



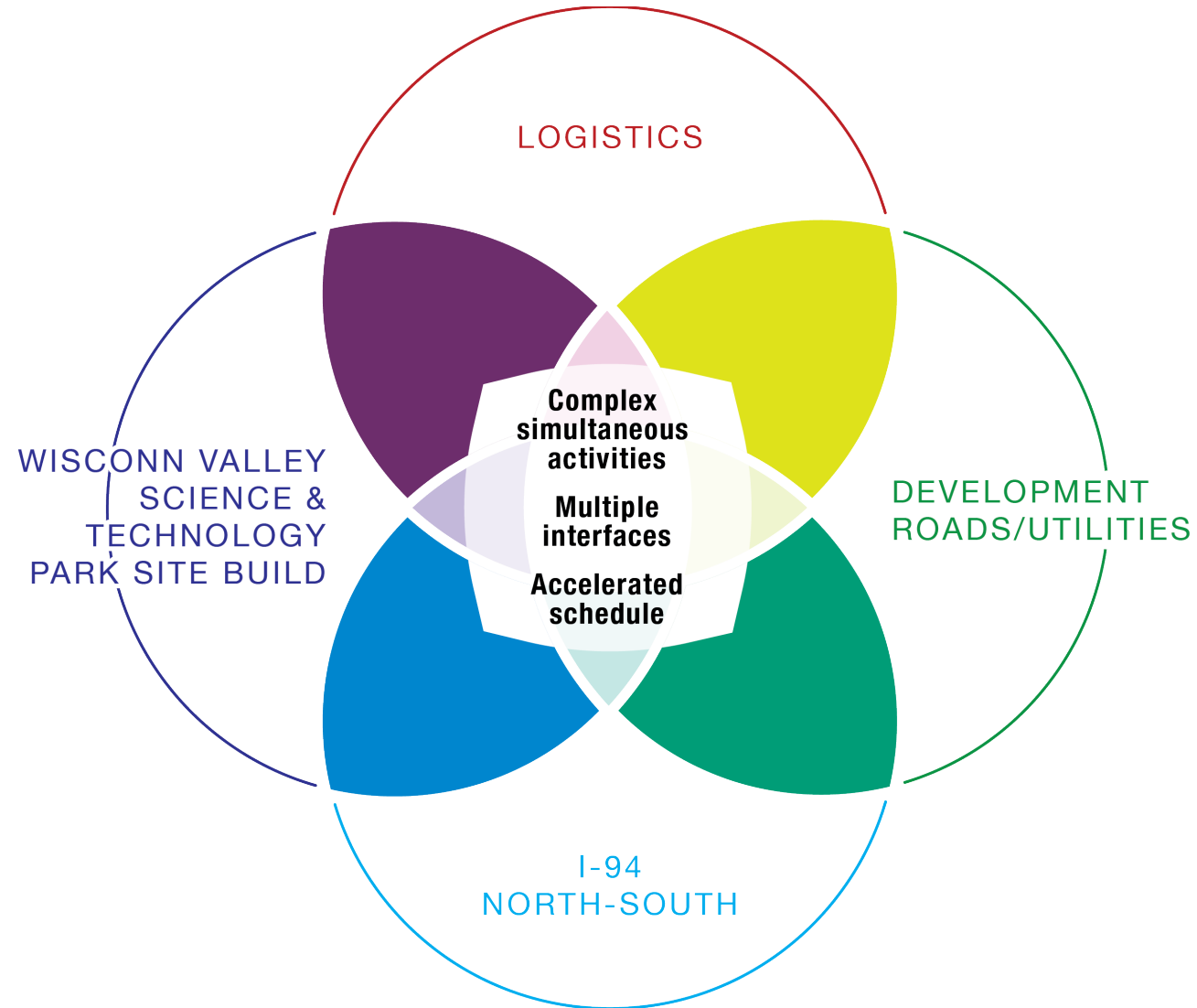
UTILITIES CONFERENCE

BRETT WALLACE, P.E.

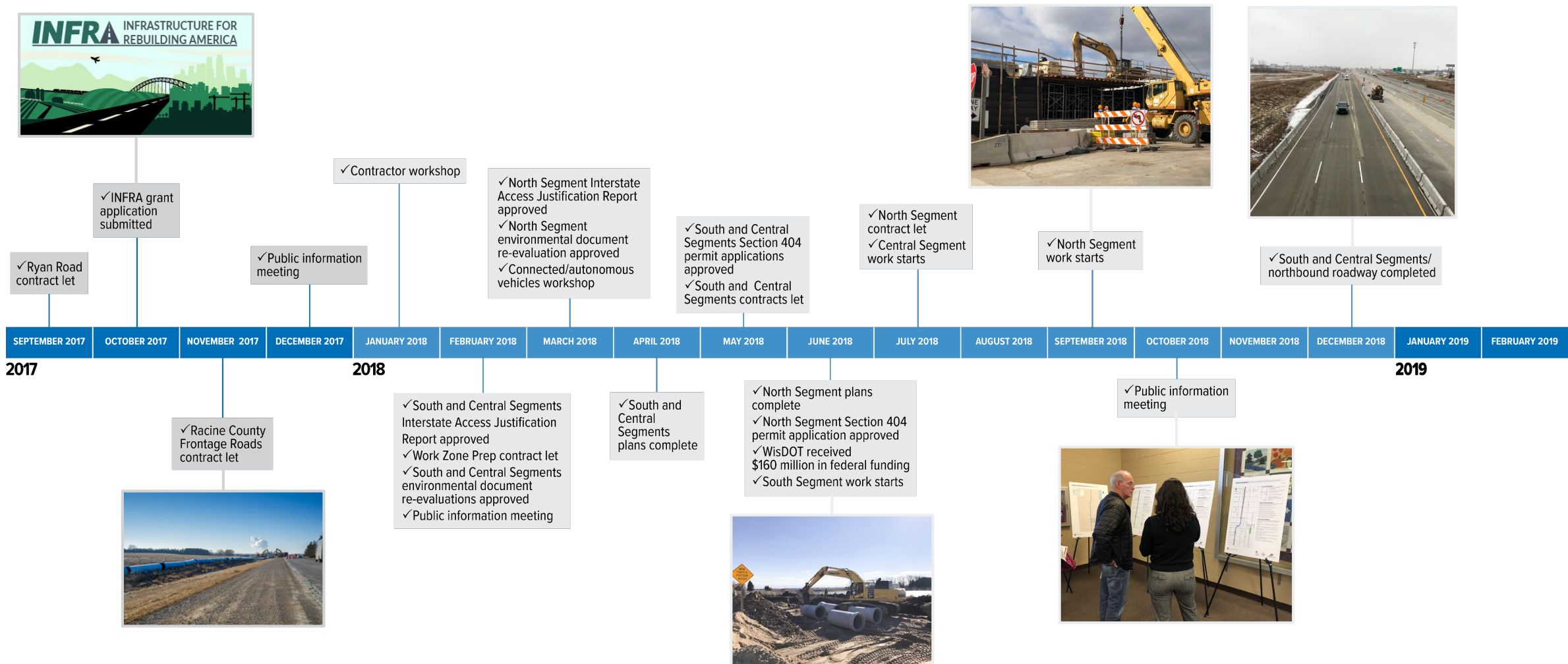
**I-94 NORTH-SOUTH FREEWAY | FOXCONN PROJECT DIRECTOR
WISCONSIN DEPARTMENT OF TRANSPORTATION**



