

THE CITY OF GOWER
VISION ZERO SAFETY ACTION PLAN

JUNE 2024



A NICE PLACE TO MAKE HOME

THE CITY OF GOWER IS COMMITTED TO IMPROVING TRANSPORTATION SAFETY

The City of Gower is committed to maintaining zero roadway fatalities and eliminating serious roadway injuries within its city limits. The City Council passed the Vision Zero resolution in May 2020 and pursued the Safe Streets and Roads for All grant to develop a Safety Action Plan to study current conditions, identify areas of need, and develop solutions to improve transportation systems in the city to achieve its goal. Mo-Kan Regional Council was hired to develop the plan for their extensive knowledge of transportation planning. The plan identifies the dangers of US Highway 169 and a need to improve the walkability of the city with projects to address these concerns.



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INTRODUCTION



The City of Gower is committed to improving transportation safety to eliminate death and serious injury that result from incidents on our roads and streets by 2033. This plan tells the story of transportation risks, safety data, and strategies to improve safety in our city. We will address the need for alternate modes of transportation such as pedestrian and non-motorized means. We also seek to improve our culture of knowing our neighbors and caring for each other in a shared community. We will address the need for developing trails and walkways to traverse town while avoiding the heavy traffic areas of the US Highway which bisects our city. We seek to assure safe transit between homes and schools for our children. We will implement guidelines to enforce that walkways are required as part of any future development within the city. Implementation of the plan will improve transportation safety for the city, its people, and its visitors. As part of an ongoing effort to make safety improvements, this Vision Zero Plan was developed with input from a diverse committee of safety partners and community stakeholders. The ultimate goal that will result from the implementation of this plan is zero deaths and serious injuries on our roadways.

VISION

To have a network of roads, streets, and healthy pathways allowing access to all that our community has to offer, allowing all to reach their destination safely

MISSION

Eliminate fatal and serious injuries resulting from traffic crashes, making decisions based on our ability to reach zero deaths on Gower's roads, streets, and pathways

GOALS

- Reduce exposure between types of transit; pedestrian, bicycle, passenger vehicle, and freight
- Increase education and awareness of risks
- Build infrastructure to support pedestrian traffic throughout the community
- Pass statutes that incorporate safe passage and transit in city planning and development

COMMITTED TO A CULTURE OF ROAD SAFETY

In 2010, due to a vehicle-pedestrian fatality just outside of city limits, the community lost a well loved and respected leader, teacher, neighbor, family member, church member, and friend. From this tragedy, the community became committed to a culture of road safety to avoid having to suffer similar grief and tragic loss again. Recognizing the risk of pedestrian fatalities and injuries, local government officials of the City of Gower collaborated with officials from the local school district to establish safer practices for school bus loading and unloading. A previous public road was relinquished to the school district. This road was blocked off to isolate a safe loading and unloading zone. The City of Gower received a Transportation Alternative Program grant in 2022 to add ADA compliant sidewalk improvements along the storefronts of its downtown to assure pedestrians have equal and safe access to community resources. In May 2020, City Council passed the Vision Zero resolution to eliminate traffic fatalities and serious injuries on our streets by 2033, while increasing safe, healthy, and equitable mobility for everyone. A draft Road Safety Plan was presented in May 2022, but required additional refinement to be eligible for federal grant dollars towards implementation projects to improve roadway safety.



PLAN DEVELOPMENT PROCESS



Utilizing grant funding through the Federal Highway Administration (FHWA) Safe Streets and Roads for All (SS4A) program, the City of Gower was able to hire a Community Development Planner from Mo-Kan Regional Council to facilitate the development of a Vision Zero Plan. The Vision Zero Planning Committee, formed by representatives of stakeholders in the community, met monthly to discuss and develop the plan. Data was collected by the GIS Specialist at Mo-Kan Regional Council using available national safety and demographic data as well as Local Law Enforcement data to identify the specific safety concerns of the community. City officials and Mo-Kan Regional Council's Transportation Planner assessed current street and sidewalk conditions and analyzed potential areas for recreational trail and safety improvements through the city. Public meetings were held, and a survey was distributed to community members. The results of the survey were analyzed and included in the plan along with feedback from the public. A public review of the plan was conducted, and the plan was adopted by the city with plan maintenance scheduled on a five-year basis to assure the plan is up to date and measurable goals are actively being achieved.

ACTION PLAN COMPONENTS

01



LEADERSHIP COMMITMENT & GOAL SETTING

An official public commitment (e.g. a resolution, policy, ordinance, etc.) to an eventual goal of zero roadway fatalities and serious injuries. The commitment must include a goal and timeline for eliminating roadway fatalities and serious injuries.

02



PLANNING STRUCTURE

A committee, task force, implementation group, or similar body charged with oversight of the Action Plan development, implementation, and monitoring.

03



SAFETY ANALYSIS

Analysis of existing conditions and historical trends that provides a baseline level of crashes within the designated area. Includes analysis of locations and contributing factors and crash types by relevant road users. Analysis of systemic and specific needs is also performed. To the extent practical, the analysis should include all roadways within the area without regard of ownership. Based on the analysis performed, a geospatial identification of higher-risk locations is developed.

04



ENGAGEMENT & COLLABORATION

Robust engagement with the public and relevant stakeholders, including the private sector and community groups, that allows for both community representation and feedback. Information received from engagement and collaboration is analyzed and incorporated into the Action Plan.

05



EQUITY CONSIDERATIONS

Plan development using inclusive and representative processes. Underserved communities are identified through data and other analyses in collaboration with appropriate partners. Analysis includes both population characteristics and initial equity impact assessments of the proposed projects and strategies.

ACTION PLAN COMPONENTS

06



POLICY & PROCESS CHANGES

Assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize transportation safety. The Action Plan discusses implementation through the adoption of revised or new policies, guidelines, and/or standards, as appropriate.

07



STRATEGIES & PROJECT SELECTION

Identification of a comprehensive set of projects and strategies, shaped by data, the best available evidence and noteworthy practices, as well as stakeholder input and equity considerations, that will address the safety problems described in the Action Plan. These strategies and countermeasures focus on a Safe System Approach, effective interventions, and consider multidisciplinary activities. To the extent practical, data limitations are identified and mitigated.

Once identified, the list of projects and strategies is prioritized in a list that provides time ranges for when the strategies and countermeasures will be deployed. The list should contain interventions focused on infrastructure, behavioral, and/or operational safety and provide and explanation of prioritization criteria used.

08



PROGRESS & TRANSPARENCY

Method to measure progress over time after an Action Plan is developed or updated, including outcome data. Means to ensure ongoing transparency is established with residents and other relevant stakeholders. Must include, at a minimum, annual public and accessible reporting on progress towards reducing roadway fatalities and serious injuries, and public posting of the Action Plan online.



VISION ZERO PLANNING COMMITTEE

The Vision Zero Planning Committee was formed by representatives of the City of Gower, health and safety professionals, transportation planners, and local stakeholders. Special interest was paid to the needs of the East Buchanan School District as student safety was the number one priority of the community in developing the plan. Public participation was solicited through public forums and community surveying with special interest focused on underserved populations.



KEN PIKE

City of Gower, Mayor



PAUL POTTIER

City of Gower, Streets
Commissioner



TREVOR TUTT

Mo-Kan Regional
Council, Executive
Director



EVAN BANKS

Mo-Kan Regional
Council, Transportation
Planner



LILY CLAJUS

Mo-Kan Regional
Council, GIS Specialist



JOSÉ RODRIGUEZ

MoDOT, Area Engineer

VISION ZERO PLANNING COMMITTEE

Monthly meetings of the Vision Zero Planning Committee were held to direct the development of the Vision Zero Safety Action Plan with updates from the community, presentations on proven safety countermeasures and transportation safety related items, and data analysis. Student representation was solicited to gain an insight into the needs of East Buchanan students from their own perspective. The Vision Zero Planning Committee hosted a public forum on February 29, 2024 to gain public feedback and participation.



ADAM HILL

City of Gower, Chief of
Police



JESSICA ROE

Gower Fire Protection
District



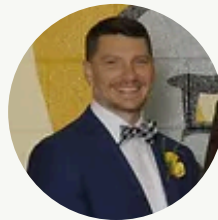
AMY ADAMS

East Buchanan School
District



LINDEE HORN

East Buchanan School
District



JESSE FISHER

East Buchanan School
District, School Board

DATA ANALYSIS & SUMMARY

Mo-Kan Regional Council, as a Regional Planning Commission in the State of Missouri, collaborates with the Missouri Department of Transportation (MoDOT) in transportation planning in their region. As such, Mo-Kan transportation planners have access to transportation data, utilizing Geographic Information Systems (GIS) to develop maps, charts, and tables to articulate the findings of said data, in the development of transportation plans. The following chapter will list the current transportation conditions and concerns in the City of Gower.

INVENTORY OF STREETS, ROADS, & HIGHWAYS WITHIN THE CITY OF GOWER

There are forty-five (45) roadways in the City of Gower for a total of 11.72 miles of road and 3.02 miles of sidewalks. As such, only twenty-six percent (26%) of Gower’s roadways have accompanying sidewalks. Nearly three fourths (3/4) of the city’s roadways have no means for pedestrian traffic to safely traverse without competing for space with vehicles on the roadway.

Street Name	Length (miles)	Sidewalk (miles)	Street Name	Length (miles)	Sidewalk (miles)
US Highway 169	1.5	0.11	4th Street	0.70	0.44
State Route H (Hallar)	0.44	0.44	3rd Street	0.64	0.52
State Highway DD	0.11		2nd Street	0.48	
County Line Road	0.70		1st Street	0.26	
Judith Avenue	0.11		Bryan Street	0.13	
Benjamin Avenue	0.11		Dewey Avenue	0.17	
Edwards Avenue	0.11		Winner Avenue	0.31	
Harrington Lane	0.31		Gibson Drive	0.10	
Cummings Drive	0.24		Railroad Avenue	0.24	0.15

INVENTORY OF STREETS, ROADS, & HIGHWAYS WITHIN THE CITY OF GOWER

Street Name	Length (miles)	Sidewalk (miles)	Street Name	Length (miles)	Sidewalk (miles)
Whitney Avenue	0.35	0.11	Fire Station Road	0.08	
Shivel Avenue	0.34	0.44	Gregory Drive	0.46	
Smith Street	0.41		Field Street	0.50	
Castille Avenue	0.07		Santa Fe Lane	0.15	
Gordon Waters Lane	0.06		Bland Lane	0.19	
Clinton Drive	0.14	0.11	Matthews Lane	0.28	
Clearview Drive	0.10		Santa Fe Drive	0.12	0.12
Grace Avenue	0.06		Castille Street	0.11	0.11
Somerset Drive	0.28	0.28	Washington Street	0.13	
Daybrook Terrace	0.07	0.07	Lincoln Drive	0.21	
Andrew Court	0.10		Kennedy Drive	0.35	
Alexander Court	0.06		Frederick Lane	0.06	
Natalee Lane	0.04	0.06	Frederick Drive	0.30	
Rosebriar Court	0.04	0.06	Total	11.72	3.02

The breakdown of road types and adjoining sidewalks within the City of Gower is:

- US Highway: 1.50 miles (12.8%), adjoining sidewalk: 0.11 miles (7.3%)
- State Routes: 0.55 miles (4.7%), adjoining sidewalk: 0.44 miles (80%)
- City Streets: 9.67 miles (82.5%), adjoining sidewalk: 2.36 miles (24%)

DATA ANALYSIS & SUMMARY

SIDEWALK ASSESSMENT

Utilizing GIS tracking and mapping, Mo-Kan transportation planners surveyed and evaluated the sidewalk conditions of the City of Gower. The Sidewalk Assessment will allow the city to identify the areas of greatest need for repair as well as plan for potential arterial walkways to better connect the city for pedestrian traffic. Special attention was paid to accessibility by determining which sidewalks were ADA compliant and where improvements would be needed to allow for equal access to the pedestrian pathways.

