



Overview of the Northeast U.S. Roundabouts Peer Exchange

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Purpose of the Event

- Magnitude of the Intersection Crash Problem
- Compared to NY, roundabout implementation has been slow in surrounding States
- Important U.S.-based information to share
- Recognized benefits of in-person events



A Partnership Foundation

- Jointly-funded effort between HQ, RC and Division Offices
- Partnered with ConnDOT and ITE Roundabouts Task Force
- Assembled an Event Planning Committee representing key audience backgrounds:

Hillary Isebrands (FHWA RC)

Charles Harlow (ConnDOT)

Bob Ramirez (FHWA CT)

Francisco Lovera (RIDOT)

Caroline Trueman (FHWA NJ)

Mike Mastaglio (RK&K)

Ed Stollof (ITE)

Joe Balskus (Tighe & Bond)

Andy O'Brien (O'Brien Traffic)

Jeff Todd (Traffic Planning & Design, Inc.)



1½ Days of Roundabouts!

- How far have roundabouts come in New England and the Upper Mid-Atlantic?
- What important lessons have been learned that practitioners should know about?
- What challenges lie ahead?
- How can we accelerate the implementation of roundabouts in our States?



The....G000000000AL!

SHARE

EDUCATE

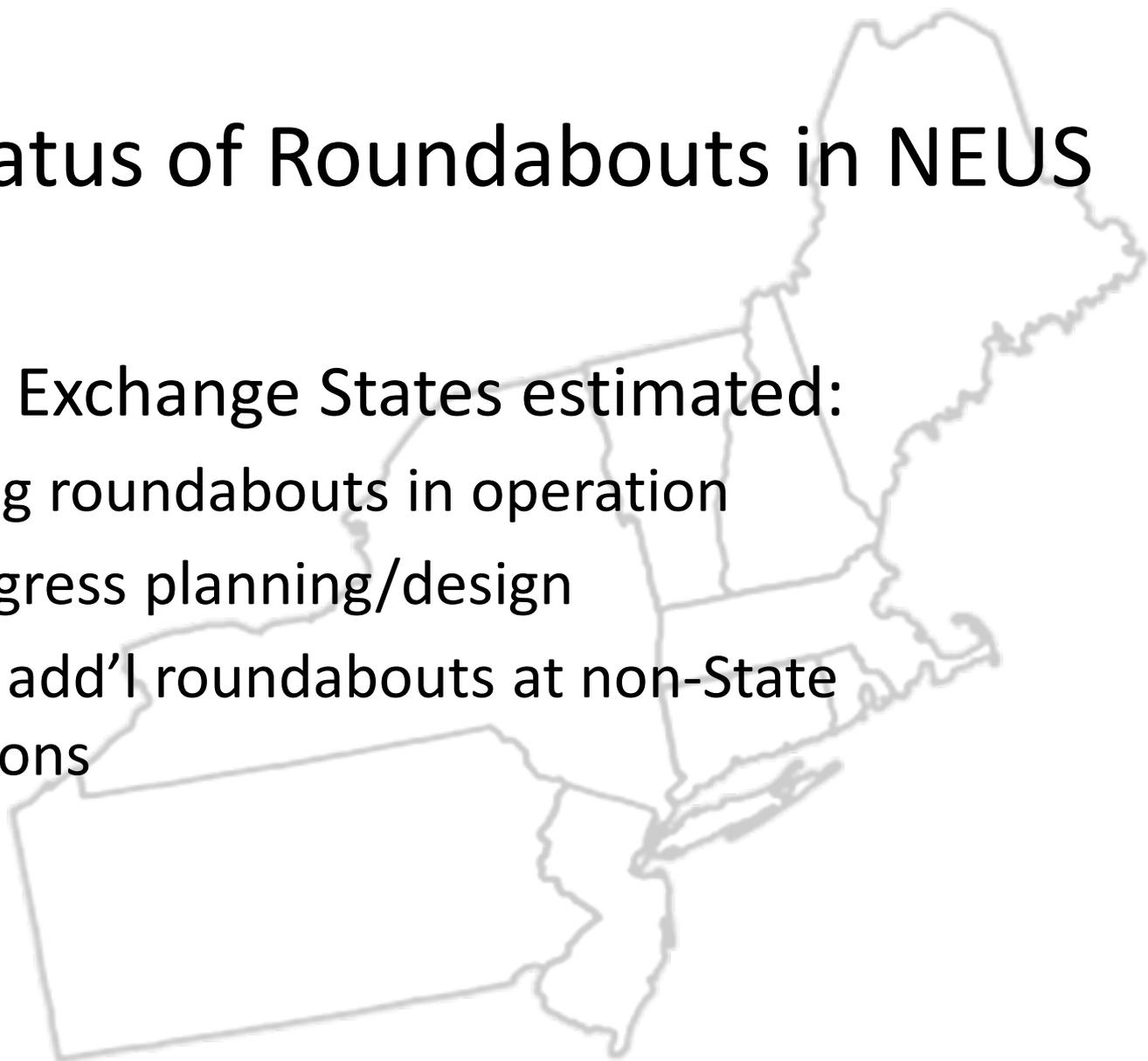
NETWORK





Status of Roundabouts in NEUS

- The 9 Peer Exchange States estimated:
 - 98 existing roundabouts in operation
 - 74 in-progress planning/design
 - Over 100 add'l roundabouts at non-State intersections





