Introduction
The purpose of the Mobility Master Plan is to develop a long-range plan that casts a vision for future transportation investment for people who walk, drive, bike, ride, or roll in and around the City of Boerne. A key component of the plan is to not only ensure the implementation not only improves mobility but improves the safety of those users.

The purpose of the Safety Action Plan is to serve as a supplemental resource to the Mobility Master Plan to highlight safety concerns within the City of Boerne and prioritize those projects that improve safety for all users navigating throughout the City of Boerne.

Tracking Progress
Project implementation will be monitored by a committee appointed by City Council that will receive annual reports on the progress made in implementing projects to coincide with annual budget and CIP processes. Once projects are implemented, performance will be measured utilizing the Texas Department of Transportation’s (TxDOT) Crash Records Information System (C.R.I.S.), which reports traffic incidents monthly including crash type, crash date, crash time, crash severity, weather conditions, lighting conditions, contributing factors, and more. Performance will compare 6 months of crashes after construction is complete for a project with 6 months of data prior to commencement of construction to compare crash rates and types and avoid analysis of construction-related incidents.
Safety Analysis
A city-wide safety analysis was performed by evaluating historical crash data for the most recent five-years of available data from 2017 to 2021. Crash data was obtained from the Texas Department of Transportation’s (TxDOT) Crash Records Information System (C.R.I.S.) which includes crashes reported on and off system. During this five-year period, a total of 2,456 crashes were reported within the City of Boerne, an average of 491 crashes per year.

2,456 TOTAL CRASHES
FROM 2017 TO 2021

Of the 2,456 crashes reported, approximately 80% where vehicular crashes only. Approximately 81% of crashes resulted in no injuries, whereas 1.5% and less than 1% resulted in serious and fatal injuries, respectively.

CRASH SEVERITY

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Injured</td>
<td>1,986</td>
<td>81%</td>
</tr>
<tr>
<td>Possible Injury</td>
<td>241</td>
<td>10%</td>
</tr>
<tr>
<td>Suspected Minor Injury</td>
<td>180</td>
<td>7%</td>
</tr>
<tr>
<td>Suspected Serious Injury</td>
<td>33</td>
<td>1.5%</td>
</tr>
<tr>
<td>Unknown Injury</td>
<td>11</td>
<td>0.5%</td>
</tr>
<tr>
<td>Fatal Injury</td>
<td>5</td>
<td>0%</td>
</tr>
</tbody>
</table>

Contributing factors such as surface conditions, lighting, and weather conditions were evaluated over the five-year period. Approximately 9% of crashes occurred during times of inclement weather such as rain, snow, sleet, or fog. Approximately 14% of all crashes occurred under dark conditions and of those 14%, 53% occurred in areas that lacked roadway or intersection lighting.

CRASH TYPE

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle</td>
<td>1,967</td>
<td>80%</td>
</tr>
<tr>
<td>Fixed Object</td>
<td>284</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>98</td>
<td>4%</td>
</tr>
<tr>
<td>Animal</td>
<td>41</td>
<td>2%</td>
</tr>
<tr>
<td>Overturned</td>
<td>33</td>
<td>1%</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>21</td>
<td>1%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>12</td>
<td>0%</td>
</tr>
</tbody>
</table>

Crash Severity By Mode

- Not Injured: 83%
- Minor Injury: 9%
- Serious Injury: 38%
- Fatal Injury: 52%

Vehicle

- Vehicular Crashes: 82%
- Fixed Object: 17%
- Other: 0%
- Animal: 0%
- Overturned: 0%
- Pedestrian: 0%
- Bicycle: 0%

Bicycle

- Vehicular Crashes: 83%
- Fixed Object: 0%
- Other: 0%
- Animal: 0%
- Overturned: 0%
- Pedestrian: 0%
- Bicycle: 83%

Pedestrian

- Vehicular Crashes: 38%
- Fixed Object: 0%
- Other: 0%
- Animal: 0%
- Overturned: 0%
- Pedestrian: 52%
- Bicycle: 0%
Safety Analysis
A geospatial analysis of the 2,456 crashes reported from 2017 to 2021 was performed to identify the locations where crash frequency and severity was the highest as shown below. While some corridors and intersections were able to be identified as higher density locations, the frequency of crashes appear to be consistent throughout Boerne.

Corridors within the City of Boerne that exhibited the highest frequency of crashes occurred primarily on TxDOT facilities and include:
- Interstate 10
- Johns Road
- E Blanco Rd
- Main St
- River Rd
- Esser Rd

Corridors that exhibited the highest frequency of bicycle and/or pedestrian crashes included:
- Blanco Road
- Main Street
- School Street
Engagement and Collaboration
The Mobility Master Plan was developed with continuous public engagement and collaboration to ensure the needs and desires of the community were reflected in the plan. A combination of in-person and virtual public engagement methods were employed to maximize public participation throughout the process. To complement these public engagement efforts, an Advisory Committee was formed to serve as representatives from the community to provide additional insight into the needs and desires of the community as well as to review and provide feedback on recommended projects. Committee members included representatives from City of Boerne Council, City of Boerne Planning and Zoning Commission, Boerne Independent School District, Texas Parks and Wildlife, and Cibolo Nature Center.

