

## **Minutes – Freeway Management & Operations Handbook (FMOH) Subcommittee of the TRB Freeway Operations Committee**

**Date:** 22 Jan, 2006; 5:00 PM

**Location:** DC, Washington

**Attendees:** Refer to sign-in sheet

**Subcommittee Co-Chairs:** Joel Marcuson and Louis Neudorff

The meeting was opened by Joel Marcuson. Ms. Jessie Yung, the Freeway Management Program Manager within FHWA, was in attendance. Jessie's contact information is as follows:

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The FMOH is available on the FHWA website<sup>1</sup> in both html format (by individual chapters and sections) and in pdf format (complete document in a single file.). Jessie indicated there is international interest in the FMOH, and two countries have requested translations.

Les Jacobson went over the recommended changes to Chapter 7 due to the pending completion of the Ramp Management Handbook. Jessie Yung is considering how to make the Chapter 7 change and provide distribution on the web site (or perhaps wider distribution than we are currently doing, to ensure that practitioners are aware of the FMOH). Jessie also indicated that FHWA was about to initiate a FMOH training course, and we need to consider how changes to the FMOH can be integrated into the course to make it current.

Other interests that could be considered for the FMOH are tolling applications, ramp and freeway management during catastrophic events (ie, Hurricane Katrina), and the current Incident Detection algorithms as developed by Fred Hall at McMaster's University in Canada.

The FMOH subcommittee previously discussed each chapter of the Handbook with respect to areas that may need updating. The chapters and points of discussion are as follows:

- . • **4 – Performance Monitoring and Evaluation:**
- . • Jan 05 - There is a new Performance Monitoring Handbook (Cambridge Systematics) that should be referenced.
- . • Jun 05 – See New Ramp Management Handbook (see Les J). Has a complete Performance Monitoring chapter written by Cambridge.

- **5 – Roadway Improvements**

Jan 05 -

Jun 05 – A. June 20 Meeting in DC to discuss methods to increase roadway capacity within rights-of-way to be attended by Joe Marcuson (notes of meeting to follow). B. Also, LA Capacity took away shoulder lanes and added through or HOV lanes to provide additional capacity. Checking Safety aspect of LA systems (shoulder on left was used - 78% of drivers go to right during a breakdown), After performing before/after studies on accidents in converted lanes, Cal adopted policy (as there were no statistics for accident “rates” increasing due to addition of new lanes) of restriping roadways to add capacity by using shoulder space (11’ lanes). There has been no study to examine capacity changes. Congestion reduction occurred during (peak hour “shoulders”). C. Drivers use hard (paved) shoulders (illegal) during incidents in Athens, Italy, France (so emergency vehicles cannot reach incident). D. VA Beach, uses right shoulders for capacity during peaks (and during incidents).

. Pete Briglia suggested that (Roundabouts) may be good topic at Annual Meeting – Roundabout Committee (TRB), NCUTCD, HCM Committee (TRB), Freeway Ops (TRB). Dan Baxter asking for ideas. Roundabout Metering, Roundabout Signalization, Roundabout interchanges, Magic Roundabouts.

- **6 – Roadway Operational Improvements**

Jan 05 - Freeway Static (plus Dynamic) Sign Requirements, Check changes/additions upcoming in MUTCD. New Roundabout Chapter for MUTCD in the works, will impact Interchange Operations, including metering. HCM also is updating Chapter 26, Interchange Ramp Terminals – may be adopted by this coming summer, and will impact ramp interchange analysis.

Jun 05 –

- **7 – Ramp Management and Control:**

. Jan 06 – Les Jacobson presented the new handbook and the changes to Chapter 7 because of it.

. Jan 05 - A new handbook on ramp management is currently being prepared (Les Jacobson). Coordination and consistency between this new Handbook and the FMOH is essential. An on-going issue is whether the new Ramp Management Handbook supplements FMOH Chapter 7; or completely replaces. Also, Ramp Management for Roundabout Interchanges is starting to heat up, and perhaps this should be included in both the Ramp Man Handbook and the FMOH.

. Jun 05 – Les Jacobson has asked review/input into the new Ramp Management Handbook by the end of June, '05. The web sites are:

- Revised chapters are complete and being posted to the TMC Pooled Fund Website
  - Under “Projects”, then “Other National Operations Related Projects”, then “Ramp Management and Control Handbook”
  - Or  
[http://tmcops.ops.fhwa.dot.gov/cfprojects/new\\_detail.cfm?id=57&new=4](http://tmcops.ops.fhwa.dot.gov/cfprojects/new_detail.cfm?id=57&new=4)
- Asking for review comments by June 30, 2005
  - E-mail comments to [JacobsonL@pbworld.com](mailto:JacobsonL@pbworld.com)

