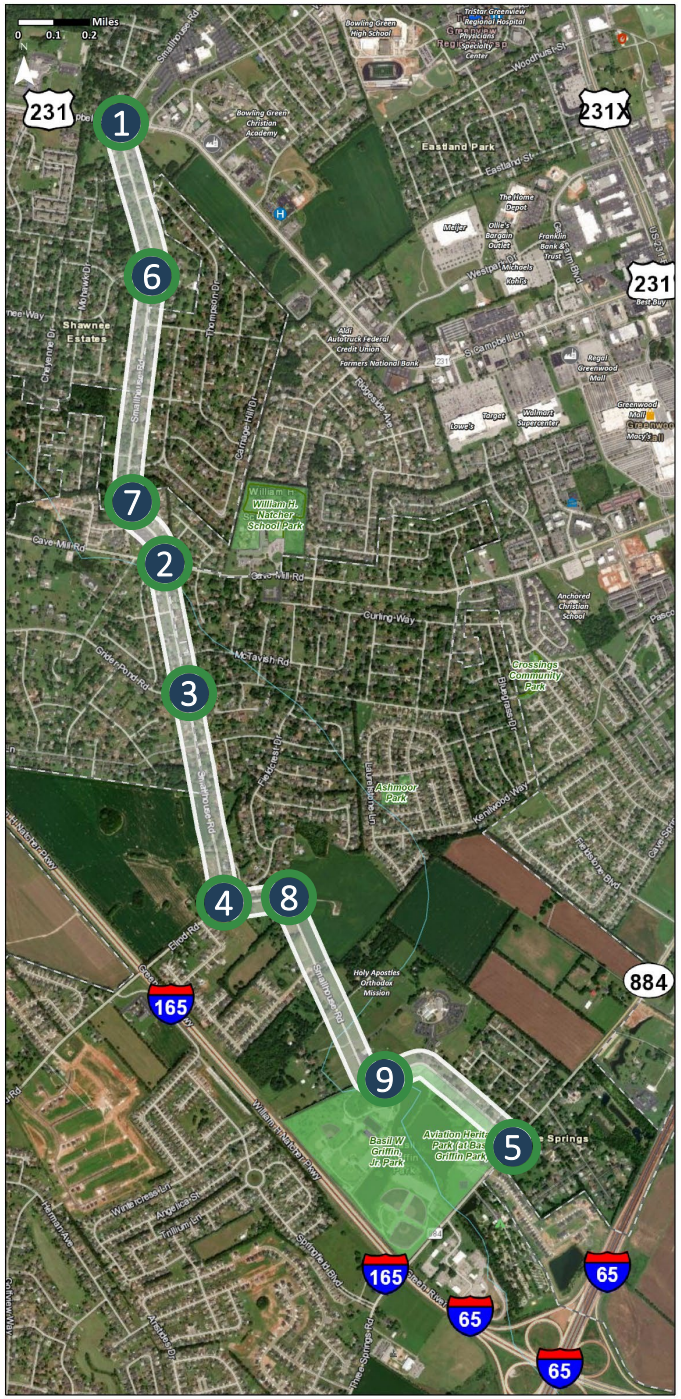
CONCEPTS



Sticker Key

Like

Dislike

1 Smallhouse Road at Campbell Lane

Draft Improvement Concepts

Concept: Extend NB Right Turn Lane

Info: Queue Length in AM > Available Storage
Primary crash type is rear-end (5 of 10 for approach)
Level of Service E for right turns (Scale = A to F)

Concept: Extend WB Right Turn Lane

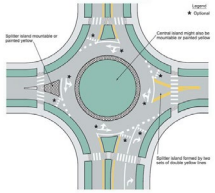
Info: Queue Length in PM > Available Storage
Primary crash type is rear-end (16 of 28 for approach)
Level of Service C for right turns (Scale = A to F)

Concept: Add Backplates to Signal Heads with Retroreflective Borders

Info: Primary crash type is rear-end (89 of 151 total)
FHWA Countermeasure = 15% reduction in all crashes

Concept: Construct Roundabout

Info: Helps reduce speeds on approaches serving as a traffic calming measure
FHWA Countermeasure = 78% reduction in fatal and injury crashes (22 of 151 injury crashes ; no fatal)



MUTCD

Other:

2 Smallhouse Road at Cave Mill Road

Draft Improvement Concepts

Concept: Extend WB Right Turn Lane

Info: Queue Length in AM equal to available storage
Primary crash type is rear-end (8 of 10 for approach)
Level of Service C for right turns (Scale = A to F)

