Overview

• Smart Streets
• Before & After Comparison
• Lessons Learned
South Bend in the 1960’s
Before Smart Streets
Before Smart Streets
Before Smart Streets

Main Street

St Joseph St
Before Smart Streets
“Smart Streets” is an effort to improve the role of streets within South Bend. Projects within this initiative utilize the “Complete Streets” philosophy which advocates for the design of streets to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.
Smart Streets Elements

- 1-Way to 2-Way Conversion
- Complete Streets
- Road Diets
- Existing Roadways

SMART STREETS
SOUTH BEND, INDIANA
Why Smart Streets?

• Pedestrian Safety
• Circulation Network Connectivity
  o Reduces out of direction travel distances and motorist confusion
  o Benefits ‘trips serving’ by providing more direct routes to destinations
• Economic Vitality
Where are they?
Smart Streets

Marion St

Michigan St

Bartlett St
Smart Streets
Smart Streets
Smart Streets
Cycle Track
Intersection Transformations
Did it Work?
Traffic Analysis

<table>
<thead>
<tr>
<th>Before Study</th>
<th>After Study</th>
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</thead>
<tbody>
<tr>
<td>2014 Counts</td>
<td>2017 Counts &amp; Analysis</td>
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<tr>
<td>2014 &amp; 2038 Analysis</td>
<td>2017 Analysis</td>
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<tr>
<td>Guided the Design Phase</td>
<td>Retimed Signals</td>
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</tbody>
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- **Before Study**: July 2014 to December 2015
- **After Study**: January 2016 to December 2017

**Timeline**:
- **Design**
  - July 2014 to May 2015
- **Construction**
  - May 2015 to December 2015
- **After Study**
  - January 2016 to December 2017

- Guided the Design Phase
- Retimed Signals
AM Operations

Before

Ewing Ave  Calvert St  Indiana Ave  Broadway St  Sample St
22  21  30  29  28
50  49  48  47  46

Michigan St

After

Ewing Ave  Calvert St  Indiana Ave  Broadway St  Sample St
22  21  30  29  28
50  49  48  47  46

Michigan St

2018 PURDUE ROAD SCHOOL
AMERICAN STRUCTUREPOINT
AM Travel Times (Michigan/MLK)

Speeds: ▲ 7.9 mph
AM Travel Times (Main St)

Speeds: ▲ 11.4 mph
PM Travel Times (Michigan/MLK)

Speeds: ▲ 6.1 mph
PM Travel Times (Main St)

Speeds: ▲ 8.2 mph

[Graph showing cumulative travel time for PM Peak with speeds at various intersections, including Northbound and Southbound routes.]
More Pedestrians & Bicyclists
Lessons Learned
Travel Demand Modeling

One Way Streets

Two Way Streets
Diversion of Thru Trips

Reduced Capacity thru Downtown
= Diversion to Alternate Routes
Traffic Volumes

- TDM did not accurately predict traffic volumes
- 50% Reduction in AADT
- 40%-70% Reduction in Hourly Volumes
Alternate Routes

• Multiple routes to avoid downtown
• No issues identified on these alternate routes

Downtown One-Way to Two-Way Street Conversion
Old Habits (Are Hard to Break)
Old Habits (Are Hard to Break)

Little To No Queues on New NB Route

Lengthy Queues on Former NB Roadway
Construction & Contractual Challenges
Access Issues
Conclusion

Smart Streets was a major success

– Slowed & Calmed Traffic
– Moved Unwanted Traffic Out of Downtown
– Beautified the Downtown
– Lead to Redevelopment Generating over $100 Million in Investment
– Created over 500 Market Based Apartments and Condominiums
– Returned Downtown South Bend to the People