THE CHALLENGE



I-94 NORTH-SOUTH MILESTONES



I-94 NORTH-SOUTH



The **FASTEST-PACED**
mega project in WisDOT history

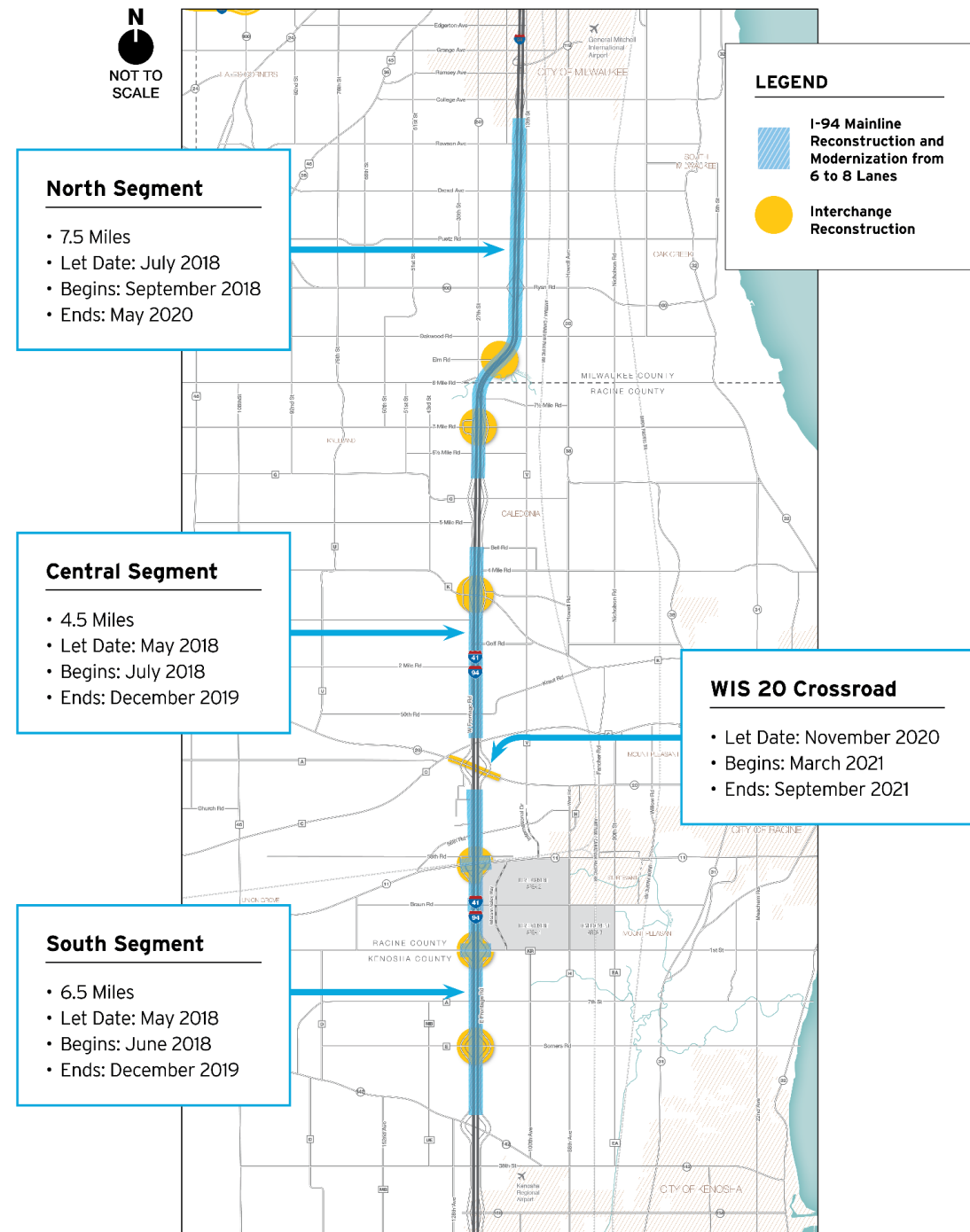
3 mainline segments

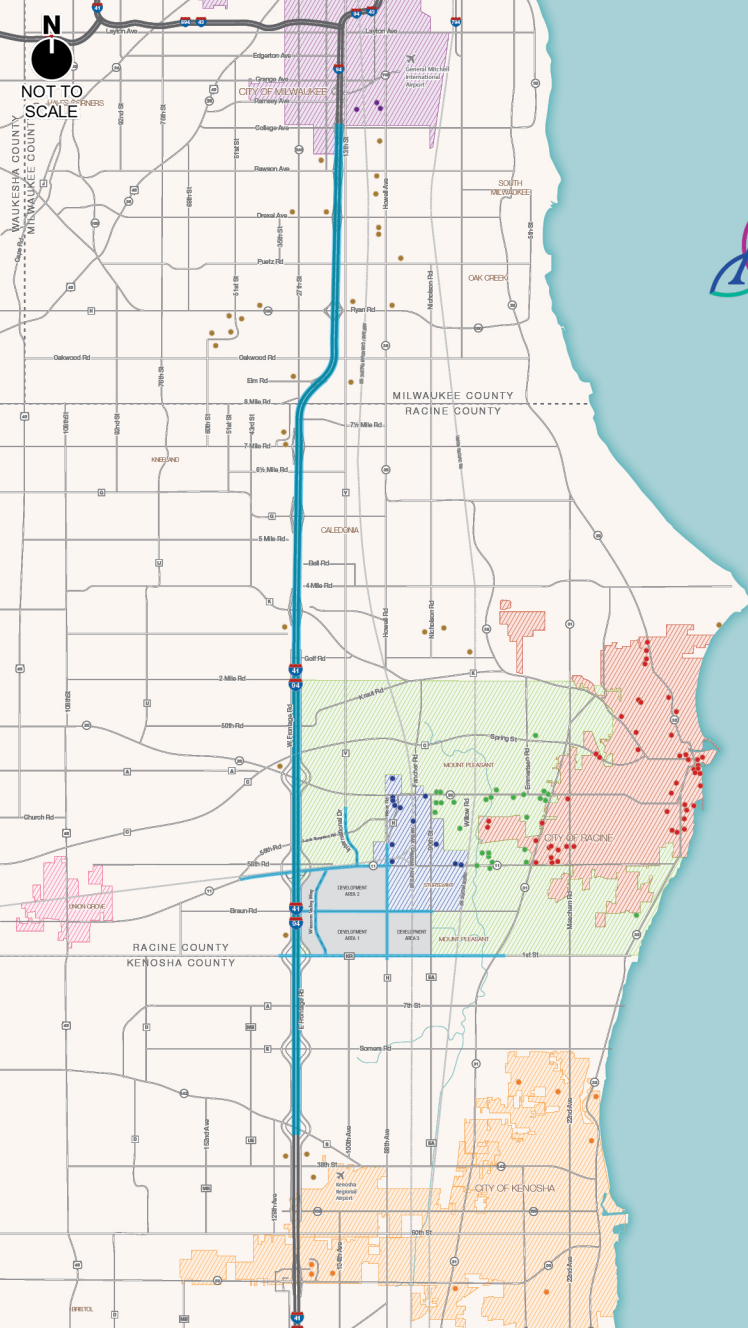
6 interchanges



18.5 miles

UNDER 2 YEARS





ECONOMIC CORRIDOR



WIS 142 to WIS 20

I-94 SOUTH SEGMENT

Project Update

Began in mid-June 2018

Reconstructed 6 miles of
northbound freeway

Reconstructed 3 interchange
northbound ramps

Completed 6 bridge pours



COUNTY A DEMOLITION



58TH RD. PILE DRIVING



58TH RD. GIRDER INSTALL



COUNTY KR DECK POUR



NORTHBOUND MAINLINE PAVING



WIS 11 RAMP PAVING



COMPLETED NORTHBOUND MAINLINE



WIS 20 to County G

I-94 CENTRAL SEGMENT

Project Update

Began in mid-July 2018

Reconstructed 4.5 miles of
northbound freeway

Reconstructed 1 interchange
northbound ramp (County K)

Completed 3 bridge deck
pours



COUNTY K BRIDGE REMOVALS



KRAUT RD. PILE DRIVING



KRAUT RD. RETAINING WALL



KRAUT RD. DECK POUR



