

SPRING LAKE TOWNSHIP ROUNDABOUT CONCEPT



OCTOBER 4, 2022

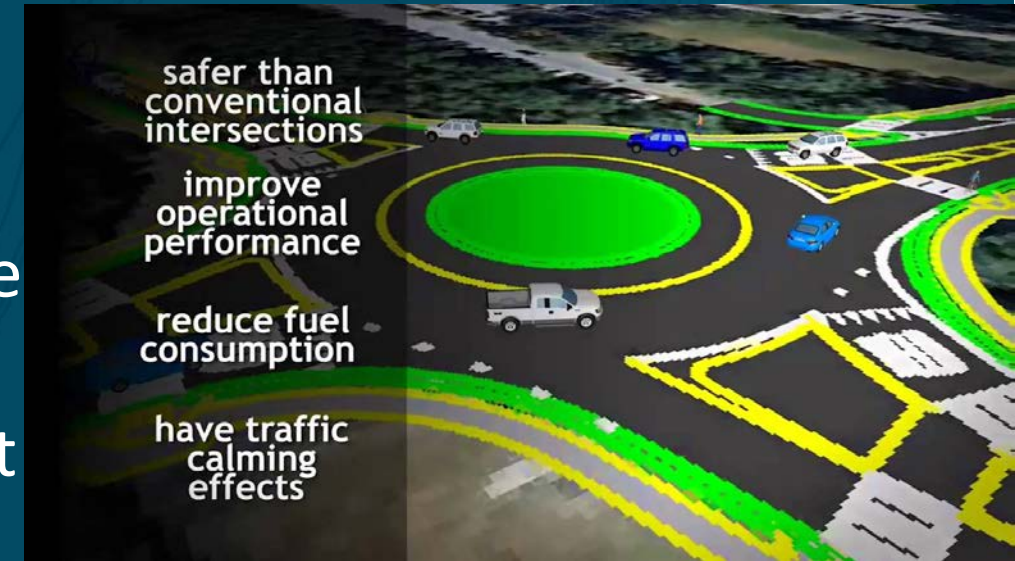
AGENDA

- Why is a roundabout being considered
 - Safety
 - Increasing Traffic
 - Efficiency
 - Community Gateway
 - Supports Long Standing Community Vision
- Concepts
- Funding
- M-104 Corridor Visioning
- Next Steps
 - Review feedback
 - Pending positive feedback – planning
- Questions/Comments/Answers/Feedback

WHY CONSIDER A ROUNDABOUT

Roundabout Installations :

- Improve Safety
- Promote lower speeds and traffic calming
 - Crashes may still occur, but reduced damage and injury from lower speeds
 - Inexperienced high school drivers significant intersection users
 - Roundabouts reduce injury crashes 75% where signals previously existed
 - FHWA research indicates 37% overall collision reduction
 - 90% reduction in fatality collisions
 - 40% reduction in pedestrian collisions

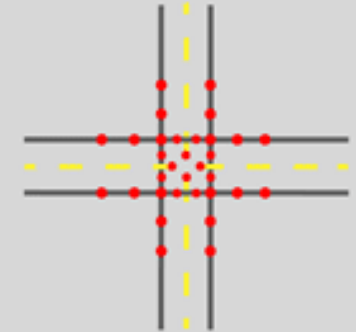


WHY CONSIDER A ROUNDABOUT?

- Roundabout Installations :
- Reduce conflict points
- Improved operational performance
- Meet a wide range of traffic conditions due to versatility in size, shape, and design
- Reduce speeds so any accidents that do occur are minor (traffic calming)
- Local data: 27 crashes at 148th with 9 injuries in last 5 years
 - 4 total crashes at 144th with 1 injury in last 5 years.
 - 7 times more crashes and 9 times more injuries at 148th.

