

## Chapter 7 – Safety Management

### Introduction

The Dixie MPO is committed to excellence in transportation planning. One area of planning will be given a lot of attention is 'Safety Management'. On the pages to follow, data and information will be presented that illustrates issues related to 'Safety and Security' as well as 'Traffic Safety'. Some ways those issues can be mitigated through objective identification and specific strategies, or projects intended to lessen their impact are also presented.

The UDOT has put significant efforts into safety related data and campaigns. That information is used as a part of the Dixie MPO planning effort. For more information on the UDOT campaign, please refer to the UDOT web site at <http://www.udot.utah.gov>.

As of 2023, the Dixie MPO received a \$1 million award from the Safe Streets and Roads Discretionary Grant Program (provided by Bipartisan Infrastructure Law under the Biden administration) to develop a Safety Action Plan in Washington County, Utah. As of October 2024, the process of completing the Safety Action Plan has been finalized. The SS4A SAP has allowed the MPO to analyze all roadway safety and roadway fatality concerns within Washington County and how to plan to reduce roadway fatalities and serious injuries. The Executive Summary of that final SAP can be found below, and the full document can be found on the Dixie MPO website at <https://dixie-mpo.com/safe-streets-4-all/>.

# Executive Summary

## ES.1 The Safe Streets for All Plan Background and Decision-Making Process

The Five County Association of Governments (FCAOG) in consultation with state and local government partners led the development of a comprehensive transportation safety plan to address serious and fatal crashes in Washington County. The FCAOG safety plan was developed with funding from the Safe Street for All (SS4A) discretionary grant program, established by the Bipartisan Infrastructure Law (BIL).

The FCAOG Action Plan is organized around the pillars of the Safe System Approach, shown in **Error! Reference source not found.**, and the SS4A program. The Federal Highway Administration (FHWA) encourages local SS4A Action Plans to adopt the Safe System Approach principles and structured around five objectives - *safer people, safer roads, safer vehicles, safer speeds, and post-crash care*. The FCAOG Action Plan embraced the Safe System principles described by the USDOT: *"deaths and serious injuries are unacceptable, humans make mistakes, humans are vulnerable, responsibility is shared, safety is proactive, and redundancy is crucial."*



The FCAOG SS4A Action Plan of goal setting, technical work program, outreach activities, and equity assessment, is designed to result in clearly defined, comprehensive safety strategies, practices, and projects focused on all transportation system users to prevent roadway fatalities and serious injuries. *The FCAOG SS4A plan addresses the eight FHWA outlined SS4A Action Plan Components and meets eligibility requirements for Washington County jurisdictions to apply for all USDOT SS4A grant types.* This report documents all activities and technical analysis associated with the development of the FCAOG SS4A plan.

As part of the SS4A Action Plan development process, a Safety Subcommittee was formed and charged with the development, implementation and monitoring progress toward the established safety goal of the Action Plan. The Safety Subcommittee was comprised of city engineering staff, the Washington County School District, bicycle advocacy groups, the Shivwits Band of Paiutes in Washington County along with interested members of the public.

To ensure a strong leadership commitment to the Action Plan, the FCAOG Board and Washington County Commission acted as the governing body to formally and publicly commit to the Vision Zero Fatality goal established by the Safety Subcommittee **(See Appendix 2 for the Resolution)**.

The Safety Subcommittee met at specific decision points throughout the study to review and approve critical elements of the Action Plan. The Subcommittee meetings helped unify county leadership focusing on the SS4A plan development. The following list shows the meetings held with the Subcommittee and the topics and actions taken.

