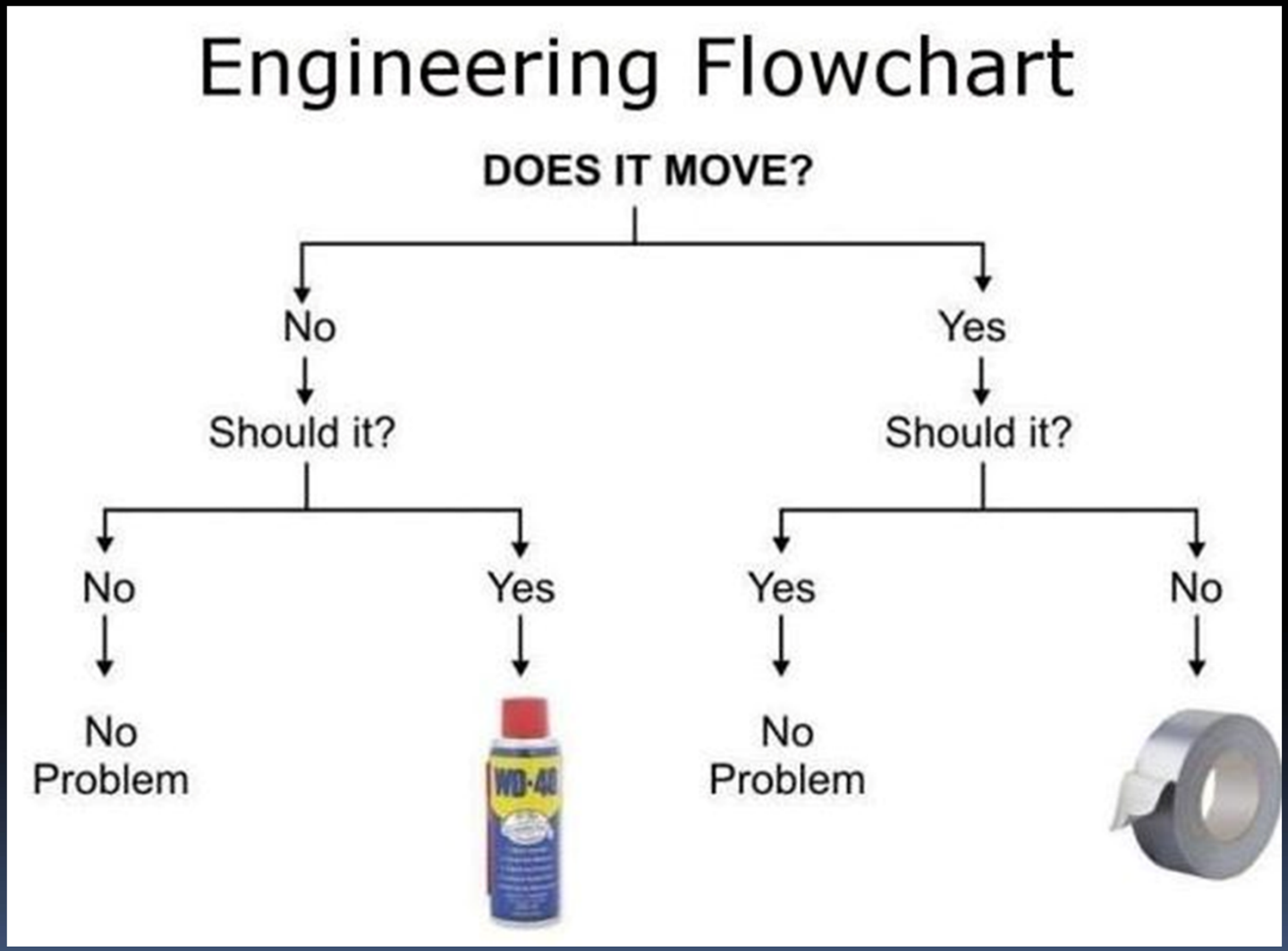