Data Collection

Data was collected through a combination of on-site field work, aerial imagery, and previous assessments. The details collected during field work include the shortest width of passage, surface condition, presence of curb ramp, and presence of any obstructions within the recorded segment.

Scoring System

To objectively assess sidewalk conditions, Mo-Kan developed a scoring system based on these collected attributes:

Width Scoring

More than 5 feet = 4 points
4 - 4.5 feet: 3 points
3 - 3.5 feet: 2 points
Less than 3 feet: 1 point

Obstruction

Scoring
No = 2 points
Yes = 0 points

Curb Presence

Yes = 2 points
Yes, but Damaged = 1 point
No or Not Applicable = 0 points

Surface Type

Smooth = 4 points
Fractured = 3 points
Uneven = 2 points
Overgrown = 1 point
Not Present = 0 point



SIDEWALK ASSESSMENT



Analysis

The scoring system was applied within ArcGIS Pro, calculating total scores based on the sum of the four criteria. Sidewalk segments were then categorized by their total score: Good (8-10 points), Fair (5-7 points), or Poor (0-4 points).

DATA ANALYSIS & SUMMARY

PEDESTRIAN STATISTICS

Nationwide, pedestrians have been dying on our roadways at an increasingly alarming rate. As quoted in the "National Roadway Safety Strategy", published in January 2022 by the United States Department of Transportation (USDOT), using the Fatality Analysis Reporting System (FARS), while total roadway fatalities have increased by 17% since 2010, pedestrian fatalities have increased by 40%.

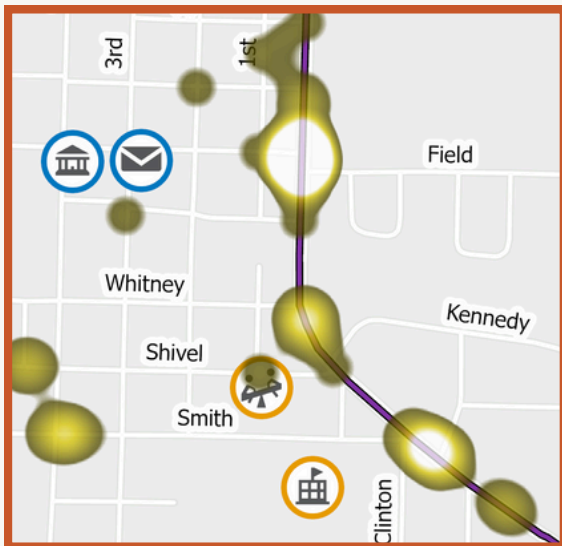
Missouri's statistics on pedestrian fatalities show a 79% increase, in the ten years from 2011 and 2020.

Per the National Highway Traffic Safety Administration (NHTSA) Motor Vehicle Crash Data Querying and Reporting system, using local data closer to home, in Buchanan County for the five years of 2011–2015 there were 4 pedestrian fatalities. In the succeeding five years (2016–2020) the number of pedestrian fatalities doubled to 8.



The City of Gower has been lucky in reporting zero pedestrian crashes or fatalities within their city limits, but the rising regularity of pedestrian related crashes nationwide along with the condition of Gower's pedestrian infrastructure, or lack there of, has been a focus of the city officials and a primary focus in the development of the Vision Zero Safety Action Plan.

HIGH RISK AREAS



The Chief of Police for the City of Gower tracked and consolidated data, revealing a relatively high crash rate for such a small community with an average of 8.5 crashes in a ten-year period (2012-2021). While US Highways represents less than 13% (12.8%) of the total roadways in Gower, nearly one third (31.4%) of those crashes were along US Highway 169. With the East Buchanan School District's Elementary and High School located within 500 feet of U.S. Highway 169, children walking to and from school are dangerously exposed to heavy traffic, with sidewalks provided along only 7.3% of said highway. Of all traffic crashes within Gower's city limits over the past five years, 50% have occurred on this roadway.

31.4%



Percentage of Crashes in the City of Gower that occur along US HWY 169

12.8%



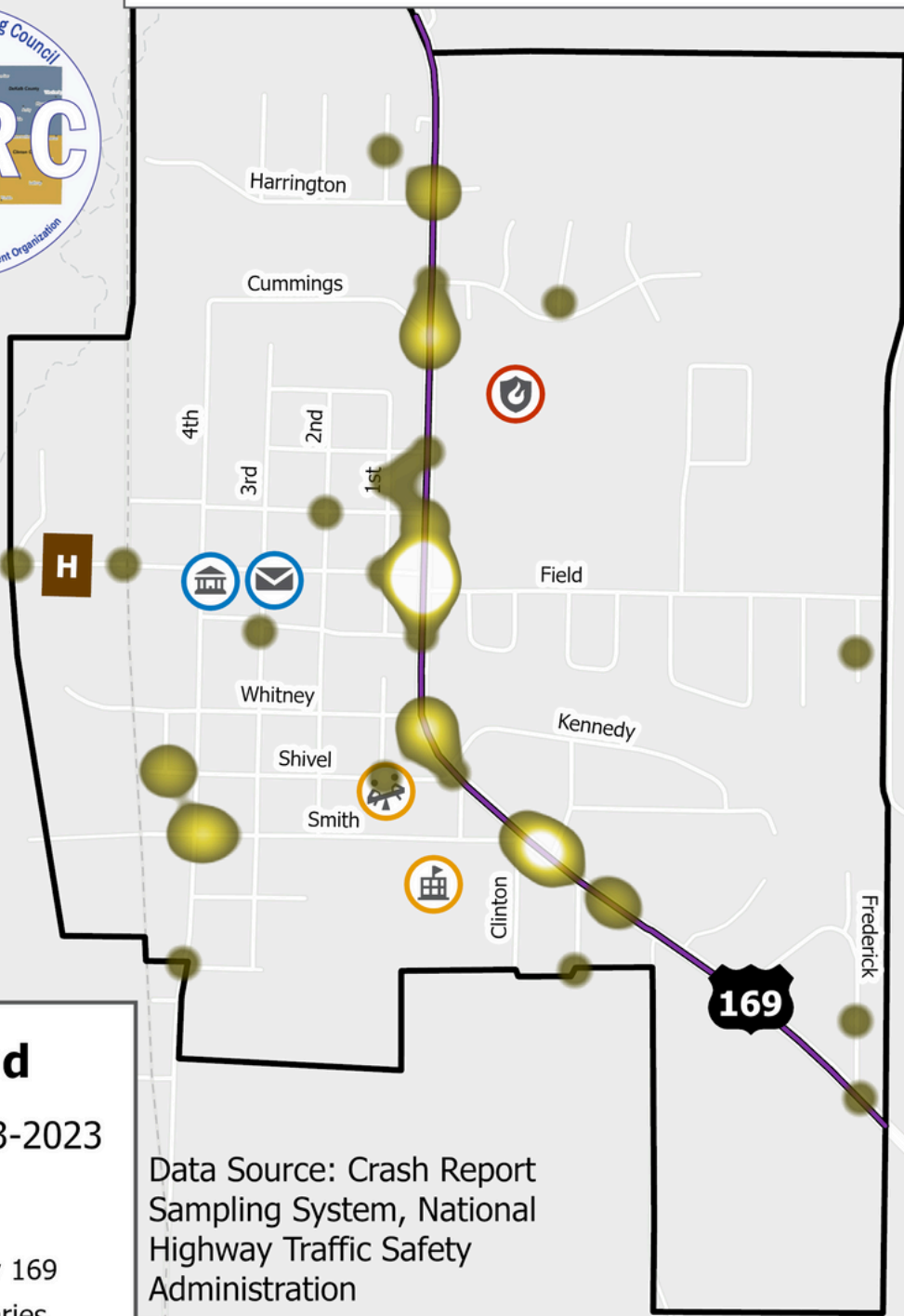
Percentage of the roadway within the City of Gower identified as US Highways

7.3%



Percentage of the sidewalks within the City of Gower along a US Highway

High Risk Areas in Gower



Legend

Crashes 2013-2023



US Highway 169

City Boundaries

Data Source: Crash Report Sampling System, National Highway Traffic Safety Administration

HIGH RISK AREAS

Other than the focus on the school area of US Highway 169, the other crashes along the highway occur at three intersections with offset and skewed entrances to the highway. From north to south along the northern entrance to the city on US Highway 169 is an entrance from the Dollar General parking lot to the northeast and the housing development of Harrington Lane from the southwest, then the housing development of Cummings Drive in the northwest and the exit from El 7 Agaves Mexican Restaurant and the Gower Fire Department to the southeast, then the main intersection of State Route H (Hallar Avenue) to the northwest and Field Street to the southeast. These three intersections resulted in twenty-two (22) crashes in the ten-year period of 2012-2021.