GOLF RD. BRIDGE FORM REMOVAL



NORTHBOUND MAINLINE PAVING



COMPLETED NORTHBOUND MAINLINE



County G to College Avenue

I-94 NORTH SEGMENT

Project Update

Began construction in September 2018

Removed 27th Street ramps

Reconstructed and realigned 27th Street at the West Frontage Road

Performed temporary northbound widening

Completed 2 temporary bridge deck pours



ROOT RIVER TEMPORARY BRIDGE WIDENING



SEVEN MILE RD. TEMPORARY BRIDGE WIDENING



27TH ST./WEST FRONTAGE RD. REALIGNMENT



ROOT RIVER BRIDGE DECKING

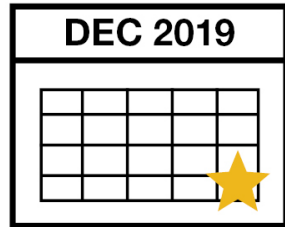


ROOT RIVER DECK POUR FOR TEMPORARY WIDENING

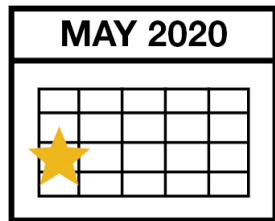


NORTHBOUND TEMPORARY MAINLINE PAVING

THE PATH AHEAD



Traffic on all
new pavement
by **end of 2019**



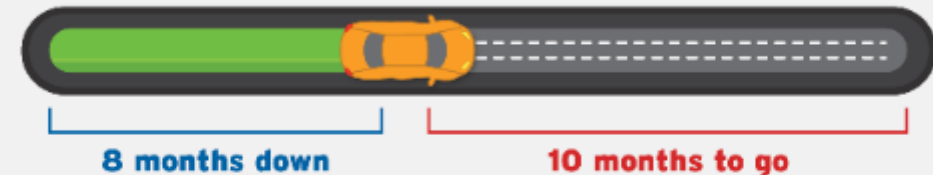
All freeway lanes
open **Memorial
Day 2020**

WE ARE MAKING PROGRESS!

Currently, I-94 North-South is configured with three lanes of traffic in each direction between WIS 142 and College Avenue.

