

ODOT TRANSPORTATION SAFETY ACTION PLAN UPDATE

DRAFT SWOT Analysis

prepared for

Oregon Department of Transportation

prepared by

Cambridge Systematics, Inc.



Draft SWOT Analysis

ODOT TRANSPORTATION SAFETY ACTION PLAN UPDATE

prepared for

Oregon Department of Transportation

prepared by

Cambridge Systematics, Inc.
555 12th Street, Suite 1600
Oakland, CA 94607

Date

March 3, 2015



Table of Contents

1.0	Introduction.....	1-1
2.0	SWOT Analysis.....	2-1
2.1	Interviews with ODOT Division Staff.....	2-1
2.2	Regional Meetings	2-4
2.3	MAP-21 Comparative Assessment	2-7



List of Tables

Table 2.1	SWOT Analysis from ODOT Interviews.....	2-2
Table 2.2	SWOT Analysis from Regional Meetings.....	2-5
Table 2.3	MAP-21 and 2011 TSAP Comparative Assessment.....	2-8

1.0 INTRODUCTION

For the next iteration of the Transportation Safety Action Plan (TSAP), the Oregon Department of Transportation (ODOT) wants to understand how the previous Plan impacted transportation and safety plans, programs, projects, and institutional awareness throughout the state. Initial steps have been taken to understand Oregonian's perceptions and perspectives on transportation safety. This included twenty two interviews with representatives from several ODOT Divisions and ten regional meetings with community members and transportation and safety stakeholders. The results of the interviews and workshops shed light on the strengths, weaknesses, opportunities, and threats (SWOT) related to safety planning and implementation in Oregon. That information is summarized in Sections 2.1 and 2.2 of this memorandum.

The TSAP is required to meet federal requirements outlined in Moving Ahead for Progress in the Twenty First Century (MAP-21). A comparative assessment of the 2011 TSAP and MAP-21 requirements is included in Section 2.3.

2.0 SWOT ANALYSIS

2.1 Interviews with ODOT Division Staff

To reflect on the successes and challenges of the 2011 TSAP and generate ideas to enhance the next iteration of the document, 22 interviews were conducted with ODOT Division and Regional offices. Division offices interviewed included Maintenance, Driver and Motor Vehicle Services, Project Delivery, Motor Carrier, Transportation Development, Crash Data, and Bike and Pedestrian programs. Full results of the interviews, including common themes, interview participants, and the interview guide can be found in the report, "Oregon Transportation Safety Action Plan Assessment Interviews Summary September and October 2014." Table 2.1 summarizes interviewee perceptions of the strengths and weaknesses of the 2011 TSAP and opportunities and threats to consider during the Plan update.

Table 2.1 SWOT Analysis from ODOT Interviews

Strengths:	Weaknesses:
<ul style="list-style-type: none"> • The TSAP is a well-regarded and comprehensive document, providing staff at ODOT with a tool to ensure safety is at the forefront of other planning and programming efforts. • Many interviewees were generally familiar with the TSAP and were involved in its development, which points to a level of coordination amongst ODOT Divisions during the previous TSAP update cycle. • The 2011 TSAP included three emphasis areas, Infrastructure, Drivers Education, and Emergency Services to prioritize actions in the Plan. Interviewees noted the emphasis areas as a strong element of the plan. 	<ul style="list-style-type: none"> • Interviewees knew of or were familiar with the 2011 TSAP, but only a few use or reference it on a regular basis. • Not all understood the connection between the Transportation Safety Division Performance Plan and the TSAP. • The 2011 TSAP includes 112 actions – some felt the volume and organization of the actions diluted the plan, making it difficult to read, and difficult to identify the items of true importance. • The development of the actions was inconsistent - some were long term and aspirational while other were near term and specific. Organizational structure reflecting this would be useful in the TSAP update. • It was not clear why the three emphasis areas emerged above others. • Interviewees expressed a level of uncertainty about their current roles in TSAP implementation and how their programs were directly linked to the TSAP. • Several interviewees expressed concern about coordination among non-ODOT agencies. Some pointed out that the TSAP seems ODOT-centric and the links and coordination with partner agencies in enforcement and emergency management are less clear. This is also true for ODOT divisions and programs other than the Safety Division.