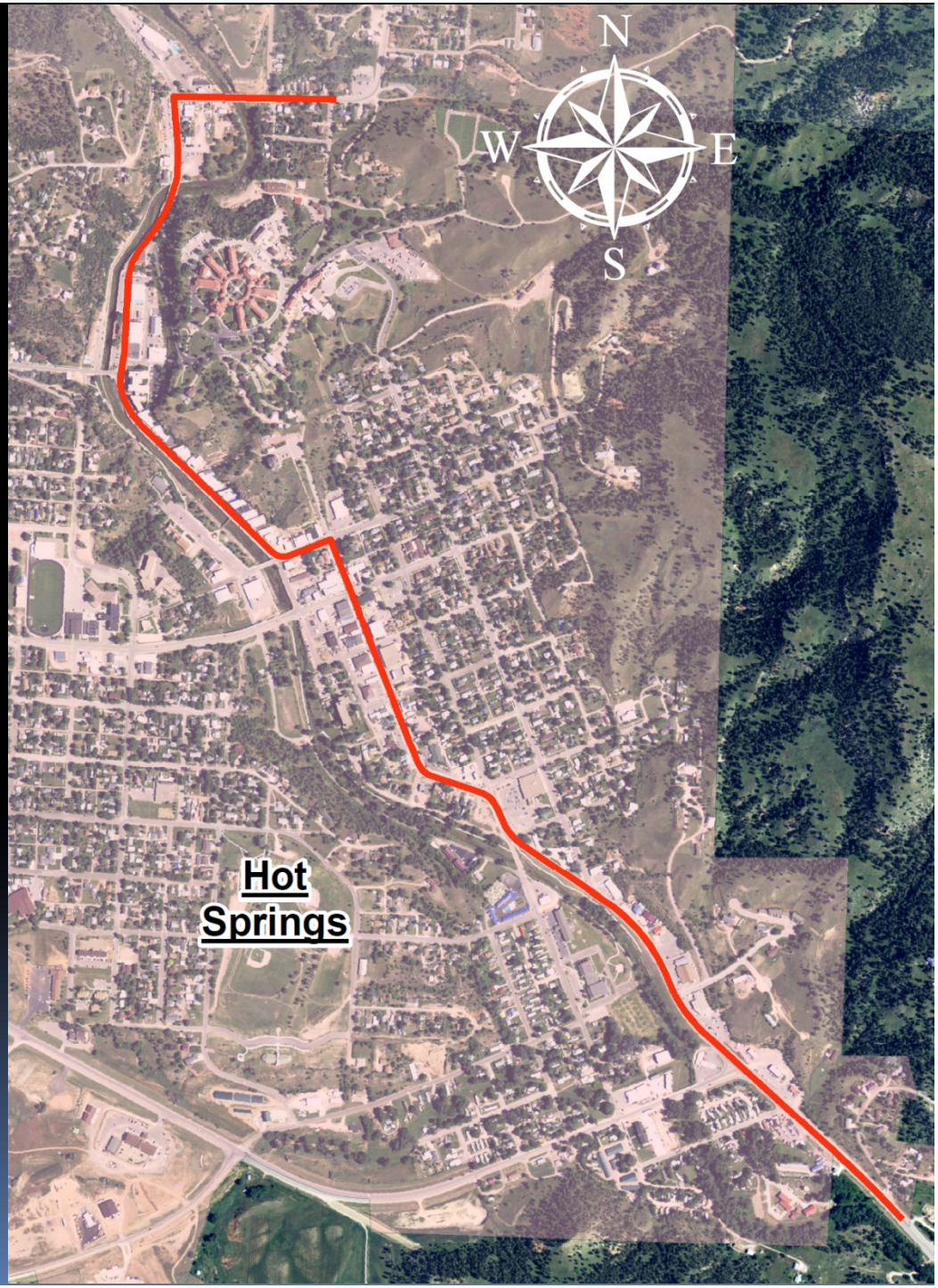
Hot Springs – US18 & US385



