



Roundabouts

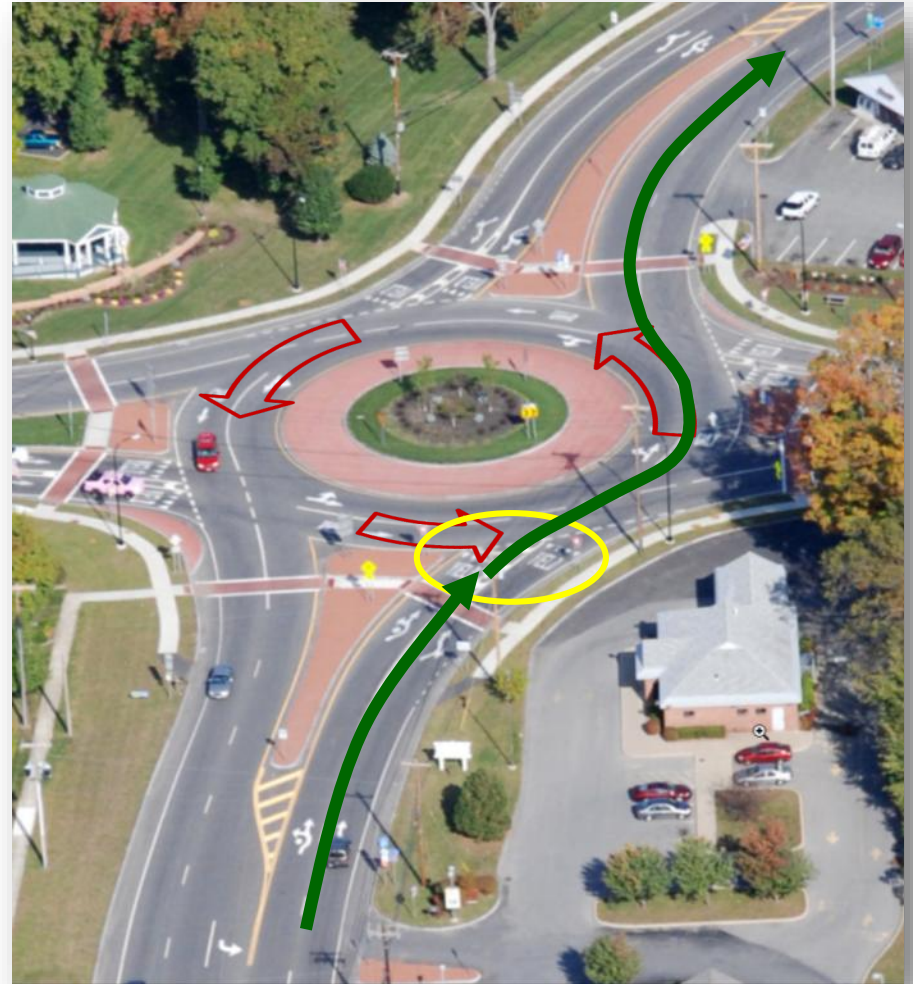
Twenty Years of Progress in North America



