North End Roadway Safety Analysis
Project Number T-7243

Need and Purpose

This study will evaluate potential crash reduction mitigation measures and make recommendations to implement the most cost-effective solutions to improve safety and increase mobility for all users in the North End area of Sandy Springs.

1.0 NEED

Introduction

The North End Roadway Safety Analysis study area consists of four roadway corridors located in the north side of Sandy Springs. The City of Sandy Springs identified fourteen intersections and one roadway segment in the four roadway corridors that have experienced higher than normal number of vehicular crashes from 2016 to 2020. Based on an analysis performed by the City staff with 2017 crash data, these intersections were ranked between third highest (Northridge Road at SR 400 southbound ramps) to 137th highest (Hope Road at Roswell Road) crash locations in the City. These intersections and roadway segments include:

1. Roswell Road Corridor
   a. Northridge Road at Roswell Road
   b. Roswell Road – Street Address Numbers 8331-8386
   c. Northridge Parkway at Roswell Road
   d. Hightower Trail at Roswell Road
   e. Hope Road at Roswell Road
   f. Huntcliff at Roswell Road

2. Dunwoody Place Corridor
   a. Dunwoody Place at N River Drive
   b. Cedar Run at Dunwoody Place
   c. Dunwoody Place at Roberts Drive
   d. Dunwoody Place at Hightower Trail
   e. Dunwoody Place at Northridge Parkway

3. Northridge Road Corridor
   a. Colquitt Road at Northridge Road
   b. Northridge Road at SR 400 S
   c. Northridge Road at SR 400 N

4. Roberts Drive
   a. Pride Place at Roberts Drive

Crash History

There were 1,293 crashes located at the above high crash areas during the five calendar years between 2016 and 2020. This number would likely have been higher if traffic volumes had not significantly dropped
in 2020 due to COVID-19 impacts. The total number of crashes by year along with the percentage change between years are listed in Table 1 on the following page.

Table 1: North End Roadway Analysis Study Corridor Crashes between 2016 and 2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Crashes</th>
<th>Percentage Change</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>328</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>327</td>
<td>-0.3%</td>
<td>Minimal Change</td>
</tr>
<tr>
<td>2018</td>
<td>264</td>
<td>-19.3%</td>
<td>Less than 2016 &amp; 2017</td>
</tr>
<tr>
<td>2019</td>
<td>279</td>
<td>5.7%</td>
<td>Trending back to previous high numbers of crashes in 2016 &amp; 2017</td>
</tr>
<tr>
<td>2020</td>
<td>95</td>
<td>-65.9%</td>
<td>Significant reduction due to COVID-19</td>
</tr>
</tbody>
</table>

Source: Georgia Electronic Accident Reporting System (GEARS), Crashes 2016 – 2020, December 2021

Between 2016 and 2020, there were also twenty-four crashes reported involving pedestrians in the study corridors (fortunately none that were fatal), but no crashes involving bicyclist were reported. The absence of reported crashes involving bicyclists may be an issue with the GDOT Numet ric crash database. The locations of these pedestrian crashes are illustrated in Exhibit 1 below. The severity of each crash is also illustrated in Exhibit 1. The severity crash scale ranges between K (fatal injury) to O (no injury) with intermediate severities rated between A and C. Severity rating of A, which there was one crash, being the most severe non-fatal injuries.

Exhibit 1: North End Roadway Analysis Study Corridor Pedestrian Related Crashes (2016 – 2020)

Source: Georgia Department of Transportation Crash Data Portal (Numetric), Crashes 2016–2020, January 2022
Daily Traffic Volumes

Most of these study corridors are heavily traveled and experience severe congestion during the weekday peak periods in the morning and evening. Annual average daily traffic volumes recorded in 2020 at various GDOT count stations range between 2,270 vehicles per day on Hightower Trail, west of Dunwoody Place and 28,000 vehicles per day on Roswell Road, north of Northridge Parkway (see Exhibit 2 below).

Exhibit 2: North End Roadway Analysis Study Corridor Annual Average Daily Traffic Volume - 2020

Source: Georgia Department of Transportation Traffic Analysis & Data Application (TADA) 2020, January 2022
2.0 PURPOSE

Potential Solutions

The number of future crashes may be reduced by implementing cost effective transportation improvements in these corridors. These improvements could improve safety and mobility for all users (motorists, transit patrons, pedestrians and bicyclists). Some of the types of improvements that will be considered are intersection control modifications/turn restrictions, roadway widening/turning lane improvements, signing/pavement marking enhancements, access control modifications, signal phasing/timing modifications, mid-block pedestrian crossings, pedestrian refuge islands, highway/pedestrian level lighting, traffic calming features, sidewalk/multi-use path enhancements, and transit stop enhancements.

Ultimately, the goal of this study is to develop recommendations for the North End area to create a safe, convenient and comfortable environment for people on two feet, two wheels, or behind the wheel. Effective transportation improvements and safe modal choices will result in healthy return on investment by encouraging reinvestment by the development community.