Opportunities:

- Currently many safety issues and initiatives are decentralized within ODOT, but the TSAP update could provide a central, unifying tool for collaboration on safety issues amongst all of the DOT Divisions and Offices. ODOT is taking a more integrated approach to transportation planning in general, which could positively influence collaboration on safety.
- To date, safety planning and programming efforts have addressed known issues, but some constituencies are beginning to express a desire to use perceived newer tools and analysis techniques to address safety in a proactive manner.
- ODOT has robust crash and roadway data to drive the planning and programming process and help identify emphasis areas and action steps and prioritize actions. This will also satisfy the MAP-21 requirement that the TSAP be data-driven.
- Annual safety workshops were considered by interviewees to be an excellent way to bring stakeholders together to continually provide information and solicit feedback on safety planning efforts. Collaboration across ODOT divisions and state offices would help ODOT staff make a better connection to the TSAP and their role in the development/implementation processes.
- Interviewees recognize the importance of coordination amongst ODOT Divisions and with non-DOT agencies for the next TSAP update. Consultation with a number of entities is also a key component of MAP-21. In addition to the committees that have been formed, the regional meetings which have been conducted, and interviews, other opportunities to continuously engage stakeholders during the TSAP update and implementation should be considered. This should be inclusive of the 4E's.
- The TSAP is the leading document for safety policies, programs, projects, and actions. For the TSAP update and longer term implementation, an understanding for how the document influences and affects ODOT planning and programming decisions is critical to expanded success.
- Emerging issues, such as automated vehicle issues, driving habits related to changing demographics, aging drivers, and ITS programs can be considered in the TSAP update.

Threats:

- Upon completion of a SHSP update, it is difficult to keep DOT staff and other stakeholders engaged in safety planning meetings and implementation efforts.
 - Limited funding means strategies and actions in the TSAP will be prioritized. This may alienate some DOT staff who do not feel the priorities can be integrated into the roles and responsibilities of their Division. As such, they may lose interest in actively pursuing safety programs and projects.
 - The planning cycles for transportation and safety planning efforts throughout the state do not align, so concepts in the TSAP will not be captured in recently updated planning documents.
 - The TSAP is required to be a data-driven document, but interviewees were interested in continuing to explore/develop safety actions, projects, and programs even for areas that are not data rich, including bike, pedestrian, and ADA.
-

2.2 Regional Meetings

Ten discussion groups were held from late October 2014 through December 2014 with community members and transportation safety advocates to solicit input on the 2011 TSAP and existing safety concerns. Events were held in Lincoln City, John Day, Redmond, Klamath Falls, Phoenix, Coos Bay, Hood River, Eugene, Portland, and Astoria and in total, over 90 individuals participated. Four hundred and fifty comments were received from participants, providing insights into the strengths and weaknesses of current safety planning efforts and opportunities and potential threats moving forward. Comments and suggestions were specific to engineering, enforcement, education, and emergency services efforts. Table 2.2 summarizes the comments from the regional meetings.

Table 2.2 SWOT Analysis from Regional Meetings

Strengths:	Weaknesses:
<p>Engineering</p> <ul style="list-style-type: none"> • ODOT continues to do a good job making roads and driving conditions safer. 	<p>Engineering</p> <ul style="list-style-type: none"> • Need to address bicycle and pedestrian safety issues, specifically in urban areas. • Road departures remain one of the biggest serious safety issues that need to be addressed through proven countermeasures and systemic treatments. • Need to address speeding related fatalities and serious injuries, specifically in rural areas.
<p>Education</p> <ul style="list-style-type: none"> • Seatbelt education campaigns have been highly successful. 	<p>Education</p> <ul style="list-style-type: none"> • Driver education programs for young and older drivers need improvement. • Current driver licensing renewal program is inadequate and there is a need for additional testing and programs. • Lack of targeted education and diversion programs aimed at repeat and chronic offenders.
<p>Emergency Response</p> <ul style="list-style-type: none"> • Emergency Responders do a good job, even where funding and other resources are not sufficient, for optimal services 	<p>Emergency Response</p> <ul style="list-style-type: none"> • EMS resources and training in rural areas is an issue - the volunteer base is dwindling, recruitment is tougher, and training resources across the board are thinning.
<p>Enforcement</p> <ul style="list-style-type: none"> • None identified. 	<p>Enforcement</p> <ul style="list-style-type: none"> • Resource deficiencies for enforcement puts limitations on the effectiveness of safety-related programs as they cannot sustain targeted enforcement or education over long periods of time.

Opportunities:

Engineering

- Low cost countermeasures, such as rumble strips can make a big difference on safety in a cost-effective way.
- Better data will help identify system deficiencies, prioritize limited funds, and ensure that expenditures are making a difference on safety.
- Incorporating safety improvements into projects during the planning phase instead of design/ construction could save on unexpected costs and the need to retrofit a project down the line.

Education

- The elements and components that go into making the seatbelt education campaign successful could be replicated for other emphasis area campaigns (i.e. impaired driving).
- Education programs related to new types of impairment including marijuana and prescription medications.
- Better data, in particular the evaluation of current education programs can help identify education efforts that are making a difference on safety.
- Develop or utilize existing partnerships to more effectively deliver safety education to rural areas.
- Education programs related to safe practices for other modes – transit users, bicyclists and pedestrians could be developed.

Emergency Response

- Identify creative solutions, such as training ODOT maintenance staff for first response medical skills (or other cross training opportunities) to address deficiencies in first response capabilities.