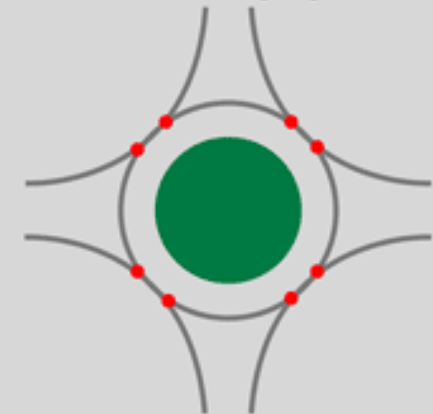
Traditional Intersection

32 possible opportunities for a collision. Many of those are dangerous, high-speed, head-on or angle collisions.



Roundabout

8 possible opportunities for a collision. Plus, the collisions that do happen are slower and less serious.



WHY CONSIDER A ROUNDABOUT?

Community Gateway

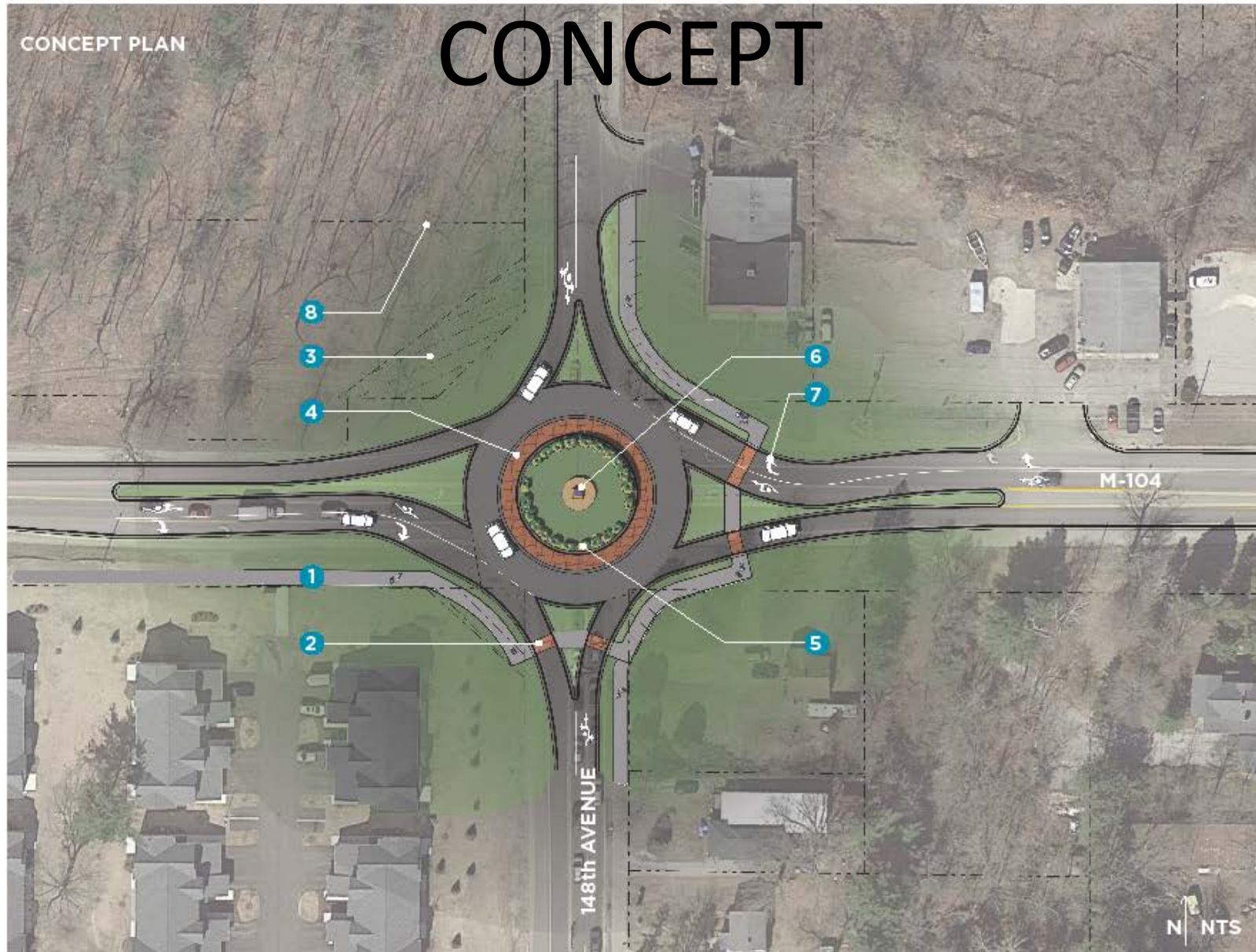


Branding
Beautification and Art
Sense of Place and Arrival
Incorporate Green Solutions



CONCEPT PLAN

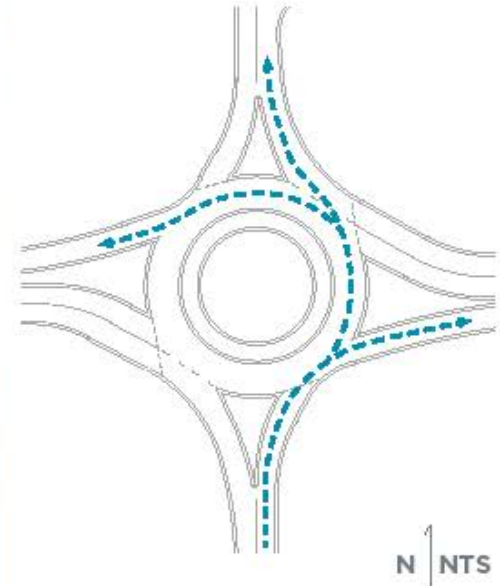
CONCEPT



KEY

- 1 Sidewalks, typ
- 2 Colored stamped concrete pedestrian crosswalks
- 3 Required easements, typ
- 4 Decorative, stamped mountable inner radius
- 5 Low maintenance shrubs, 18-24" high
- 6 Center feature element
- 7 Lane markings, typ
- 8 Parcel lines, typ

CIRCULATION DIAGRAM



ROUNDBABOUT CONCEPT
At M-104/148th Avenue | Spring Lake, MI

72160005 | JULY 6, 2022

progressive|ae

CONCEPT

- Easily accommodates large trucks and buses
- Community Gateway
 - Monument
 - Banners
 - Plantings
- Single lane inside roundabout – reduces conflict and confusion

Zeeland – Washington Ave/Main Ave



CONCEPT

- Easily accommodates large trucks and buses
- Dedicated right turn lane for northbound – similar to dedicated rights suggested in Spring Lake.