- September 6, 2023 – Safety Subcommittee Kick-off and Goal Setting (In-person)
- October 19, 2023 – SS4A Action Plan Goal Setting (In-Person)
- November 13, 2023 – High Injury Network Review and Approval (In-Person)
- December 18, 2023 – Finalize HIN, Review Equity Assessment, Project Update (Virtual)
- January 25, 2024 – Safety Profiles and Countermeasures Presentation (In-person)
- February 26, 2024 – High Injury Network Review of Crash Locations (In-person)
- March 21, 2024 – Countermeasure Workshop (In-Person)
- June 3, 2024 – SS4A Project and Policy Recommendations Counter Measure Review (In-person)
- July 30, 2024 – Review of the Draft Final Report and Final Comment Period (In-person)

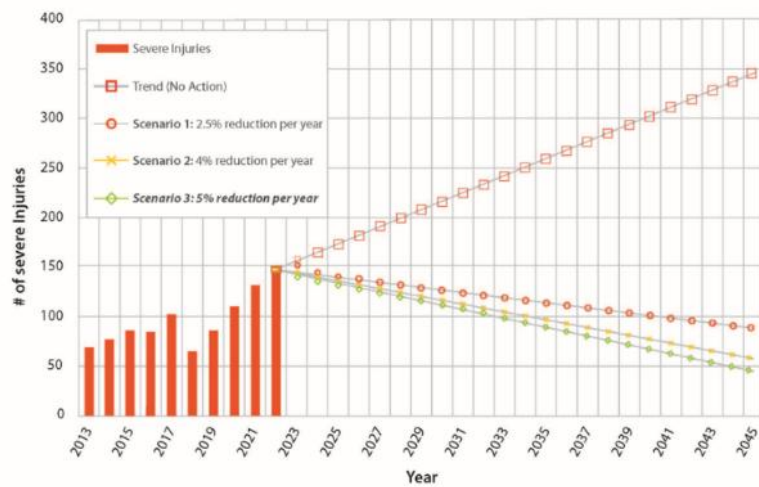
## ES.2 The SS4A Plan Goal and Safety Analysis

Since 2003, Utah has been focused on the goal of reducing serious injuries and fatalities with the goal of zero fatalities on Utah's roads. As part of UDOT's safety leadership *"The goal of the 2016 Strategic Highways Safety Plan (Version 4.0) was to reduce fatalities by 50% by 2030. That equates to a 2.5 percent decrease in fatalities annually. In our quest to reach Zero Fatalities, the State of Utah adopted the AASHTO goal of reducing fatalities by 50% by 2030."*

Building off the Strategic Highway Safety Plan's goal, the Safety Subcommittee immediately focused on establishing the Action Plan safety goal. The project study team presented three scenarios ranging from a 2.5 percent to a 5 percent reduction in severe crashes per year (**Error! Reference source not found.**) to the Safety Subcommittee. Each scenario included a description of suggested safety actions and programmatic elements necessary to work toward each goal.

In September of 2023, the Safety Subcommittee unanimously recommended to the FCAOG a SS4A Action Plan goal of “Vision Zero Fatalities and Serious Injuries with a 5% Yearly Reduction”. The FCAOG recommended by unanimous vote that Washington County set Action Plan goal. At the October 2023 Washington County Board meeting, the County Commission voted and passed by Resolution the leadership commitment to the “Vision Zero Fatalities and Serious Injuries with a 5% Yearly Reduction” goal. The safety goal, shown in **Error! Reference source not found.**, will be one of the key performance indicators used annually to measure progress toward the vision zero fatalities.

Consistent with national data, crashes along with severe crashes are increasing in Washington County. **Error! Reference source not found.**, shows both growth in VMT and in crashes over a ten-year period.



**Figure ES-2:** Chart Showing Percent Reduction Goals, with 5% in Green

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**Figure ES-3:** Crashes vs VMT in Washington County over the past 10 years

While severe crashes (fatal and serious injury crashes) make up a small percentage of total crashes, the number of severe crashes between 2019 and 2022 have significantly increased. Since 2019, fatal and serious injuries have increased by 68 percent.

The primary data source used to support the safety assessment is the Utah Crash Summary developed from Utah crash reports and provided through the AASHTOWare Safety database, which identifies crash factors associated with each crash recorded in the database. To address the crash trends in Washington County, the high-injury network (HIN) was developed and used to identify roadway segments with the highest incidents of severe crashes. The HIN ranking criteria included proximity to underserved areas, prioritizing segments in or near underserved areas. The HIN segments include 62 percent of severe crashes in the county.

