



Big Book of Ideas Engineering Safety Strategies

October 2018

VISION ZERO 
Zero fatalities. Zero excuses.



Urban Segments

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Road Diet (3- and 5-Lane Conversions)

Crash Reduction Factor

- 30% to 50%

Typical Installation Costs

- \$48,000 per mile [three-lane] + \$54,000 per mile [five-lane] + \$36,000 per signalized intersection for updates (for example, loop and signal head placement)



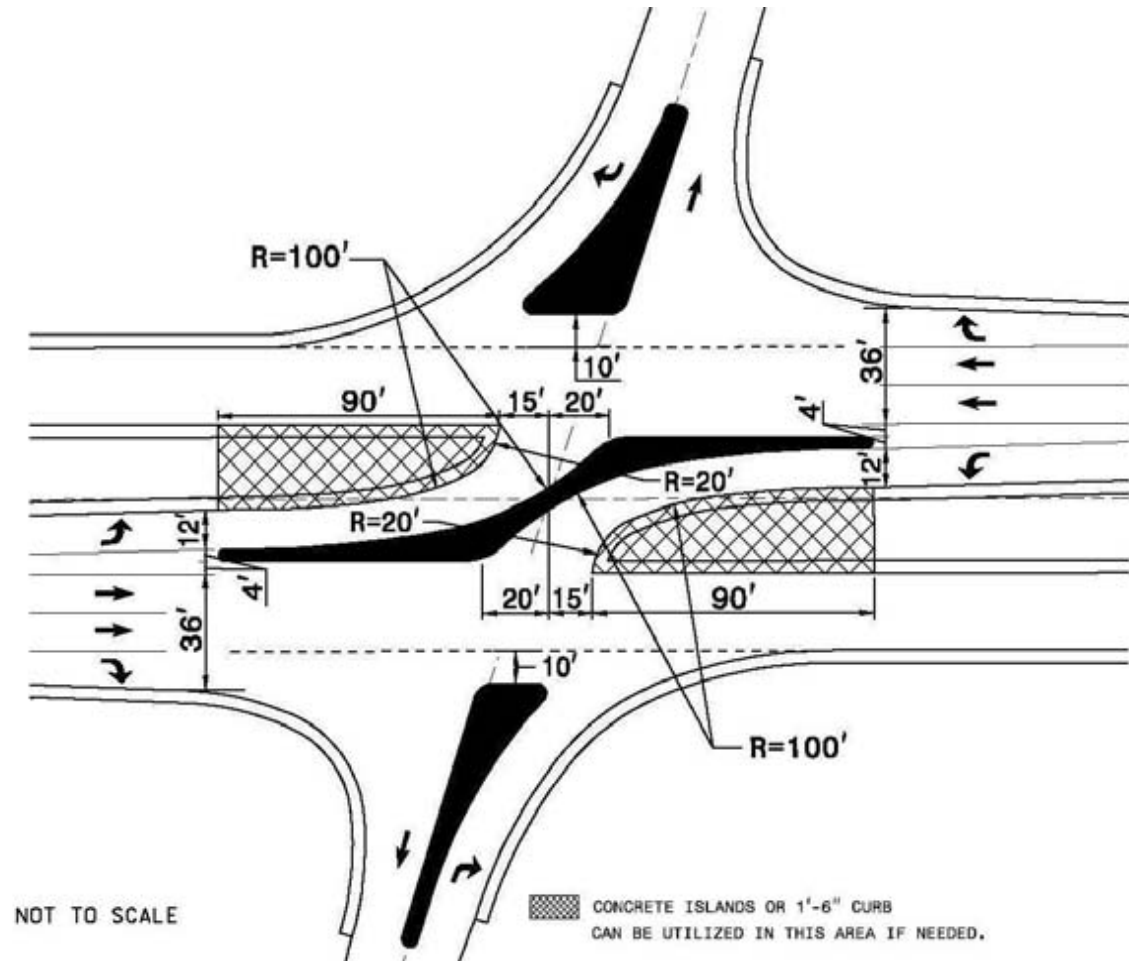
3/4 - Intersection

Crash Reduction Factor

- 25%

Typical Installation Costs

- \$150,000 per location



Access Management

Crash Reduction Factor

- 5% to 31%

Typical Installation Costs

- \$360,000 per mile



Bike Lanes and Boulevards

Crash Reduction Factor

- Approximately 60% (Some studies have noted increases)



Typical Installation Costs

- Repurposing existing road ~\$5,000 per mile
- New Construction of Separated Boulevard ~ \$500,000 per mile



Urbanization (Make it Feel Urban)

Crash Reduction Factor

- Not Available

Typical Installation Costs

- \$500,000 to \$1,000,000 per mile



Dynamic Speed Feedback Sign

Crash Reduction Factor

- 5% - 7% all crashes

Typical Installation Costs

- \$30,000 per location



Sidewalks

Crash Reduction Factor

- Not Available

Typical Installation Costs

- \$5 to \$10 per square foot