Mark Malone, PE SD DOT

Project Limits



Why are we here?

- To discuss US18 & US385 Reconstruction
  - ✓ Roadway Characteristics (including parking)
  - ✓ Pedestrian & Bicycle Accommodations
- To involve public in the design process
- Exchange ideas – listen and discuss concerns

Why so long since last meeting?

- June 12, 2013
- Design & Scope of Work Conflicts
  - ✓ Usually scope first
  - ✓ This project has numerous width constraints and complexities
  - ✓ Design and Scope simultaneously
  - ✓ Layout available of preliminary design
    - Much more detail than normal
- Pedestrian and Bicycle Safety Assessment
- Constructability Review

Pedestrian and Bicycle Safety Assessment

- All 50 states participated
  - ✓ Directive from USDOT Secretary Foxx
  - ✓ 1 project from each state
  - ✓ Improvement of Pedestrian and Bicycle awareness
- This is South Dakota's project
  - ✓ Hot Springs was selected for many reasons
- Results – we were already on the right track
  - ✓ Minor enhancements identified

Constructability Review

- 3 local contractors contacted
  - ✓ These contractors will likely bid on the project
  - ✓ Flexibility in project schedule and construction sequencing
- 2 projects - ~500+ days construction
  - ✓ Construction sequencing more difficult
    - Shorter Concrete pours
  - ✓ Possibly have 2 different contractors
- 1 Project - ~350 days construction
  - ✓ Easier to sequence
  - ✓ Utilize warm winter days
  - ✓ 1 Contractor

SDDOT Project Review

Traffic

Crashes

Costs

Traffic Analysis

- Traffic numbers and patterns were reviewed
- Number of lanes
- Traffic Signals
  - ✓ US18
- Turn lanes
- Truck turning
  - ✓ Purchased building
- Pedestrian crossing locations

