

MAJOR UPDATE OF THE 2010 HCM

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OUTLINE

- Overview of the HCM
- HCM 2010 Major Update – Why are we doing another one?
- HCM 2010: Summary of Revisions
- Conclusion

OVERVIEW OF THE HCM

- Comprehensive Discussion of Issues Related to the Capacity of Highway Facilities
- Widely Used in the United States and Worldwide
- Previous Editions
 - 1950
 - 1965
 - 1985 (Major Updates in 1994, and 1997)
 - 2000
 - 2010
- Transit Capacity Discussed in Transit Capacity Manual

OVERVIEW OF THE HCM (cont.)

- The HCM 2010 Consists of Four Volumes
 - Volume 1: Concepts
 - Volume 2: Uninterrupted Flow
 - Volume 3: Interrupted Flow
 - Volume 4: Applications Guide (electronic format only available at www.HCM2010.org)
- Alternative Tools (Chapters 6, 7, 24)

THE NEED TO UPDATE HCM 2010

Several research efforts have developed material for the HCM:

SHRP 2

- Incorporation of Travel Time Reliability into the HCM

FHWA

- HCM Methodologies to Assess Advanced Traffic Management Strategies
- Accelerating Roundabout Implementation in the U.S.

NCHRP/NCFRP

- Analysis of Managed Lanes on Freeway Facilities
- Traffic Signal Analysis with Varying Demands and Capacities
- Guidelines on the Use of Auxiliary Through Lanes at Signalized Intersections
- Evaluating the Performance of Corridors with Roundabouts
- Work Zone Capacity Methods for the HCM
- Incorporating Truck Analysis into the HCM

USER SURVEY RESULTS

- Contacted Well Over 10000 HCM 2010 Users
 - Received Over 1000 Detailed Survey Responses
- Confirmed HCM 2010 Used as Intended and Expected
 - With Over 70% Using the HCM 2010 at Least Monthly
- Learned Users Still Finding Their Way in HCM 2010
 - Only 40% Multimodal Use
 - Only 60% Volume Four Use
- Underscores HCM 2010 Update Most Appropriate
 - Not Ready for an Entirely Redeveloped Manual

HCM 2010: SUMMARY OF KEY REVISIONS

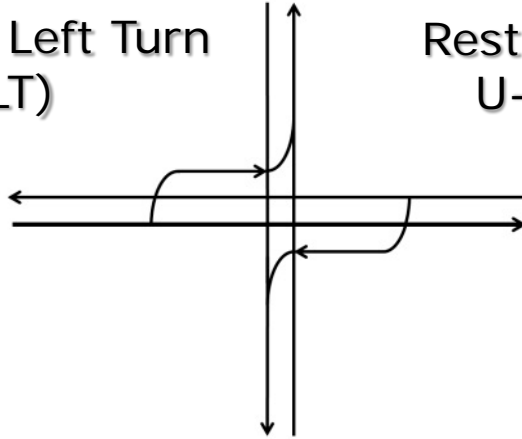
- Freeway Facilities
 - Managed Lanes, Reliability, Active Traffic Management
 - Work Zone Capacity
 - Truck Research
- Urban Streets
 - Corridors with Roundabouts
- Traffic Signals
 - Auxiliary Through Lanes
 - Improved Planning Methodology

HCM 2010: SUMMARY OF KEY REVISIONS (cont.)

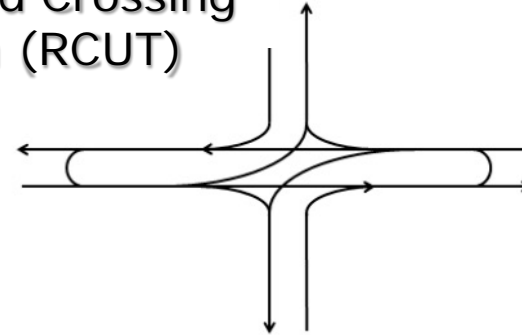
- Roundabouts
 - New Research, Updated Procedure
- Planning Applications
 - Planning and Preliminary Applications Guide to the HCM
- New Facility Types
 - Diverging Diamond Interchanges
 - Alternative Intersections: MUT/RCUT/DLT

ALTERNATIVE INTERSECTION TYPES

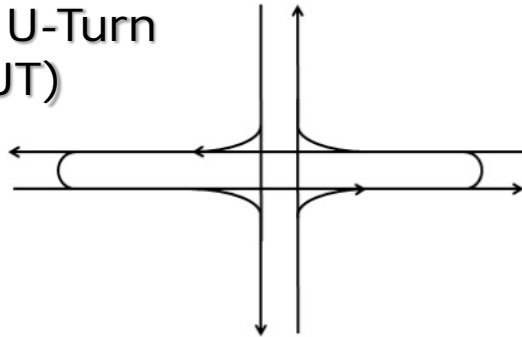
Displaced Left Turn
(DLT)



Restricted Crossing
U-Turn (RCUT)



Median U-Turn
(MUT)



CONCLUSION

- New research, priorities, and facility types has led to the development of an update to the 2010 HCM
- Watch for publication in 2016
- Interested in participating? Go to www.ahb40.org

QUESTIONS AND DISCUSSION