3



Cummings Drive & Fire Station Road

6

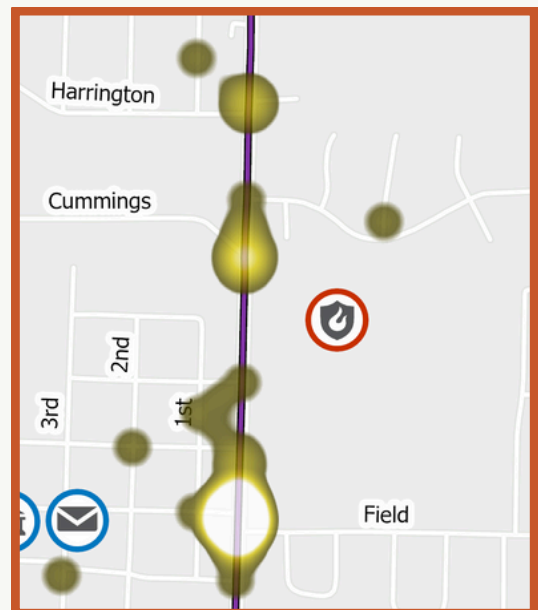


Dollar General & Harrington Lane

13



State Route H (Hallar Avenue) & Field Street



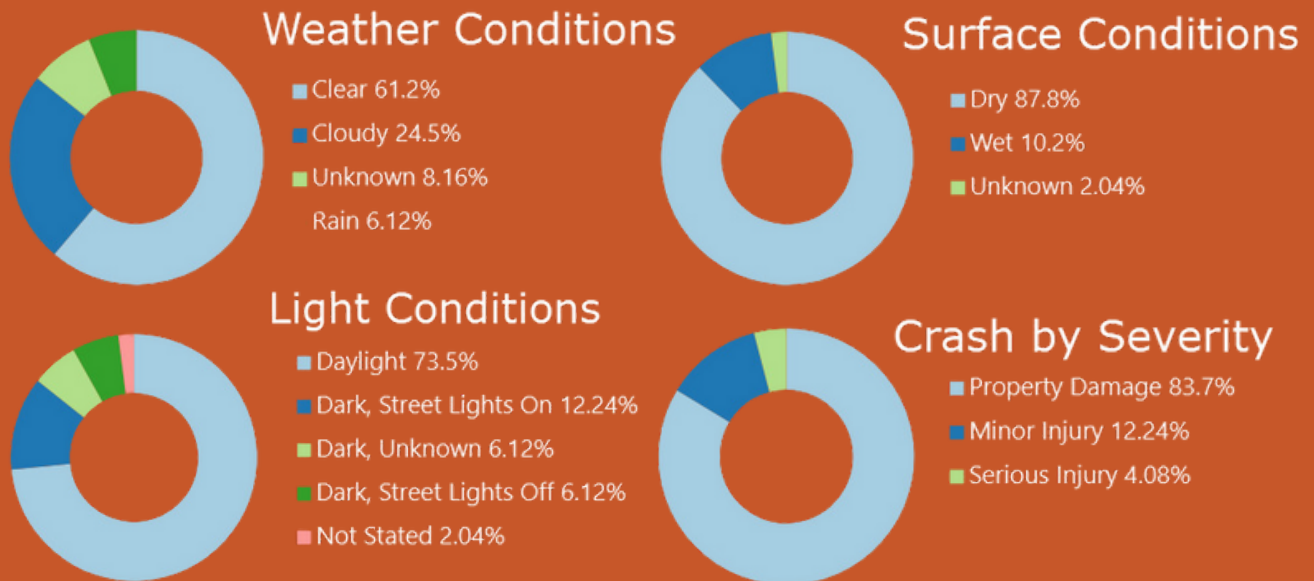
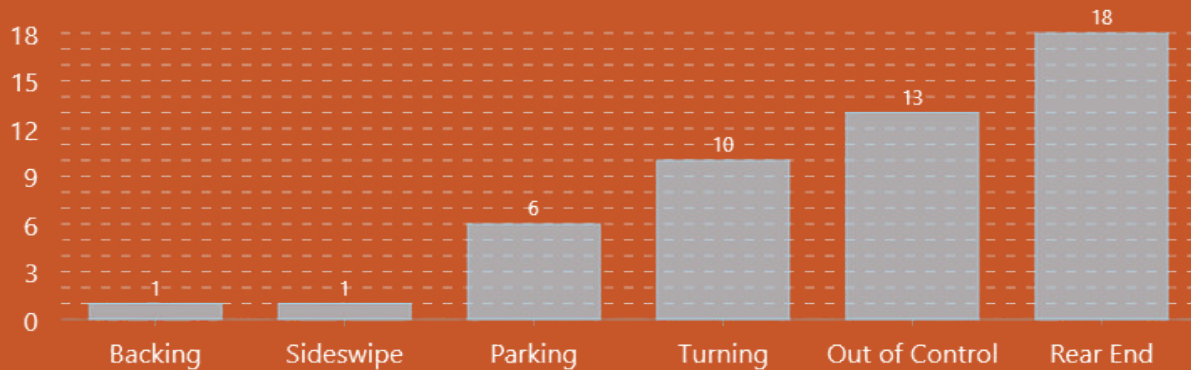
*The heat map from 2017-2021 shows a decrease in the crashes at Cummings

CRASH DATA

DATA ANALYSIS & SUMMARY

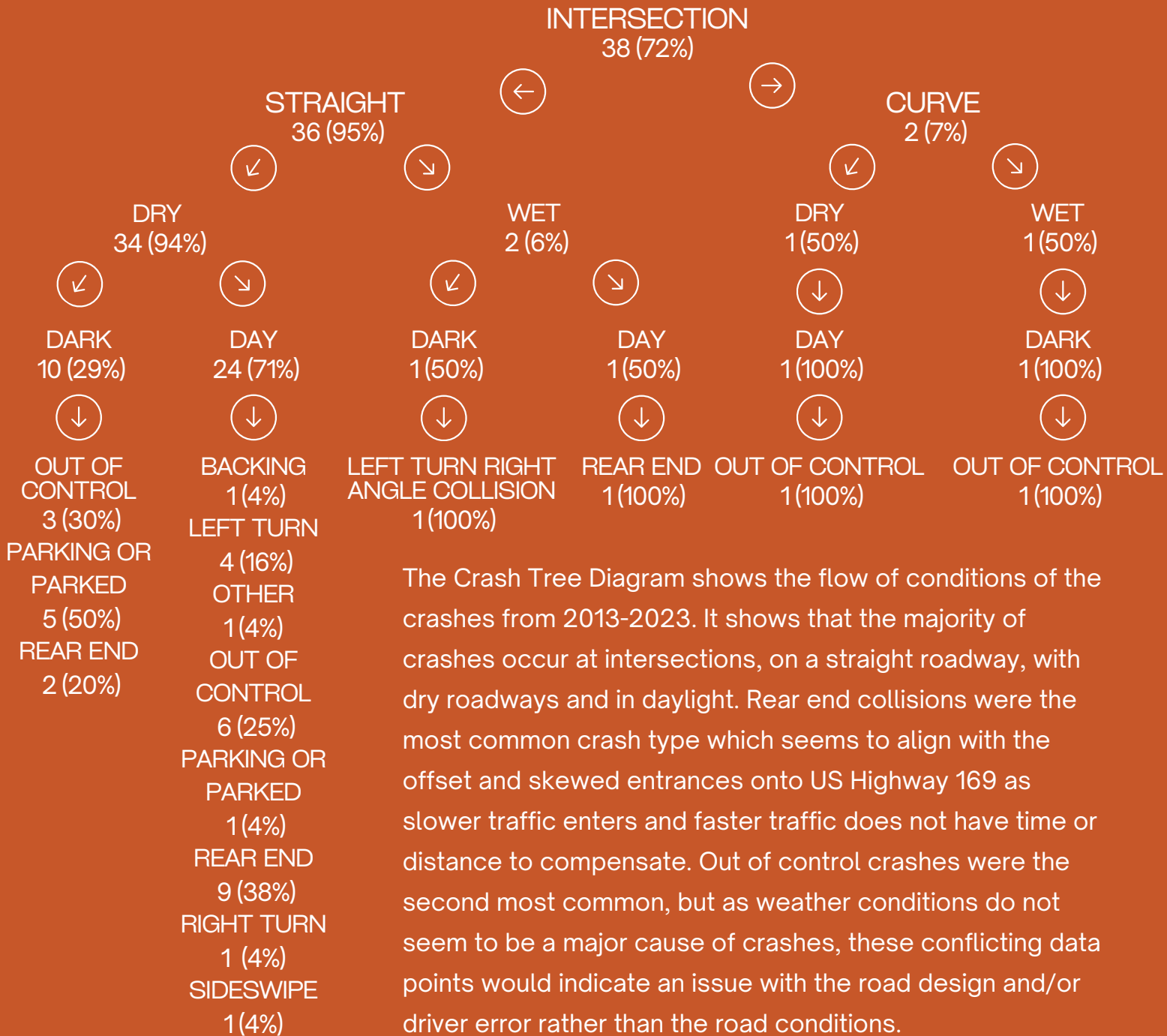
An analysis of the roadway conditions during the majority of crashes does not seem to indicate weather conditions as having a disproportionate effect on driver safety in the City of Gower. In fact, the majority of crashes occurred during clear and dry days.

Crash by Type



The City of Gower has been lucky to maintain zero fatalities within their current city limits, but increased traffic and the expansion of the school system and city boundaries is likely to increase the risk of fatalities. Of the crashes reported in the ten-year period of 2013-2023, there were fifty-three (53) crashes with 12% resulting in minor injuries and 4% resulting in serious injuries.

CRASH TREE DIAGRAM

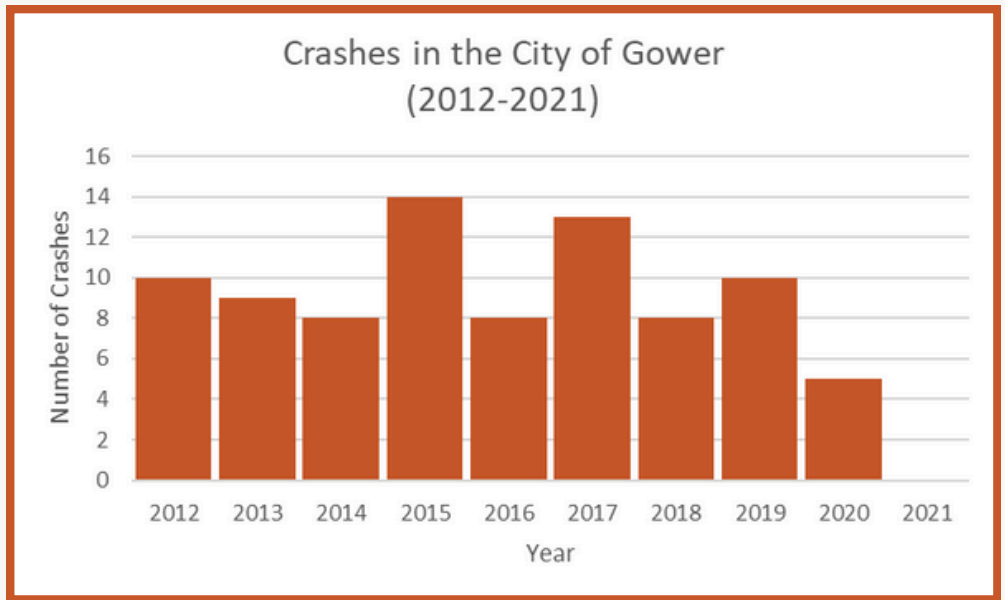


The Crash Tree Diagram shows the flow of conditions of the crashes from 2013-2023. It shows that the majority of crashes occur at intersections, on a straight roadway, with dry roadways and in daylight. Rear end collisions were the most common crash type which seems to align with the offset and skewed entrances onto US Highway 169 as slower traffic enters and faster traffic does not have time or distance to compensate. Out of control crashes were the second most common, but as weather conditions do not seem to be a major cause of crashes, these conflicting data points would indicate an issue with the road design and/or driver error rather than the road conditions.

CRASH DATA

8.5

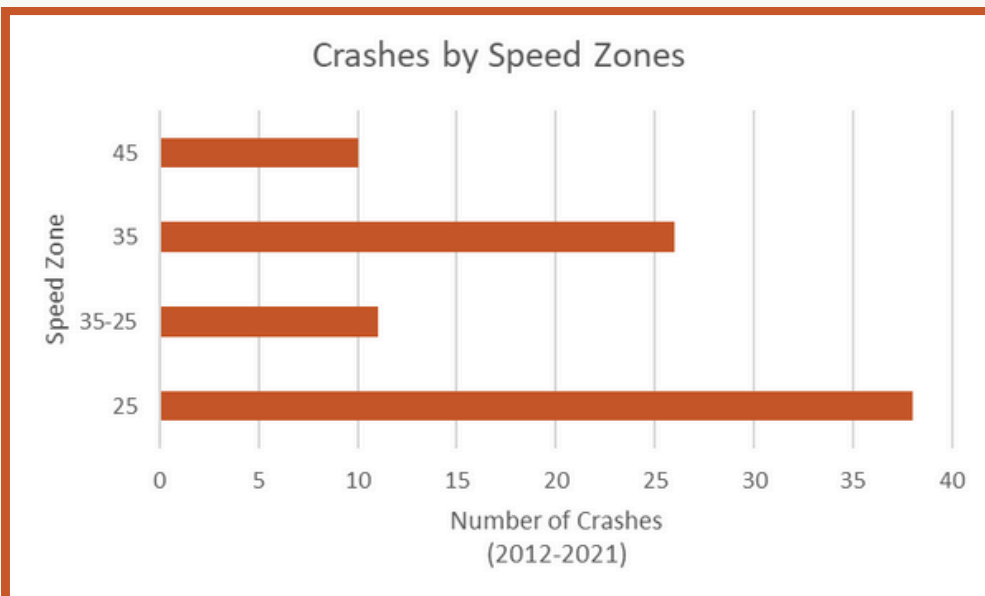
Average Crash Rate, likelihood of a crash occurring in ten years within the City of Gower



