Urban Intersections
Echelon

Crash Reduction Factor
• Not Available

Typical Installation Costs
• $10 to $15 million
Continuous Flow Intersection (CFI)

Crash Reduction Factor
• Not Available

Typical Installation Costs
• $4 to $7 million
Signalized RCUT

Crash Reduction Factor
• Not Available

Typical Installation Costs
• $1 to $5 million
Confirmation Lights

Crash Reduction Factor
• 25% to 84% reduction in violations

Typical Installation Costs
• $1,200 per two approaches
Pedestrian Countdown Timers

Crash Reduction Factor
• 25% vehicle/pedestrian crashes

Typical Installation Costs
• $12,000 per intersection
Leading Pedestrian Intervals

Crash Reduction Factor
• Up to 60% pedestrian/vehicle crashes

Typical Installation Costs
• $600 per intersection
Curb Extensions

Crash Reduction Factor
• Increase in vehicles yielding to pedestrians

Typical Installation Costs
• $36,000 per corner
Center Island Medians

Crash Reduction Factor
• 46% in vehicle/pedestrian crashes

Typical Installation Costs
• $24,000 per approach
Roundabout

Crash Reduction Factor
• 20% to 50% all crashes
• 60% to 90% right-angle crashes

Typical Installation Costs
• $4,200,000 per intersection
Mini Roundabout

Crash Reduction Factor
• 20% to 50% all crashes
• 60% to 90% right-angle crashes

Typical Installation Costs
• $40,000 - 500,000
Urbanization (Make it Feel Urban)

Crash Reduction Factor
• Not Available

Typical Installation Costs
• $250,000 to $500,000 per intersection
Rectangular Rapid Flash Beacon (RRFB)

Crash Reduction Factor
• 75% of drivers yield to pedestrians

Typical Installation Costs
• $15,000
High-Intensity Activated Crosswalk Beacon (HAWK)

Crash Reduction Factor
• 69% Vehicle/Pedestrian

Typical Installation Costs
• $75,000 to $150,000
Crash Reduction Factor

- 19.4% left turn crashes

Typical Installation Costs

- Not Available
Reflective Streetlight Material

Crash Reduction Factor
• 15% reduction

Typical Installation Costs
• $250 per intersection
Turn Lanes (Offset, Channelized)

Crash Reduction Factor

- 27%

Typical Installation Costs

- $150,000 to $500,000
Zig Zag Pavement Markings

Crash Reduction Factor
• Not Available

Typical Installation Costs
• $91,000

Figure 10. Zig-zag Markings at Belmont Ridge Road
Pedestrian Education/ Visibility

Crash Reduction Factor
• Not Available

Typical Installation Costs
• Not Available