Using the same data, systemic crash data was assessed to create ten safety profiles which account for the predominant severe crash types in the county (Table ES-). The safety profiles address over 70 percent of severe crashes in the county. All crash data, HIN segments, safety profile crashes were organized into ArcGIS, and used throughout the study as an interactive investigative and analysis tool. The tools were made available to the Safety Subcommittee members through a project SharePoint site and the public through the project webpage located on the FCAOG website. The tool was used to facilitate subcommittee and public meetings to analyze the crash attributes for both location-specific and systemic crash trends.

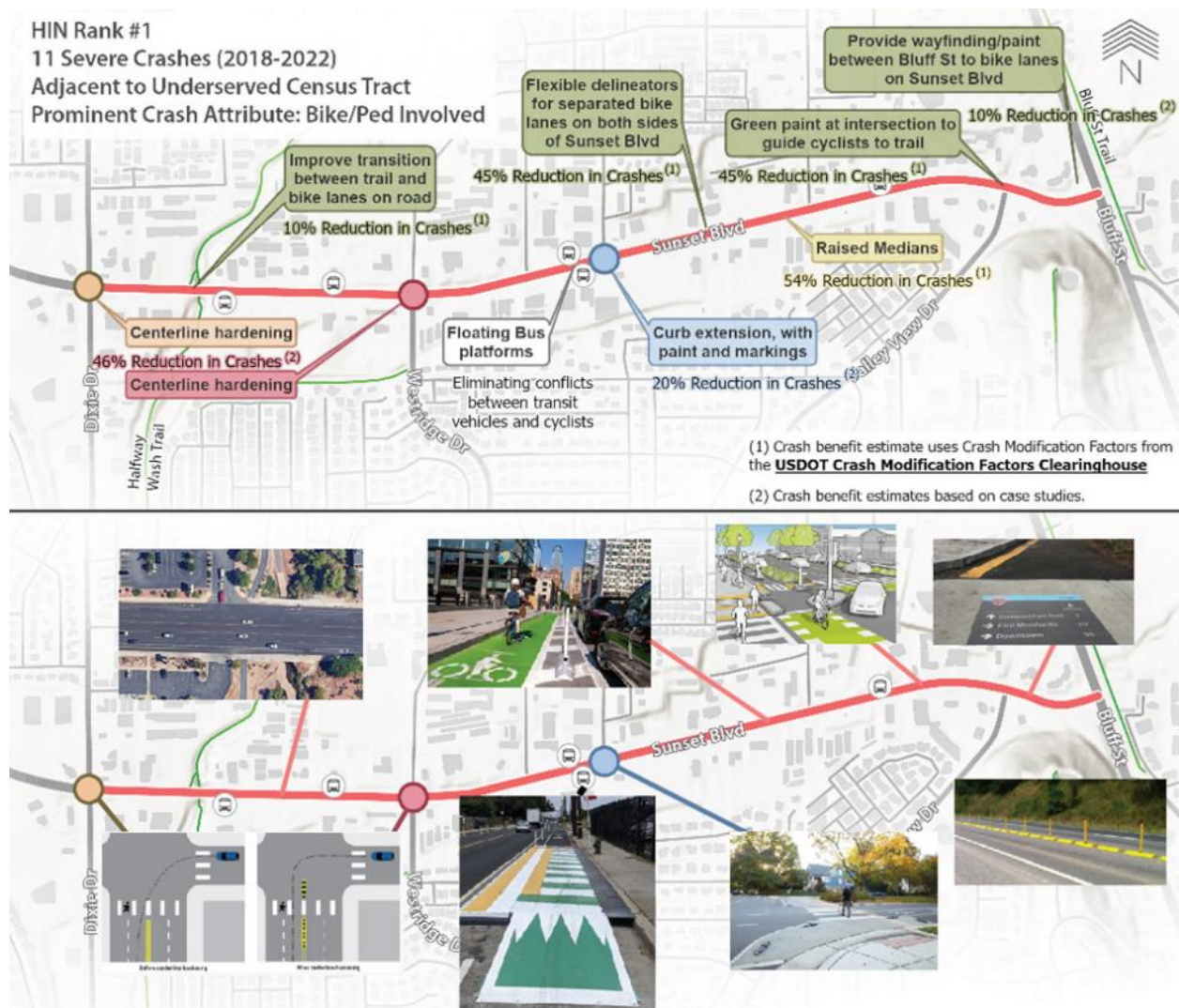
**Table ES-1. Safety Profile – Summary of Crash Types**