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• **8 – Managed Lanes:**  
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. Jan 05 - More examples are necessary, including international applications (e.g., shadow tolling (availability), lane and speed control signals). Hybrid tolling (HOT Lanes, Managed Lanes, FASTLanes, Shadow Tolls, etc), and well as full tolling technology needs to be considered. More international experience needs to be considered for future FMOH updates, in all areas of Handbook.  
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. Jun 05 – Add exclusive truck lanes, bus lanes, borders. Managed Lanes proceedings Handbook needs to be linked (@ HOV Lanes). Forward all changes to Jessie@FHWA. FHWA website – link to FMOH – links to supporting documents. State of Texas Managed Lanes (Houston area, in particular) – link to TTI Managed Lanes website.  
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• **9 – HOV Lanes.**  
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. Jan 05 - HOV Manual is not free on web or toolbox. Needs to be addressed.  
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. Jun 05 – A. Proceedings every 2 yrs (HOV systems meeting just happened – March/April, '05). B. Caltrans Manual of Guidelines for HOV Lanes, Standards? C. FHWA has bunch of projects funded by HOV pooled fund studies. D. Pooled Fund opportunity for TRB project opportunities.  
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• **10 – Traffic Incident Management:**  
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. Jan 05 - This chapter is based on the current version of the Incident Management Handbook. However, given the age of that handbook (i.e., at least 5 years old). FHWA should consider a revision / update.  
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. Jun 05 – Add “Prevention” to Handbook. Could be separate section – Rodney?  
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• **11 – Planned Special Events:**  
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. Jan 05 - The Proceedings from the Conference on Special Event Management (December, 2004) should be referenced when they are published.  
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. Jun 05 – Proceedings are available.  
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• **12 – Freeway Management During Emergencies / Evacuations:**  
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. Jan 05 - Freeway closures as a management tool should be addressed. Also, to include Fog, Smoke, Visibility, Terrorism, or Freeway Closures due to weather (snow, etc) need to be considered.  
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. Jun 05 – 2/3 Studies, Biohazards, Alternate Routes, etc. Confidential studies (exit routes only) (9/11 stuff).  
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• **13 – Information Dissemination:**  
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. Jan 05 - Several new references should be included, such as the CMS Handbook, recent AMBER Alert guidance and policies, and MUTCD updates concerning CMS.  
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- **14 – Transportation Management Centers:**
  - Jan 05 - The work and documentation from the TMC migration planning effort should be referenced
  - Jun 05 – National TMC?? (Austria, China, Netherlands). National Homeland Security Center in DC.
- **15 – Detection and Surveillance:**
  - Jan 05 - Need to eliminate the discussion on “Infostructure” in the “Emerging Trends” section, and replace with a discussion of the VII initiative (this still needs to be done – June 05). Section 508 Compliance? Handbook due out first quarter 2005? RWIS Detectors, new study by Larry Klein.
  - Jun 05 – No. for Handbook is out now (Dave Gibson – in hands of editors, and 5-08 compliance). GPS and video (Germany, Athens, UW studies). In Handbook referenced studies RWIS, etc.
- **16 – Regional Integration:**
  - Jan 05 - NCHRP 10-7 (or 20-7?) (Multi-state Transportation Operations; Critical Issues and Opportunities) should be referenced. Center to Center, NTCIP Communications.
  - Jun 05 – Big ICM effort @ FHWA. Whitepaper due in September and pilot demo.
- **17 – Communications:**
  - Jan 05 - The new “Telecommunications Handbook for Transportation Professionals” will soon be published
  - Jun 05 – May be published at this time.
- **General –**
  - Jan 06 – Consider adding tolling, catastrophic events management (ie, Katrina) and recent Incident Detection studies completed by Fred Hall, McMaster’s U.
  - Jan 05 - There is a need to review and update the “Emerging Trends” sections in all the chapters.
  - Jun 05 - A. Pooled Fund Studies. Link to information and handbook updates. FHWA links. B. May want to add a “Toll Road” Chapter. B. Packaging – CD’s. C. Comments from Practitioners, who you gonna call with questions for Fwy Ops Committee? FHWA? C. Mentoring program (Joe McDermott). D. What studies can come from this effort? E. New links have to be found, ID’d and added to site (FHWA).

<sup>1</sup>[http://ops.fhwa.dot.gov/Travel/traffic/freeway\\_management.htm](http://ops.fhwa.dot.gov/Travel/traffic/freeway_management.htm)

**Requested Action** – It was requested that FHWA include on the above-referenced FMOH website a section for “Updates”, where new references (i.e., not included within the FMOH) could be identified, with links to other FHWA sites where these documents have been published (if appropriate). Moreover, this “Updates” section should provide an opportunity for FMOH users to suggest updates that can subsequently be reviewed by the subcommittee.

TRB Fwy Ops, FMOH Subcommittee, 22 Jan, '06, Sign in Sheet

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