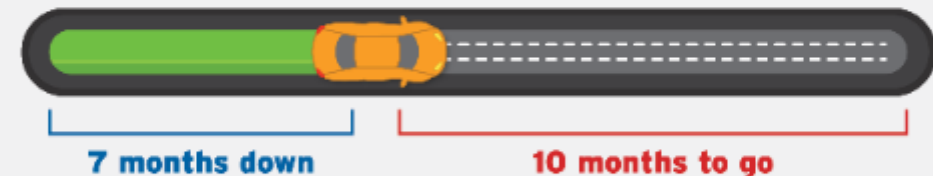
SOUTH SEGMENT (WIS 142 TO WIS 20)

The project is eight months down with ten to go before construction is complete!



CENTRAL SEGMENT (WIS 20 TO COUNTY G)

The project is seven months down with ten to go before construction is complete!

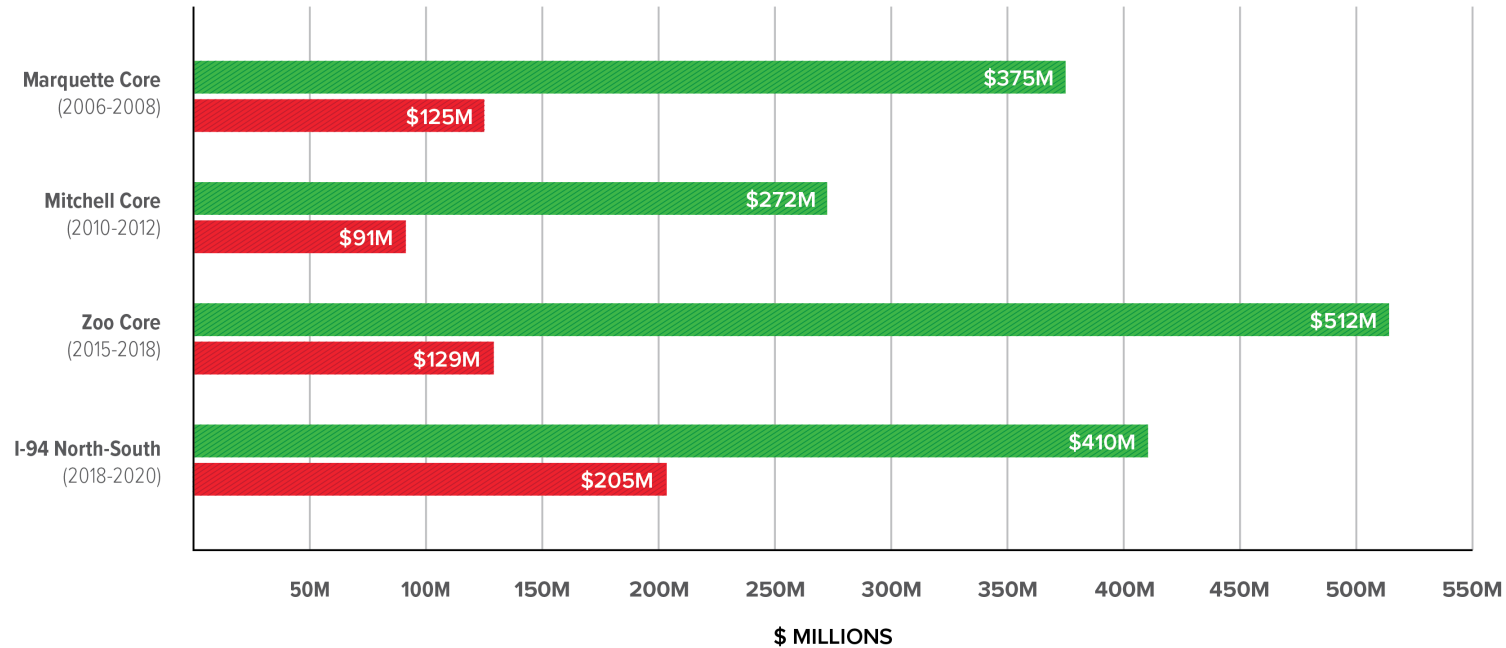


NORTH SEGMENT (COUNTY G TO COLLEGE AVENUE)

The project is five months down with fifteen to go before construction is complete!



COMPARING SE MEGA PROJECTS



LEGEND

PROJECT INVESTMENT

BURN RATE

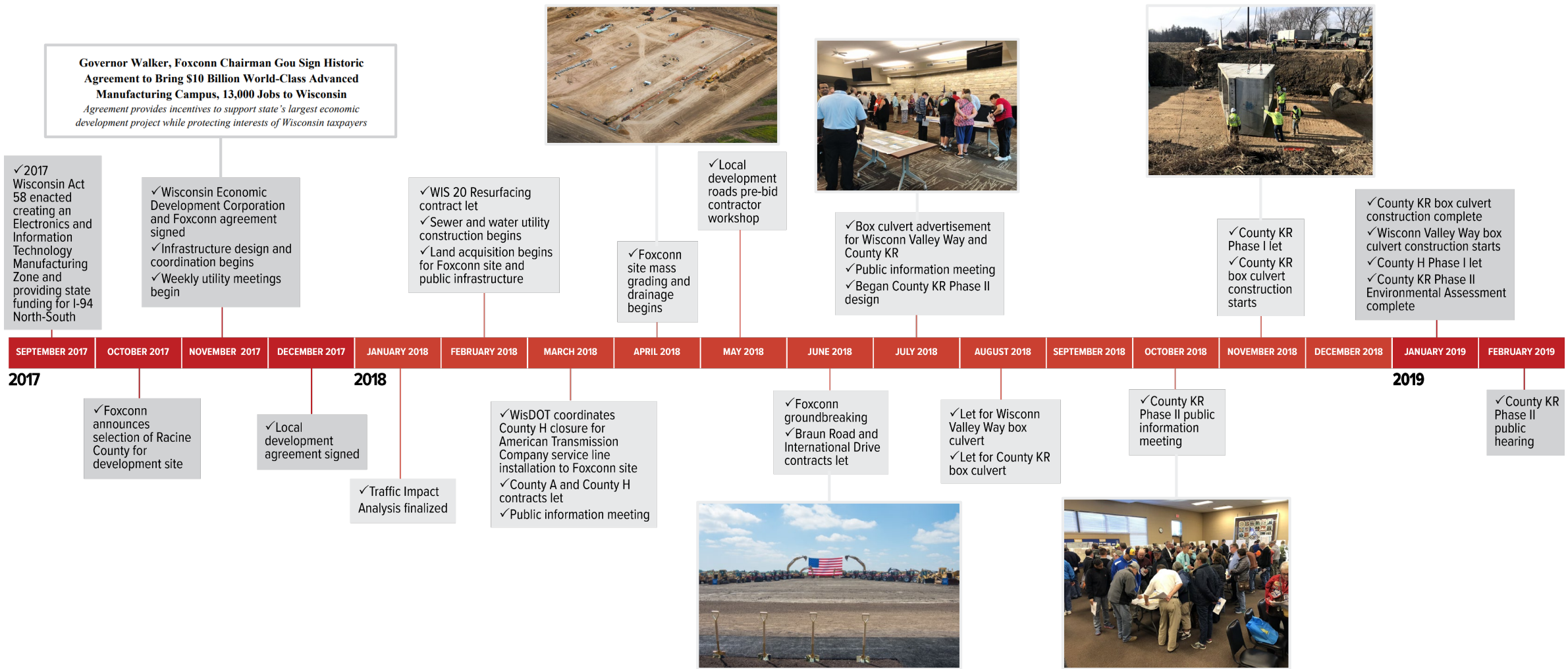
$$\text{BURN RATE} = \frac{\text{TOTAL INVESTMENT}}{\text{YEARS OF CONSTRUCTION}}$$