Enforcement

- Coordination of enforcement and education programs could have the highest impact on issues such as impaired driving, unbelted drivers, and young drivers.
- State police assistance and/or coordination amongst local law enforcement agencies to fill any gaps in rural areas.
- Implement ITS solutions (i.e. radar reader boards) at hot spot locations to alleviate staffing gaps amongst law enforcement agencies.

Threats:

Engineering

- Current ODOT infrastructure as well as future investments may need to be retrofitted or designed to address the needs of older road users.
- Funding limitations hinder the extent to which safety engineering solutions can be implemented.

Education

- Seatbelt education has been successful and fatalities and serious injuries related to unbelted drivers have decreased, but if funding is redirected to other emphasis areas/programs with higher need, unbelted fatalities and serious injuries could increase.
- It is often difficult to measure the impact educational programs are having on fatalities and serious injuries and whether funding is being well spent.
- Legalized marijuana and prescription medications present new challenges related to impairment education.

Emergency Response

- Scale of emergency services resource and service constraints may be a challenge to effectively leveraging needed services.

Enforcement

- Legalized marijuana and prescription medications present new challenges for law enforcement which is already constrained by limited finances.
- The drinking culture in Oregon will be difficult to shift.

2.3 MAP-21 Comparative Assessment

When the previous TSAP, which serves as the states SHSP, was adopted by the Oregon Transportation Commission in October 2011, the Safe, Accountable, Flexible, Efficient Transportation Equity Act - a Legacy for Users (SAFETEA-LU) was the enabling legislation related to transportation safety and funding. MAP-21 was signed into law in July 2012 and although it is still in the rulemaking process, with final rules for safety performance measures and the highway safety improvement program expected in mid-2015, many states are following these requirements to develop and update their SHSPs. Table 2.3 compares the 2011 TSAP with current MAP-21 requirements to understand the extent to which the current TSAP addresses MAP-21 legislation and where gaps exist. Column 1 describes the SHSP requirements under MAP-21, some of which are new and others that have been carried forward from previous legislation. Column 2 presents key indicators, describing whether a state has or will meet the requirement. Column 3 summarizes the contents of the 2011 TSAP and the extent to which it does or does not meet MAP-21 requirements. Column 4 outlines the strengths, weaknesses, opportunities and threats of the 2011 TSAP in relation to MAP-21 requirements.

Table 2.3 MAP-21 and 2011 TSAP Comparative Assessment

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
Consultation			
<p>23 USC 148 (a)(12)(A)</p> <p>The term 'State strategic highway safety plan' means a comprehensive plan, based on safety data, developed by a State transportation department that is developed after consultation with—</p> <ul style="list-style-type: none"> • a highway safety representative of the Governor of the State • regional transportation planning organizations and metropolitan planning organizations, if any • representatives of major modes of transportation • State and local traffic enforcement officials • a highway-rail grade crossing safety representative of the Governor of the State • representatives conducting a motor carrier safety program under section 31102, 31106, or 31309 of title 49 • motor vehicle administration agencies • county transportation officials; • State representatives of nonmotorized users • other major Federal, State, tribal, and local safety stakeholders 	<p>The State has conferred with stakeholders early in the SHSP update process, considered their input prior to decision making, and routinely informed them about actions taken regarding SHSP development.</p>	<p>Consultation was a requirement under SAFETEA-LU. As compared to SAFETEA-LU, MAP-21 added three additional stakeholders to the list, including:</p> <ul style="list-style-type: none"> • county transportation officials; • State representatives of nonmotorized users • other major Federal, State, tribal, and local safety stakeholders <p>Appendix I of the 2011 TSAP lists the public involvement activities that were part of the development process and a list of planning process participants.</p> <p>The public involvement activities, included consultation with various stakeholders through the formation of a committee, made up OTSC members; public input sessions; ten public input forums; engagement of the Area Commissions of Transportation; and newsletters.</p> <p>While consultation did occur with a broad range of stakeholders through the public involvement activities, the text does not specify if and when the required stakeholders were engaged. In looking at the list of planning process participants, some of these stakeholders can be inferred, but since agency names are not listed for every participant, it is hard to tell the extent to which the consultation requirement was met.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> • The 2011 TSAP describes how consultation was accomplished through public and stakeholder engagement and does list participating stakeholders. <p>Weaknesses:</p> <ul style="list-style-type: none"> • The 2011 TSAP does not specifically indicate who the consultation agencies were. <p>Opportunities:</p> <ul style="list-style-type: none"> • The updated TSAP will be developed with input from multiple agencies, transportation and safety stakeholders, and members of the public. This is being accomplished already through committees (PAC and PCT), stakeholder interviews, and regional meetings. As a result, including information in the TSAP Update on the required participants – who they were and how they participated in the TSAP can be accomplished. • PAC membership includes representatives from the required stakeholder list except for a highway-rail grade crossing representative and a motor vehicle administration representative. These individuals do not need to be added to the PAC, but should be included during public involvement activities and TSAP development. <p>Threats:</p> <p>None</p>