Safety Profile Description		In Washington County		On the Top 150 Updated HIN Segments	
		Persons Severely Injured	Severe Crashes	Persons Severely Injured	Severe Crashes
1	Teenage Driver Crashes	103	86	65	54
2	Angle Crashes at Intersections	101	86	72	60
3	Single Vehicle Crashes on Horizontal Curves	63	60	27	26
4	Head-On Crashes	47	32	30	23
5	Vulnerable Road User Crashes at Intersections	45	40	28	24
6	Single Vehicle Motorcycle Crashes	42	41	20	20
7	Angle Crashes at Mid-Block Accesses	28	20	26	19
8	Rear-End Crashes	25	24	21	20
9	Nighttime Pedestrian Crashes at Mid-Block Locations	16	15	12	11
10	Nighttime Pedestrian Crashes at Intersections	16	14	11	9

## ES.3 The SS4A Plan Safety Recommendations

The plan produced actionable items. For each HIN segment, crash types were organized into the safety profiles and a toolbox of counter measures were developed. For the top 12 segments, a detailed safety plan was developed based on specific crash types and locations (**Error! Reference source not found.**).

The SS4A Plan produced ten systemic safety profiles for all of Washington County. These show common crash attributes and trends that may benefit from a systemic improvement, regardless of location. Each safety profile includes a toolbox of proven counter measures. The systemic counter measures are a higher level, easy-to-apply list of solutions that an entity can use to reduce a specific crash type or attribute, as opposed to crashes in a specific location.



**Figure ES-4:** Example of the HIN Segment Safety Recommendation



*Four plan and policy recommendations are prioritized and will be the focus of FCAOG and the SS4A Safety Subcommittee over the next year.*

1. **Convene and Coordinate** –The Safety Subcommittee will focus on continuing to address safety concerns in Washington County, coordinating with UDOT and tracking progress toward the 5 percent reduction goal. The Safety Subcommittee will meet quarterly to track progress.
2. **Fund** – The Safety Subcommittee members will look for opportunities to develop competitive grant opportunities for HSIP, SS4A or other funding sources to implement safety solutions identified in this plan. Funding activities will be reported as part of the quarterly Subcommittee meetings.
3. **Educate** – The Safety Subcommittee will continue to look for opportunities to educate local leadership on the progress toward achieving the 5 percent reduction goal annually and on the activity of the Safety Subcommittee. The Subcommittee will also continue to emphasize opportunities to support best practices in educating young and inexperienced drivers. This activity could support either countywide or statewide activities.
4. **Reduce and Prevent Severe Crashes** – The FCAOG, through the Safety Subcommittee, will continue to review and revise crash trends to track progress toward reaching the 5 percent reduction per year in fatal and serious crashes. Progress will, at minimum, be reported annually and progress will be reported during the quarterly Subcommittee meetings.

*To measure progress of achieving the SS4A Plan goals a key performance indicator will be measuring change in severe and fatal crashes in the county. Crashes by the primary crash attributes will also be compared year over year to assess the trend in crash types. Crashes will also be geolocated using the ArcGIS project database and assessed against areas defined as underserved to understand crash trends within those areas. The FCAOG and the Safety Subcommittee will report the results of this analysis annually and will publish the safety assessment on the FCAOG website.*

Based on progress toward the 5 percent reduction goal the Safety Subcommittee may adjust safety planning efforts to help achieve the stated goal. Each year the FCAOG and the Safety Subcommittee will also review progress on safety planning plans and policy initiatives. This Action Plan document will be used as the basis to assess and expand policy and program safety strategies.