WisDOT ROLE IN DEVELOPMENT ROADS

- WisDOT investment in WIS 11 and local roads around Wisconn Valley Science and Technology Park
 - WisDOT taking temporary jurisdiction because:
 - Significant projects best managed by one entity
 - One entity coordinating will be most efficient and cost-effective
 - WisDOT expertise in large complicated projects
 - Local jurisdiction returned after construction completed



DEVELOPMENT ROADS MILESTONES



WISCONN VALLEY DEVELOPMENT ROADWAYS

Projects

County KR (I-94 to Old Green Bay Road)

County H (County KR to Venice Avenue)

Braun Road (I-94 to 90th Street)

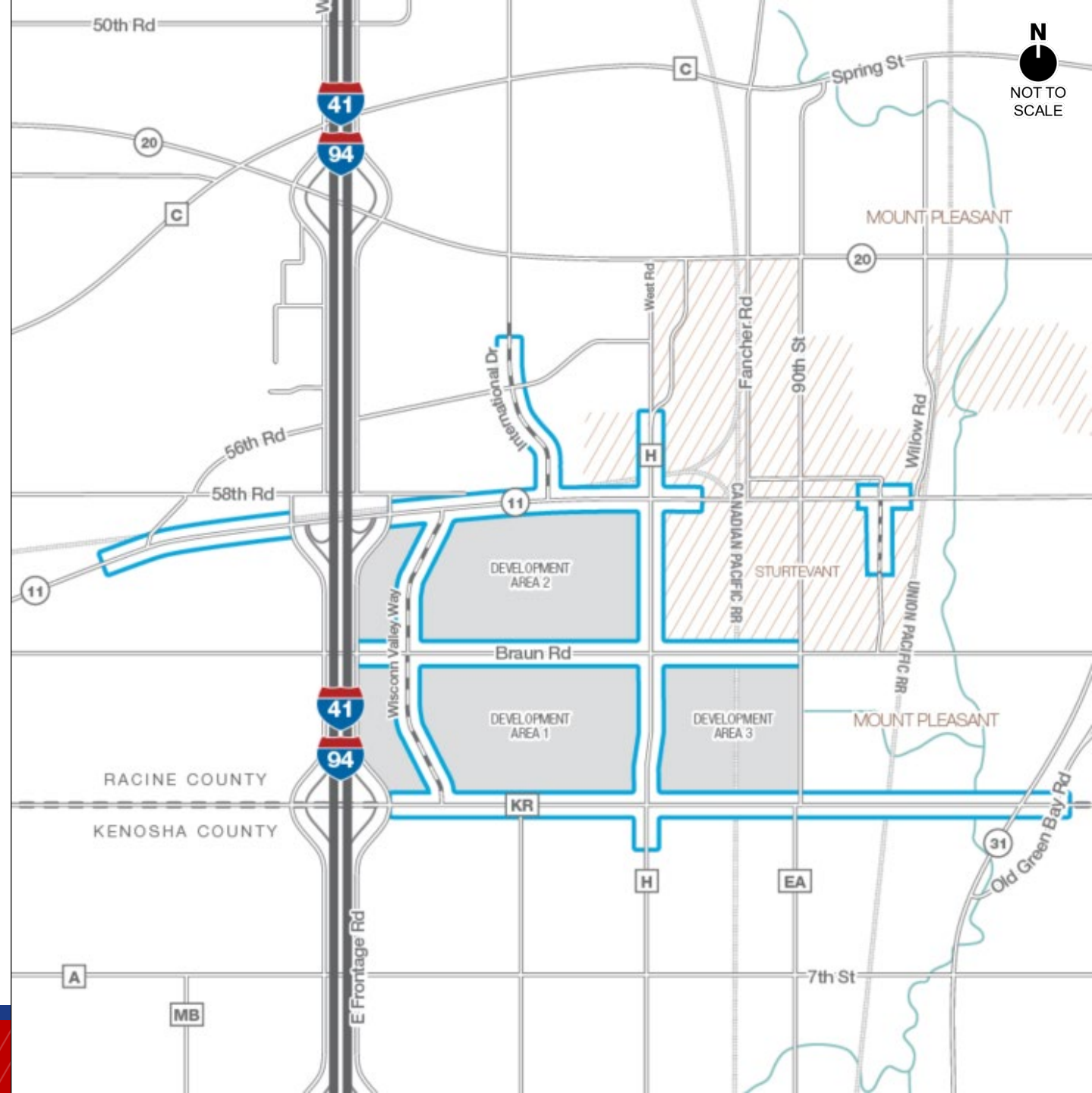
WIS 11 (56th Road to County H)