Crash Data

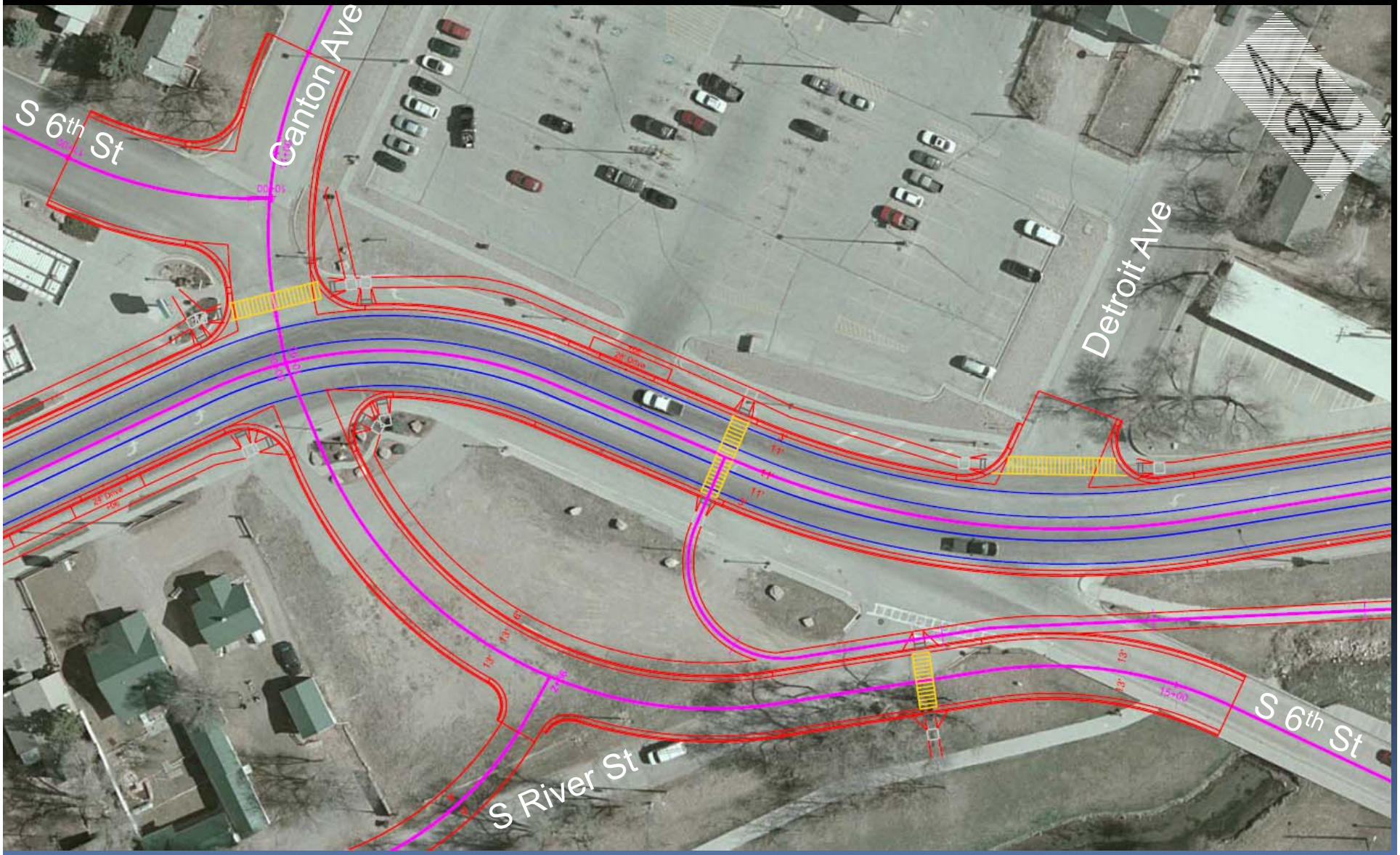
2012-2014

- Crash rate – 2.54
- Crash rate, statewide average = 2.00
  (Urban principal arterial in SD)

