

DESIGNING BETTER PEDESTRIAN CONNECTIONS TO TRANSIT: A case study of the Chicago metropolitan area



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INTRODUCTION

- This project comprises working in coordination with Pace-Suburban Bus Service of Chicago. Pace serves 284 municipalities and is the backbone of Chicago's suburbs.
- The agency is working towards enhancing network, accessibility, and innovative programs to improve mobility.
- Background of the research project is "Barriers in Pedestrian Infrastructure."

METHODOLOGY

Using base study of site audits conducted as a part of transportation workshop, my project work evolved in four stages:

- Reviewing all parts of base research and documentation.
- Case study review of UTA's First/Last Mile Strategies document, RTA's pilot programs of first/last mile solutions.
- GIS analysis of study area.
- Developing visualization of recommendations based on analysis.

EVALUATIVE FRAMEWORK

- This project helps to synthesize an understanding of transportation solutions in the suburban context.
- The presence of socio-demographic analysis through GIS analysis, as well as through synthesis of recommendations, puts equity lens as a critical component for designing better pedestrian infrastructure.
- Broadly, the results of this research can serve as a guide for other suburban transit agencies that may be facing similar barriers, and to the municipal bodies in the Pace service area for implementation at a broader scale.

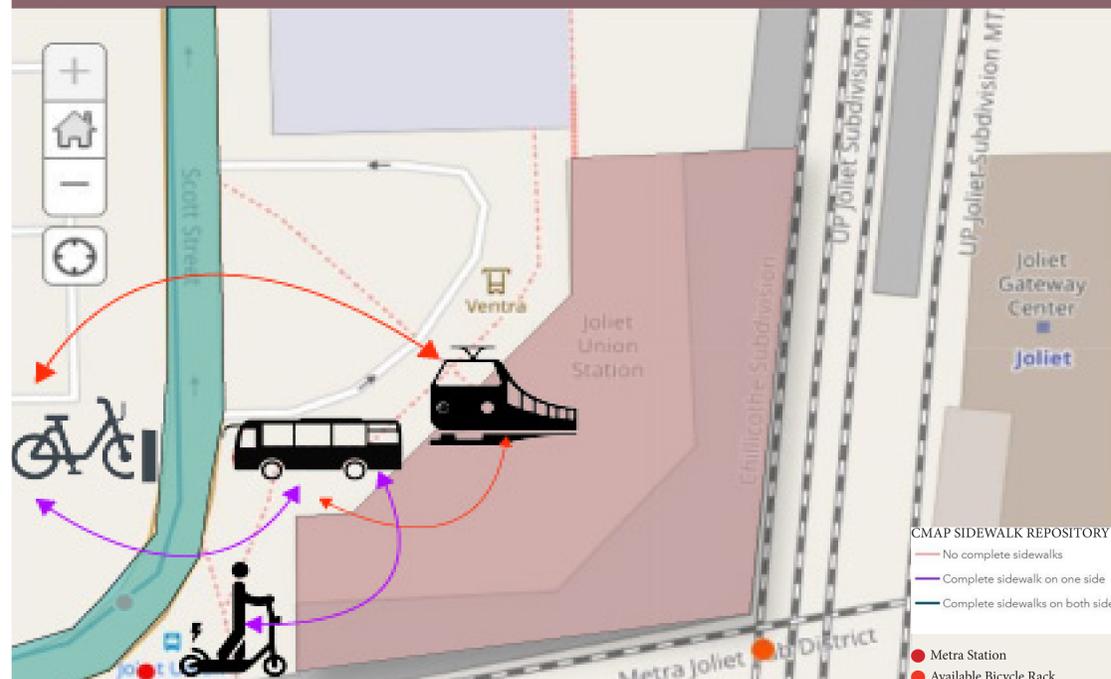
CHALLENGES IN PEDESTRIAN IMPROVEMENT

- Funding, the lack of consolidation in dedicated funding programs becomes challenging for pedestrian network improvement.
- Coordination between transit agency and local government.
- Lack of consistency in developing pedestrian plan - very few cities in region had a pedestrian plan.
- Lack of contextual guidelines for pedestrian improvements. Pace serves a wide geographic scope, the presence and conditions of bus stops is not uniform.

RECOMMENDATIONS

The project aims to work out options for the study area by recommending design suggestions for better transit connections in the audited cities of the region. This is a significant barrier in infrastructure and can improve ridership a accessibility issues.

Fig. 1 Neighborhood level, possible shared mobility - Joliet



Shared mobility options can be worked out, along several Pace routes, especially with the presence of Metra transit stops and present/possible bike racks. It supports transit use, opens up more land for parks and public spaces.

- Improvements help in users' health by encouraging biking and walking
- This recommendation ties with the first/last mile connectivity.
- These mobility options will support Pace rider's connectivity to their origin and destinations as well as efficiency in services.

POSSIBLE IMPROVEMENTS

The possibilities of improving pedestrian infrastructure of Pace bus stops and adjacent infrastructure, can help commuters wait for the bus in harsh weather conditions. On-street stations improvements can be critical features in more substantial traffic calming projects.



Fig. 2 View from site audit



Fig. 3 Visualization of improvement, based on NACTO guidelines