Concept: Extend SB Right Turn Lane

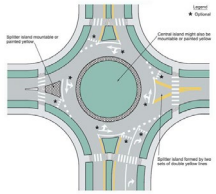
Info: Queue Length in PM equal to available storage
One rear-end and one angle crash on approach
Level of Service C for right turns (Scale = A to F)

Concept: Add Backplates to Signal Heads with Retroreflective Borders

Info: Primary crash type is rear-end (56 of 112 total)
FHWA Countermeasure = 15% reduction in all crashes

Concept: Construct Roundabout

Info: Helps reduce speeds on approaches serving as traffic calming measure
FHWA Countermeasure = 78% reduction in fatal and injury crashes (16 of 112 injury crashes ; no fatal)



MUTCD

Other:

3 Smallhouse Road at Grider Pond Road

Draft Improvement Concepts

Concept: Add SB Left Turn Lane

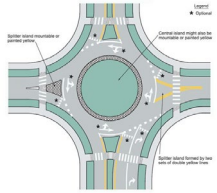
Info: Warranted per KYTC Turn Lane Calculations
Primary crash type is rear-end (3 of 6)
FHWA Countermeasure = 28-48% reduction in all crashes

Concept: Construct Mini-Roundabout

Info: Smaller size to limit right of way impacts
Has mountable central and splitter islands
Helps reduce speeds on approaches serving as a traffic calming measure

Concept: Construct Roundabout

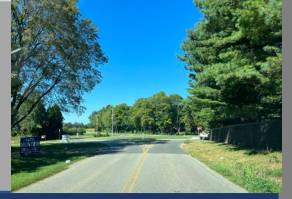
Info: Room for larger vehicles in travel lane
Larger size will impact right of way
Helps reduce speeds on approaches serving as a traffic calming measure



MUTCD

Other:

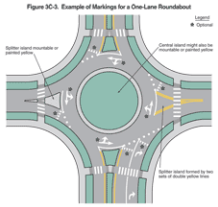
4 Smallhouse Road at Elrod Road



Draft Improvement Concepts

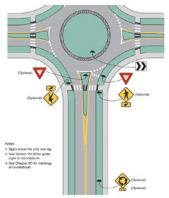
Concept: Reduce Speed with Additional / Enhanced Pavement Markings

Info: Optional lane-use arrows / pavement markings may help with direction and use
Multiple comments in Community Survey about navigation and speeding



Concept: Enhanced Signing

Info: Optional signing may help with direction and use
Multiple comments in Community Survey about navigation and speeding



Concept: Add Lighting

Info: 4 of 13 crashes were at dusk or night
FHWA Countermeasure = 33-38% reduction in nighttime crashes

Concept: Add Edge Rumble Strips

Info: Multiple crashes not reported resulted in property damage (fence) from running off road
FHWA Countermeasure = 16% reduction in run-off road crashes

Missouri DOT

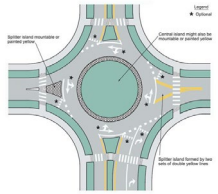
Other:

5 Smallhouse Road at Three Springs Road

Draft Improvement Concepts

Concept: Construct Roundabout

Info: Primary crash type is rear-end / angle
8 injury crashes over past 5 years
Currently in design phase with KYTC
FHWA Countermeasure = 82% reduction in fatal and injury crashes



MUTCD

Other:

6 Smallhouse Road at Shawnee Way

Draft Improvement Concepts

Concept: Add Separate NB Left Turn Lane

Info: Community Survey input included 3 comments about frequent crashes and lack of turn lanes
6 of 9 crashes were rear-end crashes

Concept: Construct Mini-Roundabout

Info: Smaller size to limit right of way impacts
Has mountable central and splitter islands
Helps reduce speeds on approaches as a traffic calming measure

Other:

7 Smallhouse Road at Curve Near Cave Mill Road

Draft Improvement Concepts

Concept: Add Chevron Signage / Enhanced Signage

Info: Horizontal Curve Class E (Scale = A to F)
Community Survey input noted this was a sharp curve, speeding is an issue and there is heavy traffic

Concept: Pavement Friction Management

Info: 5 of 8 crashes on wet roadway conditions
FHWA Countermeasure = 48% reduction in injury crashes at horizontal curves

Other:

8 Smallhouse Road at Curve Near Elrod Road

Draft Improvement Concepts

Concept: Add Chevron Signage

Info: Horizontal Curve Class E (Scale = A to F)
5 sideswipe crashes
7 of 9 crashes on wet roadway conditions

Concept: Tree Trimming to Improve Sight Distance

Info: Countermeasure = approximately 20% reduction in crashes. Benefit depends on distance of tree trimming / removal

Concept: Pavement Friction Management

Info: 7 of 9 crashes on wet roadway conditions
FHWA Countermeasure = 48% reduction in injury crashes at horizontal curves

Concept: Geometric Improvements (Realignment / Flatten Curve / Increase Clear Zone)

Info: Sharp curve with no room for recovery
FHWA Countermeasure = 8% - 44% reduction in all crashes depending on the extent of improvements

Other:

9 Smallhouse Road at Curves by Basil Griffin Park

Draft Improvement Concepts

Concept: Enhanced Signage

Info: Horizontal Curve Class F (Scale = A to F)
3 single vehicle & 3 angle crashes
4 of 7 crashes on wet roadway conditions

Concept: Pavement Friction Management

Info: 4 of 7 crashes on wet roadway conditions
FHWA Countermeasure = 48% reduction in injury crashes at horizontal curves

Concept: Geometric Improvements (Realignment / Flatten Curve / Increase Clear Zone)

Info: Sharp curve with no room for recovery
FHWA Countermeasure = 8% - 44% reduction in all crashes depending on the extent of improvements

Concept: Add Dedicated Left and Right Turn Lanes to Park Access

Info: 4 of 7 crashes angle or turn-related
FHWA Countermeasure = reductions in all crashes between 28% - 48% for left turn lane installation and 14 - 26% for right turn lane installation

Other:

Sticker Key

Like

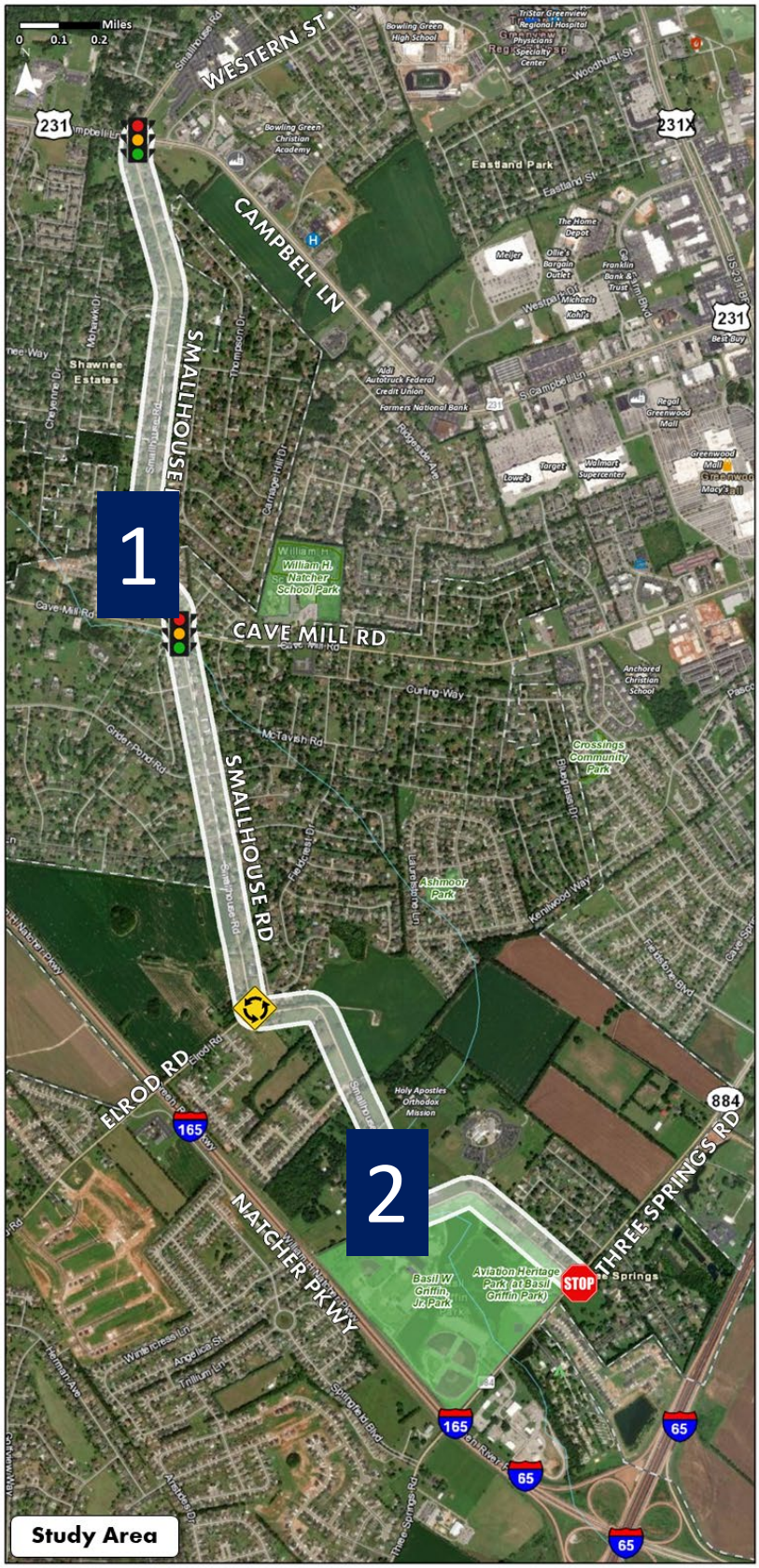
Dislike

---

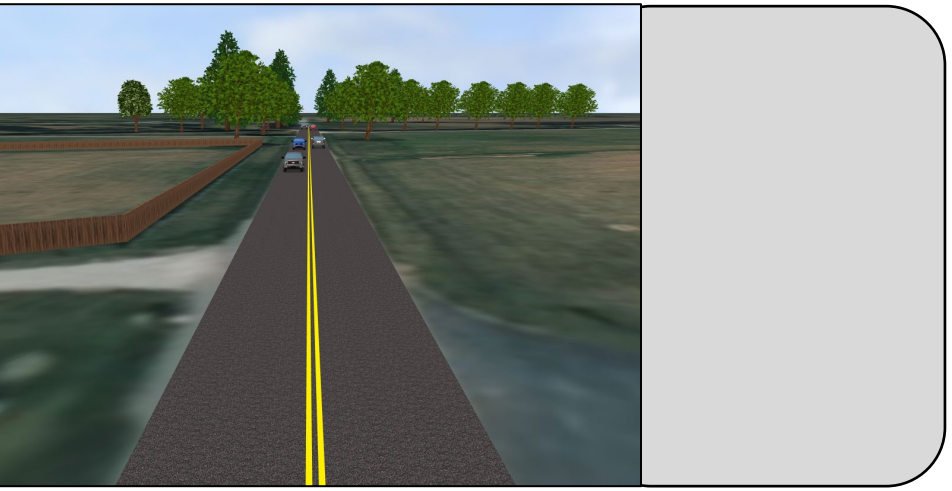
1 **Area 1: Campbell Ln to Elrod Rd**

2 **Area 2: Elrod Rd to Three Springs Rd**

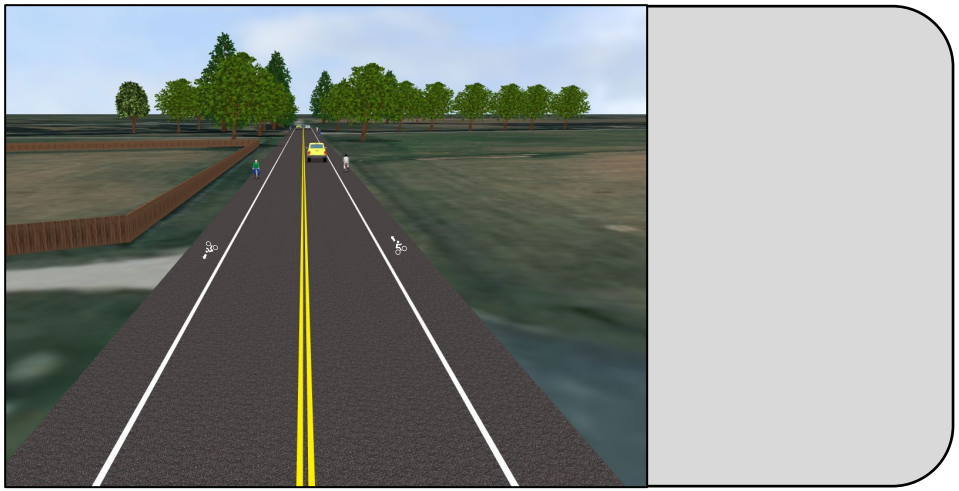
Note: Graphics are for conceptual purposes. In future design phases, exact widths, material (i.e. asphalt / concrete), and drainage treatment (i.e. curb & gutter / ditch) will be determined.



