A5

baseline data

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A5.1 Purpose of Baseline Data

Baseline Data documents the demographic, transportation, and infrastructure baseline conditions that provide context for the Scottsbluff SS4A Safety Action Plan. These data establish a reference point for understanding existing conditions, interpreting crash risk, and tracking progress over time as safety actions are implemented.

The baseline data summarized here support:

- Crash and risk analysis (APPENDICES A2–A4)
- Project and countermeasure selection (APPENDICES A8–A9)
- Performance tracking for future SS4A implementation grants

A5.2 Community Demographics

Demographic analysis for the Scottsbluff Safety Action Plan utilized U.S. Census and American Community Survey (ACS) data at the census tract and block group level to understand community characteristics across the project area. For consistency across datasets, the study area included both the Scottsbluff corporate limits and the City's extraterritorial jurisdiction (ETJ).

Because Census geographies do not align exactly with the project boundary—often extending beyond the ETJ—demographic data were used primarily to understand general patterns rather than to assign precise values to specific areas within the project limits.

To support the public engagement process, the project area was divided into five geographic regions (Northwest, Northeast, Central, Southeast, and Southwest) based on recognizable neighborhood patterns and major corridors. These regions were aligned with block group boundaries within the corporate limits and as closely as practical with Census block group boundaries outside corporate limits; however, because block groups extend beyond the project area, responses could not be assigned as exact percentages of population by geography.

Instead, survey responses and comments were tracked by general location within these five regions to ensure that input was received from across the community. A sixth category was used to capture input from adjacent communities, including Terrytown and Gering, as well as individuals who live outside the project area but work, shop, or travel regularly within Scottsbluff.

This approach allowed the project team to:

- Confirm broad geographic representation across the community
- Identify differences in perceived safety concerns by area
- Ensure that priorities reflected citywide conditions rather than isolated viewpoints
- Incorporate input from regional users who regularly interact with Scottsbluff's transportation system

This engagement-based geographic framework complements traditional demographic analysis and aligns with SS4A guidance for small communities, where community input, lived experience, and observed safety concerns provide critical context alongside crash data and Census information.

A5.3 Travel Modes and Travel Patterns

Transportation in Scottsbluff is predominantly auto-oriented, consistent with rural community travel patterns. However, walking, bicycling, and school-related travel remain important daily modes for many residents.

Observed and reported travel patterns include:

- Daily walking trips to schools, parks, downtown, and community facilities

- Limited but meaningful bicycle use, including recreational and youth travel
- Heavy reliance on personal vehicles for commuting, shopping, and services
- Seasonal variation in travel patterns related to agriculture, recreation, and weather

Public survey input and stakeholder engagement indicate that perceived exposure risk for pedestrians and students exceeds what crash history alone reflects, reinforcing the need to consider non-motorized travel in safety planning.

The Monument Valley Pathway provides an important shared-use corridor for walking and bicycling, supporting both recreational use and connectivity across the community.

A5.4 Roadway Network and Functional Classification

The Scottsbluff roadway network includes:

- Local residential streets
- Collector streets serving neighborhoods and schools
- State highways (US-26, NE-71, NE-92) that function as regional corridors

Key characteristics of the roadway system include:

- State highways serving both regional through traffic and local access
- Downtown streets with on-street parking, limited sight distance, and mixed user activity
- Residential streets with lower speeds but limited traffic calming features
- Railroad corridors intersecting major routes and affecting access and operations

Roadway centerline data were sourced from the City's GIS datasets and reviewed for consistency and completeness.

A5.5 Traffic Volumes and Exposure

Traffic volume data were available for limited locations, primarily along state highways and select corridors.

Key considerations:

- AADT data were used where available to provide context for exposure, with 2024 providing the most complete data.
- Traffic volumes (2024 AADT) are highest along US-26, Avenue I, 27th Street, Broadway, Avenue B, 5th Avenue, and 20th Street.
- Volume data were supplemented with functional classification, land use context, and observed activity patterns.
- Exposure risk was evaluated using a combination of volume, speed environment, and pedestrian activity rather than traffic counts alone.

Given limited count coverage, the plan emphasizes context-based and systemic risk assessment rather than volume thresholds.

A5.6 School Enrollment and Student Travel

Scottsbluff Public Schools and two additional private schools represent a major generator of daily travel activity.

Baseline considerations include:

- Student arrival and dismissal peaks with concentrated vehicle, pedestrian, and bus activity
- Limited walking and bicycling relative to potential demand due to perceived safety concerns
- Parent drop-off, bus circulation, and student parking contributing to operational conflicts and congestion
- Event-related traffic surges during sporting and school activities

School locations, routes, and operational patterns were incorporated into safety analysis, project prioritization, and countermeasure selection.

A5.7 Pedestrian, Bicycle, and Transit Infrastructure

Sidewalk and ADA Infrastructure

Sidewalk conditions are not completely mapped in City GIS data but field verification confirms gaps in the sidewalk network throughout residential areas, near schools, and along key corridors.

Baseline conditions include:

- Sidewalk gaps on local streets and near schools
- Inconsistent ADA curb ramp coverage

- Variable sidewalk condition and continuity
- Locations where pedestrians routinely walk in the roadway due to infrastructure gaps

A comprehensive sidewalk inventory has not been completed; however, observed conditions and community input consistently identify gaps as a key safety concern.

