Implementation:
Performance measures

Are we measuring what matters?
What should we measure to ensure Complete Streets?

What each mode needs

All travelers seek a similar experience:
- Convenience
- Safety
- Comfort
- Access
- Reasonable travel time
- Low cost
- Reliability
- Speed?

What should the street do for us?
- We need to ask for more than:
  - More pavement
  - More capacity

  What else could we measure?
  - Reduced speed
  - Reduced crashes
  - Increased on-street parking use
  - Increased walking
  - Increased bicycling
  - Decreased noise
  - Increased neighborhood and business satisfaction

Case study: Edgewater Drive (Orlando FL) Resurfacing Project
- Repaving project scheduled by FDOT
- FDOT open to 3-lane option if City takes over jurisdiction
- Changes must be accepted by neighborhood and business associations; city must conduct before/after studies

Before

Concept

Reality: Before
1. Crash rate

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.6</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Reduction: 34%

2. Injury rate

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Reduction: 68%

3. Speeding analysis

<table>
<thead>
<tr>
<th>North End</th>
<th>Middle</th>
<th>South End</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.7%</td>
<td>7.5%</td>
<td>29.5%</td>
</tr>
<tr>
<td>25%</td>
<td>10%</td>
<td>19.6%</td>
</tr>
</tbody>
</table>

4. Traffic volumes

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,500</td>
<td>18,400</td>
</tr>
</tbody>
</table>

5. On-street parking utilization

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>29%</td>
<td>41%</td>
</tr>
</tbody>
</table>
Before/after studies: 6. Pedestrian volumes

![Pedestrian volumes chart](chart1.png)

3% Increase

Before

2,136

After

2,632

Number of Pedestrians

Before/after studies 7. Bicyclist volumes

![Bicyclist volumes chart](chart2.png)

20% Increase

Before

375

After

486

Number of Bicycles

Safety

Slowing traffic improves safety for people walking

![Pedestrian safety chart](chart3.png)

Probability of pedestrian safety

Speed

20mph

30mph

40mph

Pedestrian crashes

88% with sidewalks

69% with hybrid beacon

39% with medians

29% with road conversions

Does the street benefit the community?

Which shopping center do you want in your community?

Does the street design reduce crashes?

![Street design](image.png)
Does the street treat all travelers fairly?

Exercise: What performance measures would suit your community?

Sample performance measures from other workshops

1. Reduced crashes, before and after–vehicle, pedestrians, bicyclists
2. Increase in ped, bike and transit users
3. Adopt and use Level of Service for non-car users
4. Increase in business occupancy rates / increased real estate values
5. Recruit/retain desirable employees
6. Improved air quality
7. Improved health; lower obesity rates
8. Connectivity – sidewalks/bike lanes/transit connect?
9. Are other communities looking to us as a model
10. Acceptance by politicians, funders, builders, all stakeholders
11. Fewer DWI citations – walk from tavern
12. Public opinion surveys – customer satisfaction – quality of life (2)
13. Reduced crime – eyes on the street
14. Land use changes: Promotes infill – reduced trip length
15. Benefit/cost: $ upfront /maintenance - operation, usage