

Improve Safety

South Section - Layton Avenue to I-94

Crashes

- 5 years of crash data (2008-2012) was analyzed by the study team.
- 1,423 crashes including 1 fatality occurred.
- 80% of the 4.7-mile South Section exceeds the statewide average total crash rate for similar roads classified as “Large Urban Divided Highways.”

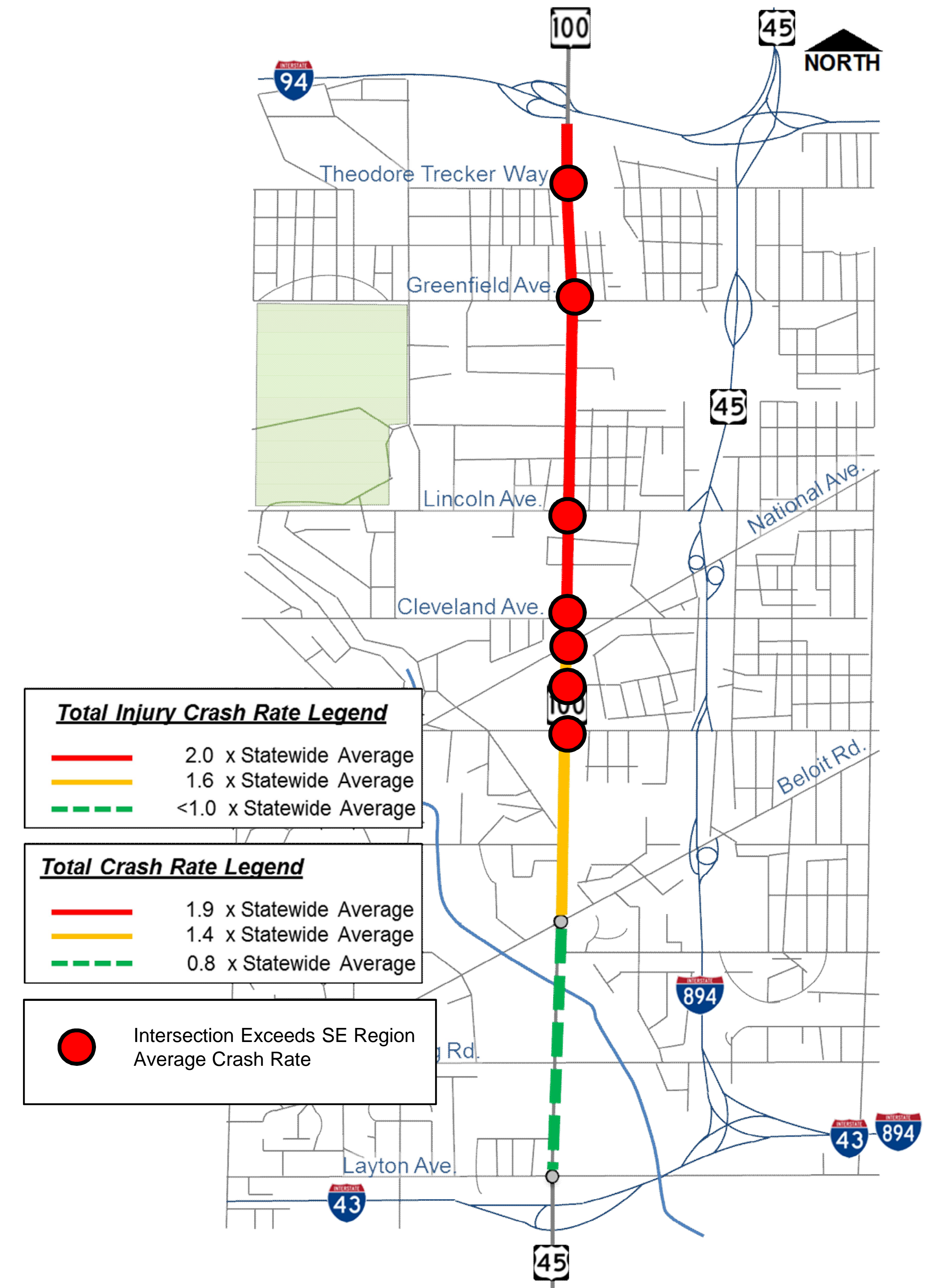
Intersection Crashes

- 6 of the 9 signalized WIS 100 intersections meet or exceed 0.72 MEV

Crash Severity and Type

- 37% of crashes involved injury.
- On average, there were 2 injury crashes per week from 2008-2012.
- 76% of the crashes were rear-end or angle crashes, indicating problems with vehicles making turns.

Total and Injury Crash Rates