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
Data			
<p>23 USC 148 (a)(12)(B)</p> <p>The term 'State strategic highway safety plan' means a comprehensive plan, based on safety data, developed by a State transportation department that:</p> <p><i>Analyzes and makes effective use of State, regional, local, or tribal safety data</i></p>	<p>The State has used the best available safety data to identify critical highway safety problems and safety improvement opportunities on all public roads.</p>	<p>Developing a data-driven SHSP was a requirement under SAFETEA-LU and has not changed under MAP-21.</p> <p>Text in the 2011 TSAP states that, "the actions in the 2011 TSAP were chosen by the OTSC after thorough consideration of the crash data and information provided by transportation safety experts..." It goes on to say that available data on the number of transportation-related crashes, the vehicles and road users involved, and their causes and locations were also reviewed for problem identification and to develop solutions.</p> <p>The TSAP lists 112 data-driven actions. Out of the 112 actions; three were selected as top priority actions. An additional seven actions were called out high priority actions. These "top three" and "top ten" priorities are considered emphasis areas.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> The 2011 TSAP does indicate that data were used to develop the actions in the Plan. <p>Weaknesses:</p> <ul style="list-style-type: none"> The 2011 TSAP does not specify what data were used, years for which the data were evaluated, or display/interpret the results of data analysis. It is also unclear the extent to which tribal and local roads were considered. The 2011 TSAP does not describe the data-driven approach used to select the emphasis areas, strategies, and actions. <p>Opportunities:</p> <ul style="list-style-type: none"> ODOT has a robust safety management system (SMS) A list of data needs is being developed to inform analysis approaches for the TSAP update. Data considerations will consider state, local, and Tribal roads, where data are available. Background narratives (BN) for the TSAP update, including the Emphasis Area BN and the Policies, Strategies, and Actions BN will be developed based on available data. This information will be used to inform the updated TSAP. <p>Threats:</p> <ul style="list-style-type: none"> None.

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
Performance Management			
<p>23 USC 148(c)(2)(C)</p> <p>As part of the State highway safety improvement program, a State shall: adopt strategic and performance-based goals that:</p> <ul style="list-style-type: none"> • <i>address traffic safety, including behavioral and infrastructure problems and opportunities on all public road</i> • <i>focus resources on areas of greatest need</i> • <i>are coordinated with other State highway safety programs</i> 	<p>The SHSP includes goals and measureable objectives to enable the State to track and monitor the status of SHSP implementation efforts and monitor progress in each of the SHSP emphasis areas.</p>	<p>The 2011 TSAP includes eleven performance measures and goals:</p> <ul style="list-style-type: none"> • Deaths due to unintentional injuries per 100,000 population • Transportation-related deaths per 100,000 population • Deaths due to motor vehicle crashes per 100 million VMT • Deaths due to motor vehicle crashes per 100,000 population that is 19 and under • Total motor vehicle crashes, per 100 million VMT • Deaths due to alcohol and drug related motor vehicle crashes, per 100 million VMT • Percentage of occupants using vehicle safety restraints – Children 4-15, Children under 4 • Communities with transportation safety programs • Percentage of teens free of involvement with alcohol in the previous month • Percentage of teens free of involvement with illicit drugs in the previous month – a. eighth graders, b. eleventh graders (OBM) • Driver perception of safety: percent of persons who think the transportation 	<p>Strengths:</p> <ul style="list-style-type: none"> • The most recent data were used to develop performance based goals and objectives • ODOT developed performance measures and targets for the 2011 TSAP <p>Weaknesses:</p> <ul style="list-style-type: none"> • Performance measures were not clearly articulated in the TSAP. However, an annual Performance Plan exists as a separate document to track progress for each of the emphasis areas. • MAP-21 requires tracking and evaluation of four performance measures; number of fatalities and serious injuries, and rate of fatalities and serious injuries. The only measure currently aligned with these requirements is fatality rate. <p>Opportunities:</p> <ul style="list-style-type: none"> • ODOT is not new to performance measurement, target setting, or tracking, which will help when developing safety targets to meet MAP-21 requirements.

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
Performance Management			
		<p>system is as safe or safer than a year ago</p>	<ul style="list-style-type: none"> • Safety performance measures and targets should be consistent across the Highway Safety Plan, State LRTP, and MPO LRTPs – with the extensive engagement of safety and transportation stakeholders through committees and outreach, safety performance measures coordination efforts will be enhanced. <p>Threats:</p> <ul style="list-style-type: none"> • A number of opportunities exist to set targets (i.e. halve fatalities, target zero, a percent reduction) and it may be challenging to reach consensus on a target that will impact many different plans and planning processes throughout the state. • Reducing the number of performance measures to meet MAP-21 requirements and address the emphasis areas may be a challenge.