International Drive (extension to WIS 11)

Wisconn Valley Way

New north-south roadway between County KR and WIS 11

Willow Road/WIS 11



WISCONN VALLEY

DEVELOPMENT ROADWAYS

2018 lets: complete or underway

Braun Road Phase I

International Drive

County KR Phase I

Wisconn Valley Way box culvert

County KR box culvert

Wisconn Valley Way and County KR
Intersection

Willow Road/WIS 11



INTERNATIONAL DR. STORM SEWER



BRAUN RD. STORM SEWER



COUNTY KR PRECAST BOX CULVERT



BRAUN RD. BOX CULVERT CONCRETE POUR



INTERNATIONAL DR. BOX CULVERT



NEWLY CONSTRUCTED WILLOW RD.



DEVELOPMENT ROADWAYS

2019 lets

County H Phase I: Jan. 15

Wisconn Valley Way: March 12

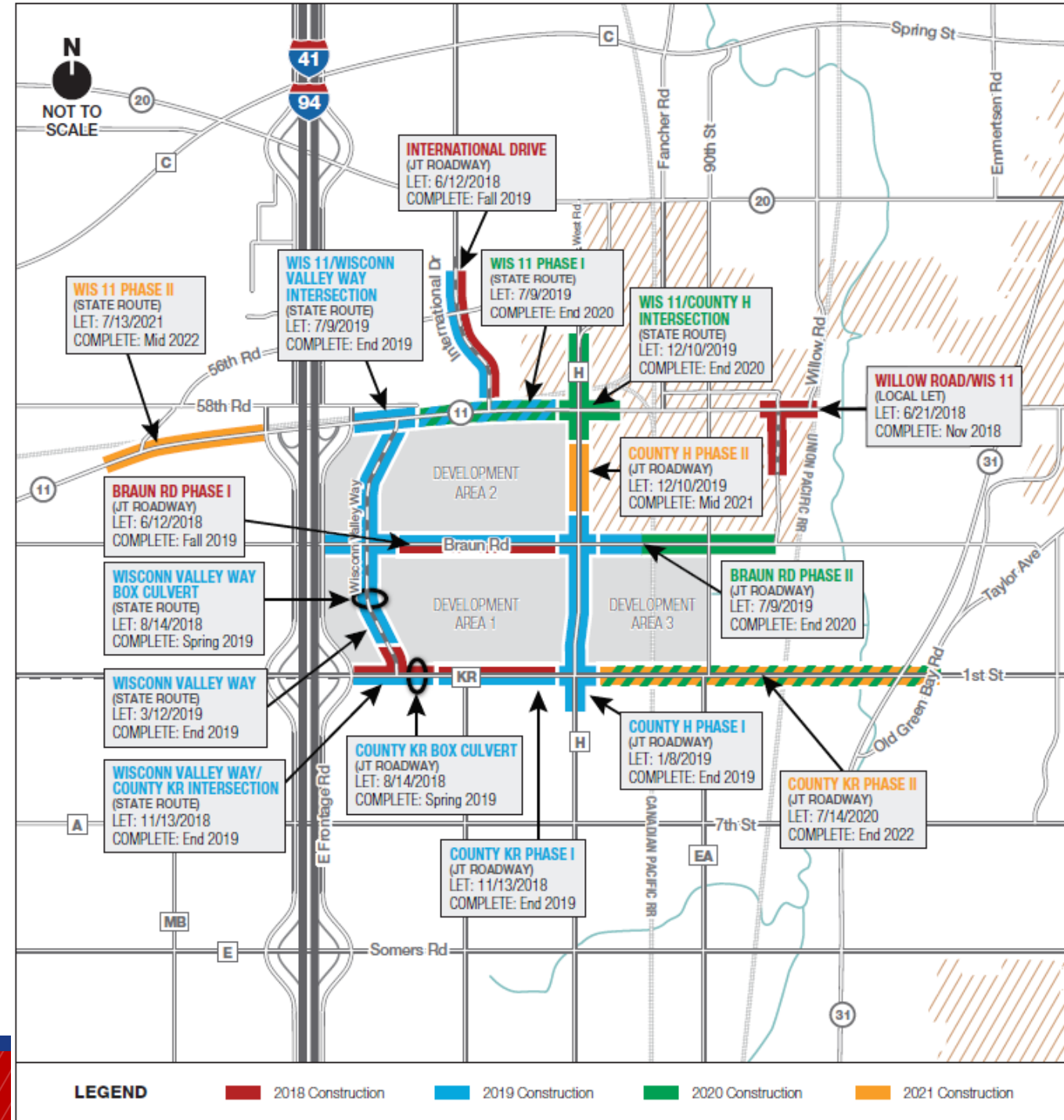
WIS 11 intersection with Wisconn Valley Way: July 9