45%

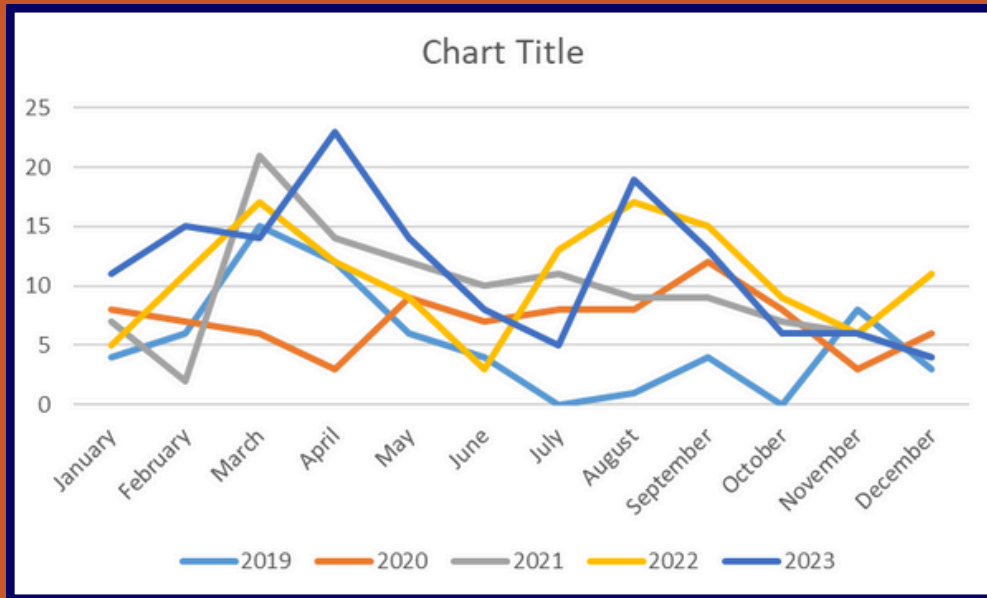
Crashes occurred in a 25 mph speed zone

The City of Gower saw a steady decrease in crashes from 2012-2021 with spikes every other year in 2015, 2017, and 2019. The majority of crashes occurred within the 25 mile per hour speed zones as the posted speed limit on city streets is 25, as is the curve of US Highway 169 near the school.



Eleven (11) of the 85 crashes occurred in the transition zone between 35 mph & 25 mph speed limit postings while twenty-six (26) occurred in the 35 mph zone of US Highway 169. This shows that the majority of crashes within the City of Gower are caused by the reduction of speed along US Highway 169.

SPEED ENFORCEMENT



Chief of Police Adam Hill provided a count of traffic speeding citations issued from 2019-2023 along US Highway 169 in the City of Gower. The consistent increase in speeding citations aligns with national data showing an increase in speed related crashes and roadway fatalities since the pandemic.

The trend of Chief Hill’s speeding citations shows an increase in speeding in town during the spring and late summer months, highlighting the concerns of the school.

63

85

112

128

138

2019

2020

2021

2022

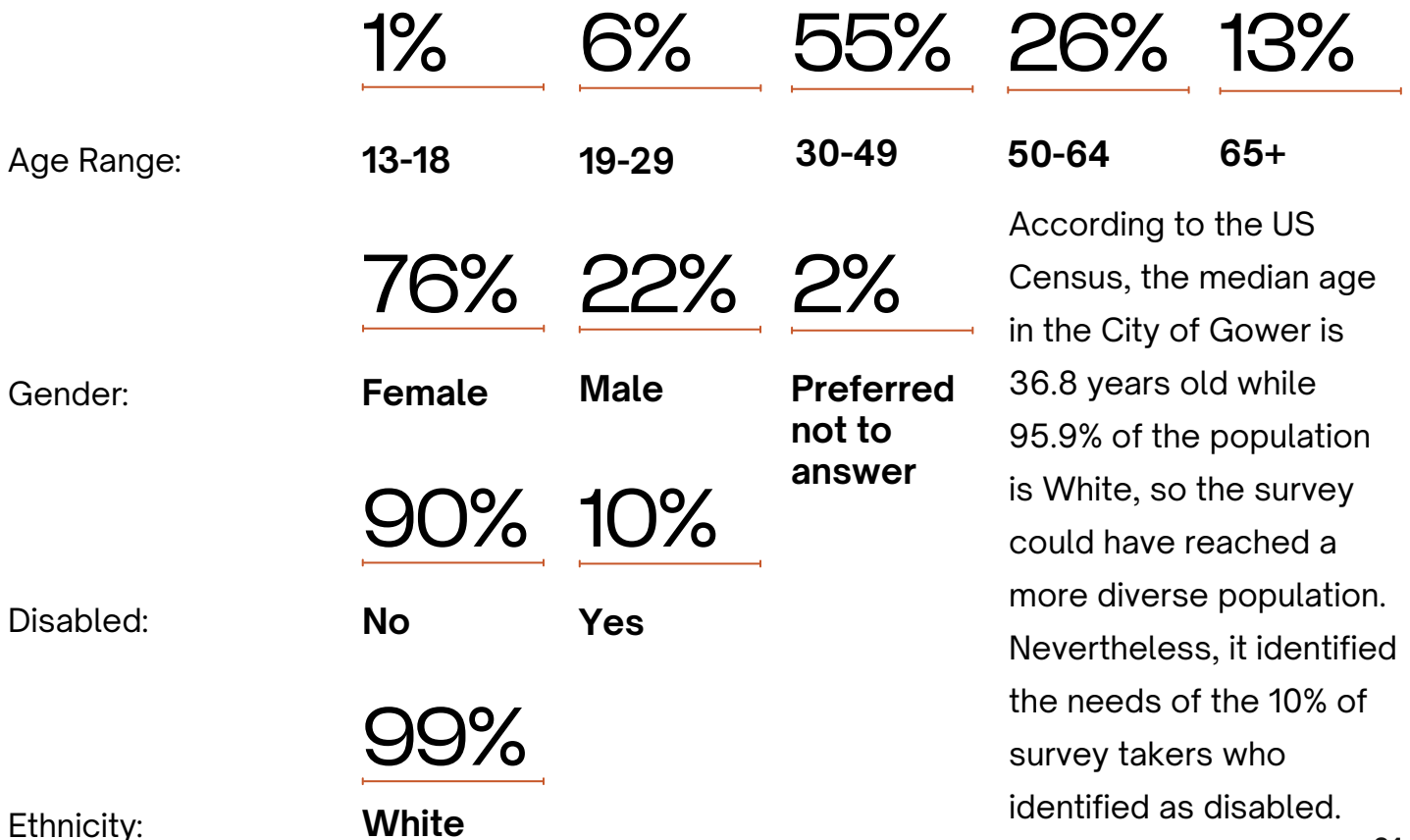
2023

SURVEYS

Mo-Kan Regional Council conducted two surveys; one to solicit traffic patterns, demographics, and concerns of the community and one to understand the safety needs of school students. The first survey was developed in house and distributed virtually while the second survey utilized the Safe Routes to School surveys and were distributed within the school system.

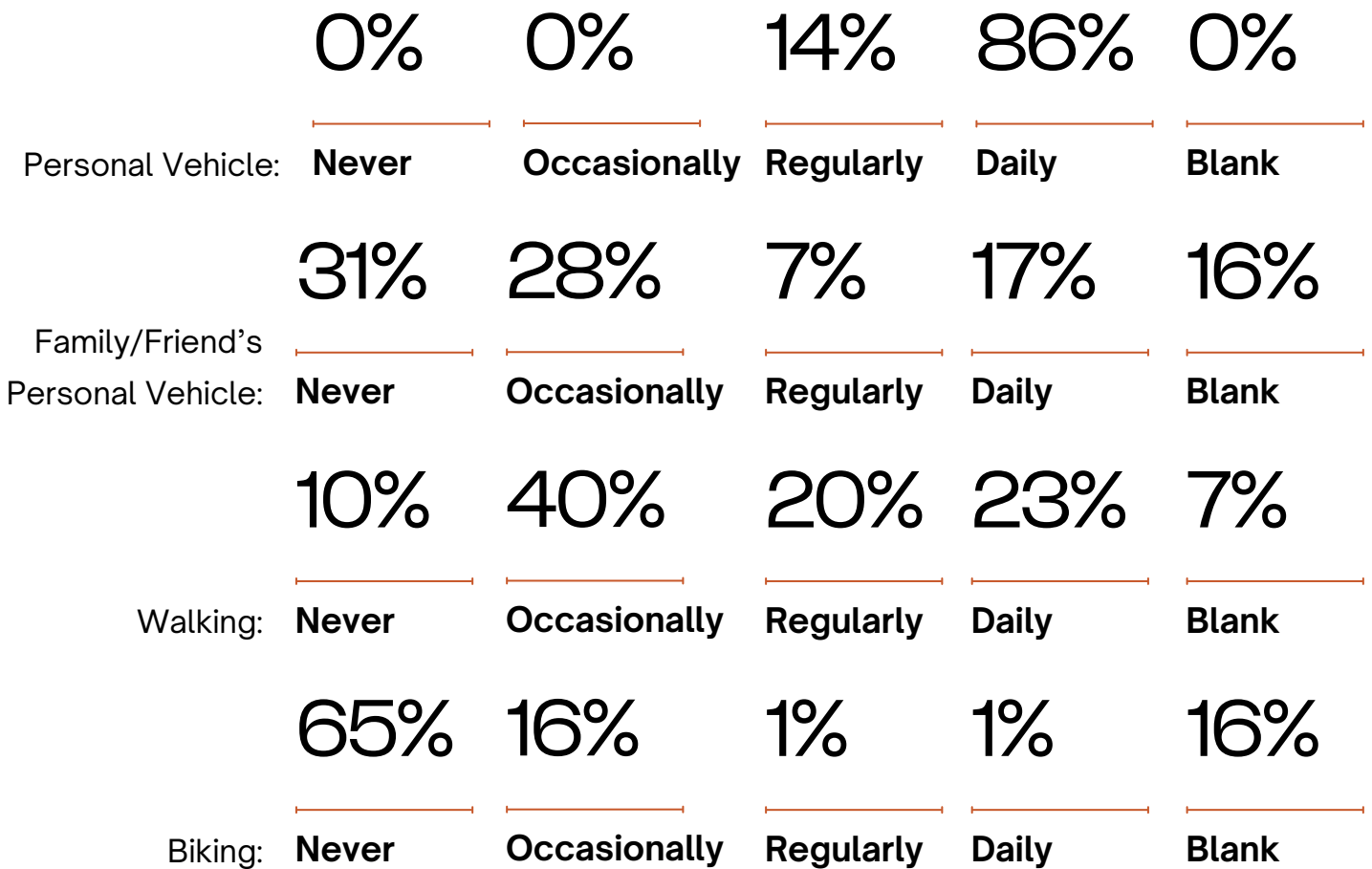
Eighty-six (86) citizens of Gower completed the first survey. Of the eighty-six:

SURVEY 1 DEMOGRAPHIC INFORMATION



SURVEY 1 TRANSPORTATION NEEDS & DATA

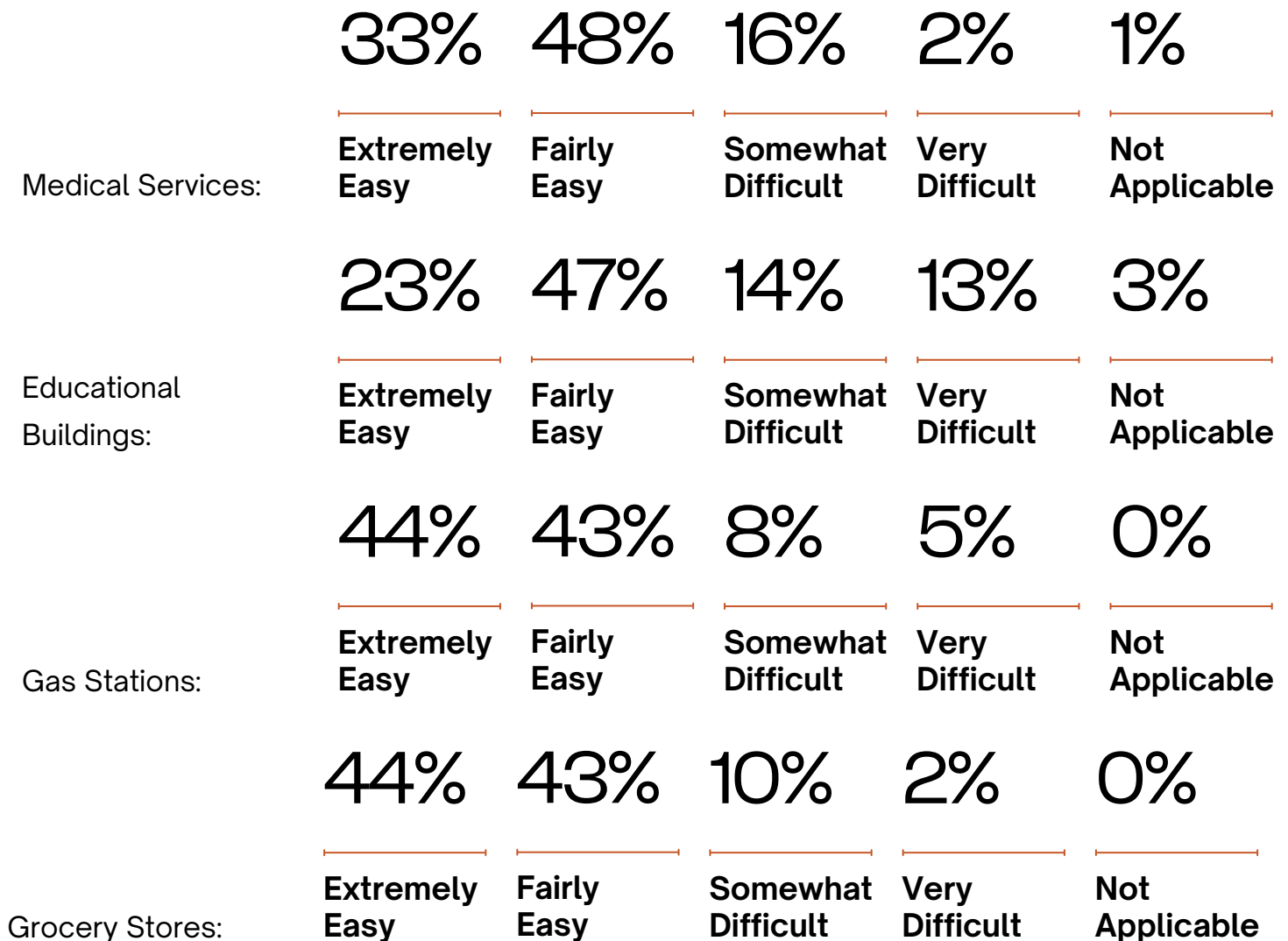
The frequency of modes of transportation for the eighty-six participants was:



The survey showed that the majority of respondents relied on their own personal vehicles or a friend or family member’s personal vehicle for transportation, however, the second most common mode of transportation of the respondents was walking, showing a need to focus on pedestrian infrastructure within the City of Gower. Biking infrastructure was identified by the Vision Zero Planning Committee in the early stages of development of the plan, but the survey results show a lack of interest in biking within the community and therefore a lack of need in safety improvements in biking infrastructure.

SURVEY 1 TRANSPORTATION NEEDS & DATA

The eighty-six participants identified the ease of access to the following facilities as:



The survey indicated that there were few barriers to access of services with the majority of respondents indicating that it was easy to access medical services, educational buildings, gas station, and grocery stores in the City of Gower.

SURVEY 1 TRANSPORTATION NEEDS & DATA

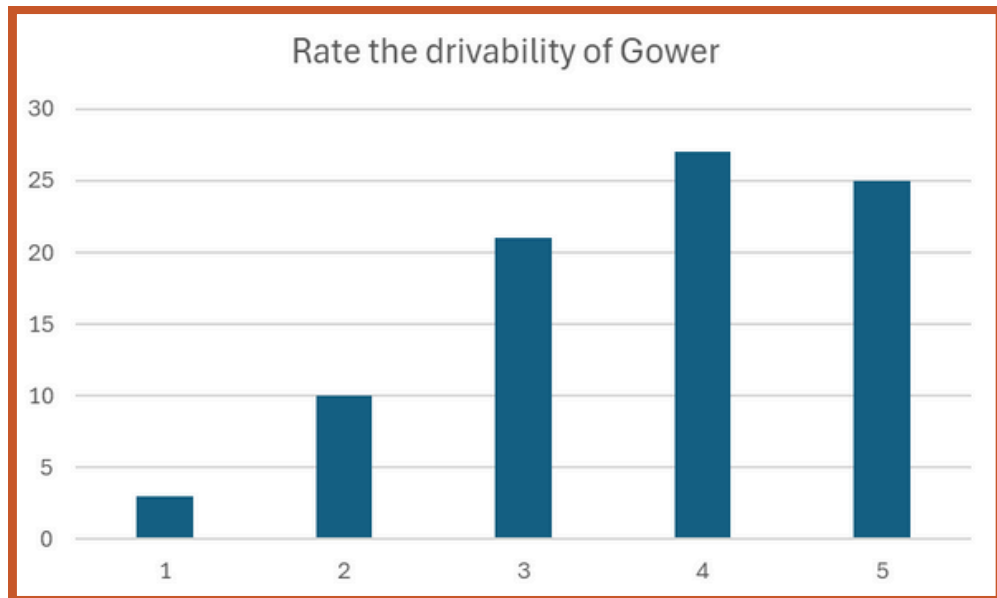
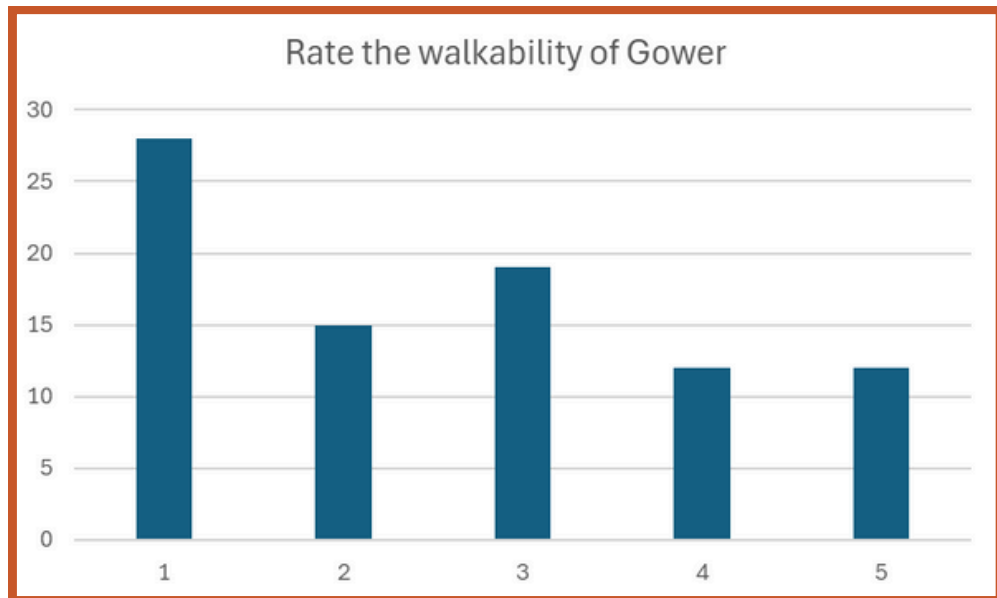
Rate the walkability of Gower



Rate the drivability of Gower



The survey asked participants to rank the general walkability and drivability of the City of Gower on a five star system. The results show diverging conditions and opinions on the infrastructure of the City of Gower. Respondents were generally favorable of the drivability of the city, but the walkability ranked very poorly. Paired with the results of the modes of transportation, this shows a need for investment in pedestrian infrastructure.



SURVEY 1 WORD BUBBLE



The first survey closed with the open ended question of “What areas of Gower do you consider to be danger?” and the answers were overwhelmingly aligned with the observations and advice of the Vision Zero Planning Committee and the roadway data. US Highway 169 and the East Buchanan School District are the top priority of the respondents to the first survey alongside concerns for pedestrian safety, highlighting the need for sidewalk infrastructure improvement. With our assumptions confirmed, the Vision Zero Planning Committee began identifying Emphasis Areas, Projects, and Implement Strategies to address these areas. The second survey focused on the needs of the school and students.

SURVEY 2 SAFE ROUTES TO SCHOOL

DATA ANALYSIS & SUMMARY

The second survey utilized the *Parent Survey About Walking and Biking to School* from the Safe Routes to School program to gauge barriers to active transportation to the students of the East Buchanan School District. There were 211 respondents, 99 from the High School, 32 from the Middle School, and 80 from the Elementary School.

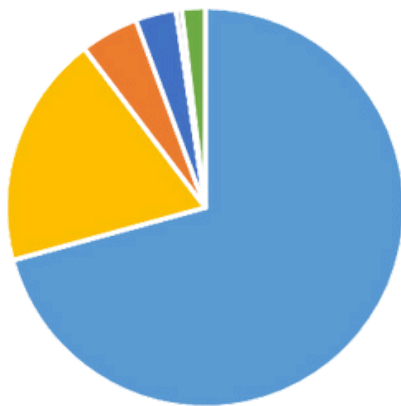
Distance From School



■ <1/4mi ■ 1/4 - 1/2mi ■ 1/2 - 1mi ■ 1 - 2mi ■ More than 2 miles ■ Don't know

Of the students who responded to the survey, 64% lived a mile or more away from the school. As the City of Gower is only about a mile circumference from the school as a centerpoint, that means only 36% of the students who responded live within the city limits. This means that the majority of students are either dropped off by parents or ride the bus to school.

Mode of Transportation To School



■ Family Vehicle ■ School Bus ■ Carpool ■ Walk ■ Transit ■ Other

An interesting difference between mode of transportation to and from school changes. Of the 150 students being dropped off by a family vehicle, 4 ride the bus home and 7 walked home.