- Single lane inside roundabout – reduces conflict and confusion

M-37 and M-46 : Casnovia



OPERATIONS VIDEO

- Easily accommodates large trucks and buses
- Dedicated right turn lane for northbound – similar to dedicated rights suggested in Spring Lake.
- Single lane inside roundabout
- Pedestrian accommodations



OPERATIONS

- Extremely efficient
- Often enter roundabout without stopping
- Vehicles can safely enter the roundabout from multiple approaches simultaneously
- Roundabouts excel in off peak periods
 - No waiting for a green light with no cross traffic



FUNDING

- Ottawa County Road Commission could pursue Federal Funding via MPO
- MDOT may be able to participate with funding
- Legislative Earmark at State or Federal level
- Construction expected to be roughly \$3,000,000 in 2026
 - Includes Inflation to 2026 - \$600,000
 - Property Acquisition Costs - \$500,000
 - Design and Construction Engineering - \$300,000
- Township participation

ROUNDABOUT NEXT STEPS

- Evaluate public opinion – from this meeting and previous
- If consensus is to move forward:
 - Seek and acquire additional funding
 - Begin Design Process
 - Construction tentatively in 2026
 - Shovel ready project available for multiple funding mechanisms
- Corridor work contingent on MDOT funding and scheduling

QUESTIONS/COMMENTS/ANSWERS/FEEDBACK