- No Fatal Crashes
- 12 Injury Crashes
- 27 Property Damage Crashes

- 4 Pedestrian involved in crashes

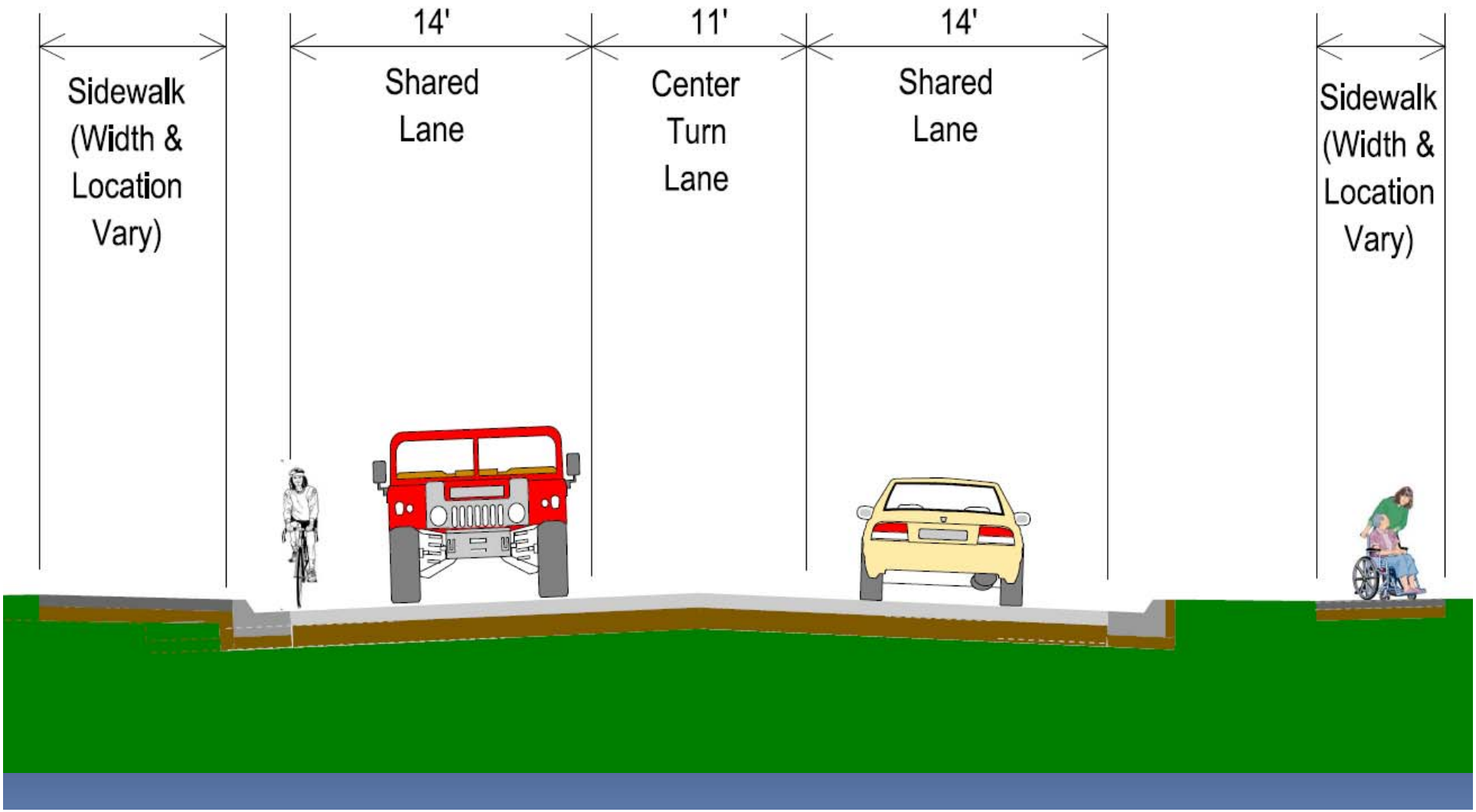
Roadway Realignment - Safety



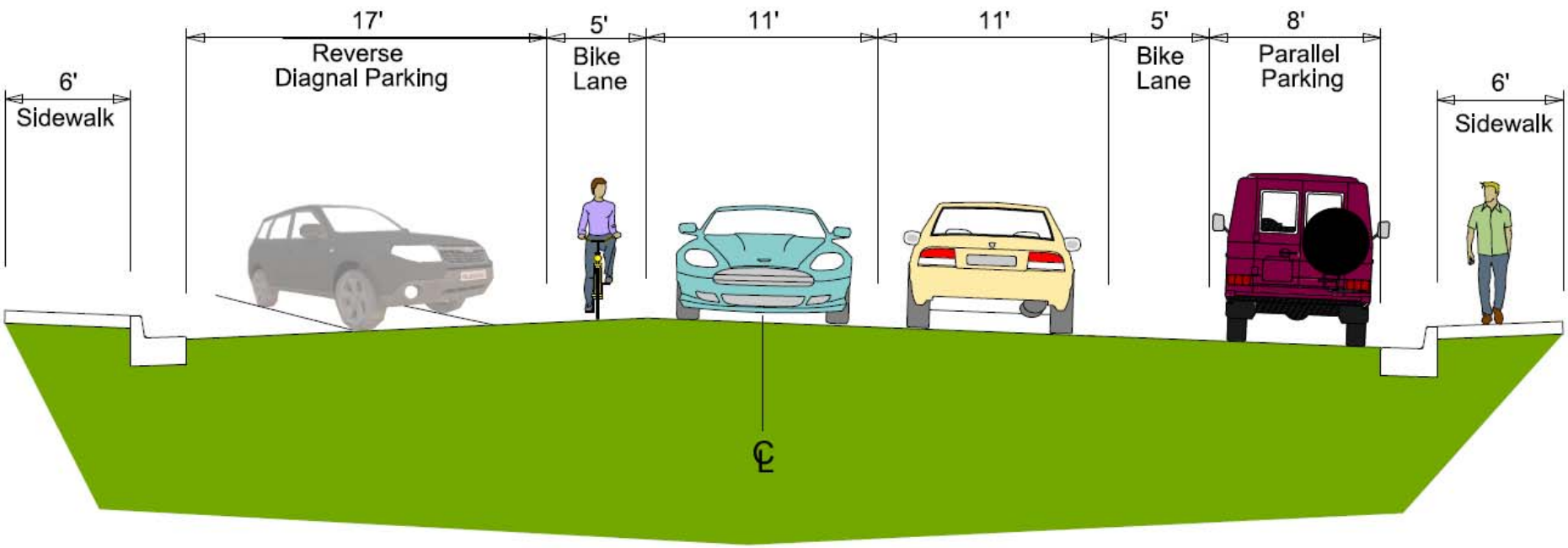
Driving Lanes & Sidewalks

- Driving lanes vary
  - ✓ 2 lanes to 5 lanes
    - Dependent on traffic numbers and turning needs
- Sidewalk
  - ✓ Boulevard - Preferred
  - ✓ 6' Curbside
  - ✓ 5' Curbside
    - Only where width restrictions are severe