Notable Lessons Learned

- Importance of Education, Marketing & Outreach
- Retrofits of existing circles/rotaries can help overcome regional legacy of circular intersections
- Applying roundabouts at challenging/unusual intersections can yield great success
- Roundabouts are scalable, adaptable and can be context sensitive and sustainable solutions

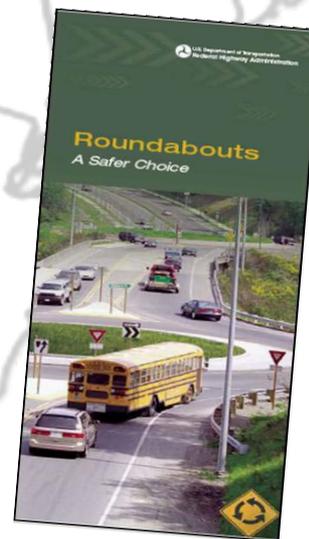


Marketing/Education/Outreach



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Brian Walsh (WSDOT)

- Updated FHWA Roundabouts Video & Brochure
- Importance of working with Education and EMS communities





Example of Circle/Rotary Retrofit



Graphic content credit to
Andy Paul (MassDOT HQ)
Joe Frawley (MassDOT D3)





Applied to Challenging Locations



Graphic content credit to
Will Britnell (ConnDOT)