WIS 11 Phase I : July 9

Braun Road Phase II: July 9

WIS 11 intersection with County H: December 10

County H Phase II: December 10



MAJOR UTILITY CONSTRUCTION



WATER:
42 mi



GAS:
26 mi



ELECTRIC:
21 mi



TELECOM:
28 mi



SEWER: 18 mi



lift station
substation

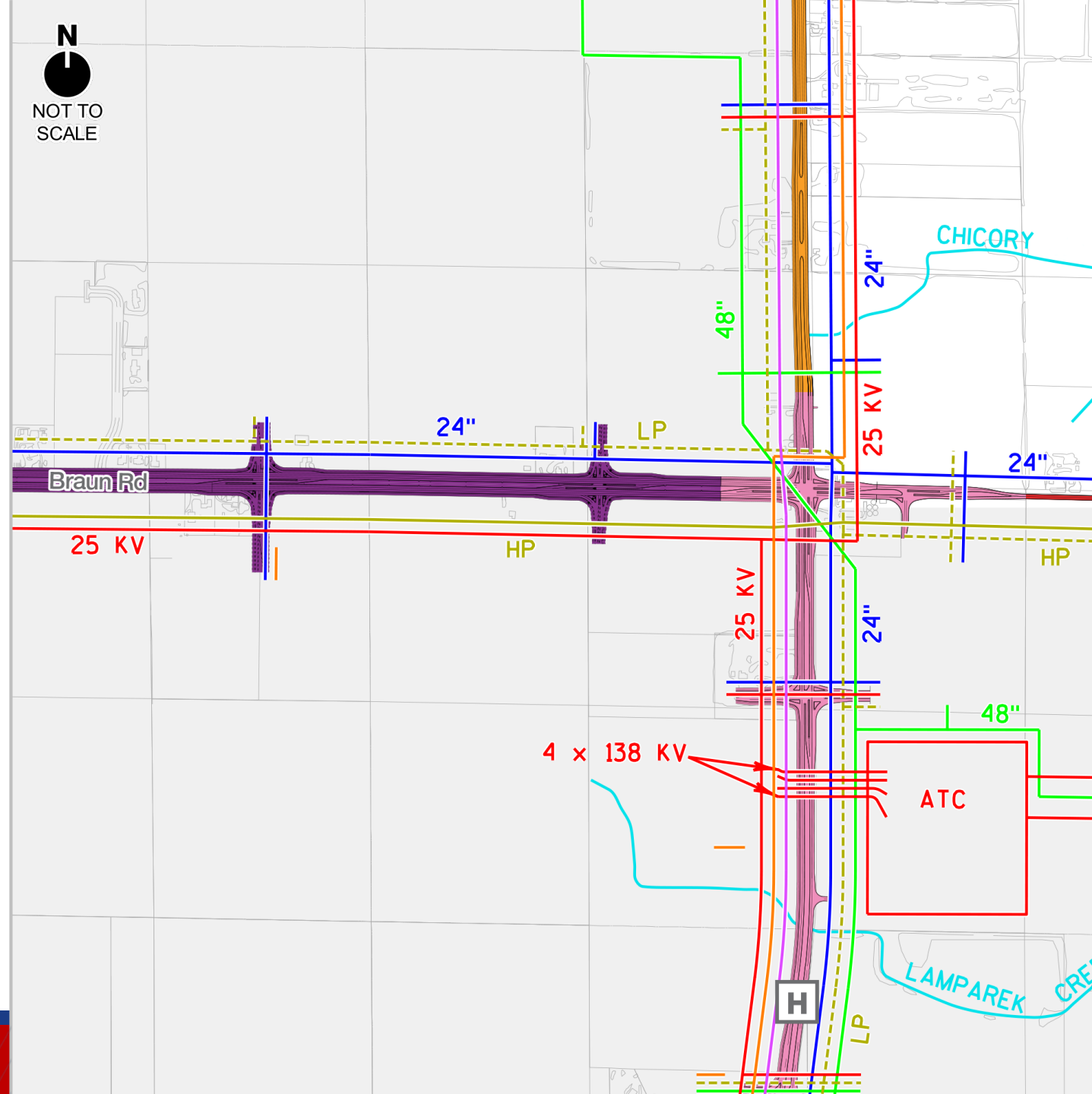
water
tower

booster
station

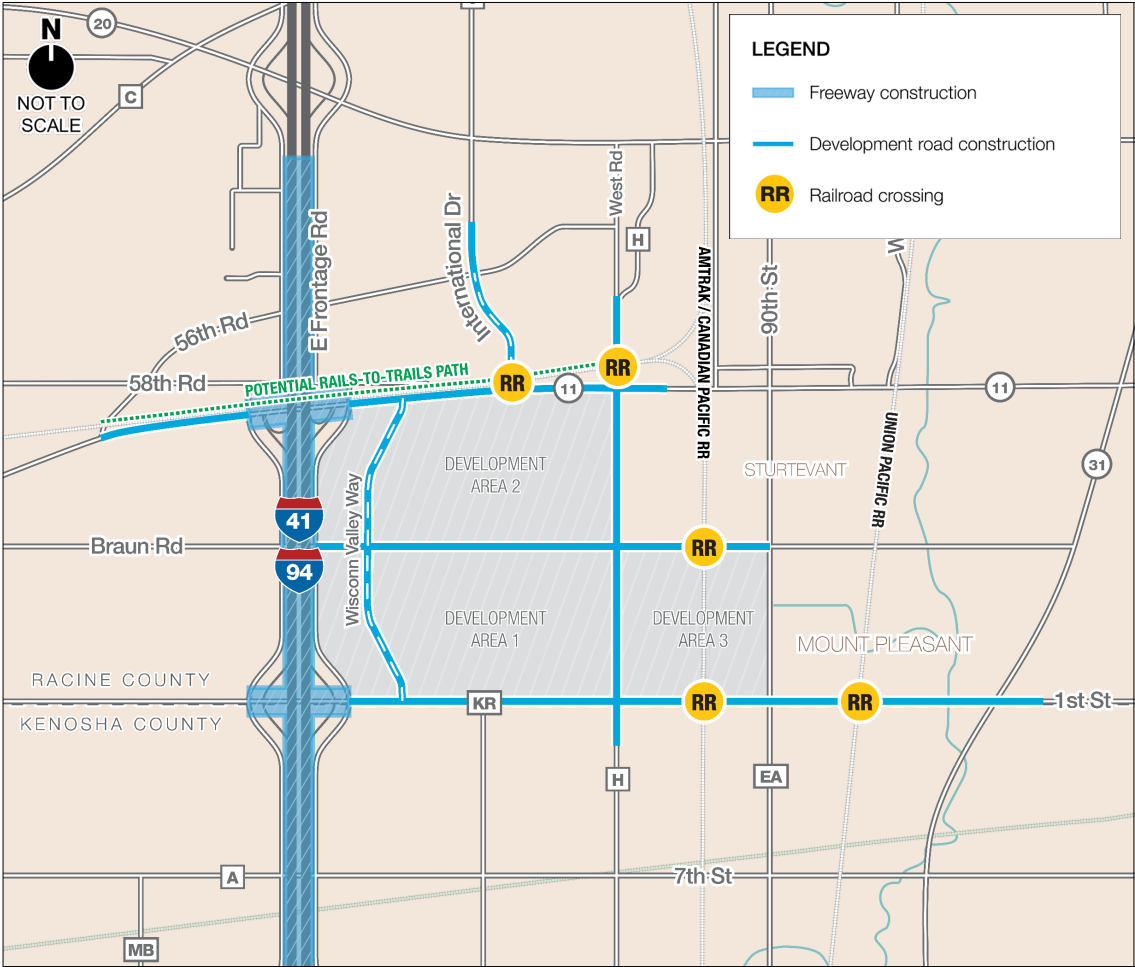


UTILITY COORDINATION

- WisDOT lead agency
- Mega Project approach
- Coordinated relocation plan
- Work plan and permit plan review
- Coordinated construction schedule
- Weekly utility coordination meeting



RAILROADS



ENVIRONMENTAL

- Early and extensive coordination with agencies and local municipalities
- U.S. Army Corps of Engineers and WI Department of Natural Resources (DNR) identified I-94 and Wisconn Valley Development Roads as priority projects
- Early decision to mitigate wetlands at 2:1 ratio
- Partnering with WI DNR to identify watershed improvements
- Erosion control maintained and monitored
- First WisDOT project to use in-lieu fee program with WDNR



New stream diversion channel at Braun Road



TRAFFIC MANAGEMENT

TRAFFIC OPERATIONS



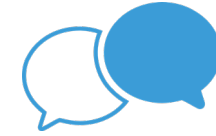
- High traffic volumes – 150,000-80,000 per day, depending on segment
- 20 percent trucks overall, 40 percent at night
- Interchanges closely-spaced, every two miles

INCIDENT MANAGEMENT



- Fire department services
- Freeway service teams
- Emergency vehicle preemption
- Incident/crisis communication plan
- Dedicated work zone law enforcement patrols

PUBLIC INFORMATION



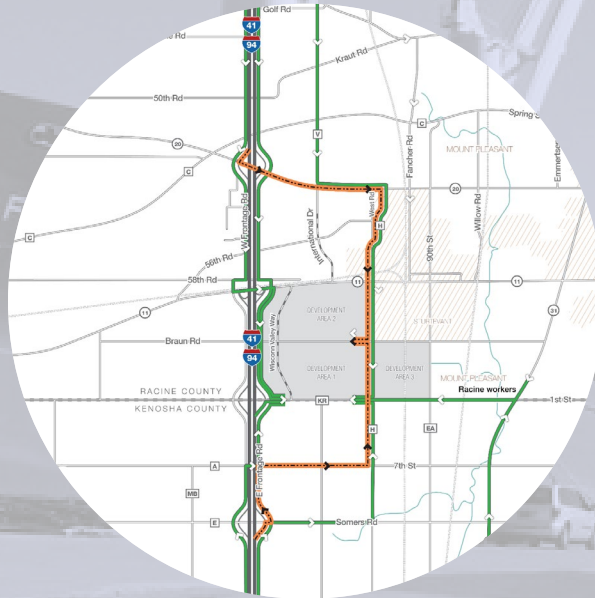
- Website
- Newsletters/hard-copy pieces
- Social media
- Media interviews/press releases
- Weekly stakeholder traffic meeting
- Local officials/government briefings
- Public open house meetings
- Residential outreach
- Business outreach and signage
- Community groups and schools
- Special events



SITE MOBILITY



- Multiple construction worker access routes northbound and southbound from I-94
- Construction materials
- Building and office materials
- Prefabricated components



MANAGING CONSTRUCTION

WisDOT is committed to delivering these projects:

- On time
- On budget
- Safely
- Efficiently
- With quality
- Proactive communication
- With the community

▶ Efficient and effective use of resources

Promotes proactive project management and maximizes resources and productivity efficiencies; requires flexibility

▶ Proper management, communication and dissemination of key information

Enables efficient and effective information flow and management (tracking, updating, storing and communicating data for everyday use); requires unique tools adapted for each individual project