Roadway Typical Sections



Roadway Typical Sections

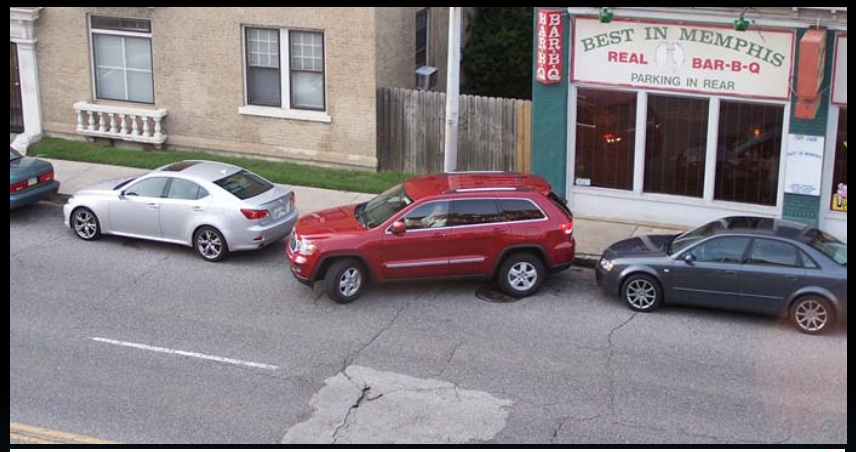


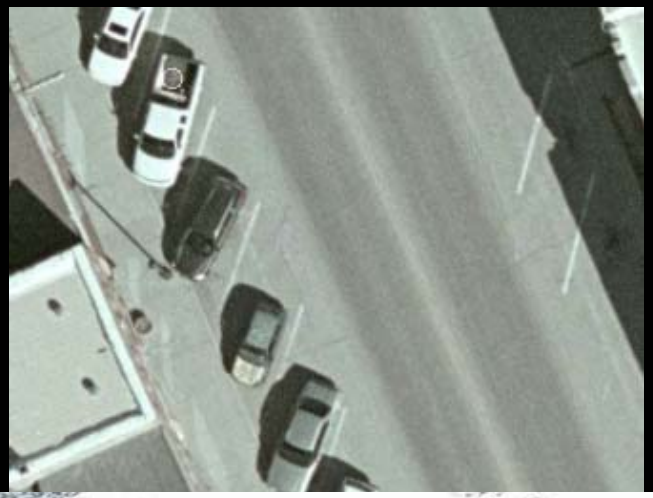
We Need Your Comments

- Layouts are proposed, not set in stone
- Width Restrictions
  - Buildings
  - Retaining Walls
- Bicycle Accommodations
  - Loss of Parking
    - Parallel vs Diagonal
  - Narrower sidewalks
- Pedestrian Accommodations
  - Loss of Parking
    - Parallel vs Diagonal
  - Narrower sidewalks