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
Multidisciplinary Approach			
<p>23 USC 148 (a)(12)(C)</p> <p>The term ‘State strategic highway safety plan’ means a comprehensive plan, based on safety data, developed by a State transportation department that:</p> <p><i>Addresses engineering, management, operation, education, enforcement, and emergency services elements (including integrated, interoperable emergency communications) of highway safety as key factors in evaluating highway projects</i></p>	<p>The State considered the highway safety elements of engineering, education, enforcement and emergency medical services (the 4 E’s) and other disciplines such as public health when determining strategies to address SHSP emphasis areas.</p>	<p>Nearly 300 transportation and safety stakeholders participated in the 2011 TSAP update (as identified in Appendix II). In reviewing the participant list, agency names are listed for many of the participants and it is clear that engineers, educators, enforcement, and emergency services were represented. This 4E approach was also reflected in the actions and emphasis areas of the TSAP, creating a comprehensive plan addressing both behavioral and infrastructure solutions to the safety issues.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> • A multidisciplinary approach was taken to develop the 2011 TSAP using input from nearly 300 participants, who represented the interests of all 4 Es. <p>Weaknesses:</p> <ul style="list-style-type: none"> • None. <p>Opportunities:</p> <ul style="list-style-type: none"> • ODOT plans to continue extensive outreach and engagement of stakeholders during the TSAP update. To date, the perspectives of all 4Es are represented on the PAC, PCT, and during the statewide interviews and regional meetings. <p>Threats:</p> <ul style="list-style-type: none"> • None
<p>23 USC 148 (a)(12)(F)</p> <p>The term ‘State strategic highway safety plan’ means a comprehensive plan, based on safety data, developed by a State transportation department that:</p> <p><i>Describes a program of strategies to reduce or eliminate safety hazards</i></p>	<p>The SHSP includes effective strategies to address the State’s emphasis areas.</p>	<p>The 2011 TSAP follows the nine overarching strategies developed for the Oregon Transportation Plan (OTP). The strategies provide basic directions for the TSAP. The 112 actions, identified to implement the strategies, specify how Oregon can address its emphasis areas. Out of the 112 actions, three were selected as top priority actions. An additional seven actions were called out high priority actions, resulting in a “top three” and “top ten” emphasis areas.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> • The 2011 TSAP identifies emphasis areas and specifies a subset of the 112 actions that will be used to address the emphasis areas. <p>Weaknesses:</p> <ul style="list-style-type: none"> • The 2011 TSAP does not articulate how the strategies and actions for each emphasis area are “proven” to reduce fatalities and serious injuries.

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
Multidisciplinary Approach			
			<p>Opportunities:</p> <ul style="list-style-type: none"> • There are a number of sources that provide information on proven countermeasures. These can be reviewed and used during strategy and action step prioritization meetings. • A test can be applied to each strategy and action to ensure it is feasible and could be implemented within the twenty year life of the plan. <p>Threats:</p> <ul style="list-style-type: none"> • In the past, the TSAP has included a large number of strategies/actions to accommodate the interests of all stakeholders. For the Plan update, strategies and action will need to be data driven, meaning many could be eliminated. This could present an issue for some stakeholders. • Elimination of experimental strategies precludes the opportunity for safety breakthroughs.

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
SHSP Update Content Considerations			
<p>23 U.S.C. 148 (1)(d)(1)(B)</p> <p>In establishing requirements under this subsection, the Secretary shall ensure that States take into consideration, with respect to updated strategic highway safety plans—</p> <ul style="list-style-type: none"> • <i>the findings of road safety audits</i> • <i>the locations of fatalities and serious injuries</i> • <i>the locations that do not have an empirical history of fatalities and serious injuries, but possess risk factors for potential crashes</i> • <i>rural roads, including all public roads, commensurate with fatality data</i> • <i>motor vehicle crashes that include fatalities or serious injuries to pedestrians and bicyclists</i> • <i>the cost-effectiveness of improvements</i> • <i>improvements to rail-highway grade crossings; and</i> • <i>safety on all public roads, including non-State-owned public roads and roads on tribal land</i> 	<p>A variety of data and safety programs were analyzed, reviewed and considered when determining SHSP Emphasis Areas and strategies in the updated SHSP.</p>	<p>As mentioned in the “Data” section of this table, text in the 2011 TSAP states that, “the actions in the 2011 TSAP were chosen by the OTSC after thorough consideration of the crash data and information provided by transportation safety experts...”</p>	<p>Strengths:</p> <ul style="list-style-type: none"> • The 2011 TSAP does indicate that data were used to develop the actions in the Plan. <p>Weaknesses:</p> <ul style="list-style-type: none"> • The 2011 TSAP does not specify what data were used, years for which the data were evaluated, or display/ interpret the results of data analysis. It is also unclear the extent to which tribal and local roads were considered. • It is not clear in the text how data were used to select the three emphasis areas. • It is not clear in the text how data were used to identify the strategies and actions. <p>Opportunities:</p> <ul style="list-style-type: none"> • ODOT has a robust safety management system (SMS) • A list of data needs is being developed to inform analysis approaches for the TSAP update, which will include items from the bulleted list in column 1. • Background narratives (BN) for the TSAP update, including the Emphasis Area BN and the Policies, Strategies, and Actions BN will be developed based on available data. This information will be used to inform the updated TSAP. <p>Threats:</p> <ul style="list-style-type: none"> • None.

