introduced 269 initiatives, of which 136 have been currently implemented
- Utah have estimated that they have benefited so far from over **\$189M** in cost savings from ideas picked up from TRB, in following areas:
 - Contracting method
 - Safety improvements
 - Accelerated bridge maintenance
- **Utah Conference Attendance Process**
 - Careful Selection of Attendees
 - Preparation for meeting (prior to and at TRB)
 - Each attendee looks for at least two key ideas, often many more, to bring back from the conference
 - Present ideas found at the conference to other DoT staff
 - Implement Ideas



Highway Safety Manual Update



- Prior to its development USA transport professionals did not have a national resource for quantitative information about crash analysis and evaluation
- Using HCM as an example a TRB task force was set-up to develop the HSM in May 2000
- Previous practice was 'naïve' measures such as linear crash rates and simple before and after experience at sites
- Determined that a more rigorous set of statistically sound models were needed to screen networks for safety projects and apply appropriate countermeasures
- Had access to some of the best crash prediction models internationally and also rigorous processes (expert panels) to select crash modifying factors for road features



Highway Safety Manual Update



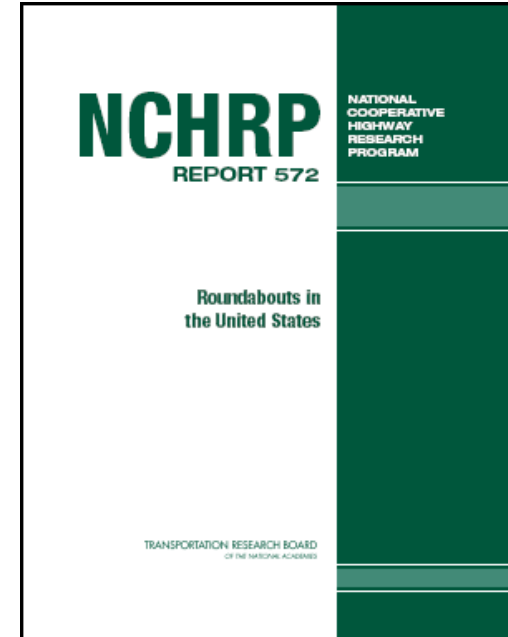
- So what's in HSM:
 - Definitions and a comprehensive explanation of crash analysis & evaluation methods, including human factors assessment
 - Various hotspot/blackspot selection methods (7)
 - Crash prediction models (SPFs) for several major roading types – more to come in future updates
 - Accident modifying factors for large number of road features. The have been carefully reviewed by expert panels. In many cases these factors are a non-linear function of traffic volume and other variables such as speed (not just simple before and after values)
 - Safety performance methods – typical versus observed

- HSM is due to be published this month (March) by AASHTO
- Extensive training planned in US on how to use HSM

Highway Capacity Manual 2010 Update

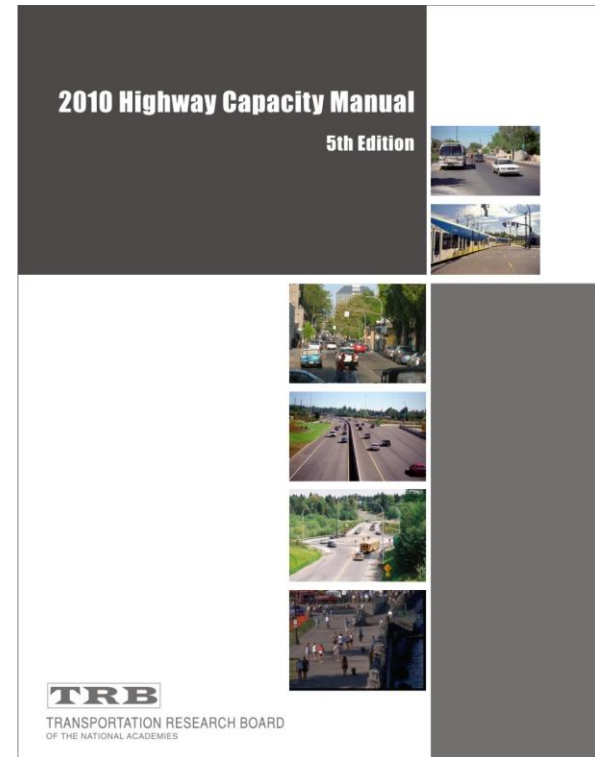
Incorporation of >US\$5m of New Research:

- NCHRP 3-60 Interchange Ramp Terminals
- NCHRP 3-64 HCM Applications Guide
- NCHRP 3-65 Roundabouts in the United States
- NCHRP 3-70 Multi-Modal Arterial LOS
- NCHRP 3-75 Freeway Weaving
- NCHRP 3-79 Arterial Travel Speeds
- NCHRP 3-82 Default Values for HCM
- NCHRP 3-85 Guidelines for the Use of Alternative Traffic Analysis Tools
- NCHRP 20-7 Two-Lane Highways
- FHWA Research on Active Traffic Management
- NCHRP 3-92 supplemental research
 - Signalized Intersection Methodology (new delay method and structure changes reflecting actuated control)
 - Gap acceptance for six-lane, two-way stop-controlled Intersections
 - 75 mph speed-flow curve for freeways



Highway Capacity Manual 2010 Update

- Four volumes
 - Volume 1: Concepts
 - Volume 2: Uninterrupted Flow
 - Volume 3: Interrupted Flow
 - Volume 4: Applications Guide
- changes desired by the user community
- a more multimodal approach to addressing transportation issues
- designed to continue to be relevant to users in an age of increasing reliance on software tools



Other Conference Highlights and Info

- Key highlights
 - Paper Sessions
 - Mon-Thu 8am to 10pm
 - Committees & Workshops
 - Includes prior weekend
 - Receptions
 - 5am - 8pm
 - Exhibition
 - Mon-Wed
- Important to plan your time:
 - many topics
 - time to meet people



Conclusions

More Kiwis should try and get to TRB once-off and regularly:

- Bring home cutting edge research findings and new applications
- Establish international peer networks and original sources
- Contribute to the world-wide profession
- Professional skills development



See you there in 2011 ?!