Traffic Operations – Level of Service

Layton Avenue to I-94 and Watertown Plank Road to Silver Spring Drive



Description of Motor Vehicle Levels of Service

Level of Service	Signalized Delay (sec)	Unsignalized Delay (sec)	Typical Roadway Conditions
A	< 10	< 10	Primarily free-flow operations. Control delay at intersections is minimal.
B	10 to 20	10 to 15	Ability to maneuver in traffic is slightly restricted. Delay at intersections is not significant.
C	> 20 to 35	> 15 to 25	Stable operations with ability to maneuver in traffic being restricted. Delay at intersections may contribute to congestion.
D	> 35 to 55	> 25 to 35	Small increases in traffic volumes may cause substantial increases in delay. Congestion at intersections is apparent.
E	> 55 to 80	> 35 to 50	Significant delay and poor travel speeds can be expected. Intersections experience significant delay and queuing.
F	> 80	> 50	Delays are at unacceptable levels for most drivers. Roadway network capacity has been exceeded.

Improve Traffic Operations

South Section – Layton Avenue to I-94



WisDOT Goal: LOS D or better for intersection and all movements.

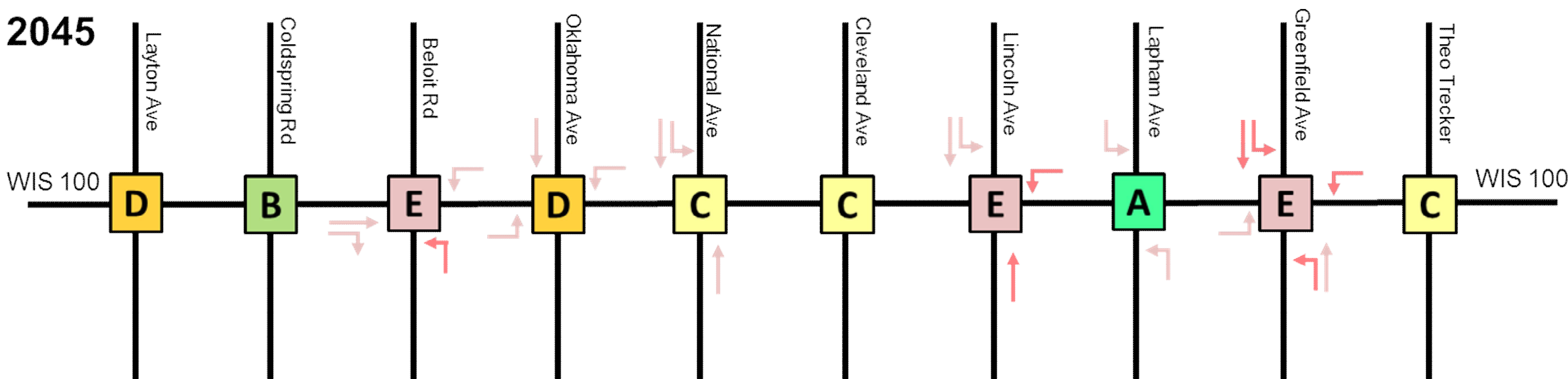
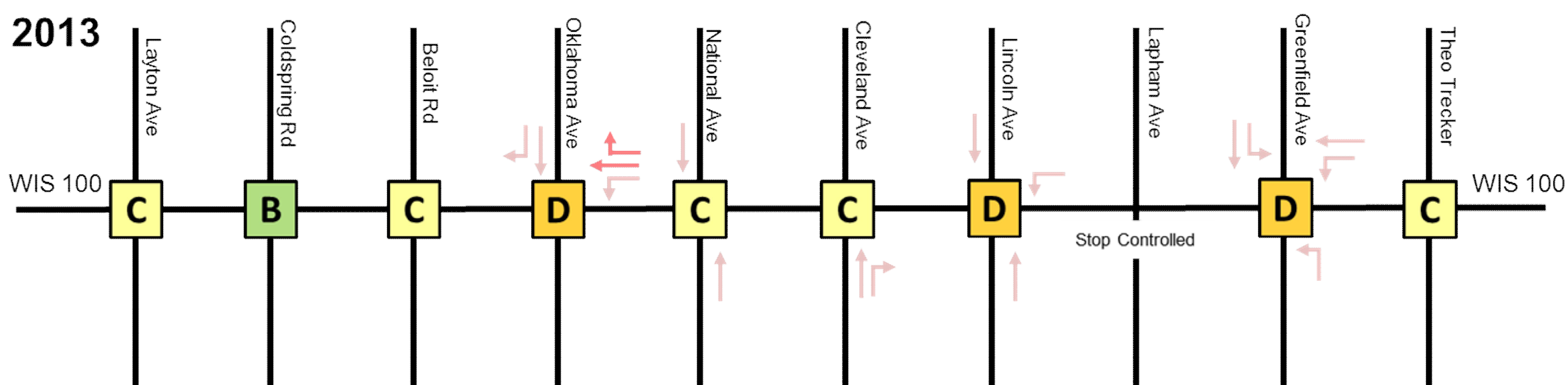
LOS Legend					
Level of Service	Signalized Delay (sec)	Unsignalized Delay (sec)	Level of Service	Signalized Delay (sec)	Unsignalized Delay (sec)
A	< 10	< 10	D	>35 to 55	>25 to 35
B	10 to 20	10 to 15	E	>55 to 80	> 35 to 50
C	> 20 to 35	> 15 to 25	F	> 80	> 50

