Many countries, cities, and communities have recently set out new policy frameworks to support growth of non-motorized transportation, creating multimodal environments. This project examines the repurposing and redesigning of Central Ave. SE as a primary route for cyclists into downtown Minneapolis. Focusing on safety for cyclists, the research presented looks at the cyclist in a multimodal environment – more specifically, road design and connection characteristics, through a discursive approach. Central Ave. SE in Minneapolis can be repurposed to emphasize cyclist safety as one component of a multimodal network to increase non-motorized transportation to and from the central business district, and reconnect the east and the west river banks across the Mississippi river.

What is causing crashes?

Safety is the number one factor discouraging people from cycling. Bicycle infrastructure impacts the safety of cycling by two means; by making cycling a more attractive and comfortable choice and secondly by providing a physical protection against other means of traffic. To understand safety at its core analyzing crash causes will help determine design features that can positively impact urban cyclist’s safety.

### Traffic Volumes

- **Bus Routes**
- **Cyclists Corridor Crash Rates**
- **Intersection crash rates**

<table>
<thead>
<tr>
<th>Crash Cause</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>43% No Clear Factor</td>
<td></td>
</tr>
<tr>
<td>13.5% Failure to Yield Right-of-Way</td>
<td></td>
</tr>
<tr>
<td>Disregarding a Traffic Control Device</td>
<td>13%</td>
</tr>
<tr>
<td>Improper Lane Use</td>
<td>9%</td>
</tr>
<tr>
<td>Cyclist Inattentive</td>
<td>5%</td>
</tr>
<tr>
<td>Non-Motorists Error</td>
<td>5%</td>
</tr>
<tr>
<td>Failure to Use Headlights</td>
<td>1.8%</td>
</tr>
<tr>
<td>Other</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

### Repurposing Central Ave. SE: A Multimodal Urban Cyclist Corridor

**Inventory & Analysis**

**Site Context**

![Site Context Diagram](image-url)

**Intersection crash rates**

- 46% Across Roadway
- 30% With Traffic
- 15% Against Traffic
- 3% Making Left Turn
- 2% Slowing, Stopping, or Starting in Traffic
- 1% Making Right Turn
- 3% Other
Deck overlook capturing historical views of Nicollet Island and the Mill City river front

COMPLETE STREET BRIDGE CROSSING across the Mississippi River for non-motorized vehicles

Deck overlook towards St. Anthony Falls

One way streets will be developed on 2nd St. SE, University SE, and 4th St. SE for functionality purposes through the multimodal corridor. One main reason for development of the one way streets is for motorist traffic into the site and for access to a crossing across the Mississippi river.

East Hennepin bridge

Overhead arch

Statue signifying the beginning of the multimodal corridor
BRIDGE CROSSING BASE MAP

- Public transportation/ Emergency vehicle Lane
- Cyclist Dismount Zone
- Arch Canopy above Bike Lanes
- Benches
- Grassland Bike Rack
- Native Grass Plantings
- Bike Lanes
- Native Grassland Tree Plantings
- Deck overlook of St. Anthony Falls
COMPLETE STREET BASE MAP

- Public Parking Zones
- Grassland Median Plantings
- Two-Lane, One-way Street
- Bike Rack
- Bus Stop Zone
- Storefront Zone
- Four-Lane, Two-way Bike Lanes

Scale 1" - 20'
BRIDGE CROSSING Section

BRIDGE CROSSING Perspective