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
SHSP Update Content Considerations			
<p>23 USC 148 (a)(12)(D)</p> <p>The term 'State strategic highway safety plan' means a comprehensive plan, based on safety data, developed by a State transportation department that:</p> <p><i>Considers safety needs of, and high-fatality segments of, all public roads, including non-State-owned public roads and roads on tribal land.</i></p>	<p>SHSP emphasis areas and strategies address State and non-State-owned public roads and roads on tribal land, when applicable.</p>	<p>Oregon has a number of Native American tribes. The 2011 TSAP does address tribal interests, but not as part of the emphasis areas. One of the actions found in the early part of the document (#3) is to, "Encourage tribes and local and regional governments to implement OTSAP." No tribal representatives are listed as planning process participants and the data analysis completed for the TSAP does not appear to include data for tribal land.</p> <p>A high percent of the roads in Oregon are non-State owned public roads. The 2011 TSAP does not specifically state how data for non-state owned roads was considered in the planning process. However, one of the actions in the TSAP (#24) does mention that an update to the SMS will enable it to process local crashes (off state highway) and calculate SPIS for all public roads possibly through geospatial referencing systems. Local interests from the counties and cities were listed as planning process participants.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> For the 2011 TSAP, representatives from local jurisdictions participated on committees or in public involvement activities and public input forums were used to engage Tribal interests. <p>Weaknesses:</p> <ul style="list-style-type: none"> All roads were considered during the data analysis for the 2011 TSAP, but the Plan does not articulate what data were used, years for which the data were evaluated, or display/interpret the results of data analysis. It is also unclear the extent to which tribal and local roads were considered. The entire document treats all roadways. Thus, the emphasis area actions do not explicitly state that they address the needs for all public roads. <p>Opportunities:</p> <ul style="list-style-type: none"> A list of data needs is being developed to inform analysis approaches for the TSAP update. This will be an opportunity to understand the availability and limitations of non-State owned and Tribal crash data. <p>Threats:</p> <ul style="list-style-type: none"> None

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
Coordination			
<p>23 USC 148 (a)(12)(E)</p> <p>The term 'State strategic highway safety plan' means a comprehensive plan, based on safety data, developed by a State transportation department that:</p> <p><i>Considers the results of State, regional, or local transportation and highway safety planning processes</i></p>	<p>The State coordinated with other planning processes, including but not limited to the State's Highway Safety Plan (HSP), Commercial Vehicle Safety Plan (CVSP) (Section 31102 of Title 49), Statewide Transportation Plan, Metropolitan Transportation Plans, local road safety plans, etc.</p>	<p>The 2011 TSAP is one of several modal or multi-modal plans called for in the OTP that defines, in greater detail, system improvements, legislative needs, and financial needs. The TSAP offers guidance for investment decisions that are reflected in the Statewide Transportation Improvement Program (STIP), the Highway Safety Performance Plan (HSP), the Highway Safety Improvement Program (HSIP), and the operating budgets of implementing agencies. In addition, the safety strategies outlined in the OTP are used as the guiding principles for the TSAP.</p> <p>Coordination with other planning processes, including Metropolitan Transportation Plans, local road safety plans, and the CVSP are not specifically mentioned in the text; however representatives from MPOs and local agencies were planning participants. It is unclear whether freight interests were represented.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> • The 2011 TSAP defines the OTP's safety goals and actions. There is a clear connection between the statewide transportation plan and safety planning activities and programs. As compared to SHSPs completed in other states, this is unusual. • The ODOT Transportation Development Division and Safety Division coordinated throughout the planning process for the 2011 TSAP to ensure consistency amongst the TSAP, OTP, HSP, and HSIP. <p>Weaknesses:</p> <ul style="list-style-type: none"> • The 2011 TSAP is not clear in how it supports, influences, or considers all other planning processes in the state, most importantly metropolitan transportation plans, local plans, and the CVSP, although there is a specific action calling for increased planning for safety. <p>Opportunities:</p> <ul style="list-style-type: none"> • The ODOT Transportation Development Division and Safety Division are working together on all aspects of the TSAP update and meet weekly to discuss coordination efforts and progress. This will continue to enhance the integration of the OTP, updated TSAP, HSP, and HSIP. <p>Threats:</p> <p>None</p>