Travel Time To School



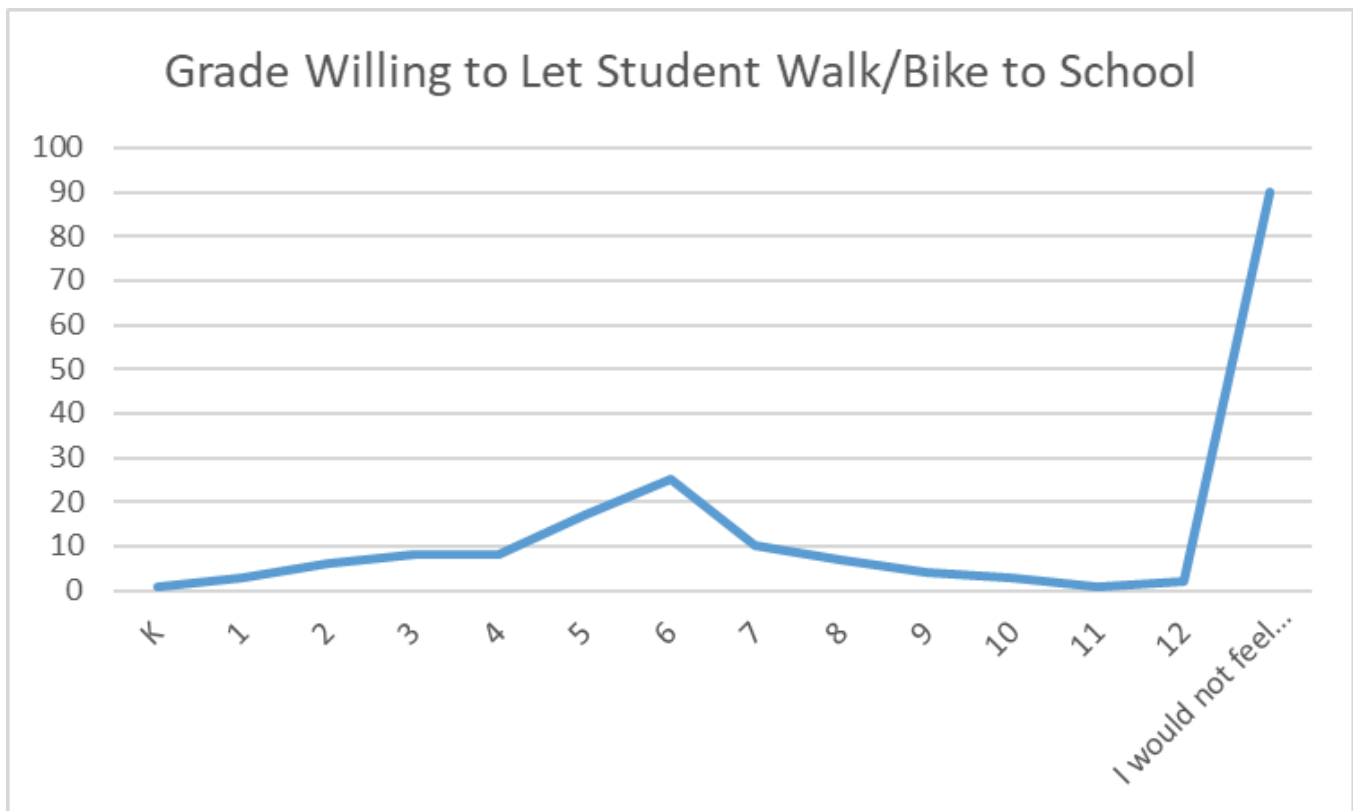
■ <5 Minutes ■ 5 - 10 Minutes ■ 11 - 20 Minutes
■ More than 20 minutes ■ Don't know / Not Sure

This leads us to believe that about a dozen students are taken to work by someone who works until after school lets out, requiring alternate modes to return home.

DATA ANALYSIS & SUMMARY

SURVEY 2 SAFE ROUTES TO SCHOOL

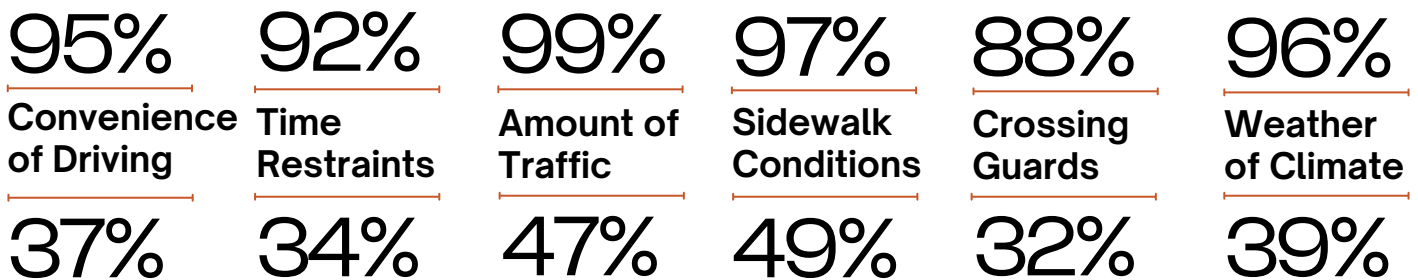
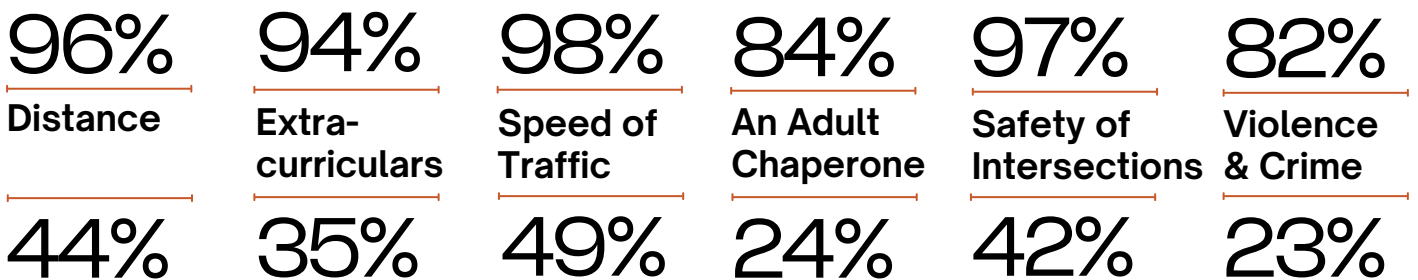
Only seven (7) respondents walked to and from school with the addition of seven (7) more walking home after school. Forty (40) respondents rode the bus to school with the additional four (4) riding home with them.



Confirming that a small percentage (3.3-6.7%) of the respondents walk to or from school in the City of Gower, the survey sought to determine if walkability posed a safety concern for parents. When asked what grade they considered an appropriate age to allow their children to walk to school was, a resounding 49% responded they would not feel comfortable allowing their child to walk at any age.

SURVEY 2 SAFE ROUTES TO SCHOOL

The survey inquired about what factors parents considered when determining if their child could walk to school and if improved conditions would increase their likelihood of allowing their child to walk. As such a large percentage of respondents indicated that they would not let their child walk regardless of age, this data was of great interest.



Presented are the percentage of respondents who responded that their decisions were based on the following topics (top percentage) and if those decisions would be altered if conditions improved (bottom percentage). Pedestrian safety and the convenience of the car based infrastructure were the primary drivers of respondents decisions while respondents were less concerned with the human element of potential crime or violence. Improvements to pedestrian safety had the highest percentage of a chance to alter parents' determination.

EMPHASIS AREAS

Through data analysis and public feedback, the following three emphasis areas were chosen to improve safety and maintain the goal of zero roadway fatalities in the City of Gower.

EMPHASIS AREA 1



PEDESTRIAN SAFETY

Goal: Reduce exposure between types of transit; pedestrian, bicycle, passenger vehicle, and freight

EMPHASIS AREA 2



INTERSECTION IMPROVEMENTS

Goal: Reduce risk of crashes occurring at offset and skewed intersections with engineering solutions to create safer roadways

EMPHASIS AREA 3



SPEED ENFORCEMENT

Goal: Improve compliance to safe speeds within the City of Gower

EMPHASIS AREA 1: PEDESTRIAN SAFETY

The data analysis shows an overwhelming need and public support for pedestrian safety improvements in the City of Gower. 83% of citizens surveyed claim to walk at least occasionally if not regularly and the majority of respondents ranked the walkability in the City of Gower as less than desirable. Mo-Kan's Sidewalk Assessment highlights areas of the current pedestrian infrastructure system that are in need of improvement. Though a relatively small number of students walk to school, and a majority of parents would not consider allowing their children to walk to school, those decisions were identified as being influenced by the danger and conditions of the pedestrian infrastructure. One major component of the goal to reduce exposure between types of transit stems from the proximity of the East Buchanan Elementary and High Schools to US Highway 169, a mere 500 ft. from the educational facilities, requiring students to cross and/or walk along a US Highway without pedestrian infrastructure to support pedestrian safety.



STRATEGIES



To improve pedestrian safety, the City of Gower will look towards prioritizing and improving its sidewalks throughout the city. MoDOT and the school district will evaluate potential alterations to the crosswalk system within the city to increase visibility and protect students more efficiently. Finally, educational programs will be pursued and hosted at the school to develop safer roadway users.

01



IMPROVE SIDEWALKS

Champions: The City of Gower, MoDOT

Potential Funding Sources: Transportation Alternative Program, SS4A Implementation Grant

02



CROSSWALK VISIBILITY ENHANCEMENTS

Champions: The City of Gower, East Buchanan School District, MoDOT

Potential Funding Sources: Transportation Alternative Program, SS4A Implementation Grant, SafeAcross

03



PEDESTRIAN SAFETY TRAINING

Champions: East Buchanan School District, MoDOT

Potential Funding Sources: SafeAcross, Northwest Missouri Coalition for Roadway Safety

EMPHASIS AREA 2: INTERSECTION IMPROVEMENTS

The data analysis highlighted the high crash rate within the City of Gower with the vast majority of crashes occurring under safe, dry, well lit conditions. The most common crash types were rear ends and out of control drivers at intersections. Studying the design of intersections in locations with the highest crash rate, it becomes abundantly clear that the offset and skewed intersections create a safety concern that leads to increased crashes in those areas. The fact that the majority of these crashes occur in low speed areas speaks to the nonfatality within the City of Gower, meaning speed zones are having a positive impact on roadway safety, but the large number of crashes and crashes with injuries still raises the potential for serious harm to occur within the community.



STRATEGIES

By working with MoDOT to evaluate the offset and skewed intersections and design potential engineering solutions, the City of Gower can improve safety along US 169 and improve traffic flow within the city. Short of engineering solutions, improved visibility at the intersections can improve conditions.



The Field & Hallar intersection is susceptible to overgrowth of nearby vegetation, so a city clearing program will improve visibility in the area. Rapid flashing beacons or specific road signs may notify distracted drivers to be more alert as the dangerous intersections approach. The best tool, however, is training roadway users to more safely navigate the US Highway, to know that city traffic enters the roadway from various angles along the lower speed areas.