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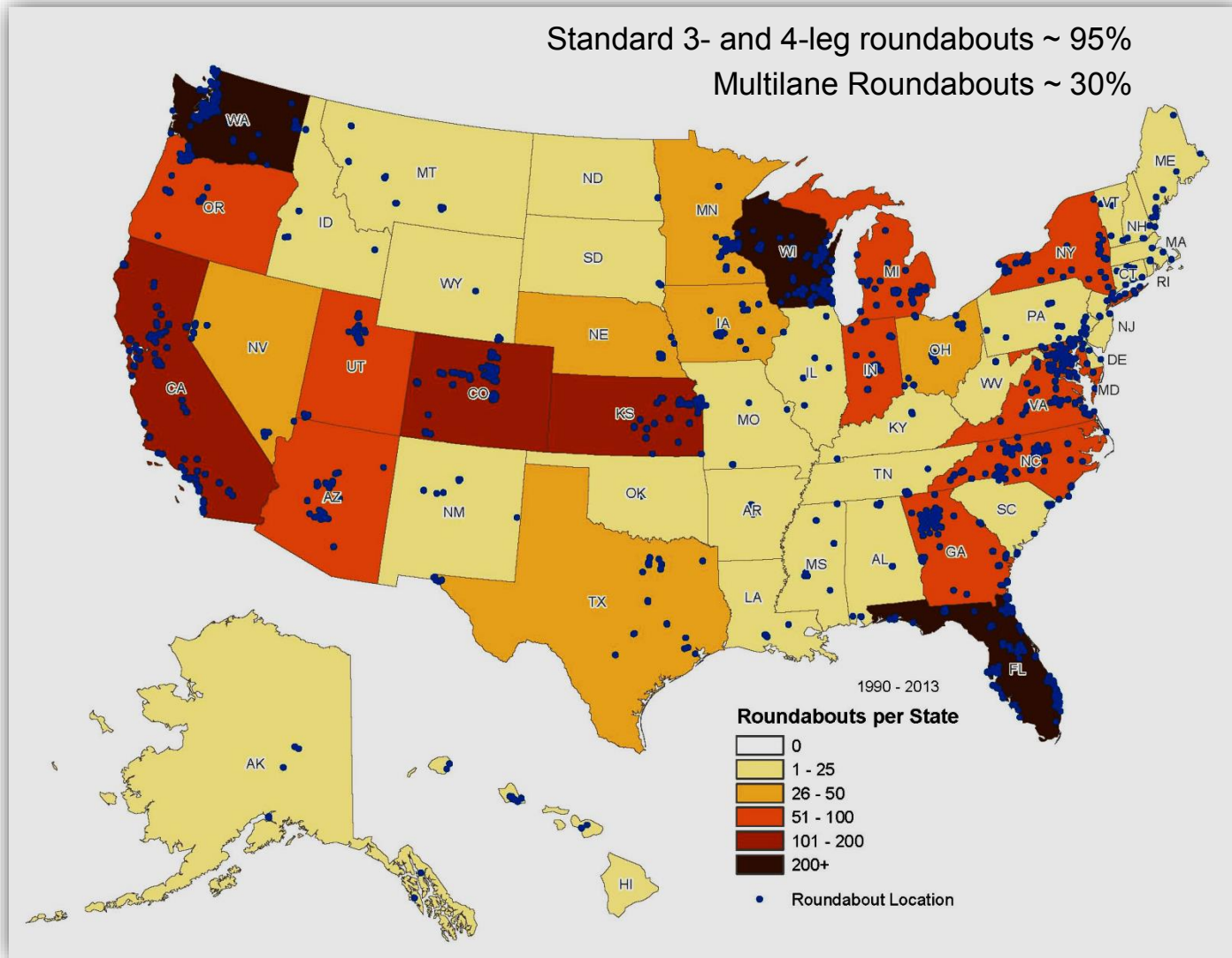
Then what is a roundabout?

- A compact circular intersection in which traffic flows counter-clockwise around a center island
- Entering traffic yields
- Approaches are channelized to deflect traffic to slow entry speeds



U.S sites by state: 1990-2013

250 to 300 per year since 2008. FHWA's Goal = 1000/year



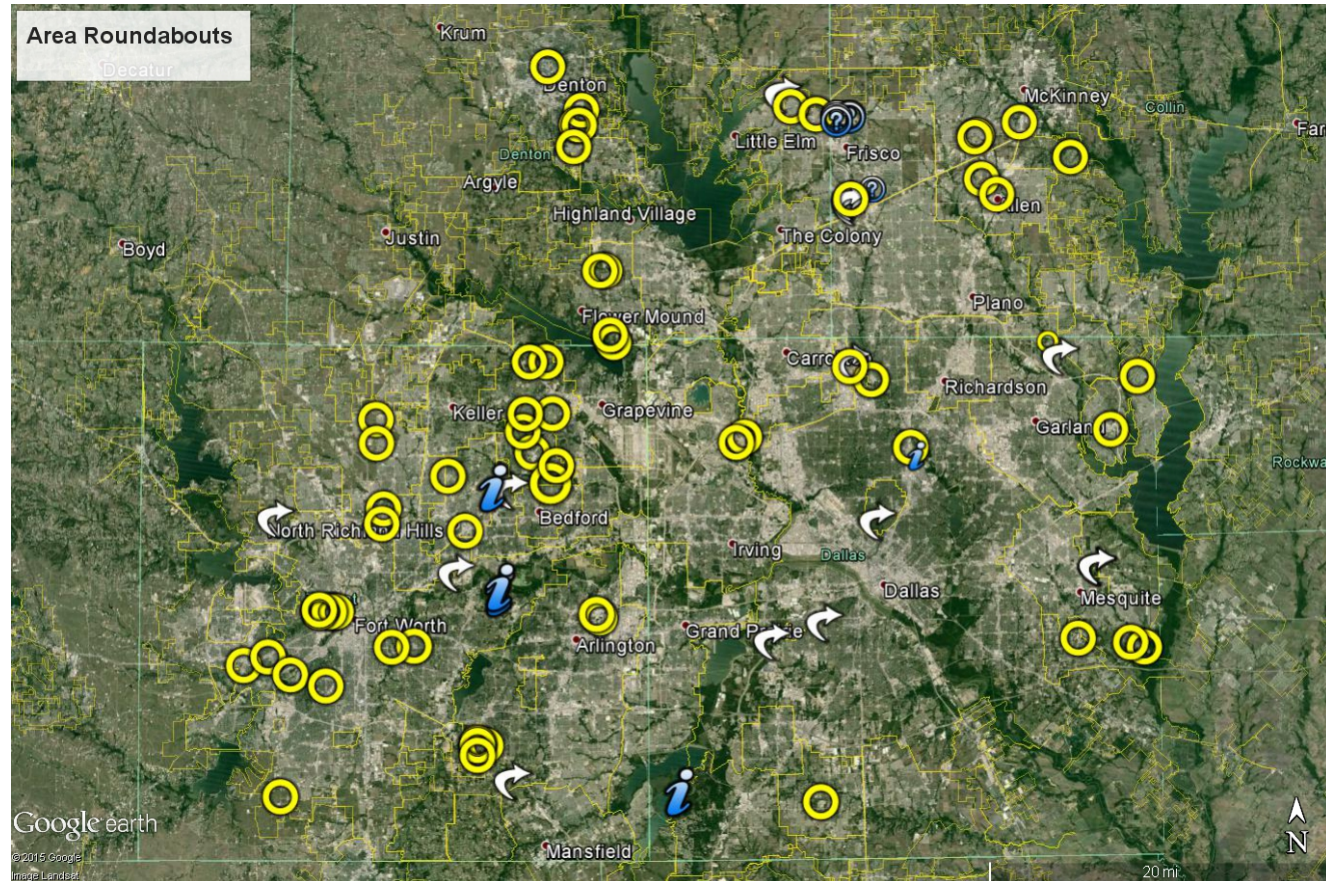
Roundabouts in North Texas and Across the U.S.