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
Coordination			
<p>3 USC 148 (a)(12)(H)</p> <p>The term 'State strategic highway safety plan' means a comprehensive plan, based on safety data, developed by a State transportation department that:</p> <p><i>Is consistent with section 135(g) [Statewide Transportation Improvement Program] of Title 23 USC.]</i></p>	<p>The SHSP was/is:</p> <p>Developed in consultation with affected non-metropolitan local officials and with Indian tribal governments</p> <p>Provided interested parties with a reasonable opportunity for comment</p> <p>Consistent with the Statewide Transportation Plan</p>	<p>In the 2011 TSAP, no tribal representatives are listed as planning process participants. Non-metropolitan local officials are not specifically called out as participants in this process, but with the number of outreach events made available for this Plan update, it is likely local officials participated.</p> <p>The public involvement activities, which included amongst other things, committee engagement; public input sessions; and ten public input forums provided the opportunity for stakeholders to provide input throughout the TSAP planning process.</p> <p>The ODOT Transportation Development Division, in charge of long range planning activities and the statewide transportation improvement program (STIP), actively participated in the 2011 TSAP update to ensure consistency with the OTP. In addition, the OTP establishes broad, long-range strategies designed to help develop an efficient, effective, and safe integrated transportation system for Oregon. The TSAP is one of several topic plans and further define the OTP's safety goals and actions.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> • The current OTP and 2011 TSAP are integrated documents. • The level of public engagement for the 2011 TSAP ensured interested stakeholders had ample opportunities to participate and comment on the Plan. <p>Weaknesses:</p> <ul style="list-style-type: none"> • The 2011 TSAP does not go into detail regarding how and if tribal and non-metropolitan officials were consulted with during the 2011 TSAP. <p>Opportunities:</p> <ul style="list-style-type: none"> • The ODOT Transportation Development Division and Safety Division are working together on all aspects of the TSAP update and meet bi-weekly to discuss coordination efforts and progress. This will continue to enhance the integration of the OTP and updated TSAP. • Being so early in the TSAP update planning process, the opportunity exists to reach out to tribal and non-metropolitan officials to engage them in public involvement activities. Tribes in two locations have already been engaged in public input activities for this TSAP update. • A fair number of public engagement activities and committee meetings have occurred and will continue to occur throughout the TSAP update, providing interested parties with numerous opportunities to comment and provide input. <p>Threats:</p> <ul style="list-style-type: none"> • None

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
SHSP Evaluation			
<p>23 USC 148(c)(1)(C)</p> <p><i>Evaluates the strategic highway safety plan on a regularly recurring basis in accordance with subsection (d)(1) to ensure the accuracy of the data and priority of proposed strategies</i></p>	<p>The State conducted a review of current data and research to determine SHSP emphasis areas and strategies.</p>	<p>The 2011 TSAP is the third such plan in Oregon, indicating a commitment to update the plan as crash, roadway, and land use trends evolve over time. The TSAP provides data on crash trends between 2000 and 2009 to demonstrate shifts in safety priorities and acknowledges some of the key safety issues and how they have been addressed over the years.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> • Oregon recognizes the value of updating the TSAP on a regular basis to reflect shifts in safety emphasis areas. <p>Weaknesses:</p> <ul style="list-style-type: none"> • The OTSC meets on a regular basis, in between TSAP updates and the annual Performance Plan embodies the annual work plan and data tracking component of the TSAP. However, this implementation and evaluation component is not included in the current TSAP. For the TSAP update, this relationship could be better described.. <p>Opportunities:</p> <ul style="list-style-type: none"> • For the TSAP update, data will be reviewed to understand shifting trends and key emphasis area priorities for this Plan. • The data reviewed for the Plan update will provide a baseline to evaluate emphasis areas moving forward. <p>Threats:</p> <ul style="list-style-type: none"> • Plan evaluation requires an investment in tracking crash data trends, sometimes at the micro level. With staff limitations, this level of regular tracking and oversight may not occur. • Evaluation includes active engagement from those implementing the plan to discuss progress and challenges. This level of commitment on a regular basis