Corridor Treatments: Pedestrian / Bicycle Options

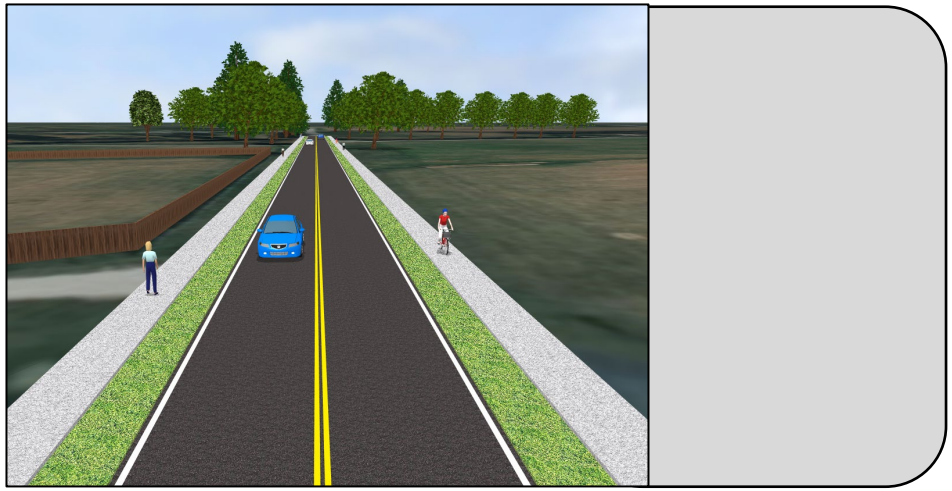


Existing (~ 20')



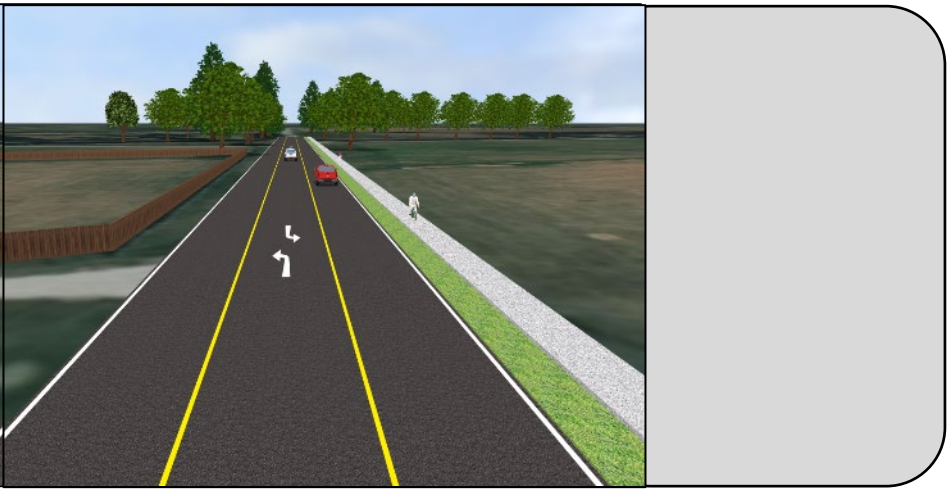
Striped Bicycle Lanes (~32')

Shared-Use Path on One Side with Buffer (~36')