01



ENTRANCE ENGINEERING

Champions: The City of Gower, MoDOT

Potential Funding Sources: Transportation Alternative Program, SS4A Implementation Grant

02



VISIBILITY ENHANCEMENTS

Champions: The City of Gower, MoDOT

Potential Funding Sources: Transportation Alternative Program, SS4A Implementation Grant, SafeAcross

03

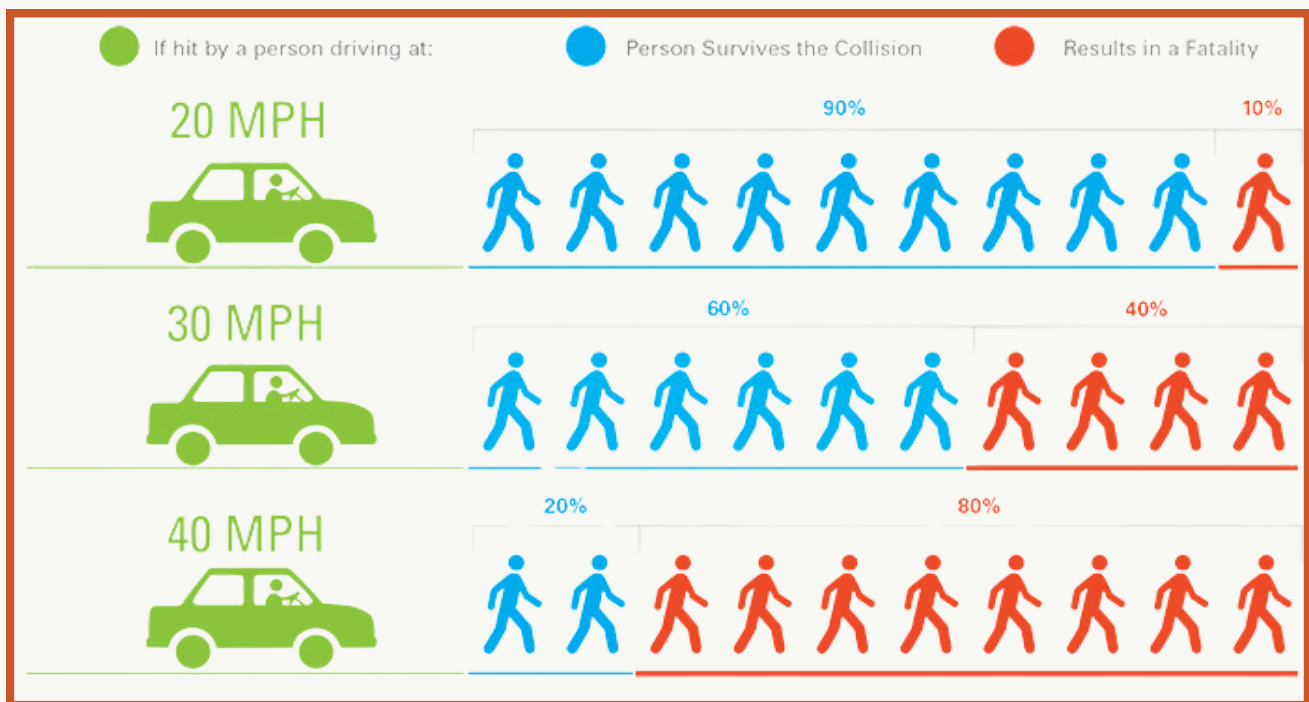


DRIVER SAFETY TRAINING

Champions: East Buchanan School District, MoDOT

Potential Funding Sources: St. Joseph Safety & Health Council, Northwest Missouri Coalition for Roadway Safety

EMPHASIS AREA 3: SPEED ENFORCEMENT



Data provided by the Gower Police Department was vital to developing the Vision Zero Safety Action Plan. The nationwide post-pandemic trend of increased speeding and distracted driving presents a threat to the City of Gower as speeds reduce along US Highway 169 to accommodate the city limits and centrally located schools. Crash data shows that a majority of crashes within the city occur within the lowest speed zone of twenty-five (25) miles per hour. While this is a positive, meaning most crashes will not result in fatalities, it does mean that speeding in lower speed zones is likely the culprit of the rear end intersection crashes.

STRATEGIES

Chief Adam Hill's enforcement data showed a peak in speeding within the City of Gower in the March, April, and the late summer months of July, August, and September. With school starting and ending during these peak months, targeted enforcement to catch speeders before they can endanger students can improve the safety of US Highway 169.

The City of Gower can implement cost effective or highly engineered measures to create traffic calming infrastructure on city streets, such as curb cutting, bumpouts, speed bumps, or bollards to encourage slower speeds in the lower speed zones of the city.

Of course, driver safety training can be an effective tool to train current and future roadway users to more effectively recognize and respect local speeds.

01



TARGETED ENFORCEMENT

Champions: The City of Gower, East Buchanan School District
Potential Funding Sources: Homeland Security, Northwest Missouri Coalition for Roadway Safety

02



TRAFFIC CALMING MEASURES

Champions: The City of Gower, East Buchanan School District, MoDOT
Potential Funding Sources: Transportation Alternative Program, SS4A Implementation Grant, SafeAcross

03



DRIVER SAFETY TRAINING

Champions: East Buchanan School District, MoDOT
Potential Funding Sources: St. Joseph Safety & Health Council, Northwest Missouri Coalition for Roadway Safety



PROJECT 1: CROSSWALK IMPROVEMENT

PROJECTS & STRATEGIES

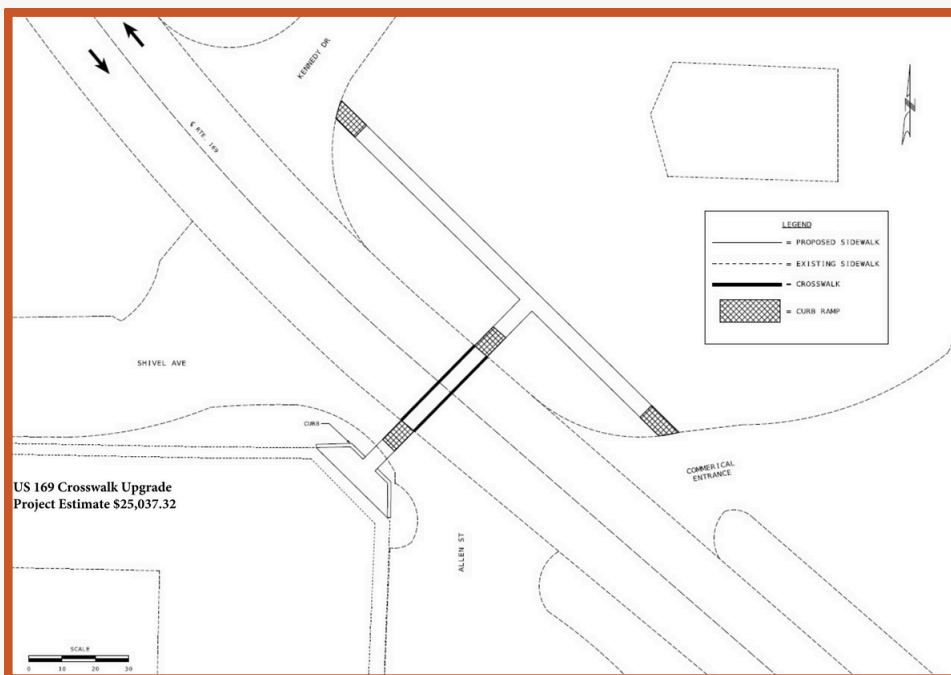
Emphasis Area: Pedestrian Safety

Strategy 2: Crosswalk Visibility

Cost Estimate: \$25,037.32

Funding Opportunities: TAP Grant

From the impetus of the City of Gower's Vision Zero Safety Action Plan, the crosswalk across US Highway 169 at the East Buchanan Elementary School has been a primary concern. The data highlights the dangers posed by this crosswalk. MoDOT Northwest District Engineer José Rodriguez provided a design and cost estimate for a potential realignment and crosswalk improvements that could increase safety at the dangerous highway crossing.



José's plan places the entrance to the crosswalk on school property south of Shivel with raised curbs for added protection and ramps for equal accessibility. The crosswalk being realigned further southeast would increase the sightline of southbound traffic coming around the curve of US Highway 169, allowing more time to stop for the crossing guard. A new sidewalk on the north side would allow students a safe place to cross to, but would require a larger sidewalk plan for the city to improve safety of walkers after leaving the school.

Shivel Ave. is a one way from 1st Street to US Highway 169 to allow parents to line up and pick up children at the end of the school day. Students who are walking are required to cross Shivel and stand in a grass island between a convenience store parking lot and the school before a crossing guard stops the highway traffic so they can cross to Kennedy Drive. There are no sidewalks on the north side of US Highway 169. Drone footage showed that traffic rounded a blind corner on Kennedy as children were running up the street in waves with no walkway present.

PROJECT 2: CROSSWALK VISIBILITY

PROJECTS & STRATEGIES

Emphasis Area: Pedestrian Safety

Strategy 2: Crosswalk Visibility

Cost Estimate: \$0

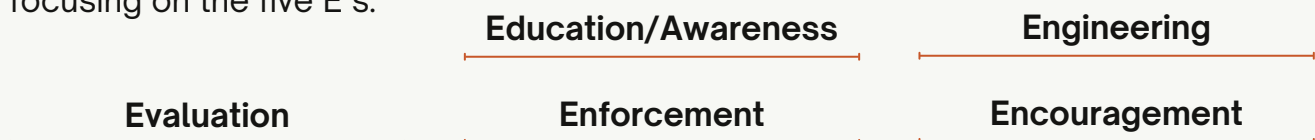
Funding Opportunities: MoDOT
HMV grants, SafeAcross allocation

Improved visibility at the crosswalk was also highlighted as a concern. As distracted driving becomes an increasing risk to pedestrian safety, it is important to emphasize compliance to roadway safety, especially in an area where routine can dull driver’s attention. The Vision Zero Planning Committee discussed options to improve the visibility of the crosswalk from rapidly flashing beacons, to a full stoplight, with cost and feasibility discussed with city officials and MoDOT representatives.



A cost effective and community oriented option was presented through the SafeAcross program. SafeAcross began in the City of Springfield in 2017, utilizing specialty signage with positive and playful educational messaging to train drivers to recognize crosswalks and follow crosswalk etiquette. The program improved crosswalk compliance from 25% to 50% in the City of Springfield and was so effective that MoDOT provided a grant to enhance the program and make it more widely available to Missouri communities. The most ambitious element is the full sized Mister Walker sign depicting the crosswalk figure in a scale and coloration to catch driver’s attention and improve crosswalk compliance.

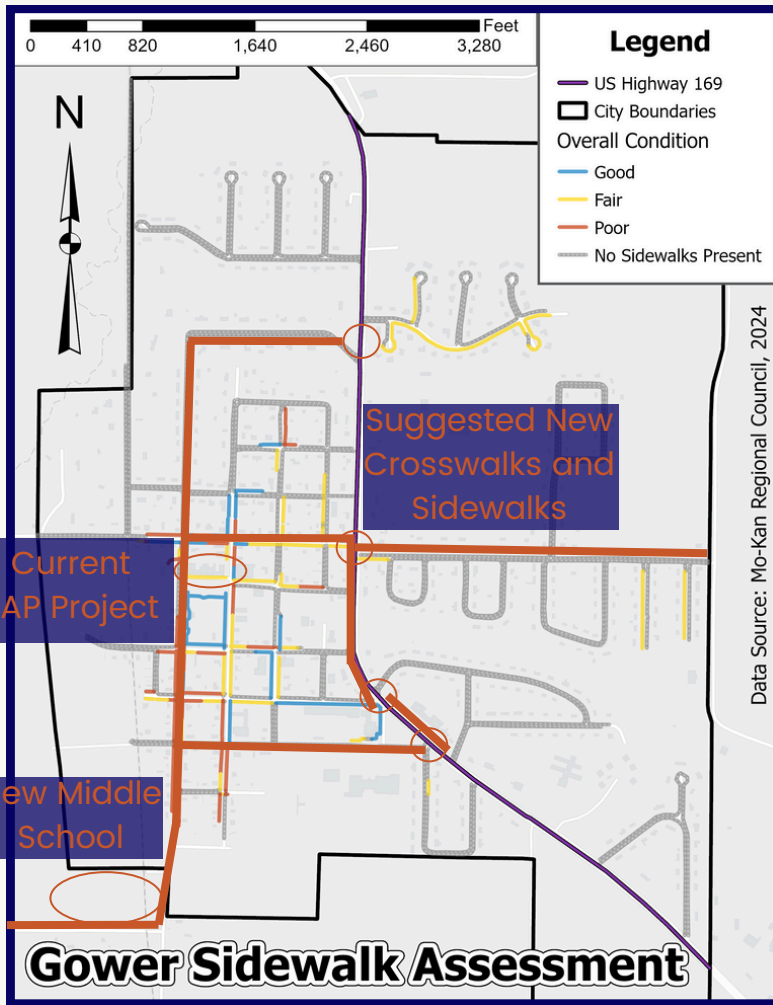
SafeAcross is free to communities who sign up, offering educational materials that can be distributed and coordinated within the school district to educate students and adults alike focusing on the five E’s:



PROJECT 3: SIDEWALK IMPROVEMENTS

PROJECTS & STRATEGIES

Emphasis Area: Pedestrian Safety
Strategy 1: Improve Sidewalks
Cost Estimate: \$6,100,000
Funding Opportunities: TAP Grant, SS4A Implementation Grant



During the development of the Vision Zero Safety Action Plan in 2023-2024, the City of Gower had applied for and received a Transportation Alternatives Program grant from MoDOT to improve the sidewalks around the storefronts of the city square with ADA entrances. The grant was made possible by the sidewalk assessment conducted by Mo-Kan in 2018. An updated sidewalk assessment highlighted areas in need of improvement and provided a map to develop a strategic sidewalk improvement plan for the city that emphasizes pedestrian safety and safe routes to school.