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
			can be a challenge.
Special Rules			
<p>23 U.S.C. 148 (a)(1) HIGH RISK RURAL ROAD - The term 'high risk rural road' means any roadway functionally classified as a rural major or minor collector or a rural local road with significant safety risks, as defined by a State in accordance with an updated State strategic highway safety plan</p>	<p>The update includes the States definition of "High Risk Rural Road."</p>	<p>The 2011 TSAP does not include a definition of high risk rural roads as this is a new requirement under MAP-21.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> • None <p>Weaknesses:</p> <ul style="list-style-type: none"> • None <p>Opportunities:</p> <ul style="list-style-type: none"> • A definition can be included in the updated TSAP. <p>Threats:</p> <ul style="list-style-type: none"> • None
<p>23 U.S.C. 148 (g)(2) OLDER DRIVERS AND PEDESTRIANS - If traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, that State shall be required to include, in the subsequent Strategic Highway Safety Plan of the State, strategies to address the increases in those rates, taking into account the recommendations included in the publication of the Federal Highway Administration entitled 'Highway Design Handbook for Older Drivers and Pedestrians' (FHWA-RD-01-103) dated May 2001, or as subsequently revised</p>	<p>The SHSP update includes strategies to address the increases in older driver and pedestrian traffic fatalities and serious injuries, if applicable.</p>	<p>Although this is a new requirement under MAP-21, the 2011 TSAP does include actions to address older drivers and pedestrians.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> • None <p>Weaknesses:</p> <ul style="list-style-type: none"> • None <p>Opportunities:</p> <ul style="list-style-type: none"> • Upon review of the data for the TSAP update, strategies addressing older drivers and pedestrians may be developed to address this special rule. <p>Threats:</p> <ul style="list-style-type: none"> • None

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
Description of SHSP Update Process			
<p>23 USC 148 (d)(2)(A)(ii)</p> <p>In general, each State shall—</p> <ul style="list-style-type: none"> • <i>update the strategic highway safety plans of the State in accordance with the requirements established by the Secretary under this subsection; and</i> • <i>submit the updated plans to the Secretary, along with a detailed description of the process used to update the plan</i> 	<p>The State included/provided a detailed description of the SHSP update process (this description can be included as a section, chapter or appendix in the SHSP, in the cover or transmittal letter for the SHSP, or as a standalone document).</p>	<p>The 2011 TSAP does provide some description of the SHSP update process, including information on public involvement activities; data collection and analysis; and the development of the TSAP Strategies (taken directly from the OTP).</p>	<p>Strengths:</p> <ul style="list-style-type: none"> • A basic level of information is included throughout the document on elements of the 2011 TSAP update process. <p>Weaknesses:</p> <ul style="list-style-type: none"> • The 2011 TSAP does not describe in any detail the approach taken to update the Plan, focusing more on broad statements, than on specifics regarding how SHSP requirements were met. These specifics having been transmitted to FHWA by cover letter in prior years. <p>Opportunities:</p> <ul style="list-style-type: none"> • A number of other states are taking the approach of including a detailed description of the update process in an appendix. The updated TSAP could do the same, including information on how all the MAP-21 requirements were met through the update process. <p>Threats:</p> <ul style="list-style-type: none"> • None

MAP-21 Requirement	Indicator That State Meets the Requirements	2011 TSAP	SWOT Analysis
Administrative			
<p>23 USC 148 (a)(12)(G)</p> <p>The term 'State strategic highway safety plan' means a comprehensive plan, based on safety data, developed by a State transportation department that:</p> <p><i>Is approved by the Governor of the State or a responsible State agency</i></p>	<p>SHSP signed by the Governor or a responsible State agency</p>	<p>The 2011 TSAP was recommended for approval by the Oregon Transportation Safety Committee on September 12, 2011. The Oregon Transportation Safety Committee is a five-member governor-appointed committee that acts as an advisory committee to the Oregon Transportation Commission. The TSAP was formally adopted by the Oregon Transportation Commission on October 20, 2011.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> The 2011 TSAP sought buy-in from top ranking officials from the onset, engaging members of the Oregon Transportation Safety Committee and Oregon Transportation Commission throughout the planning process. This ensured buy-in and support for plan adoption. <p>Weaknesses:</p> <ul style="list-style-type: none"> None. <p>Opportunities</p> <ul style="list-style-type: none"> The Oregon Transportation Safety Committee and Oregon Transportation Commission will be again be engaged through the TSAP update process, approving key milestones throughout the planning process. <p>Threats:</p> <ul style="list-style-type: none"> None.
<p>23 USC 148 (a)(12)(I)</p> <p>The term 'State strategic highway safety plan' means a comprehensive plan, based on safety data, developed by a State transportation department that:</p> <p><i>Is updated and submitted to the Secretary for approval as required under subsection (d)(2)</i></p>	<p>FHWA Division Administrator approves SHSP update process</p>	<p>The 2011 TSAP does not mention approval from the FHWA Division Administrator.</p>	<p>Strengths:</p> <ul style="list-style-type: none"> None <p>Weaknesses:</p> <ul style="list-style-type: none"> The 2011 TSAP does not mention participation in the planning process by FHWA representatives (though they did participate). The 2011 TSAP does not mention approval by the FHWA Divisions Administrator (although this does happen after the fact). <p>Opportunities:</p> <ul style="list-style-type: none"> FHWA can be included in, and mentioned in stakeholder engagement activities for the updated TSAP. <p>Threats:</p> <ul style="list-style-type: none"> None