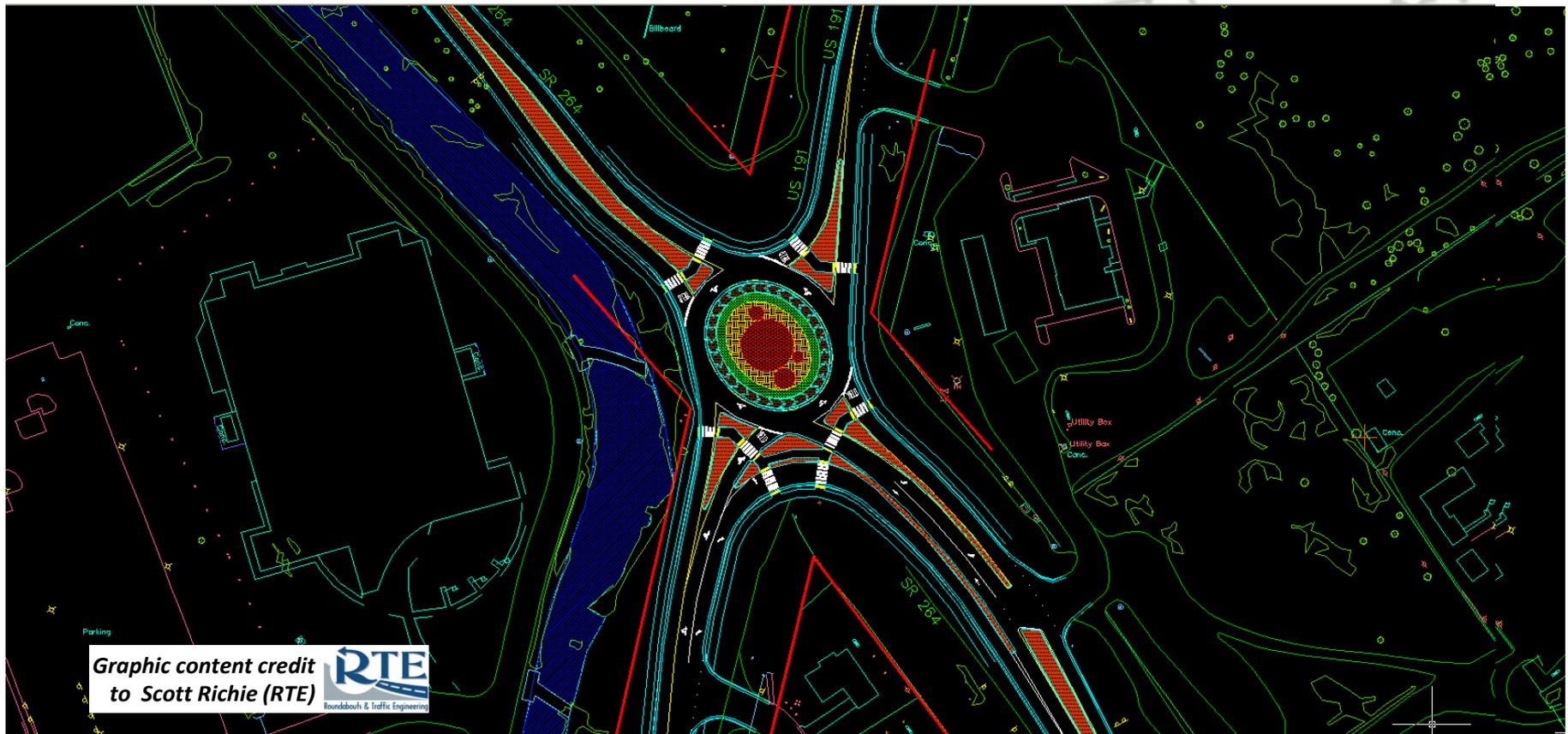
Capable of High Throughput



Photo content credit to *New Hampshire*
Mike Dugas (NHDOT) **DOT**
Department of Transportation



The Solution is Out There





Context Sensitive Opportunities

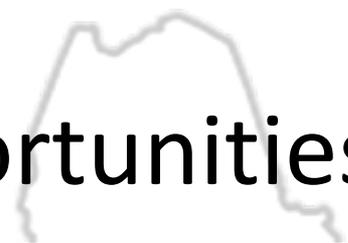


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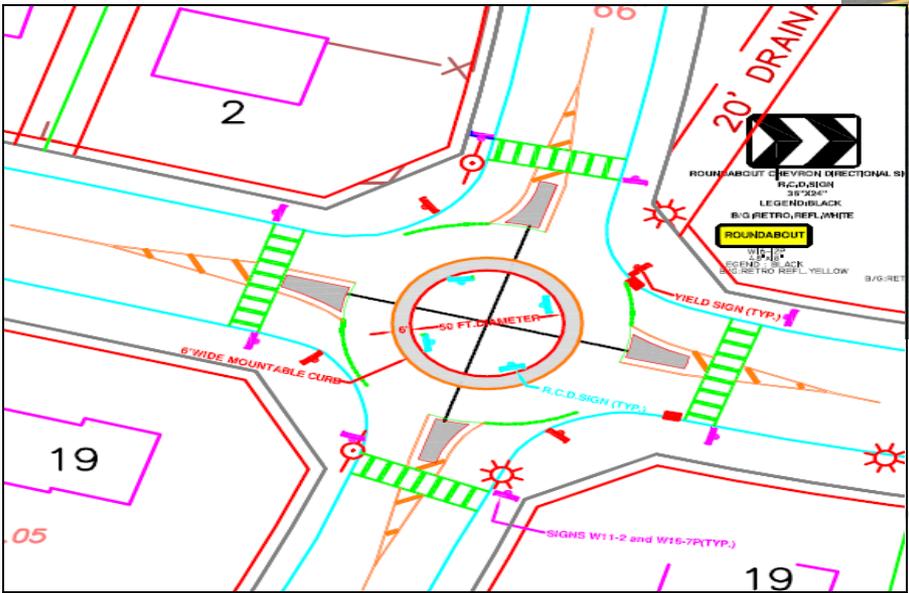
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Adaptability for Local Intersections



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Roundabouts in the Near-Term

- MassDOT creating roundabout-specific tools/products
- Accessibility of multilane crossings at roundabouts
- Capacity analysis



Upcoming MassDOT Tools/Products

- Roundabout Planning/Screening Tool
 - Working with the Central Transportation Planning Staff (CTPS) from the Boston MPO on the development of a tool to assist designers in when to consider a roundabout versus a signalized intersection
- Local Community Reference Guide
 - To provide details on the benefits of roundabouts and relationship to traffic calming and livable street aspects to ensure that a roundabout is considered for the correct reasons

Slide content credit to 
Neal Boudreau (MassDOT HQ)



Accessibility Aspects of Roundabouts

- Proposed PROWAG rulemaking targeted for fall 2010 by USDOT
- Issue at multilane roundabouts is one of **ACCESSIBILITY** not safety



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Capacity Analysis Techniques

- Growing Number of Software/Model Choices
 - Gap Theory (SIDRA, SYNCHRO, VISSIM, Paramics)
 - Empirical (RODEL, ARCADY, NCHRP 572/HCM2010)
- Different model inputs/assumptions can yield different results
- Important to Spend Time Wisely
 - Rules of Thumb/Lessons Learned
 - Hourly-based flow check can Save Time

Slide content credit to
Howard McCulloch (NYSDOT)





Early Returns/Preliminary Results

- Quality feedback from over 85 attendees: 4.6/5
- Average Knowledge Gained (self-assessed):
 - from 2.65 (Before) to 3.52 (After)
- Some Resulting Action Items:
 - Seek out lower-cost implementation opportunities
 - Immediately distribute copies of the new FHWA DVD
 - Get a mini roundabout piloted this year
 - Discuss a multi-State follow-up meeting
 - Evaluate future regional Roundabout Peer Exchanges



Thank You!

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