PROCESS MANUAL for NATIVE AMERICAN PEDESTRIAN SAFETY ASSESSMENTS



By Kshitij Sharma, Kimberly Vachal, Ronald Hall, Kelly Bengtson, and Scott Satermo

NDSU | UPPER GREAT PLAINS TRANSPORTATION INSTITUTE
RURAL TRANSPORTATION SAFETY AND SECURITY CENTER

OBJECTIVE and SCOPE

Objective

To implement strategic, technical, and programmatic measures aimed at achieving zero traffic fatalities in Native American communities through the integration of pedestrian-related projects and pertinent safety assessment frameworks.

Scope

This document outlines a comprehensive framework, including infrastructure improvements, methodologies, stakeholder engagement strategies, rigorous policy alignment protocols, and robust program evaluation models for safety interventions.

This manual should be read and applied along with:

- "Native American Pedestrian Safety Guidelines"
- "Guideline Advisory Manual for Native American Pedestrian Safety Assessments"

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ORGANIZATIONAL STRUCTURE and RESPONSIBILITIES

Governance

- **Tribal Council:** Develops and defines strategic objectives aligned with the Safe System Approach, appoints program leadership, and approves detailed implementation plans.
- **Pedestrian Safety Leader:** Oversees inter-agency coordination, ensures adherence to technical specifications, and monitors program compliance.

Operational Leadership

- **Program Champion:** Champions the promotion of evidence-based safety-first culture, coordinates stakeholder activities, and facilitates the delivery of expert-level technical guidance.
- **Tribal Nation Transportation Department:** Conducts quantitative risk assessments, implements GIS-based infrastructure planning, and maintains centralized repositories for technical documentation.

Supporting Entities

- **Indian Health Services (IHS):** Designs and disseminates data-driven advocacy campaigns emphasizing the public health implications of pedestrian safety.
- **Tribal Law Enforcement:** Implements predictive, risk-based law enforcement strategies, ensures statutory compliance, and provides community safety outreach.
- **K–12 Educators:** Embeds pedestrian safety modules into academic curricula and leads grassroots educational initiatives.

SAFETY ASSESSMENT FRAMEWORK and ASSESSOR/STAKEHOLDER ROLES

Key Assessors and Stakeholders

Focus Area	Assessors/Stakeholders	Roles/Qualifications
Safer People	Tribal Transportation Department, IHS, Educators	Highway Safety Specialist (PE, RSP), Driver Safety Specialist
Safer Roads	Tribal Transportation Department, Consultants	Program Evaluation Representatives, Subject Matter Experts
Safer Vehicles	Tribal Council, Tribal Procurement Department, Vehicle Manufacturer	Subject Matter Experts
Safer Speeds	Tribal Transportation Department, Law Enforcement, Regional Counterparts	Speed Compliance Specialists
Post-Crash Care	IHS, First Responders, Law Enforcement	Emergency Medical Services/Care Specialists

Optional Community Roles: Elders, Youth, and Educators enhance sociocultural relevance and amplify local engagement.

Stakeholder Integration

- Form a skilled, multidisciplinary task force to lead safety assessments. Involve neighboring jurisdictions for shared expertise and regional collaboration. Use community surveys and focus groups to ensure local voices shape recommendations.
- Utilize regional counterpart expertise to address inter-jurisdictional complexities.
- Conduct structured public input meetings using survey instruments and focus group methodologies.

TECHNICAL IMPLEMENTATION

Pre-Implementation Assessments

- **Facilities Scanning:** Deploy GIS-enabled tools to map potential pedestrian infrastructure deficiencies and to facilitate prioritization and planning of any walkability/bikeability assessments, road safety audits, and countermeasures etc.
- **Data Management:** Establish centralized databases for structured documentation and retrieval of safety assessment findings.

Infrastructure Design

- Conform to MUTCD (Manual on Uniform Traffic Control Devices) and ADA (Americans with Disabilities Act) standards.
- Integrate advanced traffic-calming mechanisms, high-visibility crosswalk technology, and adaptive smart lighting systems.

Implementation Timeline

- **Phase 1 (Months 0–6):** Conduct comprehensive stakeholder mobilization and data-driven safety rating of relevant transportation system components.
- **Phase 2 (Months 7–18):** Deploy pilot interventions in identified low-safety zones/locations.
- **Phase 3 (Months 19 onwards):** Implement full-scale infrastructure optimization and repeat based on real-time performance analytics.