▶ Leveraging knowledge and expertise

Improves WisDOT's core skills and facilitates project delivery through objective views, and internal and external capabilities and techniques

▶ Facilitation of continuous organizational improvement

Enhances WisDOT's capabilities and resource utilization to facilitate adaptive project delivery; embodied by the development, documentation and transfer of best practices

▶ Advance coordination

Enhances relationships that facilitate approvals/agreements and reduce schedule risk

▶ Clearly defined communication channels

Proactively enforces individuals' management roles by providing a clear structure for reporting and information flow; requires designating key points of contact

▶ Innovative delivery

Recognizes that "one-size-fits-all" policies/processes are not always suitable for Mega Projects; requires acknowledgement of unique standards and policies and also fosters creativity in developing and utilizing new processes and technologies

▶ Forward thinking

Facilitates a culture of progress, building and maintaining project and schedule momentum through forward processes; requires the aggressive management of detailed schedules and a culture of goal-setting and meeting expectations

▶ Flexibility in delivery

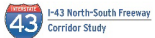
Accommodates dynamic schedules through all phases of a project; enhanced by bundling projects with interrelated scopes and building in sufficient scope float in design plan schedules to allow for acceleration or shelving

▶ Practice of Empowerment

Mega Projects offer a productive learning and growing environment. Incorporating the Practice of Empowerment is essential because it leverages the dependent relationship between successful delivery of work and the necessary development of people. The Practice of Empowerment creates ownership and helps sustain long-term delivery of the ongoing program. The Practice of Empowerment also encourages an "all hands on deck" mentality to address workload peaks and schedule critical activities

mega project BEST PRACTICES

These key best practice themes comprise the foundation for successfully managing large and complex projects, and they support the structure and delivery of WisDOT Mega Projects. These themes should be used as a guide and starting point for Mega Project structuring, staff development and delivery. True best practices are constantly evolving, adapting and changing to meet the needs of unique projects.





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