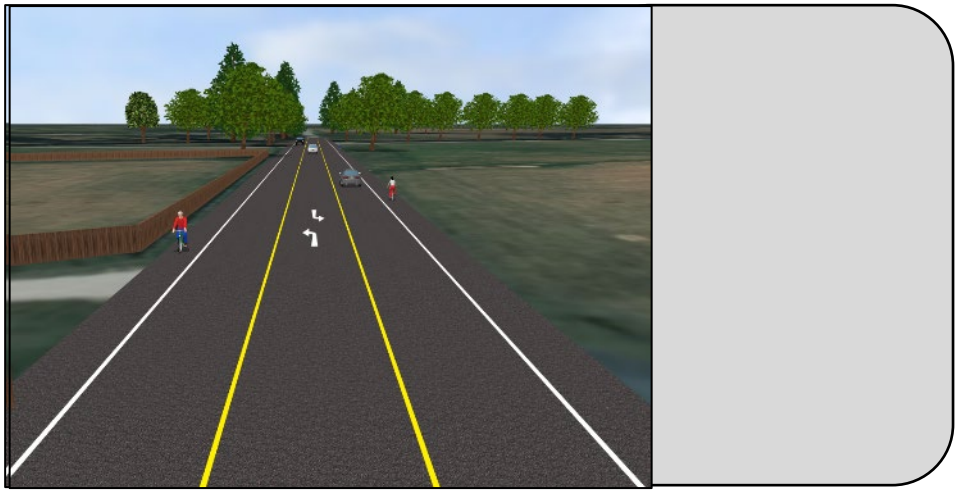


Sidewalk on Both Sides with Buffers (~40')

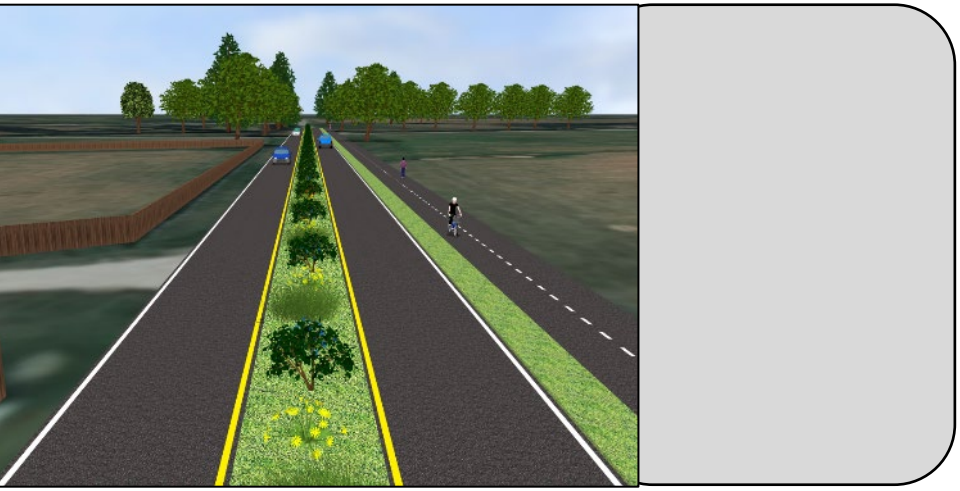
Corridor Treatments: Pedestrian / Bicycle Options



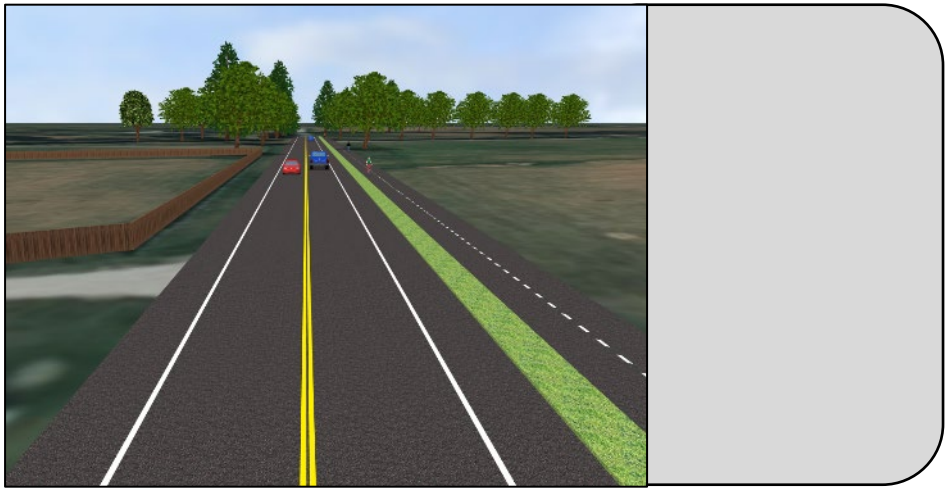
Center Turn Lane, Sidewalk on One Side with Buffer (~43')



Center Turn Lane with Striped Bicycle Lanes (~44')



Center Median with Shared-Use Path on One Side with Buffer (~46')



Wider Shoulders, Shared-Use Path on One Side with Buffer (~46')

Corridor Treatments: Speed Reduction Options

Posted Speeds = 30 – 35 mph
Majority Observed Speeds = 36-50 mph

Data Source: www.ite.org

Education

Radar Speed Sign

Enforcement

Narrow Lanes (9')

Traffic Calming