= Movement LOS E
 = Movement LOS F

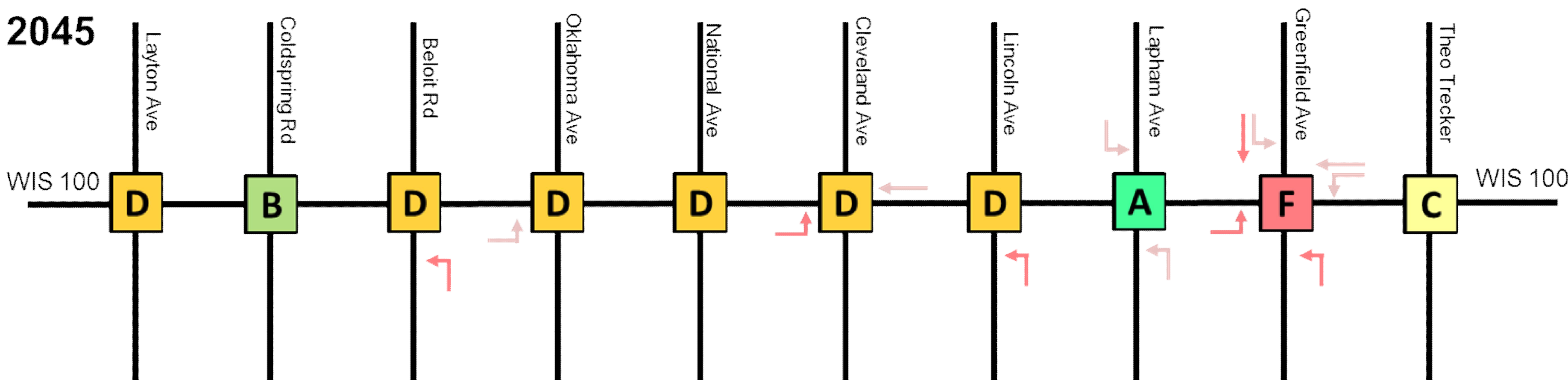
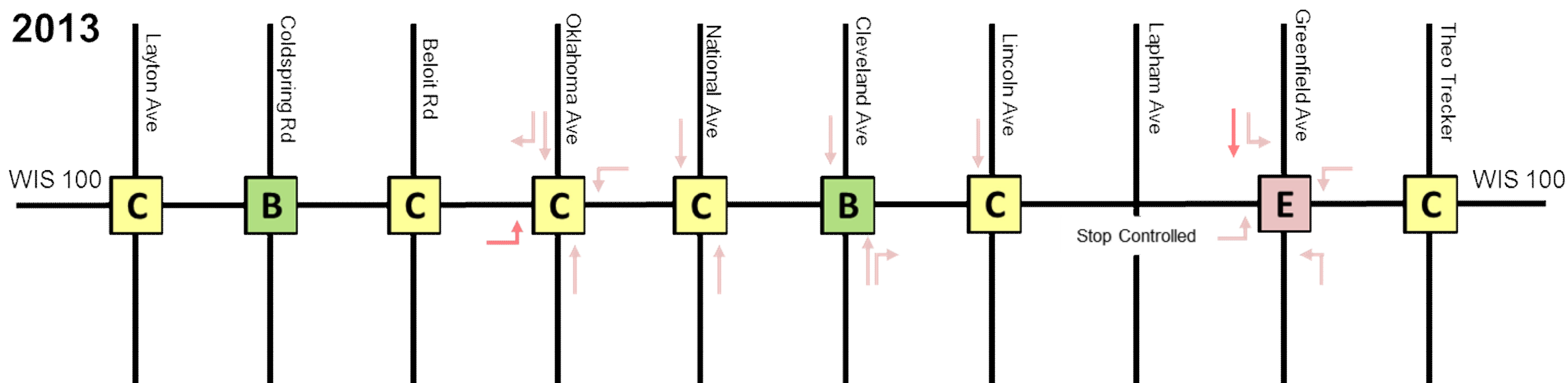


Existing and Future No-Build Operations

AM Peak Hour



PM Peak Hour



Wide range of alternatives being developed to address WIS 100 needs

- No Build Alternative (Maintenance)

- Future improvements would consist only of routine maintenance to keep the driving surface in adequate condition. Safety concerns would be addressed at spot locations.
- Maintenance projects to repair the surface would need to occur every 8-10 years due to poor condition of the underlying concrete pavement.

- Reconstruct in Kind Alternative (Minimal operational improvements)

- Roadway would be reconstructed to the same “footprint” that exists today.
- Underground utilities such as storm sewer and lighting conduit would be replaced.
- Would include minimal operational improvements, where possible.
- This alternative would require a major, disruptive construction project, possibly two seasons long. In the future, minimum acceptable Level of Service (LOS) D operational goals will not be met at key intersections.
- Existing congestion and delays would remain and increase as traffic volumes increase in the future.


- Reconstruct Alternatives with Operational Improvements

- Intersection alternatives – Alternatives meet the minimum acceptable LOS operational goals for urban arterial roadways (LOS D).
- Mainline alternatives – These alternatives consider multiple objectives for the roadway cross section between the key intersections.
- Underground utilities such as storm sewer and lighting conduit would be replaced.

Traditional Improvements

South Section – Layton Avenue to I-94

Proposed Number of Lanes With Traditional Improvements

-  4-Lane
-  6-Lane
-  8-Lane



Issues/Concerns Raised by the Public

- Maintain the fabric of the community
- Economic sustainability
- Minimize or avoid potential relocations
- Pedestrian safety and the proximity of schools to WIS 100
- Bicycle safety and accommodations
- Transit accommodations
- Access is important
- Traffic issues and crash concerns
- Consider nontraditional designs to reduce need to expand the roadway
- Drainage
- Design aesthetics