Throughout the development of the Mobility Master Plan, two open houses were held. Open House I was held on Thursday, March 3, 2022 to introduce the goals and objectives of the Mobility Master Plan, present existing conditions, and gather input from the community on perceived concerns, needs, and desires on mobility within the City of Boerne. Geospatial safety analysis was presented at this Open House. Open House II was held on Tuesday, May 17, 2022 to present the recommended bicycle and pedestrian, intersection, and roadway projects and obtain input from the community. Prioritization criteria and results for projects, including safety criteria, were presented at this Open House. In addition to the open houses, all information available at each open house was available on the project website for public review and comment throughout the duration of the process.

In addition, a business stakeholder meeting was held on Thursday, March 8, 2022 to engage local business owners to introduce the plan and obtain input on concerns, needs, and desires for mobility within the City of Boerne. Attendees were encouraged to stay engaged throughout the remainder of the process.

During engagement, safety concerns expressed by the community included a lack of connectivity for bicycle and pedestrian users and specific safety hazards at key congested intersections.

For more information regarding the engagement process, see Chapter 4 of the Mobility Master Plan.
Project Selection
Projects were developed in three categories: Bicycle and Pedestrian, Intersection, and Roadway. Within each of these categories, projects were ranked based on several categories, one of which was safety. As a result of projects being ranked on several categories, projects with the highest safety need did not consistently rank high across all categories. Therefore, a safety prioritization matrix was developed to rank projects solely on their need and potential for safety improvement as a supplemental resource to the Short-Term Capital Improvement Plan presented within the Mobility Master Plan. Projects ranked by safety improvement potential are shown below. For project descriptions, see the Short-Term Capital Improvement Plan provided in Chapter 7.

In addition to projects, some safety strategies identified to be implemented City-wide include conversion of permissive left turn signals to flashing yellow arrows, restriping crosswalks with high-visibility markings, implementation of safety lighting where lacking on existing overhead power poles and signals, and enhancing mid-block pedestrian crossings with pedestrian hybrid beacons or rectangular rapid flashing beacons, as has recently been implemented in a PHB on the Old No. 9 Trail. Projects are planned to be implemented as part of the annual CIP budget process and as funding becomes available, but is not programmed at this time into any budgets.

Prioritized Safety Project List: Bicycle and Pedestrian Projects

1. South Main Street at River Road Sidewalk Reconstruction
2. Johns Road Shared Use Path
3. Esser Road Shared Use Path
4. South Plant Avenue Bike Lane
5. Rosewood Avenue Bike Lane
6. Old No. 9 Greenway Connection
7. Cibolo Creek Trail Extension 1
8. Old No. 9 Greenway Extension 4
9. Rosewood Avenue Bike Lane
10. Old No. 9 Greenway Extension 2
11. Cibolo Creek Trail Extension 3
12. Currey Creek Trail Extension 1
Project Selection

Prioritized Safety Project List: Intersection Projects

1. River Road & Herff Road/Esster Road Turn-Lane Improvements (Short-Term)
2. River Road & Herff Road/Esster Road Intersection Improvements (Long-Term)
3. Charger Boulevard & SH 46 Turn-Lane Improvements
4. Main Street & Bandera Road Intersection Improvements
5. Main Street & River Road Intersection Improvements
6. Main Street & Blanco Road Traffic Signal Improvements
7. Scenic Loop Road & Cascade Cavern Traffic Signal Installation (Committed)
8. Main Street & School Street Roundabout
9. Old San Antonio Road & Herff Road Intersection Improvements
10. Main Street & Herff Road Turn-Lane Improvements
11. Sisterdale Cutoff & Adler Street Intersection Improvements (Short-Term)
12. Sisterdale Cutoff & Adler Street Roundabout (Long-Term)
13. Esster Road & Blanco Road Traffic Signal Improvements (Short-Term)
14. School Street & Johns Road Roundabout
15. Copper Creek/Esperanza Boulevard & SH 46 Intersection Improvements
16. Esster Road & Blanco Road/Bentwood Drive Roundabout (Long-Term)
17. Old San Antonio Road & Cascade Cavern Roundabout (Committed)
18. Esster Road & Adler Street Roundabout (Long-Term)
19. Esster Road & Adler Street Turn-Lane Improvements (Short-Term)
20. Main Street & Johns Road Turn-Lane Improvements
Project Selection

Prioritized Safety Project List: Roadway Enhancement Projects

1. River Road Corridor Study
2. Main Street Corridor Study
3. Esser Road Restriping
4. School Street Corridor Study
5. Scenic Loop Road Widening
6. Johns Road Widening
7. Adler Street Widening
8. W Blanco Road Reconstruction
9. Ranger Creek Road Widening
10. Old San Antonio Road Widening
11. Parkway Drive Reconstruction
12. Cascade Cavern Widening
13. Upper Cibolo Creek Road Widening
14. W Kronkosky Street Reconstruction
15. N Shooting Club Road Reconstruction
16. Cascade Cavern Improvements
17. Coughran Road Realignment and Widening
18. Johns Road Realignment and Widening