Different Types of Parking

Parallel Parking

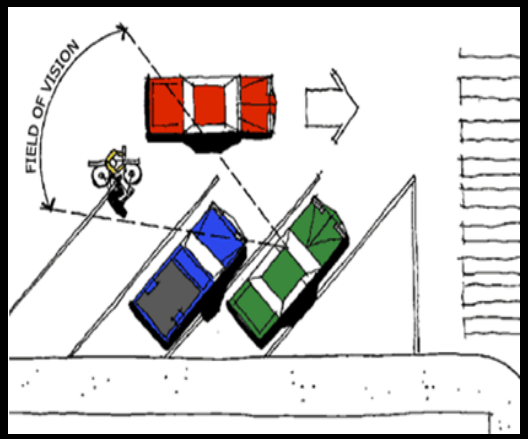


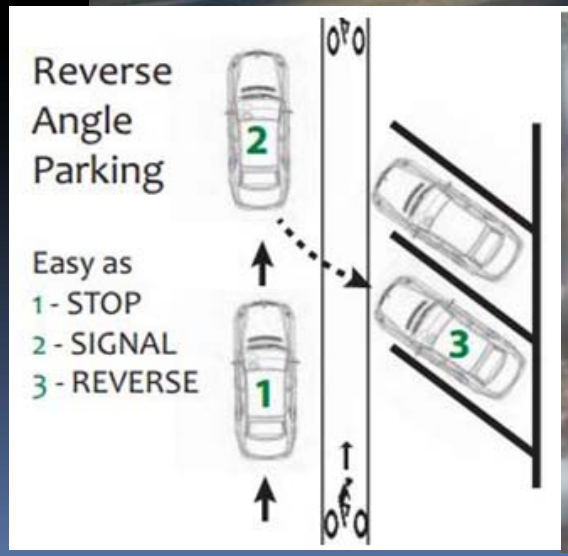


Diagonal Parking

Different Types of Parking

Reverse Diagonal Parking





Which parking type is better?

Diagonal Parking vs. Parallel Parking

- Both affect traffic flow
- Parallel parking allows view of approaching traffic
- Studies show changing diagonal parking to parallel parking reduces Crashes 28%-63% (varies on which study is used)

Diagonal Parking vs. Reverse Diagonal Parking

- Same parking movement, but performed in a different order
- Reverse diagonal forces driver to back into a parking spot
- Reverse diagonal gives better view of approaching traffic
- Reverse diagonal parking reduces Crashes due to backing

Reverse Diagonal Parking

Advantages:

- Better line of sight
- Fewer Crashes
- Easier to access vehicle
- Unloading is easier

Disadvantages:

- New, so may be confusing
- Some do not like backing into parking space
  - ✓ Think of parallel parking

- Construction currently scheduled for 2019 & 2020 – will change to 2020 or 2021
  - ✓ Pending Funding & Scheduling
  - ✓ 2 construction seasons, 1 project
  - ✓ $23.5 Million

Traffic During Construction

- Area/Region Offices will continue to review and refine options
  - ✓ Access to Businesses will be maintained
  - ✓ Access to homes will be maintained

- Design will meet with affected landowners
  - ✓ 1-2 years from now
    - Pending Schedule & Funding

Q&A

You have

Questions

We have

Answers

- Written Comments Due Thurs. January 21, 2016
  - Mail - 700 E Broadway Ave Pierre, SD 57501
  - Email – mark.malone@state.sd.us
  - Here - Now

- Website (project information)
  - http://sddot.com/dot/publicmeetings