Study Area

Cook DuPage Corridor Planning Group

- CMAP
- CTA
- RTA
- Pace
- Metra
- IDOT
- CDOT
- Municipalities

Sponsors:
West Central Municipal Conference
DuPage County Mayors and Managers
Smart Corridors Purpose and Goal

Purpose:
» Improve travel for all modes (vehicles, freight and transit) through low cost operational/ITS solutions

Goal:
» Evaluate and prioritize the candidate corridors (45) and select four for implementation and pilot projects
Potential ITS and Operational Improvement

Traffic Management
  » Enhanced detection – Arterial Travel Times
  » CCTV cameras
  » Corridor signal coordination
  » Corridor-wide management
  » Work zone coordination
Potential ITS and Operational Improvement

- Improved Traveler Information
  - Arterial Dynamic Message Signs
  - Earlier dissemination and information sharing between agencies – GoRoo/Travel Midwest
  - Parking availability at park and ride lots
  - Improved freeway, arterial and transit traveler information (pre-trip and en-route)
  - Enhance mobile platform information
Potential ITS and Operational Improvement

- **Incident Management**
  - Reduced incident clearance times
  - Incident signal retiming for arterials

- **Transit Management**
  - Arterial TSP
  - Roadside next bus arrival systems
  - Smart parking system
  - Special events coordination
Project Process
4 Steps to Reach Preliminary Design Stage

1. IDENTIFY CORRIDOR LIMITS
   - Purpose: Ensure all corridors are logical candidates for Smart Corridor designation.
   - Decision Factors:
     • Roadway network
     • Transit locations
     • Key nodes

2. PRIORITIZE ALL CORRIDORS (45)
   - Purpose: Rank corridors based on evaluation criteria to identify strong candidates.
   - Decision Factors:
     • Evaluation Criteria
     • Data Collection

3. CORRIDOR CHARACTERISTIC DIAGRAMS (6-10)
   - Purpose: Understand detailed potential benefits and impacts of strong candidates.
   - Decision Factors:
     • Operational Review
     • Tech Committee Guidance

4. SELECT SMART CORRIDORS (4)
   - Purpose: Identify best Smart Corridor candidates for preliminary design.
   - Decision Factors:
     • Technical Review
     • Tech Committee Guidance

Phase 2
CONCEPTUAL DESIGN
- Purpose: Generate conceptual design plans for each selected corridor.
- Including:
  • Concept of Operations
  • Assessment of Existing Conditions
  • Technology Scan
  • Draft MOUs
  • Concept Plans
Evaluation Criteria

- Length of Corridor
- Traffic Volume
- Population & Employment Density
- Transit Performance
- Corridor Connections
- Travel Market Linkages
- Congestion
- Corridor of Significance
- Existing ITS Infrastructure
- Safety
- Truck Route
Scoring Example – Des Plaines River Road

Travel Market Linkages | Traffic Congestion | Density | Traffic Volumes | Transit Performance | Safety | Length | Existing ITS Infrastructure | Truck Route
---|---|---|---|---|---|---|---|---
High | High | Medium | Medium | High | High | High | High | Medium
Low | Medium | Medium | Medium | Low | Low | Low | Low | Low
Base | Low | Low | Low | Base | Base | Base | Base | Low

Total Score

15% 15% 15% 10% 10% 10% 9% 5% 5% 5% 2.5%
# Results Table – Top Scorers

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**Decision Support Materials**

**Prioritization Results**

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Note: NE = North/South or East/West (N: North/South; E:East/West), H-High, M-Medium, L-Low, B-Baseline

**Flyovers Video**

“9 Corridors in 9 Minutes”

**Corridor Descriptions**

**Harlem Avenue**

Description: The Harlem corridor as it is defined is the longest north-south corridor, running from Fifth Avenue to 189th Street. It varies in character several times during its length. The corridor begins at a disturbed interchange with the Normandy Expressway and continues south through mixed residential and commercial areas in Bridgeport. The corridor passes through the harbor and the commercial areas near the harbor. The corridor continues south through mixed residential and commercial areas in Bridgeport. The corridor passes through the harbor and the commercial areas near the harbor.

**Corridor Characteristic Diagrams**
Final Results – Phase I

Technical Committee came to consensus on 4 corridors for advancement to the design phase

» Cermak/22nd/Butterfield
» Harlem Avenue
» North Avenue
» Roosevelt Road
Phase II – Conceptual Design

Products

» Assessment of Existing Conditions
» Concept of Operations/ Functional Requirements
» Technology Scan
» Concept Design Plan Documents
» Maintenance/Operational Plan

Partnered with Jacobs Engineering

Funding pending