Clybourn Ave.
Protected Bike Lane Study
Halsted St. to Division St.

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• Project Goals
• Existing Roadway Conditions
• Traffic Data/Impacts
• Parking Conditions
• Crash Analysis
• Proposed Changes
• Next Steps
Pilot Study

- IDOT and CDOT pilot project to install and evaluate the first barrier protected bike lanes on a State route
- First use of concrete for physical separation
- Pilot evaluated under IDOT’s Feasibility Study on bicycle and pedestrian facilities.
  - Analyzes safety, operations, and maintenance of various facilities.
Project Goals

- Reduce crashes
- Increase transportation options and balance needs of various roadway users
- Evaluate protected bike lane elements
Existing Roadway Conditions

Roadway Characteristics:

- 1 lane in each direction
- Rush hour parking controls
- On-street parking on both sides
- Wide undefined pavement
- Sidewalk on both sides
- Crosswalks at intersections
- CTA Red Line
- CTA Buses (#37, #70, #132)
- No bike lanes
- Four Divvy Stations
- Defined as a Crosstown Bike Route in the Streets for Cycling Plan 2020
Motor Vehicle Speed Data:
- 65% of Vehicles traveling over 30 MPH Speed Limit
- 85\textsuperscript{th} Percentile Speed – 36 MPH
- 95\textsuperscript{th} Percentile Speed – 39 MPH

Count Data:
- 11,000 vehicles per day
- Over 100 bicyclists in the peak hour
- 60% South-eastbound in AM
- 60% North-westbound in PM
Parking Conditions

0-50% Parking Utilization
51-80% Parking Utilization
81-90% Parking Utilization
91-100% Parking Utilization
• 423 reported crashes in five years (2008 – 2012)
  • 3 Serious Injury crashes
  • 1 Bicyclist Fatality in 2013

Percent of Fatal and Serious Injury Crashes by Mode:

- BIKE/PED: 60%
- VEHICULAR: 40%
KEY INTERSECTIONS AND SEGMENTS:
1. DIVISION TO LARRABEE
2. LARRABEE TO HALSTED
3. DIVISION INTERSECTION
4. LARRABEE INTERSECTION
5. OGDEN INTERSECTION
6. HALSTED TO NORTH
Division to Larrabee Alternatives

**Barrier Protected Bike Lanes**
- Eliminates door zone
- Concrete curb separation at various locations
- Some parking removal required
- Some impacts to loading zones
- Opportunities for drainage improvements
- Pedestrian refuge space

**Buffer Protected Bike Lanes**
- Increased separation between bicyclists and motorists via pavement markings
- Retains more on-street parking spaces
- Does not provide physical protection for bicyclists
- Retains existing curbside access
Division to Larrabee

**Barrier Protected Bike Lanes**

- 43 parking spaces removed (55% of total)
- Maintains three loading zones on east side
- Need to relocate one loading zone on west side
- Handicap loading zone would remain on west side
- Potential for concrete pedestrian refuge space and water infiltration applications
- Improved channelization and guidance for all modes
Division to Larrabee

Buffer Protected Bike Lanes

- 5 parking spaces removed (6% of total)
- Maintains all loading zones
- Provides a striped buffer between motorists and cyclists
- Mitigates conflicts between parked vehicles and cyclists (does not eliminate)
- Maintains existing curbside access
Larrabee to Halsted Concept

Barrier Protected Bike Lanes

- Concrete curb separation at various locations
- Potential for concrete pedestrian refuge space and water infiltration applications
- Parking removed on west side of street
- 42 parking spaces removed (42% of total)
- Improved channelization and guidance for all modes
Parking Offsets

- Removal of rush hour parking restrictions
- Extending parking through non-compliant driveways
- 15 new parking spaces on west side of Larrabee
- 5 new parking spaces on east side of Orleans
Clybourn/Division/Orleans Intersection

- **High Priority**
  - Locations of bicycle signals

- **Low Priority**
  - Intersection Markings
  - Curb Separation
  - Reduced Crosswalk distance
  - Coordinated Traffic Signals
  - High Visibility Crosswalks

CDOT

CHICAGO DEPARTMENT OF TRANSPORTATION
New Dedicated Bicycle Signals

- Improve safety
- Minimize conflicts between bicyclists and right turning motorists
- Increase compliance

Bicyclists entering Intersection on Red Lights

Before Installation: 69% entering on red, 31% not entering on red
After Installation: 10% entering on red, 90% not entering on red
Traffic Signal Phasing on Dearborn

Phase A: Bikes, Thrus
Traffic Signal Phasing on Dearborn

Phase B: Bike Clearance
Traffic Signal Phasing on Dearborn

Phase C: Conflicting Turns and Thrus
Phase D: Vehicle Clearance
Larrabee Intersection

- Curb separated bike lanes
- Intersection markings
- High visibility crosswalks
- New right turn lane
- Restriction of left turns

Illinois Department of Transportation
• Counterintuitive movement
• Design balances Bike, Left Turn, Right Turn Volumes and parking.
• Opportunities to use other streets to access Larrabee
Halsted to North

- Restricting left turns from southbound Clybourn onto southbound Halsted
- Increasing left turn bay onto North Ave
- Parking Removal
- High visibility crosswalks
- Shared-lane markings
- Increased left turn bay
- Left turn bay removal and left turn restriction onto northbound Halsted
- High visibility crosswalks
Next Steps

• Continue Outreach
• Finalize Design
• Construction in Spring / Summer 2015
• After data collection late 2015 / early 2016
• Design modifications if necessary
Questions?

Thank You!

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