Texas Trend

- Grassroots
- Success stories

Across the U.S.

- Carmel, Indiana
- DOTs & SHDs
- FHWA



Oops, No
I meant
the First

You'll have to
go round again

(M32, M4)

(M32)



Take the
second exit

Look I said
I was Sorry

Roundabout misconceptions

- “Roundabouts are the same as traffic circles.”
- “Roundabouts require too much land.”
- “The public wont embrace roundabouts.”
- “Roundabouts hurt business.”
- “Fire trucks, snowplows, buses and semis can’t use roundabouts.”
- “Roundabouts don’t work for pedestrians or bicyclists.”
- “Roundabouts aren’t good for older adults.”

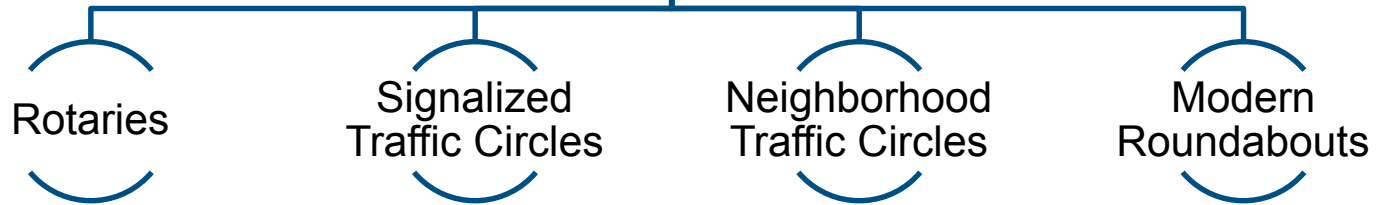
A properly executed public education plan can dispel these common misconceptions, and in turn, help gain public support.



Isn't a roundabout just a traffic circle?



Circular Intersections



Why are roundabouts still an attractive intersection design form?

1. Increased Safety – reduced injury crash frequency
2. Operational Efficiency – higher intersection capacities in most cases
3. Difficult Geometry – more than 5 legs
4. Wide Nodes/Narrow Roads
5. Reduced Costs (Lifecycle) – collision reduction savings (societal) are substantial
6. Quality of Life – improved retail access, community gateways, aesthetics, harmonized transportation and land use (“complete streets”)

National emphasis areas (ranked)

1. Public awareness campaigns
2. Pedestrians/accessibility
3. Accommodating Freight and OSOW trucks
4. Right-sizing roundabouts – staged roundabout construction to maximize simplicity
5. Detailed design plans preferences and specifications
6. SME review early in project development
7. Research and continuous improvement – track before/after crashes, costs/benefits etc.

This works well and more would not be detrimental:

1. Track statistics and monitor sites
 - Publish your success to gain wider acceptance
2. Plan your implementation strategically
 - State-wide driver awareness campaigns
 - Engage the freight industry more proactively
3. Maintain transparent and traceable option screening (2-steps)
 - Ensure roundabouts are considered on development projects.
 - Blend roundabouts into an innovative intersection toolbox
4. Apply SME review early in design progress
5. Right-sizing roundabouts to maximize simplicity



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