Safety Assessment Protocol

To ensure a consistent and replicable approach to pedestrian and bicyclist safety assessments on Tribal lands, the following step-by-step protocol is recommended:

- **Step 1: Initiate Engagement and Define Scope**
  Convene key stakeholders, including Tribal leadership, transportation officials, law enforcement, public health, and community representatives. Establish safety assessment goals, target areas, and desired safety outcomes. Formalize team roles and responsibilities using a Memorandum of Understanding (MOU) if applicable.

- **Step 2: Collect Baseline Data**
  Conduct field observations and collect historical crash data, enforcement records, and pedestrian/bicyclist volumes. Administer community surveys and hold listening sessions to capture lived experience and perceptions of safety. Leverage GIS mapping and risk scoring tools to identify high-priority locations.

- **Step 3: Perform Site Safety Assessments**
  Deploy interdisciplinary teams to inspect high-risk corridors and intersections. Use standardized checklists based on MUTCD and ADA compliance benchmarks. Document deficiencies, behavioral observations, and environmental conditions (e.g., lighting, signage, crosswalk visibility).

- **Step 4: Score and Analyze Findings**
  Use a scoring system to evaluate risk severity and frequency. Integrate community narratives and survey responses into the final qualitative analysis. Identify issues and cross-cutting traffic safety themes (e.g., speed, lack of infrastructure, impaired driving patterns).

- **Step 5: Report and Recommend**
  Compile findings into a comprehensive safety assessment report for Tribal leadership and community review. Include maps, photos, data summaries, and actionable recommendations. Prioritize interventions by impact, cost, and implementation feasibility.

- **Step 6: Feedback and Validation**
  Present findings in a town hall or stakeholder workshop for validation and input. Adjust recommendations based on community response and technical feasibility feedback.

- **Step 7: Implementation Planning**
  Integrate recommendations and any related Tribal Council resolutions into Tribal transportation plans, capital improvement programs, or grant proposals. Assign responsibility for monitoring progress and updating safety assessment documentation over time.

MONITORING and EVALUATION

Data Collection Framework

- **Quantitative Metrics:** Incident rate reductions, compliance with safety benchmarks, and increased pedestrian traffic volumes.
- **Qualitative Metrics:** Stakeholder satisfaction indices and interpretative community feedback.
- **Tools:** Advanced traffic counters, surveys, polls, and integrated manual auditing procedures.

Evaluation Methodology

- Employ mixed-methods approaches combining inferential statistical analysis with cultural insights.
- Monitor Key Performance Indicators (KPIs) such as annual reductions in pedestrian-related crashes and proportional increases in non-motorized travel activity.

STAKEHOLDER ENGAGEMENT and OUTREACH

Community Integration

- Host town hall meetings supplemented by technical workshops.
- Leverage storytelling and culturally adapted educational modules to promote safety interventions.

Public Awareness Campaigns

- Utilize data-driven, targeted digital platforms for message distribution.
- Organize annual interactive events such as "Walk Safe Days", “Walk to School Days” etc. to foster community-wide participation.

Collaboration Platforms

- Deploy advanced project management systems for cross-functional coordination.
- Maintain a secure, cloud-based documentation repository to facilitate stakeholder access.

SUSTAINABILITY and CONTINUOUS IMPROVEMENT



Long-Term Planning

- Develop and iteratively update a dynamic five-year strategic plan.
    - The Program Champion would engage the stakeholders on an annual/ongoing basis in identifying metrics for:
        - Project prioritization
        - Sustained local engagement including updates to elders/leadership
- Employ predictive analytics to preemptively address emerging risks.
    - The Program Champion, with the help of Program Evaluation Representatives and Subject Matter Experts, would also lead the efforts on a comprehensive strategic review for:
        - Policy review/updates and
        - Other strategic discussions

Asset Management

- Conduct systematic inspections leveraging available inventory tools to document existing-conditions, and if feasible deploy AI-enabled diagnostics to prioritize infrastructure repairs.
- Based on collected asset data, consider implementation of Transportation Asset Management Plans (TAMPs) incorporating lifecycle cost analysis. This practice can be initiated at a project level, and gradually expanded network-wide.

Adaptive Policies

- Revise operational protocols using empirical evidence from project outcomes.
- Collect locally relevant metrics such as current assessment ratings, stakeholder survey and focus group results etc. annually.
- Publish comprehensive periodic (annual/three-/five-year cycle) progress reports to sustain transparency and reinforce stakeholder confidence and enthusiasm for future work.