The cost of the 2022 TAP project was \$245,516. Due to inflation, the cost increased by the time construction began in 2024, but it can be estimated that a block of sidewalk improvements would cost roughly \$200,000 from the original estimate. Therefore, to repair all poor sidewalk in Gower would cost an estimated \$3,000,000 with an additional \$4,000,000 to improve fair conditioned sidewalks. Therefore, the City of Gower should develop a plan to prioritize strategically placed sidewalks to improve connectivity and pedestrian safety throughout the city.

Mo-Kan's recommended strategic sidewalk improvement plan would be to provide an arterial pedestrian pathway connecting the already robust sidewalks around the city park to the schools and residential areas. With the planned addition of a new Middle School, creating a sidewalk system that connects the three schools and moves pedestrian traffic towards the interior of town and away from US Highway 169 would be preferable. The map above shows recommended areas of improvement.

PROJECT 4: UNDERPASS

Emphasis Area: Pedestrian Safety
Strategy 1: Improve Sidewalks
Cost Estimate: \$5,500,000-
6,100,000
Funding Opportunities: TAP Grant,
SS4A Implementation Grant



Deemed the “Pie in the Sky” option by planners, a potential underpass beneath US Highway 169 to divert pedestrian traffic beneath roadway traffic would provide the greatest benefit to the first goal of the Vision Zero Safety Action Plan; to reduce exposure between types of transit. Utilizing the original alignment of the defunct railway that once passed through the heart of the City of Gower and remains the namesake of Railroad Avenue, the underpass would reconstruct the filled in former underpass that once flowed beneath US Highway 169. This would remove pedestrian traffic from the highway and connect to an improved sidewalk system.



Similar projects including landscaping and sidewalk design cost an estimate between \$5.5-6 million. Alternatively, an overpass could be utilized to raise crosswalks over US Highway 169 for a fraction of the cost and with less delay to traffic as an underpass would require.

PROJECT 5: INTERSECTION REALIGNMENT

PROJECTS & STRATEGIES

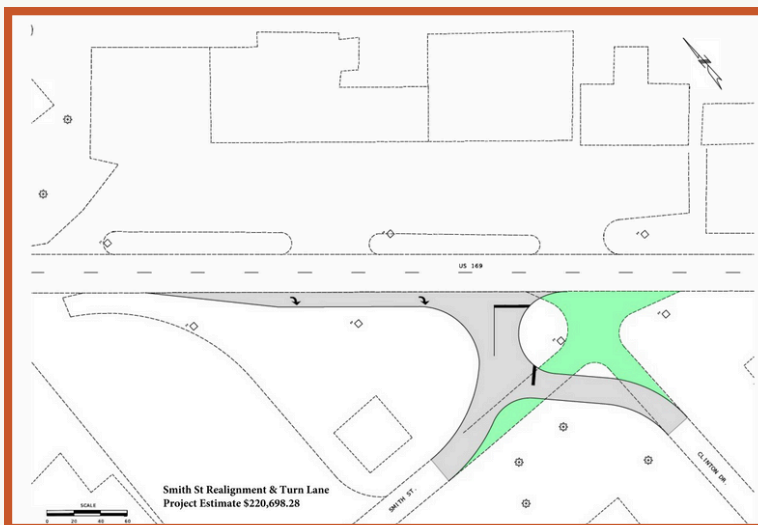
Emphasis Area: Intersection Improvements

Strategy 1: Entrance Engineering

Cost Estimate: \$220,698.28

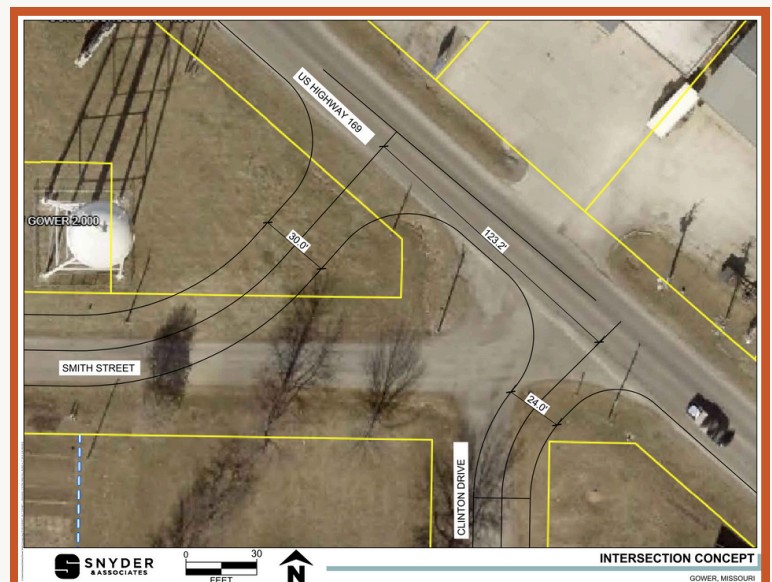
Funding Opportunities: SS4A Implementation Grant, MoDOT Cost Share

To solve the issues of both crosswalk safety and a high crash area, engineering of a three way intersection at Smith Street, Clinton Drive, and US Highway 169 was developed. The site currently has two converging streets that merge together and enter US Highway 169. School buses utilize this exit to leave once picking up students from the Elementary School parking lot north of Smith. Traffic often backs up and the turn to enter US Highway 169 is difficult for buses to maneuver.



MoDOT Northwest District Engineer José Rodriguez designed a realignment that would allow Clinton Drive to enter Smith Street rather than the two meeting in the same spot before Smith Street enters US Highway 169. The plan would move the street to the east, avoiding a powerline that has negatively effected the bus traffic and add a right turn lane off US Highway 169 onto Smith Street that could allow for buses to line up in a safer location.

Alternatively, Ryan Shewey of Snyder & Associates provided an engineering design from Shawn Duke that would instead retain the current alignment but connect Smith and Clinton each directly onto US Highway 169 separately, eliminating the merging streets but creating two access points onto the highway. The reason for the alternative plan was concerns for traffic backing up and preventing homeowners access as well as sightline concerns with the turning lane. The cost estimate is assumed to be comparable.



PROJECTS & STRATEGIES

PROJECT 6: ROUNDBABOUTS

Emphasis Area: Intersection Improvements, Speed Enforcement

Strategies: Entrance Engineering, Traffic Calming

Cost Estimate:

\$6,000,000.00-\$12,000,000

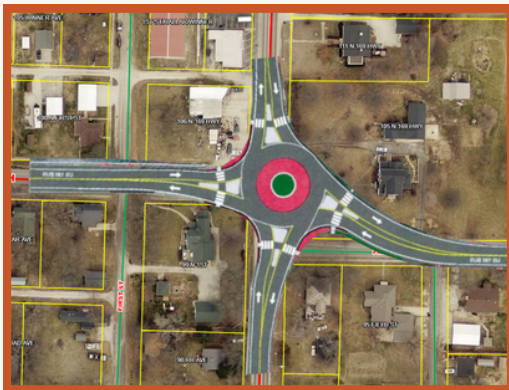
Funding Opportunities:

SS4A Implementation Grant, MoDOT Cost Share

One of the most proven safety countermeasures for improving intersections and reducing speed is the installation of a roundabout. A roundabout alters the point of impact from potential head on, rear end, and T-bone collisions to less impactful sideswipe collisions which are statistically less fatal. The roundabout is also a traffic calming measure as it forces drivers to lower their speed to navigate appropriately. Lower speeds plus the point of impact increases the chances of surviving a roadway crash the greatest of any proven safety countermeasure.

The data analysis shows the following;

- US Highway 169 is the area of town with the highest crash rate
- The highest crash type in the City of Gower are rear end crashes
- Traffic along US Highway 169 has difficulty slowing down
- Pedestrians are most at risk along US Highway 169 due to speeds
- Offset and skewed intersections add to danger of US Highway 169



Each of these issues can be solved by the addition of a roundabout or series of roundabouts at high risk areas.

Designs have not been officially solicited, but MoDOT cost estimate for a roundabout is generally set at \$6,000,000. The two areas of greatest need and highest impact of a roundabout would be the intersections of Hallar, Field, and US Highway 169 as well as the intersections of Clinton, Smith, and US Highway 169. Provided are examples of what those roundabouts may look like when engineering is solicited. Federal Highway Administration highly recommends this project, but public feedback has not been positive.

IMPLEMENTATION

The City of Gower will pursue grant funding when the city budget allows for local match on roadway safety infrastructure improvement projects. The Streets Commissioner will be responsible for identifying projects and grants to prioritize and pursue.

The East Buchanan School District will prioritize pedestrian safety and work with city officials, law enforcement, and MoDOT in developing strategies to protect pedestrians traveling to and from the schools, especially in the development of the new Middle School project. It will be the responsibility of the East Buchanan School District to identify programs and pursue funding opportunities to increase roadway safety education within the district, working with EMS and MoDOT safety partners.

The City of Gower will review the Vision Zero Safety Action Plan every year during the first regular meeting of the Board of Aldermen in June. Progress on identified projects will be addressed and evaluated. The Vision Zero Planning Committee may be reconvened every five years to update data, review progress, and prioritize new and existing projects to maintain the forward progress of the city towards achieving a continual trend of zero roadway fatalities.

JUNE,
2024



VISION ZERO SAFETY ACTION PLAN

City of Gower adopts the Vision Zero
Safety Action Plan



EVALUATION

The data provided will be updated every five years by the Vision Zero Planning Committee, but should be evaluated each year to track potential progress and effectiveness of any projects that have been completed in the meantime. The plan will be available online on both the city and Mo-Kan's web pages with physical copies available at the Mo-Kan offices and the Gower City Hall for public access, review, and feedback.

Mo-Kan Regional Council will keep the City of Gower aware of funding opportunities to apply towards projects identified in the Vision Zero Safety Action Plan.

The City of Gower will evaluate what funding opportunities fit within the budget of the city to allocate towards local match.

Progress on the identified projects will be tracked between plan updates with new projects identified, prioritized, and added to the plan as projects are completed. Any roadway safety improvements pursued without identification in the Vision Zero Safety Action Plan will be included in the Existing Efforts section of the next plan update.

The 2029 update will record the progress towards the goal of zero fatalities and serious roadway injuries by 2033 and allow for adjustments and improvements to the plan to address any additional issues that arise.

01



MAINTAIN ZERO FATALITIES

Evaluate roadway fatality data to assure the City of Gower maintains zero fatalities within its city limits. Updated city limits to be included in future plan updates, increasing potential for fatality data.

02



REDUCE CRASH RATE

Evaluate crash data each year to track and measure potential reductions or increased need for traffic calming measures. Evaluate if increased enforcement, visibility improvements, and infrastructure improvements have had an effect.

03



IMPROVE WALKABILITY

Survey citizens and students again to determine if walkability has improved and where continued improvements are warranted.

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