Bicycle Facilities

Scottsbluff does not currently have a dedicated on-street bicycle network. Bicycle travel occurs:

- On shared-use pathways where available
- On local streets
- Along shoulders of state highways in limited locations

The Monument Valley Pathway provides the primary off-street bicycle and pedestrian facility in the community, connecting the YMCA area along South Broadway and South Beltline Highway to the west side of the city, continuing east along the south side of US-26, crossing via a pedestrian bridge, and extending to the Western Nebraska Community College (WNCC) campus. This facility serves both recreational and transportation functions.

Transit

Transit service is provided by Tri-City Roadrunner, including fixed-route and demand-response services within Scottsbluff, Gering, and Terrytown.

Transit routes and stops are documented in **APPENDIX A6 – MAPS** and were incorporated into the safety analysis.

See transit stakeholder summary in **APPENDIX A1 - ENGAGEMENT**.

A5.8 Developed Layers and Features

Baseline spatial datasets developed for this plan include:

- Limited sign inventory
- Project boundary (3-mile extraterritorial jurisdiction)
- Generated intersection locations for analysis
- Railroad crossings and rail corridors (signage, lighting, decision point, sight line, sight obstruction)
- Land use data
- School sites and related safety features (beacons, lighting, crosswalk centerlines)
- Public transit routes and stops
- Traffic signal locations
- Public engagement locations and comment data
- Crowdsource safety comment point layer

These datasets supported:

- Visibility and night-condition analysis
- Intersection-based safety screening
- Understanding of access density and turning conflicts

A5.9 Crash Data Baseline

Crash data obtained from the Nebraska Department of Transportation (NDOT) for the period 2014–2023 establish the baseline safety record for the Scottsbluff Safety Action Plan. These data include all reported crashes within the City of Scottsbluff and its extraterritorial jurisdiction (ETJ) and provide the foundation for identifying trends, risk factors, and priority locations.

Between **2014** and **2023**, Scottsbluff experienced **5,361** reported crashes, including **93** crashes resulting in fatal or serious injury (KSI). These data reflect reporting practices consistent with NDOT and Model Minimum Uniform Crash Criteria (MMUCC) standards, including updates implemented in 2021.

Key baseline characteristics include:

- A concentration of fatal and serious injury (KSI) crashes along a limited number of corridors and intersections, forming the basis of the High Injury Network (HIN)
- A strong relationship between crash severity and roadway speed, corridor function, and intersection control, particularly along higher-speed, multi-lane facilities
- Recurring contributing factors, including speeding, failure to yield, distraction, and impairment
- Elevated risk for vulnerable road users, especially near schools, activity centers, and key crossing locations
- Crash patterns influenced by time of day, lighting

conditions, and roadway environment, including increased severity during nighttime conditions

Crash data were analyzed in detail in **APPENDICES A2-A4** and are summarized here to establish baseline conditions that inform the plan's strategies, priorities, and performance measures.

A5.10 Comparative Context

To provide regional context, crash data from four comparable Nebraska communities were reviewed. This comparison helped:

- Validate Scottsbluff's crash profile
- Support the emphasis on preventive and systemic safety strategies
- Reinforce the appropriateness of SS4A planning approaches for the community of Scottsbluff.

A5.11 Role of Baseline Data in Future Evaluation

The datasets documented in Baseline Data establish a foundation for:

- Monitoring changes in crash severity
- Evaluating effectiveness of implemented projects
- Supporting future SS4A Implementation Grant applications
- Updating the Safety Action Plan over time

Baseline conditions documented here may be revisited and updated as new data become available.

A5.12 Data Sources List

- US Census Bureau 2024 (ACS 5-Year Estimates): Census Tracts, Census Blocks, Demographics, Population
- TIGER/Line shapefiles: road centerlines and administrative boundaries
- NDOT crash database (2014-2023): cities of Scottsbluff, Beatrice, Gering, North Platte, South Sioux City
- NDOT AADT data (2024)
- City GIS datasets: road centerlines, landmarks, signs, corporate limits, extraterritorial jurisdiction, public spaces, public facilities, pathways, other reference layers
- sUAS imagery acquired by MCS family of companies
- Scottsbluff City Police citation and crash data (2024-2025, where available)
- BNSF railroad crossings conditions and crash data
- 4 Task Force meetings
- 12 open house / pop-up events
- 4 targeted information sharing sessions with Scottsbluff teens
- Public pop-up and online surveys (499 responses)
- Online map commenting survey (2,066 mapped responses)
- Stakeholder coordination meetings including schools, transit, business leaders, public safety and public health:
  - Elementary & Middle Schools
    - Roosevelt Elementary
    - Longfellow Elementary
    - Lincoln Heights Elementary
    - Westmoor Elementary
    - St Agnes Catholic School
    - Community Christian School
    - Bluffs Middle School
  - Tri-City Roadrunner public transit leadership
  - Rotary
  - Public safety officers (City Police and Fire Departments, Nebraska State Patrol, EMS)
  - Panhandle Public Health District (PPHD)

A5.13 Relationship to Other Appendices

This appendix supports:

- **APPENDIX A2 – COLLISIONS**
- **APPENDIX A3 – CRASH MAPS**
- **APPENDIX A4 – FINDINGS**
- **APPENDIX A6 – MAPS**
- **APPENDIX A7 – METHODS**